

Common Field Test Display Data And Layout

Specification 4

Owner:
Function:
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Location:

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1 General

1.1 Change history

Owner:	Riitta-Liisa Linnala
Scope:	Field Testing
Originator:	Riitta-Liisa Linnala
Approver:	Pekka Kuokka
Status:	Approved
Document ID :	DTS01761
Location:	Paradise_doc (Primary place): http://oucmswww.nmp.nokia.com:58081/document_browser/ccm_wa/paradise_doc/FTD Lotus Notes (Secondary place): Database: Global Field Test Web Server: bolns03m/B01/NMP/Nokia Filename: nmp/globalft.nsf

Ver	Date	Handled by	Comments
22.0	24-Jun-2008	Riitta-Liisa Linnala	Official version. Inspection 22-May-2008 SWAM ADB RL08052249132 CHANGES: <ul style="list-style-type: none"> · Inspection comment SWAM ADB RL08062449310 · Approved 61.03 and 61.04
21.3	10-Jun-2008	Riitta-Liisa Linnala	Inspection correction version for inspection follow-up. Inspection 22-May-2008 SWAM ADB RL08052249132 CHANGES: <ul style="list-style-type: none"> · REQ 417-9494:S40:Enable field test display support for point-based battery monitor · Modified 61.03 and 61.04
21.2	02-Jun-2008	Riitta-Liisa Linnala	Inspection correction version for inspection follow-up. Inspection 22-May-2008 SWAM ADB RL08052249132 CHANGES: <ul style="list-style-type: none"> · Inspection comment SWAM ADB CH08052956128 · Modified and Approved 77.04 and 77.05 · RAC 417-10042: Remove BCS/FCS FTDs · Removed 13.01, 13.03 and 13.04 · New group responsible named for Group 13: Bearer Control Displays: Jani Haapakoski and for Group 80: Socket displays: Jukka Luippunen

21.1	22-May-2008	Riitta-Liisa Linnala	<p>Upgrading version - to be inspected. Inspection 22-May-2008 SWAM ADB RL08052249132</p> <p>CHANGES:</p> <ul style="list-style-type: none"> . SCO 408-4867: FTD UI: New FTD 77.05 and update of an old FTD 77.04. <ul style="list-style-type: none"> . Added 77.05 . Modified 77.04 . RAC 415-2115: HSUPA FTDs - update of official FTD spec. <ul style="list-style-type: none"> . Added 47.18 - 47.21 . Added 48.10 . REQ 408-3347 SmartCards Field Test Display update <ul style="list-style-type: none"> . Modified 03.01 - 03.02 . Added 03.03 - 03.17 . CDMA sub-block removed from 62.04 <ul style="list-style-type: none"> . Modified 62.04
21.0	23-Nov-2007	Riitta-Liisa Linnala	<p>Official version. Inspection 07-Nov-2007 SWAM ADB RL07110736840</p> <p>CHANGES:</p> <ul style="list-style-type: none"> . Inspection comment SWAM ADB CH07112055299 <ul style="list-style-type: none"> . Approved 77.04 . Inspection comment SWAM ADB JE07112288053 <ul style="list-style-type: none"> . Approved 79.01 and 64.03
20.2	20-Nov-2007	Riitta-Liisa Linnala	<p>Inspection correction version for inspection follow-up. Inspection 07-Nov-2007 SWAM ADB RL07110736840</p> <p>CHANGES:</p> <ul style="list-style-type: none"> . Inspection comment SWAM ADB GC07110743931 <ul style="list-style-type: none"> . Approved 41.19 . Inspection comment SWAM ADB PV07111355702 <ul style="list-style-type: none"> . Modified 86.01 . Inspection comment SWAM ADB AS07110948605 <ul style="list-style-type: none"> . Modified and Approved 86.02 and 86.10 . Approved 86.03 -86.11 . Inspection comment SWAM ADB CH07111940567 <ul style="list-style-type: none"> . Modified 77.04 . RAC 401-2577: FTD Specification: Field test improvements within PMD files, mode change <ul style="list-style-type: none"> . Modified 79.01 and 64.03
20.1	02-Nov-2007	Riitta-Liisa Linnala	<p>Upgrading version - to be inspected. Inspection 07-Nov-2007 SWAM ADB RL07110736840</p> <p>CHANGES:</p> <ul style="list-style-type: none"> . RAC 006-15826: FTD for Accelerometer <ul style="list-style-type: none"> . Added 77.04 . RAC 401-1967: Changes in WLAN FTD and Additional Displays <ul style="list-style-type: none"> . Modified 86.01 - 86.05 . Added 86.07 - 86.11 . Inspection comment SWAM ADB PH07041144927 <ul style="list-style-type: none"> . Removed 74.02 - 74.05 . Input from Adrian Sandford:Group 84: Music Player can be removed <ul style="list-style-type: none"> . Removed 84.01 - 84.02 . Removed Group 84 . Input from Daniel Bencak: Display 69.05 can be removed. <ul style="list-style-type: none"> . Removed 69.05 . New group responsible named for Group 69:USB Information (Media Module) Display, Daniel Bencak . RAC 415-2115: HSUPA FTDs - update of official FTD spec <ul style="list-style-type: none"> . Added 41.19

<p>20.0</p>	<p>30-Apr-2007</p>	<p>Riitta-Liisa Linnala</p>	<p>Official version. Inspection 10-Apr-07. SWAM ADB RL07033042263 Display version histories hidden</p> <p>CHANGES:</p> <ul style="list-style-type: none"> • Inspection comment SWAM ADB PH07041144927 <ul style="list-style-type: none"> • Removed 74.06, 74.07 and 74.08 • Inspection comment SWAM ADB DK07040941350 <ul style="list-style-type: none"> • Removed 05.05 • Inspection comment SWAM ADB AK07041240289 <ul style="list-style-type: none"> • Removed Group 8 • Removed g(2) sub_block from 06.04 • Inspection comment SWAM ADB HJ07042758233 <ul style="list-style-type: none"> • Removed 75.20, 75.22, 75.70-75.79, 75.80-75.96 • Inspection comment SWAM ADB MP07041140833 <ul style="list-style-type: none"> • Approved 82.02
<p>19.1</p>	<p>28-Mar-2007</p>	<p>Riitta-Liisa Linnala</p>	<p>Upgrading version - to be inspected. Inspection 10-Apr-07. SWAM ADB RL07033042263</p> <p>CHANGES:</p> <ul style="list-style-type: none"> • RAC 010-34311: FTD Spec: Field test improvements within PMD files <ul style="list-style-type: none"> • Removed 74.06, 74.07 and 74.08 • RAC 009-27647: Removal of FAX FTDS <ul style="list-style-type: none"> • Removed 05.05 • Input from Tapio Saarinen Group 8:GPRS Measurement Displays can be removed <ul style="list-style-type: none"> • Removed Group 8 • New group responsible named for Light server, Frede Nielsen • New group responsible named for Group 89: Video Sharing, Vesa Kokko • Removed g(2) sub_block from 06.04 due to old rejected REQ: WP RM-RIM 009-9648: 2G3G IO FT displays • PCP error PR07013143449: Network monitor freezes in display 96-05 <ul style="list-style-type: none"> • Removed Groups 90, 95 and 96 • Input from Jesper Sandberg: Update to Location specific FTDS + textual improvements <ul style="list-style-type: none"> • Removed 75.20, 75.22, 75.70-75.79, 75.80-75.96 • Input from Jan Gundorf: Display 82.02 need to be as Input display <ul style="list-style-type: none"> • Modified 82.02
<p>19.0</p>	<p>30-Jun-2006</p>	<p>Riitta-Liisa Linnala</p>	<p>Official version. Inspection 27-Jun-06. SWAM ADB RL06062028271. No revision marks. Display version histories hidden, make style [Version History] visible to see them.</p> <p>CHANGES:</p> <ul style="list-style-type: none"> • Inspection comment SWAM ADB GC06062032534 <ul style="list-style-type: none"> • Approved 41.18, 47.11 - 47.17 • Inspection comment SWAM ADB CH06062032749 <ul style="list-style-type: none"> • Modified and approved 77.03

18.1	15-Jun-2006	Riitta-Liisa Linnala	<p>Upgrading version - to be inspected. Inspection 27-Jun-06. SWAM ADB RL06062028271 Revision marks shown. Display version histories visible.</p> <p>CHANGES:</p> <ul style="list-style-type: none"> · RAC 010-25876: HSDPA bearer status fields to FTD (field test display) application - update of official FTD spec <ul style="list-style-type: none"> · Added 41.18 · Added 47.11 - 47.17 · SCO 006-12759: FTD subblocks for digital ambient light sensor readings <ul style="list-style-type: none"> · Added 77.03 · New group responsible named for Monitor Server, Leon Joergensen · Executive displays changed to be as Input displays. <ul style="list-style-type: none"> · Modified 46.04, 46.06, 46.07, 46.12, 46.13, 46.28, 48.01, 49.04, 49.06, 50.12, 50.13, 50.14, 50.15
18.0	19-Apr-2006	Riitta-Liisa Linnala	<p>Official version. Inspection 07-Apr-06. SWAM ADB RL06033051582. No revision marks. Display version histories hidden, make style [Version History] visible to see them.</p> <p>CHANGES:</p> <ul style="list-style-type: none"> · Input from Tim Harris: SCO 5330:FTD UI: v3.7 Display 10.01 (Sync Live Params) can be rejected. <ul style="list-style-type: none"> · Removed Group 70 · Removed 70.01 and 70.02 · Inspection comment SWAM ADB MS06033058074 <ul style="list-style-type: none"> · Approved Group 83 · Inspection comment SWAM ADB JH06041938995 <ul style="list-style-type: none"> · Approved 73.06 and 73.07 · Inspection comment SWAM ADB TS06033058342 <ul style="list-style-type: none"> · Approved 05.19 · SCO 006-11060: FTD UI: VERIZON: Test Menu: Need option for Auto Answer in all modes: already implemented <ul style="list-style-type: none"> · Approved 32.14
17.1	28-Mar-2006	Riitta-Liisa Linnala	<p>Upgrading version - to be inspected. Inspection 07-Apr-06. SWAM ADB RL06033051582 Revision marks shown. Display version histories visible.</p> <p>CHANGES:</p> <ul style="list-style-type: none"> · Location for COMMON R&D; DISPLAY DATA AND LAYOUT specification updated (secondary place). · SCO: 006-9276: PCError: FTD UI: Move the ADSP FTD groups 12-05 to the FTD common pool <ul style="list-style-type: none"> · Group 12 moved to Group 83 · Input from Pekka Kuokka: Server and sub_block IDs changed to match the implementation <ul style="list-style-type: none"> · Modified 73.06 and 73.07 · New group responsible named for Group 70: SyncML Server Information Displays , Tim Harris · New group responsible named for Group 5: SyncML Server Information Displays , Kalle Haviala · SCO 006-11060: FTD UI: VERIZON: Test Menu: Need option for Auto Answer in all modes <ul style="list-style-type: none"> · Added 32.14 · RAC 009-25101: FTD Spec Update for Non-transparent Data Call FTD <ul style="list-style-type: none"> · Added 05.19

17.0	03-Feb-06	Riitta-Liisa Linnala	<p>Official version. Inspection 19-Jan-06. SWAM ADB RL06011341270. No revision marks. Display version histories hidden, make style [Version History] visible to see them.</p> <p>CHANGES:</p> <ul style="list-style-type: none"> • Inspection comment SWAM ADB JG06013137109 <ul style="list-style-type: none"> • Approved 38.03 • Inspection comment SWAM ADB MP06012728502 <ul style="list-style-type: none"> • Approved 82.01 - 82.04
16.2	30-Jan-06	Riitta-Liisa Linnala	<p>Inspection correction version for inspection follow-up. Inspection 19-Jan-06. SWAM ADB RL06011341270 Revision marks for inspection correction shown. Display version histories visible.</p> <p>CHANGES:</p> <ul style="list-style-type: none"> • Inspection comment SWAM ADB KL06011641201 <ul style="list-style-type: none"> • Modified 85.03 • Inspection comment SWAM ADB MP06012728502 <ul style="list-style-type: none"> • Modified 82.01 - 82.04 • Inspection comment SWAM ADB JS06011351267 <ul style="list-style-type: none"> • Approved 75.10 • Inspection comment SWAM ADB KM06012655350 <ul style="list-style-type: none"> • Approved 73.15 - 73.24 • Inspection comment SWAM ADB HT06011351582 <ul style="list-style-type: none"> • Approved 82.07 - 82.25 • Approved 63.12 • Approved 36.08 • Inspection comment SWAM ADB JR06012655426 <ul style="list-style-type: none"> • Removed 66.01 - 66.02 • Inspection comment SWAM ADB AS06011644464 <ul style="list-style-type: none"> • Approved 86.01 • Inspection comment SWAM ADB TS06013049224 <ul style="list-style-type: none"> • Approved 01.06 • Approved 04.05 and 04.06 • Approved 11.06 and 11.07

1.2 Introduction

This document specifies the features of R&D Displays. R&D Display, i.e. engineering test mode, is a configurable software feature that is available through MMI menu. R&D Display is useful for testing mobile phones during development or for verifying the operation of the network (Field Testing).

1.3 Terms and Acronyms

Term/Acronym	Definition
AFC	Automatic Frequency Control
AGC	Automatic Gain Control
3G	3rd Generation mobile communications
BC	Bearer Capability
BC-IE	
BER	Bit Error Rate
BSIC	Base Station Identity Code
BT	Bluetooth
CRC	Cyclic Redundancy Check
CSD	Circuit Switched Data
CCCH	Common Control Channel

DAMPS	Digital Advanced Mobile Phone Service
DCS	Data Communication Server
DSS	DAMPS (IS-136) Stack Server
DTE	Data Terminal Equipment (e.g. a PC)
DTR	Data Terminal Ready (an RS-232 control signal)
DTX	Discontinuous Transmission
EGPRS	Enhanced GPRS
EM	Energy Management
ERLC	
FCS	Frame Check Sum
FER	Frame Error Rate
FT	Field Test application or field testing in general
FTD	Field Test Display application
FtTool	Field Test Tool application
GMM	GPRS Mobility Management
GPDS	General Packet Data Server
GPRS	General Packet Radio Service for GSM and UMTS systems
GPS	Global Positioning System
GSM	Global System for Mobile communications
GSS	GSM Stack Server
HAL	Hardware Abstraction Layer
HDLC	High-level Data Link Control
HSCSD	High Speed Circuit-Switched Data
IMSI	International Mobile Subscriber Identity
IP	Internet Protocol
IR	Infra Red
IrDA	Infra Red Data Association
Kc	Ciphering key
LA	Location Area
LAC	Location Area Code
LCS	Location Services
LLC	
MAC	Medium Access Control
MCC	Mobile Country Code
MNC	Mobile Network Code
MM	Mobility Management
MNC	Mobile Network Code
MS	Mobile Station

MSC	Mobile Switching Center
NC	
NON-DRX	
NSAPI	Network Service Access Point Identifier
OS	Operating System
PDCH	Packet Data Channel
PDCP	
PDP	Packet Data Protocol
PDU	Protocol Data Unit
PLMN	Public Land Mobile Network
PPP	Point-to-Point Protocol
P-TMSI	
TBF	Temporary Block Flow
PMM	Permanent Memory Manager
PPC	Product Performance Counter
PPM	Post Programmable Memory
QoS	Quality of Service
RAC	
RAU	Routing Area Update
RFC	Request For Comments (an Internet standard)
RR	Radio Resources
RSSI	Received Signal Strength Indication
SAPI	Service Access Point Identifier
SDCCH	Stand alone Dedicated Control Channel
SMC	System Mode Control
SyncML	Synchronisation Markup Language
TA	Timing Advance
TBF	Temporary Block Flow
TCH	Traffic Channel
TCP	Transport Control Protocol
UDP	User Datagram Protocol
UL	Uplink
UMA	Unlicensed Mobile Access
USB	Universal Serial Bus
WAP	Wireless Application Protocol
WDP	Wireless Datagram Protocol
WSP	Wireless Session Protocol (part of WAP protocol suite)
WTP	Wireless Transaction Protocol

1.4 Using The S40 Field Test Displays

General

When the Field Test Display is active, the phone works in a similar way as without it, except that the arrow buttons (^, v) scroll through the various tests, whereas they would scroll through the memory locations while the Field Test Display is inactive. The test numbers that are not valid are not scrolled.

The Field Test Display appears as a so-called soft indicator, which means that it is visible only if there is nothing else to display. For example, once the first digit of a phone number has been dialed, the Field Test Display disappears and the digit appears. After the whole number has been dialed and a call setup has started, the number disappears and the Field Test Display reverts.

When the Field Test Display is active and mobile originated call setup is going; 'CALLING XXXXX' text is shown for some time. However, if some call divert is active, 'note diverts' text is viewed. When keyguard is active, keyguard texts (or icons) are disabled and Field Test Display is visible. Pressing a key views normal keyguard texts. When user activates the keyguard, keyguard note is shown shortly.

During proper power off (use of power key or RE-CHARGE indication) some valuable data (e.g. the number of current field test display) is stored onto the permanent memory. Next time when the phone is powered on the lastly selected field test display will be automatically re-activated.

Activating the Field Test Displays

Active Idle and Tab mode MenuView should be disabled in order to see the Field Test Displays. The Field Test Display is located at the end of the main menu loop. It is activated as follows:

- 1 Press the Menu button
- 2 Scroll in the main menu loop to field test display item (NETWORK MONITOR)
- 3 Press the Select button
- 4 Enter the index number of the test to be activated at the query prompt (TEST GROUP;TEST NUMBER) according to this specification (example 0103 = group 01, display 03)
- 5 Confirm with the Ok button

The field test data will then appear in a moment. The index numbers of the test group and test display will appear in the top left corner of the display. If given test group or -number is not valid "No Test" -text will appear to the display. A quicker way to activate the Field Test Display is to use the menu shortcut. The field test display is the last item in the main menu loop. The shortcut activation of the field test display is done in the following way:

MENU <number of the last item> <number of the desired test group> <number of the desired field test display> (according to this specification).

If the last number of the main menu loop is e.g. 8, in order to activate test display number 20 from group 14, just press Menu, 08, 14, 20 and Ok in a sequence.

Once the field test displays have been activated, the arrow keys (^,v) offer an easy way to scroll the displays without using menu.

Deactivating the Field Test Displays

The Field Test Display is deactivated as follows:

- 1 Press the Menu button
- 2 Scroll in the main menu loop to field test display item
- 3 Press the Select button

- 4 Enter 0000 at the Group/display prompt
- 5 Confirm with the Ok button

Automatic display switching

Some displays automatically switch to another display if the current display becomes obsolete. For example, a GSM display may switch to a WCDMA display when phone makes a handover from GSM to WCDMA. The switching feature is FTD application/client specific, therefore the switching rules are not described in this document. ISA FTD application maintains a switching table that describes the switching rules for that application. The table can be utilized by other applications, as well.

Field Test Display usage modes

There are four Field Test Display usage modes :

Data display mode

Input mode

Execute mode

Help mode

In the data display mode, the field test data (e.g. carrier, power level, cell) is visible on the main display. The screen is automatically updated whenever the data changes.

In the help mode, one screen of instructions is shown to make it easier to understand the data on the active data display. A long press of asterisk (*) is used to toggle between data display mode and help mode.

Input mode is activated when an input display is selected from menu as described in the chapter Activating the Field Test Displays. The input mode prompts for input data (decimal or hex number) and performs a specific action with the data as soon as user presses Ok button. After that, data display mode takes over. In other words, the input mode is of the one time type. To enter the input mode again, an input display must be selected from the menu.

Execute mode works like input mode, but it performs a specific action immediately after display activation without asking input data or confirmation from user.

Input or execute mode is never activated when displays are scrolled with the arrow keys, i.e. input will not be prompted and nothing will be executed or set on if an input or execute display is selected with arrow keys. This is to prevent the user from accidentally performing an undesired action.

Field test display data modes

Phone can be in one of four FTD data modes:

- R= R&D Mode: allows all data to be shown
- 0 = Operator Mode: allows only operator data that is marked with "O" to be shown
- I = Infra vendor Mode: allows only infra vendor data that is marked with "I" to be shown
- Idle mode: allows no data to be shown

The presented data are divided into displays so that data with same mode are located in the own displays. So, some displays can be activated/deactivated to be visible or not by the R&D people.

Signal and battery level

When Field Test Display is active, normal signal and battery level bars are visible.

1.5 Inspection of this specification

Next group is responsible of inspecting this document:

Groups	Inspectors
Group 01: GSM Signaling displays which can be visible to network operators	Pentti Lavikainen Antti Kangas
Group 02: GSM Registration and Mobility Displays	Pentti Lavikainen Antti Kangas
Group 03: SmartCard Field Test Displays	Emil Froeding
Group 04: GSM Test Timers, SMS and Call Counter Displays	Pentti Lavikainen Antti Kangas
Group 05: GSM Data Displays	Bhaskar Goddanakoppalu
Group 06: GPRS Signaling Displays	Antti Kangas
Group 07: GPRS Data protocol displays	Pentti Lavikainen Antti Kangas
Group 09: GPRS Test Counter Displays	Pentti Lavikainen Antti Kangas
Group 10: GSM DSP displays	Lars-Michael Petersen
Group 11: Adaptive Multirate Displays	Kent Pedersen Antti Kangas
Group 15: PoC (push to talk over cellular) displays	Reijo Pyorala
Group 41-45: WCDMA layer 1 displays	Graham Charles
Group 46-60: WCDMA layer 2 and layer 3 displays	Quan Tat
Group 61: Common EM (Energy Management) displays	Søren Bisgaard
Group 62: Common general displays	Ossi Lindvall: HW drivers , especially 62.01 Leon Joergensen: Monitor server displays Zoran Stevanovic: Info server displays Frede Nielsen: Light server displays Toni Laivo: MTC server displays
Group 63: Common OS status displays	Pasi O. Arffman: principal responsibility Leon Joergensen: Monitor server aspects
Group 64: Common Audio Displays	Adrian Sandford
Group 65: PPC (Product Performance Counters) display	Leon Joergensen
Group 66: Common Voice Dialer Displays	Harri Aunoila Juha Hakkinen
Group 67: Common WAP Displays	Claus Pedersen

Group 68: IrDA Information (Media Module) Display	Richard Petrie: principal responsibility Leon Joergensen: Monitor server aspects
Group 69: USB Information (Media Module) Display	Daniel Bencak: principal responsibility Leon Joergensen: Monitor server aspects
Group 71: Common Bluetooth information displays	Christian Zechlin: principal responsibility Leon Joergensen: Monitor server aspects
Group 72: Bluetooth media module displays	Christian Zechlin: principal responsibility Leon Joergensen: Monitor server aspects
Group 73: Common Accessory Displays	Jari Huhtamaki
Group 74: Common Memory Management Displays	Petteri Hanhimaki
Group 75: Location Displays	Henning Jensen
Group 76: Touchpad Displays	Feng-Fred Jiang Leon Joergensen: Monitor server aspects
Group 77: Sensor displays	Carsten Hauge
Group 78: Email displays	Alain Ciotta
Group 79: FM radio	Graham Rowse
Group 80: Socket displays	Jukka Luippunen
Group 81: Multimode protocol displays	Pasi Harju (ext Sesca/Oulu) Sami Jutila
Group 82: DSP Core	Miska Peippo Leon Joergensen: Monitor server aspects
Group 83: ADSP SW Platform	Mika Siukola: principal responsibility Leon Joergensen: Monitor server aspects
Group 85: UMA (Unlicensed Mobile Access) displays	Jan Suumaki
Group 86: WLAN displays	Arto Suomi
Group 89: Video Sharing	Vesa Kokko

1.6 Outlook distribution lists related to FTD specification

FTD spec owner is responsible for delivery groups below:

NMP-FTD-SPEC-OWNER DG: Contains list of spec owners

NMP-FTD-SPEC-REVIEWERS DG: Contains list of most important FTD people (e.g. group responsables)

NMP-FTD-SPEC-INTEREST DG: Contains list of people which might be interested about spec changes.

2 Group 01: GSM Signaling displays which can be visible to network operators

2.1 Group 01 Information

The network operators can activate these signaling displays. Before field test displays are visible, mobile has to be modified. With the normal production mobile, field test displays are not working.

2.2 Display 01.01: Information of the serving cell

S40 Data display	S40 HELP display
<pre>abbb ccc ddd e ff g hhhh iii jjj kk mm no llll</pre>	<pre>CH RxL TxPwr TS TA RQ RLT C1 C2 BD GP ud CHT</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_HOPPING	S	R,I,O	yes
	H, if carrier numbers are scrolled when hopping is on. Otherwise empty						
b(3)	GSS			FTD_SB_CARRIER	S	R,I,O	yes
	When mobile is on TCH: DCH carrier number of serving cell in decimal. When mobile is NOT on TCH: CH means carrier number of serving cell in decimal. If hopping is on, used channels are scrolled when display is updated ERR means that mobile is out of band.						
c(3)	GSS			FTD_SB_RX_LEVEL	B:D	R,I,O	yes
	Rx level in dBm, minus sign not shown if <-100						
d(3)	GSS			FTD_SB_TX_LEVEL	S	R,I,O	yes
	Tx power level. If transmitter is on, symbol * is shown in front of the power level value.						
e	GSS			FTD_SB_TIME_SLOT	B:D	R,I,O	yes
	Time Slot, range is 0 - 7						
f(2)	GSS			FTD_SB_TIMING_ADV	B:D	R,I,O	yes
	Timing advance, range is 0 - 63						
g	GSS			FTD_SB_RX_QUALITY	B:D	R,I,O	yes
	Rx quality (sub), range is 0 - 7						
h(4)	GSS			FTD_SB_RADIO_LINK_TIMEOUT	B:D	R,I,O	yes
	Radio Link Timeout value. If value is negative, 0 is shown. Maximum value is 64. When mobile is NOT on TCH then xx is show						
i(3)	GSS			FTD_SB_C1	S	R,I,O	yes
	Value of the path loss criteria (C1). Range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated						
j(3)	GSS			FTD_SB_C2	S	R,I,O	yes
	Value of the cell reselection criteria (C2). Range is -99 - 999. If phone is phase 1 then C1 value is shown. ERR means that the value is out of range, e.g. because it was not able to be calculated.						
k(2)	GSS			FTD_SB_CURR_BAND	B:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Currently used band.Values: 9 = GSM900, 18 = GSM1800, 19 = GSM1900 .. extensible for future						
I(4)	GSS			FTD_SB_TYPE_OF_CURR_CH	S	R,I,O	yes
	Type of current channel THRO : TCH HR subchannel 0 THR1 : TCH HR subchannel 1 AHS0 : TCH AHS subchannel 0 AHS1 : TCH AHS subchannel 1 TFR : TCH FR AFS : TCH AFS TEFR : TCH EFR F144 : TCH FR data channel, speed 14.4 kbps F96 : TCH FR data channel, speed 9.6 kbps F72 : TCH FR data channel, speed 7.2 kbps F48 : TCH FR data channel, speed 4.8 kbps F24 : TCH FR data channel, speed 2.4 kbps H480 : TCH HR data channel, speed 4.8 kbps, subch 0 H481 : TCH HR data channel, speed 4.8 kbps, subch 1 H240 : TCH HR data channel, speed 2.4 kbps, subch 0 H241 : TCH HR data channel, speed 2.4 kbps, subch 1 FA : TCH FR signaling only (FACCH) channel FAH0 : TCH HR signaling only (FACCH) channel, subch 0 FAH1 : TCH HR signaling only (FACCH) channel, subch 1 PCCC, PBCC, PAGC : GPRS packet control channel PNDR : GPRS non-DRX mode (in PCCCH) PDTC : GPRS traffic channel NDRX : GPRS non-DRX mode (in CCCH) SDCC : SDCCH AGCH : AGCH CCCH : CCCH CBCH : CCCH and cell broadcast receiving on BCCH : BCCH SEAR : SEARCH NSPS : MS is in No Serv Power Save state						
m(2)	GPDS			FTD_SB_GPDS_ATT_AND_PDP	S	R,I,O	yes
	G if MS is GSM-GPRS attached, GP if attached and PDP context created, U if UMTS-GPRS attached, UP if attached and PDP context created, otherwise empty.						
n	GSM_DSP			FTD_SB_AMR_UL_MODE	B:D	R,I,O	yes
	Current absolute uplink mode on AMR channels, (0-7). 0 =4.75, 1 =5.15, 2 =5.9, 3 =6.7, 4 =7.4, 5 =7.95, 6 =10.2, 7 =12.2.						
o	GSM_DSP			FTD_SB_AMR_DL_MODE	B:D	R,I,O	yes
	Current absolute downlink mode on AMR channels. See definition above.						

2.3 Display 01.02: More information of the serving cell

S40 Data display	S40 HELP display
<pre>aa b c Bdd ee f ggg hh iii H=j kk ll</pre>	<pre>PM RAR Ro BC ReIR QLF' CRO TO PenT H MAIO HSN</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSS			FTD_SB_PAGING_MODE	S	R,I,O	yes
	Paging mode NO : normal paging EX : extended paging RO : paging reorganization SB : same as before						
b	GSS			FTD_SB_MAX_RAND_ACC_TRA	B:D	R,I,O	yes
	Maximum number of Random Access retransmission						
c	GSS			FTD_SB_ROAMING_IND	S	R,I,O	yes
	Roaming indicator, values are R or empty.						
d(2)	GSS			FTD_SB_BSIC	B:D	R,I,O	yes
	Letter B and BSIC value, range is 0 - 63.						
e(2)	GSS			FTD_SB_LAST_CALL_REL_REAS	B:D	R,I,O	yes
	Reason of last call release. Cause from messages disconnect and release complete.						
f	GSS			FTD_SB_RX_QUALITY	B:D	R,I,O	yes
	Rx quality (sub), range is 0 - 7						
g(3)	GSS			FTD_SB_CELL_RESEL_OFFSET	B:D	R,I,O	yes
	Cell reselect offset, range 0 - 126 dB. 0 - 63 * 2 dB. 'xxx' in active mode.						
h(2)	GSS			FTD_SB_TEMP_OFFSET	B:D	R,I,O	yes
	Temporary offset, range 0 - 60 dB. 0 - 7 * 10 dB. 70 dB means infinite time. 'xx' in active mode.						
i(3)	GSS			FTD_SB_PENALTY_TIME	W:D	R,I,O	yes
	Penalty time, range 0 - 620 s. 0 - 31 * 20 s. 'xxx' in active mode						
j	GSS			FTD_SB_HOPP_CH	B:D	R,I,O	yes
	Hopping channel 0 Single RF channel 1 RF hopping channel						
k(2)	GSS			FTD_SB_MOB_ALLOC_INDEX	B:D	R,I,O	yes
	Mobile allocation index offset, MAIO Range: 00 to 63 / xx when H=0						
l(2)	GSS			FTD_SB_HSN	B:D	R,I,O	yes
	Hopping sequence number, HSN Range: 00 to 63 / xx when H=0						

2.4 Display 01.03: Information of the serving cell, 1st and 2nd neighbor

1. row: serving cell information

- 2. row: 1. neighbor information
- 3. row: 2. neighbor information
- 4. row, mn: 1. neighbor information
- 4. row, op: 2. neighbor information

S40 Data display	S40 HELP display
<pre>aaabbbcccd eeefffgghh iiiijjkklll mn op</pre>	<pre>SCH C1 rx C2 1CH C1 rx C2 2CH C1 rx C2 1N 2N</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_BCCH_CARRIER_SERV	S	R	yes
				Serving cell channel number			
b(3)	GSS			FTD_SB_C1S	S	R,I,O	yes
				C1 value of serving cell, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.			
c(3)	GSS			FTD_SB_RX_LEVEL	B:D	R,I,O	yes
				Rx level in dBm, minus sign not shown if <-100			
d(3)	GSS			FTD_SB_C2S	S	R,I,O	yes
				C2 value of serving cell, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.			
e(3)	GSS			FTD_SB_CARRIER_1_NEIGH	S	R,I,O	yes
				Carrier number of 1. neighbor in decimal			
f(3)	GSS			FTD_SB_C1_1_NEIGH	S	R,I,O	yes
				C1 of 1. neighbor value, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.			
g(3)	GSS			FTD_SB_RX_LEVEL_1_NEIGH	B:D	R,I,O	yes
				Rx level of 1. neighbor in dBm, minus sign not shown if <=-100			
h(3)	GSS			FTD_SB_C2_1_NEIGH	S	R,I,O	yes
				C2 of 1. neighbor value, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.			
i(3)	GSS			FTD_SB_CARRIER_2_NEIGH	S	R,I,O	yes
				Carrier number of 2. neighbor in decimal			
j(3)	GSS			FTD_SB_C1_2_NEIGH	S	R,I,O	yes
				C1 value of 2. neighbor, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.			
k(3)	GSS			FTD_SB_RX_LEVEL_2_NEIGH	B:D	R,I,O	yes
				Rx level of 2. neighbor in dBm, minus sign not shown if <=-100			
l(3)	GSS			FTD_SB_C2_2_NEIGH	S	R,I,O	yes
				C2 value of 2. neighbor, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
m	GSS			FTD_SB_LOCATION_AREA_INFO_1	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
n	GSS			FTD_SB_CELL_PRIORITY_1	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						
o	GSS			FTD_SB_LOCATION_AREA_INFO_2	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
p	GSS			FTD_SB_CELL_PRIORITY_2	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						

2.5 Display 01.04: Information of the 3rd, 4th and 5th neighbor

- 1. row: 3. neighbor information
- 2. row: 4. neighbor information
- 3. row: 5. neighbor information
- 4. row, mn: 3. neighbor information
- 5. row, op: 4. neighbor information
- 6. row, qr: 5. neighbor information

S40 Data display	S40 HELP display
<pre>aaabbbccddd eeefffggghh iiiijjjkklll mn op qr</pre>	<pre>3CH C1 rx C2 4CH C1 rx C2 5CH C1 rx C2 3N 4N 5N</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_CARRIER_3_NEIGH	S	R,I,O	yes
	Carrier number of 3. neighbor in decimal						
b(3)	GSS			FTD_SB_C1_3_NEIGH	S	R,I,O	yes
	C1 value of 3. neighbor, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.						
c(3)	GSS			FTD_SB_RX_LEVEL_3_NEIGH	B:D	R,I,O	yes
	Rx level of 3. neighbor in dBm, minus sign not shown if <=-100						
d(3)	GSS			FTD_SB_C2_3_NEIGH	S	R,I,O	yes
	C2 value of 3. neighbor, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.						
e(3)	GSS			FTD_SB_CARRIER_4_NEIGH	S	R,I,O	yes
	Carrier number of 4. neighbor in decimal						
f(3)	GSS			FTD_SB_C1_4_NEIGH	S	R,I,O	yes
	C1 value of 4. neighbor, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(3)	GSS			FTD_SB_RX_LEVEL_4_NEIGH	B:D	R,I,O	yes
	Rx level of 4. neighbor in dBm, minus sign not shown if <=-100						
h(3)	GSS			FTD_SB_C2_4_NEIGH	S	R,I,O	yes
	C2 value of 4. neighbor, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.						
i(3)	GSS			FTD_SB_CARRIER_5_NEIGH	S	R,I,O	yes
	Carrier number of 5. neighbor in decimal						
j(3)	GSS			FTD_SB_C1_5_NEIGH	S	R,I,O	yes
	C1 value of 5. neighbor, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.						
k(3)	GSS			FTD_SB_RX_LEVEL_5_NEIGH	B:D	R,I,O	yes
	Rx level of 5. neighbor in dBm, minus sign not shown if <=-100						
l(3)	GSS			FTD_SB_C2_5_NEIGH	S	R,I,O	yes
	C2 value of 5. neighbor, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.						
m	GSS			FTD_SB_LOCATION_AREA_INFO_3	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
n	GSS			FTD_SB_CELL_PRIORITY_3	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						
o	GSS			FTD_SB_LOCATION_AREA_INFO_4	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
p	GSS			FTD_SB_CELL_PRIORITY_4	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						
q	GSS			FTD_SB_LOCATION_AREA_INFO_5	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
r	GSS			FTD_SB_CELL_PRIORITY_5	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						

2.6 Display 01.05: Information of the 6th, 7th and 8th neighbor

- 1. row: 6. neighbor information
- 2. row: 7. neighbor information
- 3. row: 8. neighbor information
- 4. row, mn: 6. neighbor information
- 5. row, op: 7. neighbor information
- 6. row, qr: 8. neighbor information

S40 Data display	S40 HELP display
<pre>aaabbbccddd eeefffggghh iiiijjjkklll mn op qr</pre>	<pre>6CH C1 rx C2 7CH C1 rx C2 8CH C1 rx C2 6N 7N 8N</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_CARRIER_6_NEIGH	S	R,I,O	yes
	Carrier number of 6. neighbor in decimal						
b(3)	GSS			FTD_SB_C1_6_NEIGH	S	R,I,O	yes
	C1 value of 6. neighbor, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.						
c(3)	GSS			FTD_SB_RX_LEVEL_6_NEIGH	B:D	R,I,O	yes
	Rx level of 6. neighbor in dBm, minus sign not shown if <=-100						
d(3)	GSS			FTD_SB_C2_6_NEIGH	S	R,I,O	yes
	C2 value of 6. neighbor, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.						
e(3)	GSS			FTD_SB_CARRIER_7_NEIGH	S	R,I,O	yes
	Carrier number of 7. neighbor in decimal						
f(3)	GSS			FTD_SB_C1_7_NEIGH	S	R,I,O	yes
	C1 value of 7. neighbor, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.						
g(3)	GSS			FTD_SB_RX_LEVEL_7_NEIGH	B:D	R,I,O	yes
	Rx level of 7. neighbor in dBm, minus sign not shown if <=-100						
h(3)	GSS			FTD_SB_C2_7_NEIGH	S	R,I,O	yes
	C2 value of 7. neighbor, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.						
i(3)	GSS			FTD_SB_CARRIER_8_NEIGH	S	R,I,O	yes
	Carrier number of 8. neighbor in decimal						
j(3)	GSS			FTD_SB_C1_8_NEIGH	S	R,I,O	yes
	C1 value of 8. neighbor, range is -99 - 999, displayed only in idle mode. ERR means that the value is out of range, e.g. because it was not able to be calculated. Instead of C1 value, letter 'B' and BSIC value will be displayed in active mode.						
k(3)	GSS			FTD_SB_RX_LEVEL_8_NEIGH	B:D	R,I,O	yes
	Rx level of 8. neighbor in dBm, minus sign not shown if <=-100						
l(3)	GSS			FTD_SB_C2_8_NEIGH	S	R,I,O	yes
	C2 value of 8. neighbor, range is -99 - 999. ERR means that the value is out of range, e.g. because it was not able to be calculated.						
m	GSS			FTD_SB_LOCATION_AREA_INFO_6	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
n	GSS			FTD_SB_CELL_PRIORITY_6	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
o	GSS			FTD_SB_LOCATION_AREA_INFO_7	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
p	GSS			FTD_SB_CELL_PRIORITY_7	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						
q	GSS			FTD_SB_LOCATION_AREA_INFO_8	S	R,I,O	yes
	F is shown if cell is in a forbidden location area, otherwise location is empty.						
r	GSS			FTD_SB_CELL_PRIORITY_8	S	R,I,O	yes
	B is Barred, N is normal priority and L is low priority, otherwise location is empty.						

2.7 Display 01.06: Network selection display

This display shows the last registered network country code and network code as well as the codes for four forbidden networks and the first 3 preferred networks. If data isn't available there is shown xxx on the display.

1. row: last registered network - 1st forbidden network
2. row: 1st preferred network - 2nd forbidden network
3. row: 2nd preferred network - 3rd forbidden network
4. row: 3rd preferred network - 4th forbidden network

S40 Data display	S40 HELP display
<pre> aaaaaaeeeeeee bbbbbbf f f f f ccccccggggggg ddddddh h h h h </pre>	<pre> LReg 1_For 1_Pre 2_For 2_Pre 3_For 3_Pre 4_For </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	GSS			FTD_SB_LAST_REG	DW:H	R,I,O	yes
	Last registred network						
b(6)	NETWOR K			FTD_SB_FIRST_PREF	S	R,I,O	yes
	1. preferred network						
c(6)	NETWOR K			FTD_SB_SECOND_PREF	S	R,I,O	yes
	2. preferred network						
d(6)	NETWOR K			FTD_SB_THIRD_PREF	S	R,I,O	yes
	3. preferred network						
e(6)	GSS			FTD_SB_1ST_FORBIDDEN_NW	DW:H	R,I,O	yes
	1. forbidden PLMN in SIM						
f(6)	GSS			FTD_SB_2ND_FORBIDDEN_NW	DW:H	R,I,O	yes
	2. forbidden PLMN in SIM						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(6)	GSS			FTD_SB_3RD_FORBIDDEN_NW	DW:H	R,I,O	yes
	3. forbidden PLMN in SIM						
h(6)	GSS			FTD_SB_4TH_FORBIDDEN_NW	DW:H	R,I,O	yes
	4. forbidden PLMN in SIM						

2.8 Display 01.07: System information bits for serving cell

The following is picked from Phase2+ ETSI GSM 05.08 version 5.4.0, Section 8.4.3 "Additional cell reporting requirements for multiband MS".

For a multi band MS the number of cells, for each frequency band supported, which shall be included in the measurement report is indicated by the parameter, MULTIBAND_REPORTING. The meaning of different values of the parameter is specified as follows:

Value	Meaning
0 (00)	Normal reporting of the six strongest cells, with known and allowed NCC part of BSIC, irrespective of the band used.
1 (01)	The MS shall report the strongest cell, with known and allowed NCC part of BSIC, in each of the frequency bands in the BA list, excluding the frequency band of the serving cell. The remaining positions in the measurement report shall be used for reporting of cells in the band of the serving cell. If there are still remaining positions, these shall be used to report the next strongest identified cells in the other bands irrespective of the band used.
2 (10)	The MS shall report the two strongest cells, with known and allowed NCC part of BSIC, in each of the frequency bands in the BA list, excluding the frequency band of the serving cell. The remaining positions in the measurement report shall be used for reporting of cells in the band of the serving cell. If there are still remaining positions, these shall be used to report the next strongest identified cells in the other bands irrespective of the band used.
3 (11)	The MS shall report the three strongest cells, with known and allowed NCC part of BSIC, in each of the frequency bands in the BA list, excluding the frequency band of the serving cell. The remaining positions in the measurement report shall be used for reporting of cells in the band of the serving cell. If there are still remaining positions, these shall be used to report the next strongest identified cells in the other bands irrespective of the band used.

S40 Data display	S40 HELP display
<pre> E A H C I BR a b c d e fg EC 2Ter MB G h i j k </pre>	<pre> Serving Cell System Info Bits </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_SYSTEM_INFO_BITS1	B:D	R,I,O	yes
				1 is shown if emergency calls are supported, else 0			
b	GSS			FTD_SB_SYSTEM_INFO_BITS2	B:D	R,I,O	yes
				1 is shown if attach-detach-procedure is allowed, else 0			
c	GSS			FTD_SB_SYSTEM_INFO_BITS3	B:D	R,I,O	yes
				1 is shown if half rate channels are supported, else 0			
d	GSS			FTD_SB_SYSTEM_INFO_BITS4	B:D	R,I,O	yes
				1 is shown if C2 values are broadcast, else 0			
e	GSS			FTD_SB_SYSTEM_INFO_BITS5	B:D	R,I,O	yes
				1 is shown if system information 7 and 8 are broadcast, else 0			
f	GSS			FTD_SB_SYSTEM_INFO_BITS6	B:D	R,I,O	yes
				1 is shown if cell broadcast is supported, else 0			
g	GSS			FTD_SB_SYSTEM_INFO_BITS7	B:D	R,I,O	yes
				1 is shown if re-establishment is supported, else 0			
h	GSS			FTD_SB_SYSTEM_INFO_BITS8	B:D	R,I,O	yes
				In idle mode 1 is shown if Early Classmark (ECSC) sending is supported, else 0. In dedicated mode (conversation) X is shown.			
i	GSS			FTD_SB_SYSTEM_INFO_BITS9	B:D	R,I,O	yes
				In idle mode 1 is shown if 2-Ter messages are supported, else 0. In dedicated mode (conversation) X is shown.			
j	GSS			FTD_SB_SYSTEM_INFO_BITS10	B:D	R,I,O	yes
				MultiBand reporting decimal value (0,1,2,3) is shown if supported. This is shown both in idle and dedicated mode.			
k	GSS			FTD_SB_GPRS_SUPPORT	B:D	R,I,O	yes
				1 is shown if GPRS is supported, else 0			

2.9 Display 01.08: Paging repeat period, TMSI, periodic location update, AFC and AGC

S40 Data display	S40 HELP display
<pre>TMSIaaaaaaa T321:bbb/ccc PRP:d ee ff ggggg hhh</pre>	<pre>TMSI(hex) T3212ctr/tim PaRP DSF AGC AFC Ch</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GSS			FTD_SB_TMSI	DW:H	R,I,O	yes
	TMSI value in hex format						
b(3)	GSS			FTD_SB_T3212	B:D	R,I,O	yes
	Current value of T3212 counter (range is 000 - 'ccc', where 1 means 6 min time. So, if this value is 2 less than 'ccc' then next periodic location updating will be made within 2 * 6 min = 12 minutes)						
c(3)	GSS			FTD_SB_T3212_TIMEOUT	B:D	R,I,O	yes
	Timeout value of T3212 counter (range is 000 - 240, where 1 means 6 min time between location updates and 240 means 240 * 6 min = 24 h between location updates. 000 means that periodic location update is not in use.) This value is received from the network.						
d	GSS			FTD_SB_PRP	B:D	R,I,O	yes
	Value of paging repeat period (range is 2 - 9, when paging is in every second multiframe, mobile takes more current than if it were in every 9th multiframe)						
e(2)	GSS			FTD_SB_DOWNLINK_SIGN_FAIL	B:D	R,I,O	yes
	Downlink signaling failure value. If value is negative, 0 is shown. Maximum value is 45. When mobile is on TCH then xx is shown						
f(2)	GSS			FTD_SB_GAIN_ON_TCH	B:D	R,I,O	yes
	Gain value on TCH/SDCCH, range is 0 - 93						
g(5)	GSS			FTD_SB_VCTCXO_AFC_DAC	W:D	R,I,O	yes
	VCTCXO AFC DAC control, range is -1024 - 1023						
h(3)	GSS			FTD_SB_BCCH_CARRIER_SERV	S	R	yes
	Serving cell channel number						

2.10 Display 01.09: Network parameters

LAC and CID may be in hex format in some projects. Or even both decimal and hexadecimal formats may be shown on the same line.

S40 Data display	S40 HELP display
<pre>CC:aaa NCbbb LAC:cccc CH : ddd eeeeeeeeee</pre>	<pre>MCC MNC LocAreaCode ServChannel CellId</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_REG_CC	S	R,I,O	yes
	MCC value in decimal (MCC=Mobile Country Code)						
b(3)	GSS			FTD_SB_REG_MNC	S	R,I,O	yes
	MNC value in decimal (MNC=Mobile Network Code). Three digits are shown only in DCS1900. In other systems only two digits are shown.						
c(5)	GSS			FTD_SB_LAC	W:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	LAC value in decimal (LAC=Location Area Code)						
d(3)	GSS			FTD_SB_BCCH_CARRIER_SERV	S	R	yes
	Serving cell channel number						
e(10)	GSS			FTD_SB_CELL_ID	DW:D	R,I,O	yes
	Cell Identifier in decimal format. Data format is DW:D from GSS ISI header version 2.1 onwards. Older GSS ISI headers handle this as W:D						

2.11 Display 01.10: Cipherng, hopping DTX status and IMSI

These values are updated only on the TCH.

S40 Data display	S40 HELP display
<pre>CIPHER :aaa HOPPING:bbb DTX : ccc IMSI : ddd</pre>	<pre>CipherValue HoppingValue DTXValue IMSIAttach</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_CIPH	S	R,I,O	yes
	Cipherng value, OFF/A51/A52						
b(3)	GSS			FTD_SB_HOPP_STATUS	S	R,I,O	yes
	Hopping value, ON/OFF						
c(3)	GSS			FTD_SB_DTX_VALUE	S	R,I,O	yes
	DTX value ON/OFF						
d(3)	GSS			FTD_SB_IMSI_ATT	S	R,I,O	yes
	IMSI attach ON : IMSI attach on OFF : IMSI attach off						

2.12 Display 01.11: Uplink DTX switching display

With this display it is possible to change MS to use DTX or not, if BS allows MS to decide it. This display must be activated from MENU to change DTX state. When MENU is not active and the user is scrolling field test displays with NEXT and PREVIOUS, the DTX state will not change.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa DTX(DEF) :bbb DTX(BS) :ccc</pre>	<pre>DTXMode DefaultDXSta DTXValFromBS</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	GSS			FTD_SB_DTX_STATUS	S	R,I,O	no
	Status of switched mode. DTX:ON : MS uses DTX DTX:OFF : MS does not use DTX DTX:DEF : MS use default state of DTX. Defined in MS_PAR.H NOTALLOWED : BS does not allow MS to decide if it uses DTX or not.						
b(3)	GSS			FTD_SB_DTX_DEF	S	R,I,O	no
	Default state of DTX. Defined in MS_PAR.H. The value is either ON or OFF						
c(3)	GSS			FTD_SB_DTX_FROM_BS	S	R,I,O	no
	Is DTX value from BS MAY : BS allows MS to decide if it uses dtx or not on uplink. USE : BS controls MS to use dtx (on uplink) NOT : BS controls MS not to use dtx (on uplink)						
EXE	GSS			FTD_SB_DTX_STATUS_CHANGE	B:D	R,I,O	yes
	Toggle DTX status.						

2.13 Display 01.12: Storing and removing BTS_TEST carrier

This display is used to change BTS_TEST carrier on permanent memory. If BTS_TEST carrier is stored on permanent memory each time the mobile sends a search list it uses only the carrier number stored on Mobile Station permanent memory. Also the neighbor information from system information messages is ignored. If the BTS_TEST carrier is not stored, then the mobile behaves normally (i.e. does the neighbor measurements according the GSM specifications).

Mobile is searching only one frequency. Neighbor measurements are not done.

Mobile is behaving normally. Neighbor measurements are done.

To store BTS test carrier, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 0112 (TEST GROUP;TEST DISPLAY) to the query prompt.
5. Test input prompt will be shown on the display, enter the channel number in display.
6. Confirm with the Ok button.
7. Switch power off and on.
8. If activation succeeded, there is text "BTS TEST LOCKED, CH:" in display 12 of group 1.

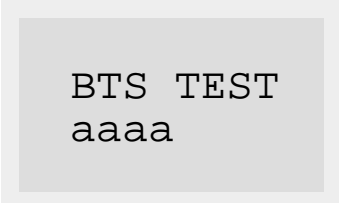
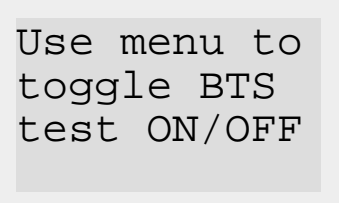
To deactivate BTS tests, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 0112 (TEST GROUP;TEST DISPLAY) to the query prompt.
5. Test input prompt will be shown on the display, enter the 3333 as a channel number in display

6. Confirm with the Ok button.
7. Switch power off and on.
8. If deactivation succeeded, there is text "BTS TEST OFF" in display 12 of group 1.

The legal carrier numbers:

Band	Carrier Numbers
GSM450	259-293
GSM480	306-340
GSM850	128-251
GSM900	1-124
GSM1800	512-885
GSM1900	512-810
E-GSM	0, 975-1023
R-GSM	955-974

S40 Data display	S40 HELP display
	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	NETWOR K			FTD_SB_BTS_STATUS	S	R,I,O	no
	BTS test status						
INPUT(4)	NETWOR K			FTD_SB_BTS_TEST	DW:D	R,I,O	yes
	BTS test						

2.14 Display 01.13: Toggle Cell Barred Status

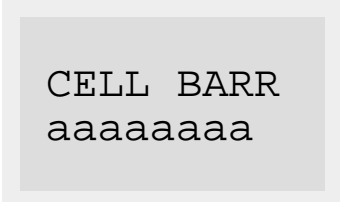
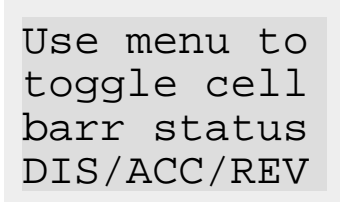
This test is meant to be used when some cells are tested prior taking them into commercial use. By setting the barring on in the base station normal GSM phones will not try to register these barred cells. By selecting cell barring reversed, the MS will only use the cells to be tested. However, if at the same time it is wanted that MS will be capable to use normal network cell barring ignored can be set. This display will show the cell barring mode.

NOTE! If a cell has been selected before barring state is changed the selected cell may have different barring state than what the display shows. After reselection the cell barring state is working for sure.

To change Cell Barring status, perform following steps:

1. Press the Menu button.

2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in executive mode by entering 0113 (TEST GROUP;TEST DISPLAY) to the query prompt.
5. Confirm with the Ok button.
6. If activation succeeded, there is text "CELL BARR" in display 13 of group 1.

S40 Data display	S40 HELP display
	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GSS			FTD_SB_CELL_BARR_IND_STATUS	S	R,I,O	yes
Cell Barring status							
EXE	GSS			FTD_SB_CELL_BARR_IND_STATUS_CHANGE	B:D	R,I,O	yes
Toggle Cell Barring status							

2.15 Display 01.14: Modify last used band

This display is applicable only in phones having both European and American frequencies.

With this display it is possible to manipulate the "last used band". In multi-band products this parameter is used at startup to decide which band shall be searched first. In most cases the last used band is the most promising band to find networks in. Nevertheless, for testing purposes it is helpful to have influence on this decision.

If at startup no "last used band" is found in the memory, the "Default" setting (Europe or America) will be effective.

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 01.14 (TEST GROUP;TEST DISPLAY) to the query prompt.
5. Test input prompt will activate, enter the desired band code (see the table below) in display.
6. Confirm with the Ok button.
7. REMOVE BATTERY or POWER SUPPLY

NOTE: In normal operation the last used band is saved to the memory at power-down. If this value is written via Test Display 01.14, the phone MUST NOT be powered off normally afterwards, because then the user-set value will be overwritten. The power supply has to be interrupted instead.

Band codes:

Band Code	Meaning
-----------	---------

9	GSM900
18	GSM1800
19	GSM1900
Other	Delete stored value

S40 Data display	S40 HELP display
<pre> LAST USED BAND aa </pre>	<pre> Use menu to write first band to be searched </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSS			FTD_SB_LAST_USED_BAND_READ	B:D	R,I,O	yes
Last used band, see the table below							
INPUT(4)	GSS			FTD_SB_LAST_USED_BAND_SET	DW:D	R,I,O	yes
Write value to memory							

2.16 Display 01.15: Equivalent PLMN display

This display shows the equivalent PLMN list. If data isn't available xxx is shown on the display.

- 1. row: 1st equivalent PLMN - 5th equivalent PLMN
- 2. row: 2nd equivalent PLMN - 6th equivalent PLMN
- 3. row: 3rd equivalent PLMN - 7th equivalent PLMN
- 4. row: 4th equivalent PLMN - 8th equivalent PLMN

S40 Data display	S40 HELP display
<pre> aaaaaaeeeeeee bbbbbbff f f f f f ccccccggggggg ddddddh h h h h h </pre>	<pre> 1PLMN 5PLMN 2PLMN 6PLMN 3PLMN 7PLMN 4PLMN 8PLMN </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	GSS			FTD_SB_1_EQUIV_PLMN	DW:H	R,I,O	yes
Equivalent PLMN							
b(6)	GSS			FTD_SB_2_EQUIV_PLMN	DW:H	R,I,O	yes
Equivalent PLMN							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(6)	GSS			FTD_SB_3_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
d(6)	GSS			FTD_SB_4_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
e(6)	GSS			FTD_SB_5_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
f(6)	GSS			FTD_SB_6_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
g(6)	GSS			FTD_SB_7_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
h(6)	GSS			FTD_SB_8_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						

2.17 Display 01.16: Equivalent PLMN display

This display shows the equivalent PLMN list. If data isn't available xxx is shown on the display.

- 1. row: 9th equivalent PLMN - 13th equivalent PLMN
- 2. row: 10th equivalent PLMN - 14th equivalent PLMN
- 3. row: 11th equivalent PLMN - 15th equivalent PLMN
- 4. row: 12th equivalent PLMN - 16th equivalent PLMN

S40 Data display	S40 HELP display
<pre> aaaaaaaaeeeeee bbbbbbbf f f f f f ccccccggggggg ddddddh h h h h h </pre>	<pre> 9PLMN 13PLMN 10PLMN14PLMN 11PLMN15PLMN 12PLMN16PLMN </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	GSS			FTD_SB_9_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
b(6)	GSS			FTD_SB_10_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
c(6)	GSS			FTD_SB_11_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
d(6)	GSS			FTD_SB_12_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
e(6)	GSS			FTD_SB_13_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
f(6)	GSS			FTD_SB_14_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						
g(6)	GSS			FTD_SB_15_EQUIV_PLMN	DW:H	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Equivalent PLMN						
h(6)	GSS			FTD_SB_16_EQUIV_PLMN	DW:H	R,I,O	yes
	Equivalent PLMN						

3 Group 02: GSM Registration and Mobility Displays

3.1 Display 02.01: Reset Registration and Mobility counters

With this display all timers listed on the displays in this group can be reset.

S40 Data display	S40 HELP display
<pre>RESET REG & MOB COUNTERS</pre>	<pre>Use menu to reset reg & mob counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	GSS			FTD_SB_RESET_ HANDOVERS	B:D	R	yes
Reset handover counters.							

3.2 Display 02.02: Neighbor Measurement Counter Display

Counter values are shown in hexadecimal form. On poweroff the values of the counter displays are stored onto the permanent memory, where they will be read during power on. To initialize the counters to zero, select Display 02.01: Reset Registration and Mobility counters. Counters are automatically reset to zero when they exceed their maximum value.

S40 Data display	S40 HELP display
<pre>PSW : aaaa SYNCR :bbbb BCCH :cccc BCCHE :dddd</pre>	<pre>NeghbrPSWCtr SyncMeasCntr BCCHMeasAtm BCCHExtMeAtm</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_NEIGH_PSW_ATT	W:H	R	yes
Counter for neighbor PSW measurement attempts (In R99 includes also RTD assisted attempts)							
b(4)	GSS			FTD_SB_NEIGH_SYNC_ATT	W:H	R	yes
Counter for neighbor synchronization measurement attempts							
c(4)	GSS			FTD_SB_NEIGH_BCCH_ATT	W:H	R	yes
Counter for neighbor BCCH measurement attempts							
d(4)	GSS			FTD_SB_NEIGH_BCCH_EXT_ ATT	W:H	R	yes
Counter for neighbor BCCH Ext measurement attempts							

3.3 Display 02.03: Search and reselection counter display

On power off the values of the counter displays are stored onto the permanent memory, where they will be read during power on. To initialize the counters to zero, select Display 02.01: Reset Registration and Mobility counters. Counters are automatically reset to zero when they exceed their maximum value

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd eeeee fffff ggggg hhhhh</pre>	<pre>NOPswGSM DCS Sync GSM DCS reselG>G D>D reselG>D D>G</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	GSS			FTD_SB_NO_PSW_FOUND_GSM	DW:D	R	yes
GSM900 counter for MDI_NO_PSW_FOUND message received from DSP in decimal form (max 99999).							
b(5)	GSS			FTD_SB_NO_PSW_FOUND_DCS	DW:D	R	yes
GSM1800 counter for MDI_NO_PSW_FOUND message received from DSP in decimal form (max 99999).							
c(5)	GSS			FTD_SB_SYNC_GSM	DW:D	R	yes
GSM900 counter for synchronization measurement attempts in decimal form. If counter value is over 99999 then five x are shown.							
d(5)	GSS			FTD_SB_SYNC_DCS	DW:D	R	yes
GSM1800 counter for synchronization measurement attempts in decimal form. If counter value is over 99999 then five x are shown.							
e(5)	GSS			FTD_SB_RESEL_GSM_GSM	DW:D	R	yes
Counter for GSM900->GSM900 cell reselections in decimal form (max 99999).							
f(5)	GSS			FTD_SB_RESEL_DCS_DCS	DW:D	R	yes
Counter for GSM1800->GSM1800 cell reselections in decimal form (max 99999).							
g(5)	GSS			FTD_SB_RESEL_GSM_DCS	DW:D	R	yes
Counter for GSM900->GSM1800 cell reselections in decimal form (max 99999).							
h(5)	GSS			FTD_SB_RESEL_DCS_GSM	DW:D	R	yes
Counter for GSM1800->GSM900 cell reselections in decimal form (max 99999).							

3.4 Display 02.04: Location update attempts counters

On poweroff the values of the counter displays are stored onto the permanent memory, where they will be read during power on. To initialize the counters to zero, select Display 02.01: Reset Registration and Mobility counters. Counters are automatically reset to zero when they exceed their maximum value.

S40 Data display	S40 HELP display
<pre>aa ccc ddd bb eee fff</pre>	<pre>Nfai NL NLOK PFai PL PLOK Loc update counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSS			FTD_SB_LAST_NORMAL_LOC_UP_REASON	B:D	R	yes
				Reason of last normal location update failure			
b(2)	GSS			FTD_SB_LAST_IMSI_ATT_FAIL_REASON	B:D	R	yes
				Reason of last periodic or IMSI attach location update failure			
c(3)	GSS			FTD_SB_NORMAL_LOC_UP_COUNT	W:D	R	yes
				Count of normal location update attempts			
d(3)	GSS			FTD_SB_SUCC_LOC_UP_COUNT	W:D	R	yes
				Count of succeeded normal location updates			
e(3)	GSS			FTD_SB_LOC_UP_COUNT_IMSI	W:D	R	yes
				Count of all periodic and IMSI attach location update attempts			
f(3)	GSS			FTD_SB_SUCC_LOC_UP_COUNT_IMSI	W:D	R	yes
				Count of succeeded periodic and IMSI attach location updates			

3.5 Display 02.05: Handover display, INTER CELL

Counters will stop when they reach their maximum. To initialize the counters to zero Display 02.01: Reset Registration and Mobility counters.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeefffggghhh iiiijjjkkklll</pre>	<pre>G>GInterD>D G>D OK D>G InterHoFail BackToPrev</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_HO_GSM_GSM	W:D	R	yes
				Counter of successful handovers (max 9999) from GSM900 to GSM900			
b(4)	GSS			FTD_SB_HO_DCS_DCS	W:D	R	yes
				Counter of successful handovers (max 9999) from GSM1800 to GSM1800			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(4)	GSS			FTD_SB_HO_GSM_DCS	W:D	R	yes
	Counter of successful handovers (max 9999) from GSM900 to GSM1800						
d(4)	GSS			FTD_SB_HO_DCS_GSM	W:D	R	yes
	Counter of successful handovers (max 9999) from GSM1800 to GSM900						
e(3)	GSS			FTD_SB_FAILED_HO_GSM_GSM	W:D	R	yes
	Counter for failed handovers (max 999) from GSM900 to GSM900						
f(3)	GSS			FTD_SB_FAILED_HO_DCS_DCS	W:D	R	yes
	Counter for failed handovers (max 999) from GSM1800 to GSM1800						
g(3)	GSS			FTD_SB_FAILED_HO_GSM_DCS	W:D	R	yes
	Counter for failed handovers (max 999) from GSM900 to GSM1800						
h(3)	GSS			FTD_SB_FAILED_HO_DCS_GSM	W:D	R	yes
	Counter for failed handovers (max 999) from GSM1800 to GSM900						
i(3)	GSS			FTD_SB_BACK_TO_PREV_GSM_GSM	W:D	R	yes
	Counter of successful back to previous channel attempts (max 999) from GSM900 to GSM900						
j(3)	GSS			FTD_SB_BACK_TO_PREV_DCS_DCS	W:D	R	yes
	Counter of successful back to previous channel attempts (max 999) from GSM1800 to GSM1800						
k(3)	GSS			FTD_SB_BACK_TO_PREV_GSM_DCS	W:D	R	yes
	Counter of successful back to previous channel attempts (max 999) from GSM900 to GSM1800						
l(3)	GSS			FTD_SB_BACK_TO_PREV_DCS_GSM	W:D	R	yes
	Counter of successful back to previous channel attempts (max 999) from GSM1800 to GSM900						

3.6 Display 02.06: Handover display, INTRA CELL

Counters will stop when they reach their maximum. To initialize the counters to zero, select Display 02.01: Reset Registration and Mobility counters.

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd eeefffggghhh iiiijjkkkl111 </pre>	<pre> G>G IntraD>D G>D OK D>G IntraHoFail BackToPrev </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_INTRA_HO_GSM_GSM	W:D	R	yes
	Counter of successful INTRA CELL handovers (max 9999) from GSM900 to GSM900						
b(4)	GSS			FTD_SB_INTRA_HO_DCS_DCS	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Counter of successful INTRA CELL handovers (max 9999) from GSM1800 to GSM1800							
c(4)	GSS			FTD_SB_INTRA_HO_GSM_DCS	W:D	R	yes
Counter of successful INTRA CELL handovers (max 9999) from GSM900 to GSM1800							
d(4)	GSS			FTD_SB_INTRA_HO_DCS_GSM	W:D	R	yes
Counter of successful INTRA CELL handovers (max 9999) from GSM1800 to GSM900							
e(3)	GSS			FTD_SB_FAILED_INTRA_HO_GSM_GSM	W:D	R	yes
Counter of failed INTRA CELL handovers (max 999) from GSM900 to GSM900							
f(3)	GSS			FTD_SB_FAILED_INTRA_HO_DCS_DCS	W:D	R	yes
Counter of failed INTRA CELL handovers (max 999) from GSM1800 to GSM1800							
g(3)	GSS			FTD_SB_FAILED_INTRA_HO_GSM_DCS	W:D	R	yes
Counter of failed INTRA CELL handovers (max 999) from GSM900 to GSM1800							
h(3)	GSS			FTD_SB_FAILED_INTRA_HO_DCS_GSM	W:D	R	yes
Counter of failed INTRA CELL handovers (max 999) from GSM1800 to GSM900							
i(3)	GSS			FTD_SB_INTRA_BACK_TO_PREV_GSM_GSM	W:D	R	yes
Counter of successful back to previous normal INTRA CELL channel attempts (max 999) from GSM900 to GSM900							
j(3)	GSS			FTD_SB_INTRA_BACK_TO_PREV_DCS_DCS	W:D	R	yes
Counter of successful back to previous normal INTRA CELL channel attempts (max 999) from GSM1800 to GSM1800							
k(3)	GSS			FTD_SB_INTRA_BACK_TO_PREV_GSM_DCS	W:D	R	yes
Counter of successful back to previous normal INTRA CELL channel attempts (max 999) from GSM900 to GSM1800							
l(3)	GSS			FTD_SB_INTRA_BACK_TO_PREV_DCS_GSM	W:D	R	yes
Counter of successful back to previous normal INTRA CELL channel attempts (max 999) from GSM1800 to GSM900							

3.7 Display 02.07: L2 display

Counters will stop when they reach their maximum. To initialize the counters to zero Display 02.01: Reset Registration and Mobility counters.

S40 Data display	S40 HELP display
<pre>T200MS: aaaa T200BS: bbbb T200MS: cccc T200BS: dddd</pre>	<pre>T200 MS GSM T200 BS GSM T200 MS DCS T200 BS DCS</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_T200_EXP_MS_GSM	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	GSM900: Counts how many times T200 in MS has expired and therefore L2 transmission has been repeated.						
b(4)	GSS			FTD_SB_T200_EXP_BS_GSM	W:D	R	yes
	GSM900: Counts how many times T200 in BS (network) has expired and therefore L2 transmission has been repeated						
c(4)	GSS			FTD_SB_T200_EXP_MS_DCS	W:D	R	yes
	GSM1800: Counts how many times T200 in MS has expired and therefore L2 transmission has been repeated (for dualband phones).						
d(4)	GSS			FTD_SB_T200_EXP_BS_DCS	W:D	R	yes
	GSM1800: Counts how many times T200 in BS (network) has expired and therefore L2 transmission has been repeated (for dualband phones)						

4 Group 03: SmartCard Field Test Displays

4.1 Display 03.01: SmartCard - Software / Hardware Versions

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb</pre>	<pre>SRV SIM Ver HAL SIM Ver</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	SIM			FTD_SC_SIM_SW_VERSION	S	R	
A 12 character string showing the current ATK/SIM/APDU server version number. i.e. 07w17							
b(12)	SIM			FTD_SC_HAL_SW_VERSION	S	R	
A 12 character string showing the current HAL SIM HW Driver Version number. i.e. 07w17.1							

4.2 Display 03.02: SmartCard - Service Table (ST)

S40 Data display	S40 HELP display
<pre>aaaaaaa bbbbbbb ccccccc</pre>	<pre>ST byte 4-1 ST byte 8-5 ST byte 12-9</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	SIM			FTD_SC_ST_BYTE_4_1	DW:H	R,I,O	
An uint32 (hex) value showing byte 4-1 of the service table							
b(8)	SIM			FTD_SC_ST_BYTE_8_5	DW:H	R,I,O	
An uint32 (hex) value showing byte 8-5 of the service table							
c(8)	SIM			FTD_SC_ST_BYTE_12_9	DW:H	R,I,O	
An uint32 (hex) value showing byte 12-9 of the service table							

4.3 Display 03.03: SmartCard – Terminal Profile (TP) Part 1

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>TP byte 4-1 TP byte 8-5 TP byte 12-9 TP byte16-13</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	SIM			FTD_SC_BYTE_4_1	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 4-1 of the Terminal Profile						
b(8)	SIM			FTD_SC_BYTE_8_5	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 8-5 of the Terminal Profile						
c(8)	SIM			FTD_SC_BYTE_12_9	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 12-9 of the Terminal Profile						
d(8)	SIM			FTD_SC_BYTE_16-13	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 16-13 of the Terminal Profile						

4.4 Display 03.04: SmartCard – Terminal Profile (TP) Part 2

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>TP byte20-17 TP byte24-21 TP byte28-25 TP byte32-29</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	SIM			FTD_SC_BYTE_20_17	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 20-17 of the Terminal Profile						
b(8)	SIM			FTD_SC_BYTE_24_21	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 24-21 of the Terminal Profile						
c(8)	SIM			FTD_SC_BYTE_28_25	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 28-25 of the Terminal Profile						
d(8)	SIM			FTD_SC_BYTE_32_29	DW:H	R,I,O	
	An uint32 (HEX) value showing byte 32-29 of the Terminal Profile						

4.5 Display 03.05: SmartCard – ICC id and IMSI number

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa bbbbbbbbbb cccccccc dddddddd</pre>	<pre>ICC_id_10_6 ICC_id_5_1 IMSI_8_5 IMSI_4_1</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SIM			FTD_SC_ICC_ID_10_6	S	R,I,O	
	A 10 character string showing digit 20-11 of the ICC id						
b(10)	SIM			FTD_SC_ICC_ID_5_1	S	R,I,O	
	A 10 character string showing digit 10-1 of the ICC id						
c(8)	SIM			FTD_SC_IMSI_8_5	S	R,I,O	
	An 8 character string showing digit 18-9 of the IMSI						
d(8)	SIM			FTD_SC_IMSI_4_1	S	R,I,O	
	An 8 character string showing digit 8-1 of the IMSI						

4.6 Display 03.06: SmartCard – Feature status part 1

S40 Data display	S40 HELP display
<pre>aaaaaa bbb cccccc ddd eeeeee fff gggggg hhh</pre>	<pre>Fea 1 Sta Fea 2 Sta Fea 3 Sta Fea 4 Sta</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	SIM			FTD_SC_FEA_1	S	R	
	A 6 character string showing the feature name						
b(3)	SIM			FTD_SC_FEA_1_STATUS	S	R	
	A 3 character string showing the status of the feature						
c(6)	SIM			FTD_SC_FEA_2	S	R	
	A 6 character string showing the feature name						
d(3)	SIM			FTD_SC_FEA_2_STATUS	S	R	
	A 3 character string showing the status of the feature						
e(6)	SIM			FTD_SC_FEA_3	S	R	
	A 6 character string showing the feature name						
f(3)	SIM			FTD_SC_FEA_3_STATUS	S	R	

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	A 3 character string showing the status of the feature						
g(6)	SIM			FTD_SC_FEA_4	S	R	
	A 6 character string showing the feature name						
h(3)	SIM			FTD_SC_FEA_4_STATUS	S	R	
	A 3 character string showing the status of the feature						

4.7 Display 03.07: SmartCard – Feature status part 2

S40 Data display	S40 HELP display
<pre> aaaaaa bbb cccccc ddd eeeeee fff gggggg hhh </pre>	<pre> Fea 5 Sta Fea 6 Sta Fea 7 Sta Fea 8 Sta </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	SIM			FTD_SC_FEA_5	S	R	
	A 6 character string showing the feature name						
b(3)	SIM			FTD_SC_FEA_5_STATUS	S	R	
	A 3 character string showing the status of the feature						
c(6)	SIM			FTD_SC_FEA_6	S	R	
	A 6 character string showing the feature name						
d(3)	SIM			FTD_SC_FEA_6_STATUS	S	R	
	A 3 character string showing the status of the feature						
e(6)	SIM			FTD_SC_FEA_7	S	R	
	A 6 character string showing the feature name						
f(3)	SIM			FTD_SC_FEA_7_STATUS	S	R	
	A 3 character string showing the status of the feature						
g(6)	SIM			FTD_SC_FEA_8	S	R	
	A 6 character string showing the feature name						
h(3)	SIM			FTD_SC_FEA_8_STATUS	S	R	
	A 3 character string showing the status of the feature						

4.8 Display 03.08: SmartCard – Applications part 1

S40 Data display	S40 HELP display
<pre> aaaaaa bb cc dddddd ee ff gggggg hh ii jjjjjj kk ll </pre>	<pre> App 1 Num St App 2 Num St App 3 Num St App 4 Num St </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	SIM			FTD_SC_APP_1	S	R	
	A 6 character string showing the application name						
b(2)	SIM			FTD_SC_APP_1_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
c(2)	SIM			FTD_SC_APP_1_STATUS	B:H	R	
	An uint8 (Hex) value showing the state of the application.						
d(6)	SIM			FTD_SC_APP_2	S	R	
	A 6 character string showing the application name						
e(2)	SIM			FTD_SC_APP_2_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
f(2)	SIM			FTD_SC_APP_2_STATUS	B:H	R	
	An uint8 (Hex) value showing the state of the application						
g(6)	SIM			FTD_SC_APP_3	S	R	
	A 6 character string showing the application name						
h(2)	SIM			FTD_SC_APP_3_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
i(2)	SIM			FTD_SC_APP_3_STATUS	B:H	R	
	An uint8 (Hex) value showing the state of the application.						
j(6)	SIM			FTD_SC_APP_4	S	R	
	A 6 character string showing the application name						
k(2)	SIM			FTD_SC_APP_4_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
l(2)	SIM			FTD_SC_APP_4_STATUS	B:H	R	
	An uint8 (Hex) value showing the state of the application						

4.9 Display 03.09: SmartCard – Applications part 2

S40 Data display	S40 HELP display
<pre> aaaaaa bbc dddddd eef gggggg hhi jjjjjj kkl </pre>	<pre> App 5 Num S App 6 Num S App 7 Num S App 8 Num S </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	SIM			FTD_SC_APP_5	S	R	
	A 6 character string showing the application name						
b(2)	SIM			FTD_SC_APP_5_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
c	SIM			FTD_SC_APP_5_STATUS	S	R	

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	An uint8 (Hex) value showing the state of the application.						
d(6)	SIM			FTD_SC_APP_6	S	R	
	A 6 character string showing the application name						
e(2)	SIM			FTD_SC_APP_6_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
f	SIM			FTD_SC_APP_6_STATUS	S	R	
	An uint8 (Hex) value showing the state of the application						
g(6)	SIM			FTD_SC_APP_7	S	R	
	A 6 character string showing the application name						
h(2)	SIM			FTD_SC_APP_7_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
i	SIM			FTD_SC_APP_7_STATUS	S	R	
	An uint8 (Hex) value showing the state of the application.						
j(6)	SIM			FTD_SC_APP_8	S	R	
	A 6 character string showing the application name						
k(2)	SIM			FTD_SC_APP_8_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
l	SIM			FTD_SC_APP_8_STATUS	S	R	
	An uint8 (Hex) value showing the state of the application						

4.10 Display 03.10: SmartCard – Applications part 3

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbc dddddd eef </pre>	<pre> App 9 Num S App 10 Num S </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	SIM			FTD_SC_APP_9	S	R	
	A 6 character string showing the application name						
b(2)	SIM			FTD_SC_APP_9_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
c	SIM			FTD_SC_APP_9_STATUS	S	R	
	An uint8 (Hex) value showing the state of the application.						
d(6)	SIM			FTD_SC_APP_10	S	R	
	A 6 character string showing the application name						
e(2)	SIM			FTD_SC_APP_10_NUMBER	B:D	R	
	An uint8 (Hex) value showing the application number						
f	SIM			FTD_SC_APP_10_STATUS	S	R	
	An uint8 (Hex) value showing the state of the application						

4.11 Display 03.11: SmartCard – Applications part 4

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bb c</pre>	<pre>Sim serv sta Refresh typ. and timeout</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	SIM			FTD_SC_SIM_STATE	S	R	
	A 12 character string showing the last six SIM server states, each state is shown as a two digit hex number.						
b(2)	SIM			FTD_SC_APP_9_NUMBER	B:D	R	
	An uint8 (Hex) value showing the latest refresh type.						
c	SIM			FTD_SC_APP_9_STATUS	S	R	
	A 1 character string showing if the latest refresh timed out , i.e. Y or N.						

4.12 Display 03.12: SmartCard – Latest four Proactive commands.

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>Proact. L Proact. L-1. Proact. L-2 Proact. L-3</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	SIM			FTD_SC_PROACTIVE_COMMAND	S	R,i,0	
	A 8 character string showing the name of the latest proactive command						
b(8)	SIM			FTD_SC_PROACTIVE_COMMAND_1	S	R,I,0	
	A 8 character string showing the name of the second latest proactive command.						
c(8)	SIM			FTD_SC_PROACTIVE_COMMAND_2	S	R,I,0	
	A 8 character string showing the name of the third latest proactive command						
d(8)	SIM			FTD_SC_PROACTIVE_COMMAND_3	S	R,I,0	
	A 8 character string showing the name of the latest proactive command						

4.13 Display 03.13: SmartCard – Common informations.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc d eeeee f g hhhhh ii jj</pre>	<pre>mode Voltage BRR Prot clksle pin12 downgr puk12</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	SIM			FTD_SC_mode	S	R,I,O	
A 4 character string showing if the ICC uses SIM or USIM mode							
b(4)	SIM			FTD_SC_VOLTAGE	S	R,I,O	
A 4 character string showing if the selected voltage, i.e. 1.2V, 1.8V or 3V							
c(4)	SIM			FTD_SC_BRR	W:D	R,I,O	
An uint16 (decimal) value showing the BRR, i.e. number of clocks/etu							
d	SIM			FTD_SC_PROTOCOL	B:D	R,I,O	
An uint8 (decimal) value showing selected protocol, i.e. T=0 or T=1							
e(5)	SIM			FTD_SC_CLOCK_STOP_LEVEL	S	R,I,O	
A 5 character string showing the clock stop level, i.e. Low, High, NoPre							
f	SIM			FTD_SC_PIN1_LEFT	B:D	R	
An uint8 showing how many attempts left for PIN1.							
g	SIM			FTD_SC_PIN2_LEFT	B:D	R	
An uint8 showing how many attempts left for PIN2.							
h(5)	SIM			FTD_SC_DOWNGRADE	S	R	
A 5 character string showing if any downgrade has occurred, i.e. clock, voltage, frequency, etc..							
i(2)	SIM			FTD_SC_PUK1_LEFT	B:D	R	
An uint8 showing how many attempts left for PUN1.							
j(2)	SIM			FTD_SC_PUK2_LEFT	B:D	R	
An uint8 showing how many attempts left for PUN2.							

4.14 Display 03.14: SmartCard – ATR

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa bbbbbbbbbb cccccccccc dd</pre>	<pre>ATR LenghtOfATR</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SIM			FTD_SC_ATR_1	S	R,I,O	
	A 10 character string showing the byte 1-5 of the ATR.						
b(10)	SIM			FTD_SC_ATR_2	S	R,I,O	
	A 10 character string showing the byte 6-10 of the ATR.						
c(10)	SIM			FTD_SC_ATR_3	S	R,I,O	
	A 10 character string showing the byte 11-15 of the ATR.						
d(2)	SIM			FTD_SC_ATR_LENGTH	B:H	R,I,O	
	Length of the ATR without the historical bytes.						

4.15 Display 03.15: SmartCard – ATR historical bytes

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa bbbbbbbbbb cccccccccc dd</pre>	<pre>Historical bytes LengthOfHis</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SIM			FTD_SC_ATR_HIS_1	S	R,I,O	
	A 10 character string showing byte 1-5 of the historical bytes..						
b(10)	SIM			FTD_SC_ATR_HIS_2	S	R,I,O	
	A 10 character string showing byte 6-10 of the historical bytes..						
c(10)	SIM			FTD_SC_ATR_HIS_3	S	R,I,O	
	A 10 character string showing byte 11-15 of the historical bytes.						
d(2)	SIM			FTD_SC_ATR_HIS_LENGTH	B:H	R,I,O	
	Length of the historical bytes						

4.16 Display 03.16: SmartCard – Counters

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb cccc ddddd eeee fffff ggggg hhhhh</pre>	<pre>CommErr Timeout BSI/Card APDUretrans</pre>

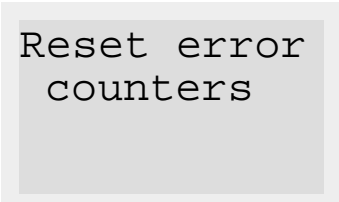
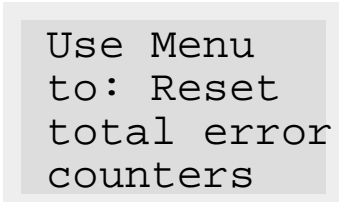
Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	SIM			FTD_SC_COMM_ERROR_COUNT_TOTAL	W:D	R	
				An uint16 (decimal) value showing the total number of communication errors, i.e. parity errors, retransmissions or frame errors.			
b(5)	SIM			FTD_SC_COMM_ERROR_COUNT	W:D	R	
				An uint16 (decimal) value showing the number of communication errors, i.e. parity errors, retransmissions or Frame errors, from last power up of the phone.			
c(5)	SIM			FTD_SC_TIMEOUT_COUNT_TOTAL	W:D	R	
				An uint16 (decimal) value showing the total number of timeouts.			
d(5)	SIM			FTD_SC_TIMEOUT_COUNT	W:D	R	
				An uint16 (decimal) value showing the number of timeouts from last power up of the phone			
e(5)	SIM			FTD_SC_BSI_CARD_DETECT_COUNT_TOTAL	W:D	R	
				An uint16 (decimal) value showing the total number of BSI/Card detect interrupts			
f(5)	SIM			FTD_SC_BSI_CARD_DETECT_COUNT	W:D	R	
				An uint16 (decimal) value showing the number of BSI/Card detect interrupts from last power up of the phone			
g(5)	SIM			FTD_SC_RETRANS_COUNT_TOTAL	W:D	R	
				An uint16 (decimal) value showing the total number of retransmitted APDU commands			
h(5)	SIM			FTD_SC_RETRANS_COUNT	W:D	R	
				An uint16 (decimal) value showing the number of retransmitted APDU commands from last power up of the phone			

4.17 Display 03.17: SmartCard – Reset Counters

To select a discovered device:

1. Press the Menu button
2. Scroll in the main menu loop to field test display item
3. Press the Select button
4. Select this display in executive mode by entering 0317
5. Test input prompt will be shown on the display, enter "1" to reset all counters
6. Press OK to confirm

S40 Data display	S40 HELP display
	


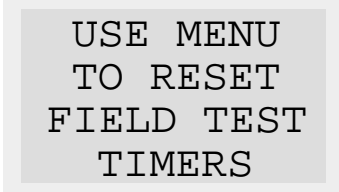
Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	SIM			FTD_SC_RESET_ERR_COUNT	B:D	R	
Reset error counters.							

5 Group 04: GSM Test Timers SMS and Call Counter Displays

5.1 Display 04.01: Reset test timers to zero and restart them

With this display all timers listed on the Display 04.02. can be reset.

S40 Data display	S40 HELP display
	

Fields


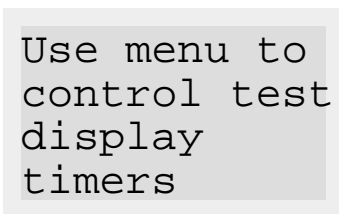
Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	GSS			FTD_SB_RESET_TEST_TIMERS	B:D	R	yes
Reset and restart Test timers							

5.2 Display 04.02: Enable or disable test timers

This display will only use to start or stop the timers. When looking the status of timers user should use the Display 04.03: Test timer display

On power off the values of the timer displays are stored onto the permanent memory, where they will be read during power on. To initialize the counters to zero, use Display 04.01: Reset test timers to zero and restart them.

Also the current state of timer disabling/enabling is stored onto the permanent memory.

S40 Data display	S40 HELP display
	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_TEST_TIMER_STATE	S	R	no
State of timers, ON/OFF							
EXE	GSS			FTD_SB_ENAB_OR_DISAB_TEST_TIMERS	S	R	yes
Enable / Disable Timers							

5.3 Display 04.03: Test timer display

All the values are shown in one minute resolution. The accuracy of the timers is about one second. The display uses following format for timers: HHMM where HH is hours and MM is minutes.

NOTE: When the maximum usage time of the phone is required (e.g. idle time measurement) then ALL field test displays must be deactivated! See chapter 1.4 Using The S40 Field Test Displays, how to deactivate the field test displays.

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd TIMERS eee </pre>	<pre> PWRON INSEV NSPS TXON TIMERS STATUS </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_POWER_ON_TIMER	W:D	R	yes
Timer for how long the phone has been powered on							
b(4)	GSS			FTD_SB_SERV_TIMER	W:D	R	yes
Timer for how long the phone has been in service							
c(4)	GSS			FTD_SB_NSPTS_TIMER	W:D	R	yes
Timer for NO-SERV POWER-SAVE state							
d(4)	GSS			FTD_SB_TRANSMIT_TIMER	W:D	R	yes
Timer for how long the transmitter has been on							
e(3)	GSS			FTD_SB_TEST_TIMER_STATE	S	R	no
State of timers, ON/OFF							

5.4 Display 04.04: Reset SMS and Call Counters to zero

With this display all counters listed on the Display 04.05: Call attempts counters, Display 04.07: SMS attempts counters and Display 04.08: SMS timeout counters can be reset.

S40 Data display	S40 HELP display
<pre> SMS & CALL COUNTERS RESET </pre>	<pre> Use menu to reset SMS & call counters </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	GSS			FTD_SB_RESET_TEST_COUNTERS	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Reset SMS & Call counter displays						

5.5 Display 04.05: Call attempts counters

On poweroff the values of the counter displays are stored onto the permanent memory, where they will be read during power on. To initialize the counters to zero, select Display 04.04: Reset SMS and Call Counters to zero. Counters are automatically reset to zero when they exceed their maximum value.

S40 Data display	S40 HELP display
<pre>aa bb ccc ddd eee fff</pre>	<pre>CalRel RelDi MOCAtmp MOOK AllMT MTOK</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSS			FTD_SB_LAST_CALL_REL_REAS	B:D	R,I,O	yes
Reason of last call release. Cause from messages disconnect and release complete.							
b(2)	GSS			FTD_SB_LAST_CALL_REL_DIRECTION	S	R,I,O	yes
Direction of last call release: UN : Unknown MO : Mobile originated MT : Mobile terminated IN : Internal (ME CS sw)							
c(3)	GSS			FTD_SB_MO_CALL_COUNT	W:D	R,I,O	yes
Count of all MO call attempts made							
d(3)	GSS			FTD_SB_MO_CALL_OK_COUNT	W:D	R,I,O	yes
Count of succeeded MO calls							
e(3)	GSS			FTD_SB_MT_CALL_COUNT	W:D	R,I,O	yes
Count of all call setups received							
f(3)	GSS			FTD_SB_MT_CALL_OK_COUNT	W:D	R,I,O	yes
Count of succeeded MT calls							

5.6 Display 04.06: Information about reasons for call clearing

All cause values are shown in decimal form.

S40 Data display	S40 HELP display
<pre>CC: aaaa MM: bbbb RR: cccc</pre>	<pre>CC CauseValu MM CauseValu RR CauseValu</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_CC_CAUSE	S	R,I,O	yes
	CC cause value, see section 10.5.4.11/GSM 04.08. '*' is shown in front of cause value if cause is made up by CC layer in MS						
b(4)	GSS			FTD_SB_MM_CAUSE	S	R,I,O	yes
	MM cause value, see section 10.5.3.6/GSM 04.08. '*' is shown in front of cause value if cause is made up by MM layer in MS						
c(4)	GSS			FTD_SB_RR_CAUSE	S	R,I,O	yes
	RR cause value, see section 10.5.2.31/GSM 04.08. '*' is shown in front of cause value if cause is made up by RR layer in MS						

5.7 Display 04.07: SMS attempts counters

On poweroff the values of the counter displays are stored onto the permanent memory, where they will be read during power on. To initialize the counters to zero Display 04.04: Reset SMS and Call Counters to zero. Counters are automatically reset to zero when they exceed their maximum value.

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eee fff gggg</pre>	<pre>SFai MO MOOK RFai MT MTOK Sched Msgs SMS counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_LAST_MO_SMS_FAIL	B:D	R	yes
	Reason of last sending failure						
b(3)	GSS			FTD_SB_MO_SMS_COUNT	W:D	R	yes
	Count of all M0 short message attempts						
c(3)	GSS			FTD_SB_MO_SMS_OK_COUNT	W:D	R	yes
	Count of succeeded M0 short message attempts						
d(3)	GSS			FTD_SB_LAST_MT_SMS_FAIL	B:D	R	yes
	Reason of last receiving failure						
e(3)	GSS			FTD_SB_MT_SMS_COUNT	W:D	R	yes
	Count of all MT short message attempts						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
f(3)	GSS			FTD_SB_MT_SMS_OK_COUNT	W:D	R	yes
				Count of succeeded MT short message attempts			
g(4)	GSS			FTD_SB_CB_SCHEDULE_MSG	W:D	R	yes
				Count of all received cell broadcast schedule messages			

5.8 Display 04.08: SMS timeout counters

On poweroff the values of the counter displays are stored onto the permanent memory, where they will be read during power on. To initialize the counters to zero, select Display 04.04: Reset SMS and Call Counters to zero. Counters are automatically reset to zero when they exceed their maximum value.

S40 Data display	S40 HELP display
<pre>aaa bbb cc ddd eee ff</pre>	<pre>TR1 TR2 TRA TC1 TC2 SCH SMS timeout counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_TR1M_COUNT	W:D	R	yes
				Counter for TR1M timeouts			
b(3)	GSS			FTD_SB_TR2M_COUNT	W:D	R	yes
				Counter for TR2M timeouts			
c(2)	GSS			FTD_SB_TRAM_COUNT	W:D	R	yes
				Counter for TRAM timeouts			
d(3)	GSS			FTD_SB_TC1M_COUNT	W:D	R	yes
				Counter for TC1M timeouts			
e(3)	GSS			FTD_SB_TC2M_COUNT	W:D	R	yes
				Counter for TC2M timeouts			
f(2)	GSS			FTD_SB_CB_SCHEDULE_COUNT	W:D	R	yes
				Counter for CB schedule timeouts			

5.9 Display 04.09: Toggle transmitter functionality

When selected, disables transmitter functionality if enabled and vice versa. New setting is valid until next power off or until new execute of this display.

This FTD can be used to simulate easily situations when the MS can hear the network (i.e. receiving signal is good enough), but the network can not receive any messages from the MS.

Location updating attempts or MO call establishment attempts can be failed (random access failure) by this FTD and field testing of these failures is much easier now.

Next periodic location updating can be checked from the Display 01.08: Paging repeat period, TMSI, periodic location update, AFC and AGC by taking the difference of current T3212 counter value and T3212 timeout value.

S40 Data display	S40 HELP display
<div style="border: 1px solid gray; padding: 10px; width: fit-content; margin: auto;"> <p>TRANSMITTER aaaaaaaa</p> </div>	<div style="border: 1px solid gray; padding: 10px; width: fit-content; margin: auto;"> <p>Use menu to enable or disable transmitter</p> </div>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GSS			FTD_SB_TOGGLE_TRANS_	S	R	no
				STATUS			
Transmitter status							
EXE	GSS			FTD_SB_TOGGLE_TRANS_	B:D	R	yes
				STATUS_CHANGE			
Toggle transmitter functionality							

6 Group 05: GSM Data Displays

6.1 Display 05.01: HSCSD, Timeslot information display

S40 Data display	S40 HELP display
<pre>Ts: 01234567 RX: aaaaaaaa TX: bbbbbbbb mCh:c mPw:dd</pre>	<pre>HSCSD multi- slot config for TX and RX</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GSS			FTD_SB_RX_TIMESLOT_ ALLOC	DW:H	R,I,O	yes
Each bit can have value 1 or 0, 1 indicating that timeslot is part of multislot allocation in downlink direction.							
b(8)	GSS			FTD_SB_TX_TIMESLOT_ ALLOC	DW:H	R,I,O	yes
Each bit can have value 1 or 0, 1 indicating that timeslot is part of multislot allocation in uplink direction.							
c	GSS			FTD_SB_MAIN_CH_PLACE	B:D	R,I,O	yes
Value from 0 to 7 indicating the place of main channel. In case of GPRS multislot allocation, this is not valid "x".							
d(2)	GSS			FTD_SB_MAIN_CH_PWR_ CONTROL	B:D	R,I,O	yes
Value from 0-31 indicating main channel power control level. In case of GPRS multislot allocation, this is not valid "xx".							

6.2 Display 05.02: HSCSD, Timeslot power control level display

S40 Data display	S40 HELP display
<pre>mCh:a mPw:bb cc dd ee ff gg hh ii jj</pre>	<pre>HSCSD Pwr ctrl levels for multi- slot conf</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_MAIN_CH_PLACE	B:D	R,I,O	yes
Value from 0 to 7 indicating the place of main channel. In case of GPRS multislot allocation, this is not valid "x".							
b(2)	GSS			FTD_SB_MAIN_CH_PWR_ CONTROL	B:D	R,I,O	yes
Value from 0-31 indicating main channel power control level. In case of GPRS multislot allocation, this is not valid "xx".							
c(2)	GSS			FTD_SB_PWR_CONTROL_ TS_0	B:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Power control level for timeslot 0.						
d(2)	GSS			FTD_SB_PWR_CONTROL_ TS_1	B:D	R,I,0	yes
	Power control level for timeslot 1.						
e(2)	GSS			FTD_SB_PWR_CONTROL_ TS_2	B:D	R,I,0	yes
	Power control level for timeslot 2.						
f(2)	GSS			FTD_SB_PWR_CONTROL_ TS_3	B:D	R,I,0	yes
	Power control level for timeslot 3.						
g(2)	GSS			FTD_SB_PWR_CONTROL_ TS_4	B:D	R,I,0	yes
	Power control level for timeslot 4.						
h(2)	GSS			FTD_SB_PWR_CONTROL_ TS_5	B:D	R,I,0	yes
	Power control level for timeslot 5.						
i(2)	GSS			FTD_SB_PWR_CONTROL_ TS_6	B:D	R,I,0	yes
	Power control level for timeslot 6.						
j(2)	GSS			FTD_SB_PWR_CONTROL_ TS_7	B:D	R,I,0	yes
	Power control level for timeslot 7.						

6.3 Display 05.03: Transparent data information

S40 Data display	S40 HELP display
<pre> aaa bbbb cccc dddd eee fff gg hhhh </pre>	<pre> Chan ConSp ConTy ConMd SOfCM SB X SUbMd </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	CSD			FTD_SB_TB_NUM_CHAN	S	R	yes
	Number of channels. Value 1+1 or 2+2. Applicable only in GSM mode, otherwise show xxx.						
b(4)	CSD			FTD_SB_TB_CON_SPEED	S	R	yes
	Connection speed in kbit/s. 2.4 : 2400 bit/s 4.8 : 4800 bit/s 9.6 : 9600 bit/s 14.4 : 14400 bit/s 19.2 : 19200 bit/s 28.8 : 28800 bit/s 32 : 32000 bits/s 33.6 : 33600 bits/s						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	56: 56000 bits/s 64: 64000 bits/s						
c(4)	CSD			FTD_SB_TB_CON_TYPE	S	R	yes
	Connection type. Asyn :When connection is asynchronous Syn :When connection is synchronous						
d(4)	CSD			FTD_SB_TB_CON_MODE	S	R	yes
	Connection mode. Buff : Connection is in buffered mode V.80 : Connection is in V.80 mode						
e(3)	CSD			FTD_SB_TB_STATUS_CON_MODE	S	R	yes
	Status of connection mode. SCN : When synchronizing CON : When connected Applicable only in GSM mode, otherwise show xxx.						
f(3)	CSD			FTD_SB_TB_STATUS_SB	S	R	yes
	Status bit SB value 0 or 1. SB0 : Status ON SB1 : Status OFF Applicable only in GSM mode, otherwise show xxx.						
g(2)	CSD			FTD_SB_TB_STATUS_X	S	R	yes
	Status bit X value 0 or 1. X0 : Status ON X1 : Status OFF Applicable only in GSM mode, otherwise show xx.						
h(4)	CSD			FTD_SB_TB_V80_SM	S	R	yes
	When V.80 is used the sub mode is shown. Tran : Transparent Fram : Framed						

6.4 Display 05.04: Non transparent data

S40 Data display	S40 HELP display
<pre> aaaaaaaa bb cccccccc dd eeeeeeee ff gggggggg hh </pre>	<pre> Sent Xout ReTx OfUP Recvd Xin SREJd OfDOWN </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	CSD			FTD_SB_NTb_NUM_SENT_I_FRAME	DW:D	R	yes
	Number of sent I-frames. 32-bit hex number and range is 0 - FFFFFFFF.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(2)	CSD			FTD_SB_NTB_STATUS_XOUT	S	R	yes
				X-bit out value 0 or 1. X0 : Status OFF X1 : Status ON			
c(8)	CSD			FTD_SB_NTB_NUM_RETRANS_FRAME	DW:D	R	yes
				Number of retransmitted frames. 32-bit hex number and range is 0 - FFFFFFFF.			
d(2)	CSD			FTD_SB_NTB_UPLINK_BUF	B:D	R	yes
				Uplink buffer overflow. 8-bit hex number and range is 0 - FF. If not supported xx is shown.			
e(8)	CSD			FTD_SB_NTB_NUM_RECV_I_FRAME	DW:D	R	yes
				Number of received I-frames. 32-bit hex number and range is 0 - FFFFFFFF.			
f(2)	CSD			FTD_SB_NTB_STATUS_XIN	S	R	yes
				X-bit in. Value is 0 or 1. X0 : Status OFF X1 : Status ON			
g(8)	CSD			FTD_SB_NTB_NUM_SREJ_FRAMES	DW:D	R	yes
				Number of SREJ'ed frames. 32-bit hex number and range is 0 - FFFFFFFF.			
h(2)	CSD			FTD_SB_NTB_DOWNLINK_BUF	B:D	R	yes
				Downlink buffer overflow. 8-bit hex number and range is 0 - FF. If not supported xx is shown.			

6.5 Display 05.06: CSD Server, main data display

S40 Data display	S40 HELP display
<pre> aaaaaaaaaaaa b c ddd eeee f ggg hhhhh </pre>	<pre> DTE ID list TCH N CO STM GN NbofPTran Timer info </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	CSD			FTD_SB_CSDDS_MDD1_DTE_ID	S	R	yes
				Existing DTE IDs. Each character represents a DTE (upto 12 separate sessions). DTE ID is 4-bit hex number and range is 0 - C and x. x : session doesn't exists Example: the value 01345xxxxxxx means that there are five DTE sessions with DTE IDs $a_0 = 0$, $a_1 = 1$, $a_2 = 3$, $a_3 = 4$ and $a_4 = 5$. F means that the session a_j , [5 - 11] doesn't exists.			
b	CSD			FTD_SB_CSDDS_MDD1_TCH_ID	B:D	R	yes
				TCH ID. 4-bit hex number and range is 0 - C and x. x : Not active			
c	CSD			FTD_SB_CSDDS_MDD1_NUM_OF_CALLS	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Number of call contexts within DTEs. Range is 0 - 6.							
d(3)	CSD			FTD_SB_CSDS_MDD1_CONFERENCE	S	R	yes
d0 = Conference call active. A : Active, x : Not active. d1 = Conference call state. A : Active H : On hold x : Not active. d2 = DTE ID of conference owner DTE. 4-bit hex number and range is 0 - C -and x. x : Conference not active.							
e(4)	CSD			FTD_SB_CSDS_MDD1_STATE	S	R	yes
State Machine state information. 4-bit hex numbers. e ₀ = Main state. Range is 0 - 8. e ₁ = State branching condition. Range is 0 - F. e ₂ = Next state. Range is 0 - 8. e ₃ = Call stack depth. Range is 0 - 4.							
f	CSD			FTD_SB_CSDS_MDD1_NUM_GPDS_CONNECTIONS	B:D	R	yes
Number of GPDS connections. 4-bit hex number and range is 0 - B.							
g(3)	CSD			FTD_SB_CSDS_MDD1_NUM_OF_TRANSACTIONS	W:D	R	yes
Number of pending transactions. Range is 0 - 999.							
h(6)	CSD			FTD_SB_CSDS_MDD1_MB_TIMER_STATUS	S	R	yes
Number of delta elements (pending time-outs) for a timer. There are six timers and each of the timers use one digit (k). Range is 0 - Z (0 - 40). h ₀ : DTR. h ₁ : HANGUP. h ₂ : ALERT. h ₃ : GENERIC. h ₄ : DIAL_DELAY. h ₅ : USSD_REPLY.							

6.6 Display 05.07: CSD Server, active DTE info 1/2, call related info

S40 Data display	S40 HELP display
<pre> a b cccc dd e ff gg hh iii jjjjj kk llll mmmm </pre>	<pre> DINoCCcSt Mo TC Dir AC HC NoPT Ctrm Di Stat LEv </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	CSD			FTD_SB_CSDS_ADTE1_DTE_ID	B:D	R	yes
				DTE ID. 8-bit hex number and range is 0 - C and x. x : Not active			
b	CSD			FTD_SB_CSDS_ADTE1_NUM_OF_CALLS	B:D	R	yes
				Number of calls. Range is 0 - 2.			
c(4)	CSD			FTD_SB_CSDS_ADTE1_CALL_STATE	S	R	yes
				Current call state. IDLE : IDLE MTCO : MT CONNECTING WCON : WAITING CONNECT CONN : CONNECTED DISC : DISCONNECTING			
d(2)	CSD			FTD_SB_CSDS_ADTE1_CALL_MODE	S	R	yes
				Call mode. 0 : EMERGENCY 1 : SPEECH 2 : DATA 3 : FAX A0 : ALT SPEECH DATA A1 : ALT DATA SPEECH A2 : ALT SPEECH FAX A3 : ALT FAX SPEECH A4 : SPEECH THEN DATA A5 : UNDEFINED			
e	CSD			FTD_SB_CSDS_ADTE1_TCH_ID	B:D	R	yes
				TCH ID. 8-bit hex number and range is 0 - C and x. x : No TCH channel active.			
f(2)	CSD			FTD_SB_CSDS_ADTE1_CALL_DIR	S	R	yes
				Call direction. MO : Mobile Originated MT : Mobile Terminated			
g(2)	CSD			FTD_SB_CSDS_ADTE1_ACTIVE_CALL_ID	B:D	R	yes
				Active call ID. 8-bit hex number and range is 0 - 9 and 80 - 83. 0 : CSDC_CALL_ID_NONE 1 - 9 : Call id from CALL server 80 : CSDC_CALL_ID_ALL 81 : CSDC_CALL_ID_ACTIVE 82 : CSDC_CALL_ID_HOLD 83 : CSDC_CALL_ID_CONFERECE			
h(2)	CSD			FTD_SB_CSDS_ADTE1_ON_HOLD_CALL_ID	B:D	R	yes
				Held call ID. 8-bit hex number and range is 0 - 9 and 80 - 83. Interpretation, as above.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind			
i(3)	CSD			FTD_SB_CS_DS_ADTE1_NUM_OF_PENDING_TRANS	W:D	R	yes			
				Number of pending transactions. Range is 0 - 999.						
j(5)	CSD			FTD_SB_CS_DS_ADTE1_CALL_TERM_REASON	S	R	yes			
				j ₁ j ₂ = Call termination reason. 8-bit hex number and range is 0 - 13.						
				j ₃ j ₄ = Network related call termination reason. 8-bit hex number and range is 1 - 7F.						
k(2)	CSD			FTD_SB_CS_DS_ADTE1_CALL_TERM_ORIG_AND_DIR	S	R	yes			
				k ₀ = Call termination origin. C : Client S : Server N : Network k ₁ = Call termination direction. O : Mobile Originated T : Mobile Terminated U : Unspecified / Unknown						
l(4)	CSD			FTD_SB_CS_DS_ADTE1_SM_STATE_INFO	W:D	R	yes			
				SM State information. 4-bit hex numbers. m ₀ = Main state. Range is 0 - 8. m ₁ = State branching condition. Range is 0 - F. m ₂ = Next state. Range is 0 - 8. m ₃ = Call stack depth. Range is 0 - 4.						
m(4)	CSD			FTD_SB_CS_DS_ADTE1_LAST_EVENT	W:D	R	yes			
				Last event id. 16-bit hex value and range is 0 - 7FFF.						

6.7 Display 05.08: CSD Server, active DTE info 2/2, GPDS, socket, conference info

S40 Data display	S40 HELP display
<pre> a bb cc ddddd ee f g hhhhh </pre>	<pre> DTE ACid GID GPDS QoS Socket Cfo St Mmbrs </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	CSD			FTD_SB_CS_DS_ADTE2_DTE_ID	B:D	R	yes
				DTE ID. 8-bit hex number and range is 0 - C and x. x : No DTE ID available			
b(2)	CSD			FTD_SB_CS_DS_ADTE2_ACTIVE_CALL_ID	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Active call ID. 8-bit hex number and range is 0 - 9 and 80 - 83. 0 : CSDC_CALL_ID_NONE 1 - 9 : Call id from CALL server 80 : CSDC_CALL_ID_ALL 81 : CSDC_CALL_ID_ACTIVE 82 : CSDC_CALL_ID_HOLD 83 : CSDC_CALL_ID_CONFERENCE						
c(2)	CSD			FTD_SB_CSDS_ADTE2_GPDS_CID_AND_STATE	S	R	yes
	c ₀ = GPDS context id. 4-bit hex number and range is 0 - 7. c ₁ = GPDS status value A or D. A : Attached D : Detached						
d(6)	CSD			FTD_SB_CSDS_ADTE2_GPDS_QOS	S	R	yes
	GPRS Quality of service. 4-bit hex numbers. D ₀ : Precedence class. Range is 0 - 3. D ₁ : Delay class. Range is 0 - 4. D ₂ : Reliability class. Range is 0 - 5. D ₃ : Peak throughput class. Range is 0 - 9. d ₄ and d ₅ : Mean throughput class. Range is 0 - 13 (8-bit hex).						
e(2)	CSD			FTD_SB_CSDS_ADTE2_SOCKET_INFO	B:D	R	yes
	Socket connection. 00 : No 01 : Yes						
f	CSD			FTD_SB_CSDS_ADTE2_CONFERENCE_OWNER	B:D	R	yes
	DTE ID of a conference owner. 8-bit hex number and range is 0 - C and x. x : No DTE ID available						
g	CSD			FTD_SB_CSDS_ADTE2_CONFERENCE_STATUS	S	R	yes
	Conference call status. A : Active H : Held						
h(5)	CSD			FTD_SB_CSDS_ADTE2_CONFERENCE_PARTICIPANTS	DW:D	R	yes
	Call ids in a conference. Each h _i (0 < i < 4) is a call id of a participating call. Each h _i is in range 1 - 9.						

6.8 Display 05.09: GPRS Rel99 Display

To change GPRS context, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 0509 (TEST GROUP;TEST DISPLAY) to the query prompt
5. Test input prompt will be shown on the display, enter the context number in display.
6. Confirm with the Ok button.
7. If change succeeded, the new session information are displayed in display 09 of group 05.

S40 Data display	S40 HELP display
<pre>aa b cc dd ee fff gggg hhh iii jj kkk lll mm</pre>	<pre>Context Info AUC PDP QoS MUL MDL SDER RUL RDL RBER</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	CSD			FTD_SB_GPRS99_CONTEXT_ID	B:D	R	yes
				User context id. Range is 1 - 10.			
b	CSD			FTD_SB_GPRS99_CONTEXT_STATE	S	R	yes
				GPRS context state. A : Attached D : Detached			
c(2)	CSD			FTD_SB_GPRS99_GPDS_CONTEXT_ID	B:D	R	yes
				GPDS context id. 8-bit hex number. Range is 0 - FF.			
d(2)	CSD			FTD_SB_GPRS99_NBR_GPDS_CONNECTIONS	B:D	R	yes
				Number of GPDS connections. Range is 0 - 99.			
e(2)	CSD			FTD_SB_GPRS99_ACT_USER_CID	B:D	R	yes
				Active user cid. Range is 1 - 10.			
f(3)	CSD			FTD_SB_GPRS99_PDP_TYPE	S	R	yes
				PDP type. IP : Internet Protocol IP6 : Internet Protocol version 6 PPP : Point to Point Protocol			
g(4)	CSD			FTD_SB_GPRS99_NEQ_QOS	S	R	yes
				Negotiated Qos profile. g₀ : Traffic class (0-3) g₁ : Delivery order (0-1) g₂ : Delivery of erroneous SDUs (0-2) g₃ : Traffic handling priority (0-2)			
h(3)	CSD			FTD_SB_GPRS99_NEQ_MAX_UL	W:D	R	yes
				Negotiated Qos profile's maximum uplink bitrate. Range is 0-64 kbit/s.			
i(3)	CSD			FTD_SB_GPRS99_NEQ_MAX_DL	W:D	R	yes
				Negotiated Qos profile's maximum downlink bitrate. Range is 0-384 kbit/s.			
j(2)	CSD			FTD_SB_GPRS99_SDER	B:D	R	yes
				SDU error ratio. 00 : 0E0 (Subscribed) 11 : E 12 : E2 13 : E3 14 : E4 15 : E5 15 : E6 73 : 7E3 FF : Default			
k(3)	CSD			FTD_SB_GPRS99_NEQ_GUA_UL	W:D	R	yes
				Negotiated Qos profile's quaranteed uplink bitrate. Range is 0-64 kbit/s.			
l(3)	CSD			FTD_SB_GPRS99_NEQ_GUA_DL	W:D	R	yes
				Negotiated Qos profile's quaranteed downlink bitrate. Range is 0-384 kbit/s.			
m(2)	CSD			FTD_SB_GPRS99_RBER	B:D	R	yes
				Residual bit error rate. 00 : 0E0 (Subscribed) 12 : E2 13 : E3 14 : E4 15 : E5 16 : E6 43 : 4E3 52 : 5E2 53 : 5E3 68 : 6E8 FF : Default			
INPUT(4)	CSD			FTD_SB_GPRS99_CHANGE_CONTEXT	DW:UD	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Change GPRS context.						

6.9 Display 05.10: MAC Interface Display

S40 Data display	S40 HELP display
aaaaaaaaa	AllowCombs

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(9)	CSD			FTD_SB_MAC_ALLOWED_COMB	S	R	yes
Allowed frame combinations for CSD-MAC to use. Each character represents one combination, 0 means that combination is not allowed. If zero frame is allowed, then it will be marked as 1. a_n : n = associated transmission frame a_1 = zeroth frame a_9 = eighth frame Example: 112040008 Means that legal combination of frames are 0,1,2,4 and 8.							

6.10 Display 05.11: CSD Server Main Data Display, Control 2001

This display is applicable for Kenny.

S40 Data display	S40 HELP display
a bb cc ddd e f ggg hhh iii jjj kkk lll m n o p	M Ns Nc Ptr R I UAU UAN UCU UCN UDU UDN B S D Un

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	CSD			FTD_SB_CSDS_MAIN_ACT_CALL_MODE	S	R	yes
Active call mode. G : GSM W : WCDMA							
b(2)	CSD			FTD_SB_CSDS_MAIN_NBR_DTE	B:D	R	yes
Number of DTE sessions. Range: 0 - 50.							
c(2)	CSD			FTD_SB_CSDS_MAIN_NBR_CALL	B:D	R	yes
Number of connected calls. Range: 0 - 99.							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(3)	CSD			FTD_SB_CSDS_MAIN_PENDING_TRANS	W:D	R	yes
	Number of pending transactions. Range is 0-999.						
e	CSD			FTD_SB_CSDS_MAIN_RS232	S	R	yes
	A DTE of the type RS232 connected. R : If connected x : No RS232 connection						
f	CSD			FTD_SB_CSDS_MAIN_IRDA	S	R	yes
	A DTE of the type IrDA connected. I : If connected x : No IrDa connection						
g(3)	CSD			FTD_SB_CSDS_MAIN_USB_UAU	S	R	yes
	A DTE of the type USB connected. (AT cmd, unsolicited responses) UAU : If connection xxx : No connection						
h(3)	CSD			FTD_SB_CSDS_MAIN_USB_UAN	S	R	yes
	A DTE of the type USB connected. (AT cmd, no unsolicited responses) UAN : If connection xxx : No connection						
i(3)	CSD			FTD_SB_CSDS_MAIN_USB_UCU	S	R	yes
	A DTE of the type USB connected. (Modem ctrl, unsolicited responses) UCU : If connection xxx : No connection						
j(3)	CSD			FTD_SB_CSDS_MAIN_USB_UCN	S	R	yes
	A DTE of the type USB connected. (Modem ctrl, no unsolicited responses) UCN : If connection xxx : No connection						
k(3)	CSD			FTD_SB_CSDS_MAIN_USB_UDU	S	R	yes
	A DTE of the type USB connected. (Modem data, unsolicited responses) UDU : If connection xxx : No connection						
l(3)	CSD			FTD_SB_CSDS_MAIN_USB_UDN	S	R	yes
	A DTE of the type USB connected. (Modem data, no unsolicited responses) UDN : If connection xxx : No connection						
m	CSD			FTD_SB_CSDS_MAIN_BT	S	R	yes
	A DTE of the type Bluetooth connected. B : If connected x : No Bluetooth connection						
n	CSD			FTD_SB_CSDS_MAIN_SCK	S	R	yes
	A DTE of the type Socket connected. S : If connected x : No Socket connection						
o	CSD			FTD_SB_CSDS_MAIN_DCP	S	R	yes
	A DTE of the type DCP connected. D : If connected x : No DCP connection						
p	CSD			FTD_SB_CSDS_MAIN_UNK	S	R	yes
	An unknown DTE type connected. U : Unknown connection x : No unknown connection						

6.11 Display 05.12: Control DTE and Call Info Displays, Control 2001

Next display is applicable for Kenny.

To change DTE or Call session, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 0512 (TEST GROUP;TEST DISPLAY) to the query prompt.
5. Test input prompt will be shown on the display, enter the session number in display.
6. Confirm with the Ok button.
7. If change succeeded, the new session information are displayed in group 5 display 13 for DTE and display 14 for Call. Also locked session information are changed in display 12 of group 5.

Abbreviation	Description
XX	Locked DTE session. DTE session type. XX = 1 : RS232 XX = 2 : IRDA XX = 3 : Bluetooth XX = 4 : USB AT command, no unsolicited responses XX = 5 : USB AT command, unsolicited responses XX = 6 : USB modem control, no unsolicited responses XX = 7 : USB modem control, unsolicited responses XX = 8 : USB modem data, no unsolicited responses XX = 9 : USB modem data, unsolicited responses XX = 10 : Socket XX = 11 : DCP XX = 12 : Unknown
2y 30 31	Locked Call session. y : Call ID. Range is 1 - 7. 30 : MO call being created 31 : MT call being created

This display is used for selecting the Call or DTE session the information of which the user wants to browse.

The CSD server Main Display indicates the total number of existing DTE sessions as well as what types of DTEs are included. The user selects the DTE session which he wants to browse by indicating the type of this session.

Call display is selected by entering the Call ID of the call to be browsed. The user finds the correct Call IDs from the display of the DTE session which owns the call. The user may also request the information of an MO or MT call that is in the process of being created by typing 30 (MO) or 31 (MT).

S40 Data display	S40 HELP display
LOCKED SESSION DTE : aaa Call: bb	Use menu to change DTE or CALL session

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	CSD			FTD_SB_CSIDS_INFO_DTE_STATE	B:D	R	yes
Show locked DTE session.							
b(2)	CSD			FTD_SB_CSIDS_INFO_CALL_STATE	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Show locked Call session.						
INPUT(4)	CSD			FTD_SB_CS_DS_INFO_CHANGE_DISPLAY	DW:UD	R	yes
	Change DTE or Call display's session.						

6.12 Display 05.13: Active DTE Display xx, Control 2001

Display is applicable for Kenny.

S40 Data display	S40 HELP display
aaa bbbbb ccc ddddddd	ID DType Cst callsIDs

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	CSD			FTD_SB_CS_DS_DTE_SESSION_ID	B:D	R	yes
	DTE Session ID. Range is 0 - 255.						
b(5)	CSD			FTD_SB_CS_DS_DTE_TYPE	S	R	yes
	DTE type. NONE : Not active RS : RS232 IRDA : Infra Red Data Association BT : Bluetooth SCKT : Socket DCP : Data Control Protocol FF : Unknown Universal Serial Bus USATN : AT, no unsolicited responses USATU : AT, unsolicited responses USMCN : Modem control, no unsolicited responses USMCU : Modem control, unsolicited responses USMDN : Modem data, no unsolicited responses USMDU : Modem data, unsolicited responses						
c(3)	CSD			FTD_SB_CS_DS_DTE_CTRL_STATE	S	R	yes
	Control state. WC : CSDC_WAIT_FOR_COMMAND CP : CSDC_COMMAND_PROCESSING WRA :CSDC_WAIT_FOR_REMOTE_ACK PNC : CSDC_PROCESS_NEXT_CMD SRM : CSDC_SMS_READ_MODE						
d(7)	CSD			FTD_SB_CS_DS_DTE_CID	S	R	yes
	Associated call ids. d _n : n = associated call id. Range is 1 - 7. Example: the values 1xx5xx means that associated call ids are 1 and 5.						

6.13 Display 05.14: Active Call Display

S40 Data display	S40 HELP display
aaa bb c ddd eeee ff ggg h iii	Cid Cm T Srv Ccst Cd Did S Cid

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	CSD			FTD_SB_CSDS_CALL_ID	B:D	R	yes
	Call ID. Range is 1 - 7.						
b(2)	CSD			FTD_SB_CSDS_CALL_CURRENT_MODE	S	R	yes
	Current Call Mode. EM : EMERGENCY SP : SPEECH DA : DATA FA : FAX SF : ALT SPEECH FAX FS : ALT FAX SPEECH UN : UNDEFINED						
c	CSD			FTD_SB_CSDS_CALL_TYPE	S	R	yes
	Call Type S : Single D : Dual						
d(3)	CSD			FTD_SB_CSDS_CALL_SERVICE	S	R	yes
	Service A : ASYNC S : SYNC F1 : Fax Class 1 F2 : Fax Class 2 F20 : Fax Class 2.0						
e(4)	CSD			FTD_SB_CSDS_CALL_STATE	S	R	yes
	Current call state. IDLE : CSDC_IDLE OCM : CSDC_ONLINE_CMD_MODE DCG : CSDC_DATA_CONNECTING DCD : CSDC_DATA_CONNECTED MTA : CSDC_MT_CALL_ANSWERED MTCG : CSDC_MT_CALL_CONNECTING MOCG : CSDC_MO_CALL_CONNECTING VC : CSDC_VOICE_CONNECTED FCD : CSDC_FAX_CONNECTED REL : CSDC_CALL_RELEASING DTMF : CSDC_DTMF_TRANSMIT						
f(2)	CSD			FTD_SB_CSDS_CALL_DIR	S	R	yes
	Call direction. MO : Mobile Originated MT : Mobile Terminated						
g(3)	CSD			FTD_SB_CSDS_CALL_SESSION_ID	B:D	R	yes
	DTE session ID. Range is 0 - 255.						
h	CSD			FTD_SB_CSDS_CALL_SYSTEM	S	R	yes
	System. G : GSM W : WCDMA						
i(3)	CSD			FTD_SB_CSDS_CALL_TCH_RAB_ID	B:D	R	yes
	TCH/RAB ID. RAB ID if system is WCDMA and TCH ID for GSM. In WCDMA system this is left empty if RAB ID has not been received. Range is 0 - 255.						

6.14 Display 05.15: Common CSD Display

(* See csd_common_ftd.h for more information how to activate debugging fields.

Continuus Server: tresw15

Database Path: /opt/ccm_dbs/tr_dcom

Project Name: csd4_sw

Directory: csd4_sw/common

Filename: csd_common_ftd.h

S40 Data display	S40 HELP display
<pre> aaaaaaaa bb cccccccc dd eeeeeeee ff gggggggg hh </pre>	<pre> TCHer Dbug1 Dbug2 Dbug3 Dbug4 Dbug5 Dbug6 Dbug7 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	CSD			FTD_SB_COMMON_NUM_TCH_OVERRUNS	DW:D	R	yes
				Number of received TCH overrun and underrun indications from TCH pipe. 32-bit hex number and range is 0 - FFFFFFFF.			
b(2)	CSD			FTD_SB_COMMON_DEBUG_1	S	R	yes
				For general debugging use. String with max. length 2 +1. (*			
c(8)	CSD			FTD_SB_COMMON_DEBUG_2	DW:D	R	yes
				For general debugging use. 32-bit hex number and range is 0 - FFFFFFFF. (*			
d(2)	CSD			FTD_SB_COMMON_DEBUG_3	B:D	R	yes
				For general debugging use. 8-bit hex number and range is 0 - FF. (*			
e(8)	CSD			FTD_SB_COMMON_DEBUG_4	DW:D	R	yes
				For general debugging use. 32-bit hex number and range is 0 - FFFFFFFF. (*			
f(2)	CSD			FTD_SB_COMMON_DEBUG_5	S	R	yes
				For general debugging use. String with max. length 2 +1. (*			
g(8)	CSD			FTD_SB_COMMON_DEBUG_6	DW:D	R	yes
				For general debugging use. 32-bit hex number and range is 0 - FFFFFFFF. (*			
h(2)	CSD			FTD_SB_COMMON_DEBUG_7	B:D	R	yes
				For general debugging use. 8-bit hex number and range is 0 - FF. (*			

6.15 Display 05.16: Current BC-IE

S40 Data display	S40 HELP display
<pre>aa bb cc dd ee ff gg hh ii jj kk ll mm nn</pre>	<pre>1 2 3 4 5 6 7 8 9 10 11 12 13 14</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	CSD			FTD_SB_BC_IE_OCTET_1	B:D	R	yes
				1. octet of the BC-IE, which is length. . Range is 00-FF.			
b(2)	CSD			FTD_SB_BC_IE_OCTET_2	B:D	R	yes
				2. octet of the current BC-IE. Range is 00-FF.			
c(2)	CSD			FTD_SB_BC_IE_OCTET_3	B:D	R	yes
				3. octet of the current BC-IE. Range is 00-FF.			
d(2)	CSD			FTD_SB_BC_IE_OCTET_4	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
		4. octet of the current BC-IE. Range is 00-FF.					
e(2)	CSD			FTD_SB_BC_IE_OCTET_5	B:D	R	yes
		5. octet of the current BC-IE. Range is 00-FF.					
f(2)	CSD			FTD_SB_BC_IE_OCTET_6	B:D	R	yes
		6. octet of the current BC-IE. Range is 00-FF.					
g(2)	CSD			FTD_SB_BC_IE_OCTET_7	B:D	R	yes
		7. octet of the current BC-IE. Range is 00-FF.					
h(2)	CSD			FTD_SB_BC_IE_OCTET_8	B:D	R	yes
		8. octet of the current BC-IE. Range is 00-FF.					
i(2)	CSD			FTD_SB_BC_IE_OCTET_9	B:D	R	yes
		9. octet of the current BC-IE. Range is 00-FF.					
j(2)	CSD			FTD_SB_BC_IE_OCTET_10	B:D	R	yes
		10. octet of the current BC-IE. Range is 00-FF.					
k(2)	CSD			FTD_SB_BC_IE_OCTET_11	B:D	R	yes
		11. octet of the current BC-IE. Range is 00-FF.					
l(2)	CSD			FTD_SB_BC_IE_OCTET_12	B:D	R	yes
		12. octet of the current BC-IE. Range is 00-FF.					
m(2)	CSD			FTD_SB_BC_IE_OCTET_13	B:D	R	yes
		13. octet of the current BC-IE. Range is 00-FF.					
n(2)	CSD			FTD_SB_BC_IE_OCTET_14	B:D	R	yes
		14. octet of the current BC-IE. Range is 00-FF.					

6.16 Display 05.17: LLC

S40 Data display	S40 HELP display
<pre>aa bb cc dd ee ff gg</pre>	<pre>1 2 3 4 5 6 7</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	CSD			FTD_SB_LLC_OCTET_1	B:D	R	yes
		1. octet of the LLC, which is length. . Range is 00-FF.					
b(2)	CSD			FTD_SB_LLC_OCTET_2	B:D	R	yes
		2. octet of the LLC. Range is 00-FF.					
c(2)	CSD			FTD_SB_LLC_OCTET_3	B:D	R	yes
		3. octet of the LLC. Range is 00-FF.					
d(2)	CSD			FTD_SB_LLC_OCTET_4	B:D	R	yes
		4. octet of the LLC. Range is 00-FF.					
e(2)	CSD			FTD_SB_LLC_OCTET_5	B:D	R	yes
		5. octet of the LLC. Range is 00-FF.					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
f(2)	CSD			FTD_SB_LLC_OCTET_6	B:D	R	yes
	6. octet of the LLC. Range is 00-FF.						
g(2)	CSD			FTD_SB_LLC_OCTET_7	B:D	R	yes
	7. octet of the LLC. Range is 00-FF.						

6.17 Display 05.18: WCDMA Transparent Data

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dd eeee f g hhhhhhhhhhhhhhhh</pre>	<pre> DlOF UlOF UlUF FrSize SeqErr PFC S SyncSequence</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	CSD			FTD_SB_WTB_NUM_DL_OF	W:H	R	yes
	Number of downlink buffer overflows.						
b(4)	CSD			FTD_SB_WTB_NUM_UL_OF	W:H	R	yes
	Number of uplink buffer overflows.						
c(4)	CSD			FTD_SB_WTB_NUM_UL_UF	W:H	R	yes
	Number of uplink buffer underflows.						
d(2)	CSD			FTD_SB_WTB_FRAME_SIZE	B:H	R	yes
	Length of used frame in bytes.						
e(4)	CSD			FTD_SB_WTB_APP_SEQ_ERR	W:H	R	yes
	Number of data packages received from application with mismatching sequence numbers.						
f	CSD			FTD_SB_WTB_PIPE_FLOWCTRL	B:D	R	yes
	Pipe flow control enabled: 1: ON 0: OFF						
g	CSD			FTD_SB_WTB_TASK_STATUS	B:D	R	yes
	Task status: 1: CONNECTED 0: DISCONNECTED						
h(12)	CSD			FTD_SB_WTB_SYNC_SEQ	S	R	yes
	Used synchronization sequence. Six 8-bit hex numbers.						

6.18 Display 05.19: Non transparent data call

S40 Data display	S40 HELP display
<pre>aaaaa bbbbbb c d e fff</pre>	<pre>F'NUR WAIUR TxTS RxTS Comp ITC</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	CSD			FTD_SB_NTBFNUR	W:D	R	yes
	Connection speed in bps						
b(5)	CSD			FTD_SB_NTBWAIUR	W:D	R	yes
	Requested connection speed in bps						
c	CSD			FTD_SB_NTBTX_TIMESLOT	B:D	R	yes
	Transmission timeslot(s). GSM data call range is 1-4 and 0 when WCDMA data call.						
d	CSD			FTD_SB_NTBRX_TIMESLOT	B:D	R	yes
	Receiving timeslot(s). GSM data call range is 1-4 and 0 when WCDMA data call.						
e	CSD			FTD_SB_NTBV42BIS_COMP_MODE	S	R	yes
	V.42bis compression mode: n = none, d = downlink, u = uplink, b = both						
f(3)	CSD			FTD_SB_NTBITC	S	R	yes
	Connection ITC value: UDI = Unrestricted Digital Information, MOD = 3.1 kHz audio ex PLMN, FAX = Facsimile group 3, RDI = Other ITC						

7 Group 06: GPRS Signaling displays

7.1 Group 06 Information

If MS is not GPRS attached, xxx is shown in all displays.

7.2 Display 06.01: Information of the current GPRS state and previous TBF configuration

S40 Data display	S40 HELP display
<pre> abbbb ccc dd e+f CSg/h ii jjnnnnnnnnn m llll kkkk </pre>	<pre> CH RxL TAdv TS CS TAI TFI USF 's R/S CHT MACm </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_GPRS_HOPPING	S	R,I,O	yes
				H, if carrier numbers are scrolled when hopping is on. Otherwise empty.			
b(4)	GSS			FTD_SB_GPRS_CARRIER	S	R,I,O	yes
				Carrier number in decimal. If hopping is on, used channels are scrolled when display is updated			
c(3)	GSS			FTD_SB_GPRS_RX_LEVEL	B:D	R,I,O	yes
				Rx level in dBm, minus sign not shown if <=-100			
d(2)	GSS			FTD_SB_GPRS_TIMING_ADV	B:D	R,I,O	yes
				The latest value for timing advance, range 0-63			
e	GPDS			FTD_SB_RLC_DL_SLOTS	B:UD	R,I,O	yes
				Downlink time slot count in the latest TBF configuration, range 0-8			
f	GPDS			FTD_SB_RLC_UL_SLOTS	B:UD	R,I,O	yes
				Uplink time slot count in the latest TBF configuration, range 0-8.			
g	GPDS			FTD_SB_RLC_DL_CH_CODE	B:UD	R,I,O	yes
				Channel coding scheme in downlink direction, range 1-4. If no downlink TBF is active, x is shown. Appears also on display 07.03.			
h	GPDS			FTD_SB_RLC_UL_CH_CODE	B:UD	R,I,O	yes
				Channel coding scheme in uplink direction, range 1-4. If no uplink TBF is active, x is shown. Appears also on display 07.03.			
i(2)	GSS			FTD_SB_PH_TAI	B:D	R,I,O	yes
				The latest value for timing advance index, range 0-15. If continuous timing advance is/was not in use, xx is shown.			
j(2)	GPDS			FTD_SB_MAC_DL_TFI	B:UD	R,I,O	yes
				TFI of the latest TBF configuration, range 0-31. If there is/was no downlink TBF in the latest TBF configuration, xx is shown.			
k(4)	GPDS			FTD_SB_MAC_ALLOC_MODE	S	R,I,O	yes
				MAC mode, i.e. resource allocation method, used during the latest TBF configuration: DYN EDYN FIXD DUSF : USF granularity in use EUSF : USF granularity in use F_HD : Fixed Half Duplex			
l(4)	GSS			FTD_SB_GPRS_TYPE_OF_CURR_CH	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Type of current channel In GPRS idle mode, if PBCCH supported in cell: PCCC, PBCC, PAGC, PNDR (non-DRX state): In GPRS idle mode, if PBCCH not supported in cell: AGCH, NDRX (non-DRX state), CCCH, BCCH In GPRS transfer mode: PDTC Other possibilities are the same as in Display 1 in group 1.						
m	GPDS			FTD_SB_GMM_R_AND_S	S	R,I,O	yes
R if MS is in READY state, S if GPRS is suspended and otherwise empty,							
n(8)	GSS			FTD_SB_PH_USF	S	R,I,O	yes
USF values of the current TBF configuration, the first value corresponding timeslot 0, next timeslot 1 and so on. The range of each USF value is 0-7. If there is no uplink TBF, or dynamic allocation was not used in the latest TBF configuration, xxxxxxxx is shown. If there is an uplink TBF but not all the 8 time slots are used, x is shown in place of the unused time slots.							

7.3 Display 06.02: Previous UL TBF establishment

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbb c ddddddd eeeeeee </pre>	<pre> establish.cause P/RACH pri TBF result 1 or 2-phase </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GPDS			FTD_SB_MAC_UL_TBF_EST_CAUSE	S	R,I,O	yes
The establishment cause of the previous TBF establishment: ONE-PHASE : one-phase access request SHORT : short access request TWO-PHASE : two-phase access request PAGE RES : paging response CELL UPD : cell update GMM SIGN : GMM or SM procedure SINGLE B : single block without TBF establishment These correspond the establishment causes in PACKET CHANNEL REQUEST.							
b(5)	GPDS			FTD_SB_MAC_CH_REQ_TYPE	S	R,I,O	yes
PRACH : if PACKET CHANNEL REQUEST was sent (PCCCH) RACH : if CHANNEL REQUEST was sent (CCCH)							
c	GPDS			FTD_SB_MAC_RADIO_PRIORITY	B:UD	R,I,O	yes
Radio priority, range 1-4							
d(7)	GPDS			FTD_SB_MAC_TBF_EST_RES	S	R,I,O	yes
Result of the TBF establishment: OK : TBF establishment succeeded. REJECT : IMM ASS REJECT (CCCH) or PACKET ACCESS REJECT (PCCCH) received from the network. TIMEOUT : No response to (P)RACH from the network. QUEUE : CS channel description received in IMM ASS (CCCH) or PACKET QUEUING NOTIFICATION received (PCCCH) and the TBF was not established (the final result may still be OK if the TBF was established correctly after queueing). FAILURE : TBF establishment failed due to any other reason.							
e(7)	GPDS			FTD_SB_MAC_TBF_EST_REALIZED	S	R,I,O	yes
The used access type, 1-PHASE or 2-PHASE access. This informs the finally used method, regardless of the requested access type. If the TBF establishment failed, xxxxxx is shown.							

7.4 Display 06.03: Information of the GMM state

S40 Data display	S40 HELP display
<pre> aaa bbbbbb c h dddd READY:eee s T312:fff/ggg </pre>	<pre> NWMod Attach GMMsta Rdy/F READYtimeout T3312ctr/tim </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GPDS			FTD_SB_GMM_NW_MODE	S	R,I,O	yes
				Network operation mode NW1 NW2 NW3			
b(8)	GPDS			FTD_SB_GMM_ATTACH_TYPE	S	R,I,O	yes
				The status of GPRS attach: (xxxxxxx displayed in all these displays in case no GPRS attach is made) BOTH : Both IMSI and GPRS attach made GPRS : GPRS attach only			
c	GPDS			FTD_SB_GMM_ATTACH_STATUS	S	R,I,O	yes
				The state of GMM c: main state of GMM X idle R registered D deregistered			
d(5)	GPDS			FTD_SB_GMM_READY_TMR_STATUS	S	R,I,O	yes
				While UE is in GSM READY : MS is in READY state FORCE : MS is in standby state after receiving "force to standby" indication STAND : MS is in standby state (xxxx shown if in IDLE state) While UE is in UMTS CONN : UE is registered and the PS signalling connection exists (alike with READY mode in GSM) IDLE : UE is registered but has no PS signalling connection (alike with STANDBY mode in GSM) Otherwise xxxx (include DETACHED mode)			
e(3)	GPDS			FTD_SB_GMM_READY_TMR_TIMEOUT	W:UD	R,I,O	yes
				The used timeout value for READY timer. Unit seconds. xxx if READY timer is deactivated			
f(3)	GPDS			FTD_SB_GMM_RAU_TMR_CURRENT	B:UD	R,I,O	yes
				Current value of T3312 timer, timer for periodical routing area updates. Range is 000 - 186 and unit is minutes.			
g(3)	GPDS			FTD_SB_GMM_RAU_TMR_TIMEOUT	W:UD	R,I,O	yes
				Timeout value of T3312 timer. Range 000 - 186 and unit is minutes. xxx if T3312 timer is deactivated			
h	GPDS			FTD_SB_GMM_PREVENT_READY_EXPIRY	S	R,I,O	yes
				F if READY timer expiry prevention mechanism is activated, otherwise empty.			

7.5 Display 06.04: Values of P-TMSI, RAC, SMS radio priority, Ciphering and Non-DRX parameters

S40 Data display	S40 HELP display
PTMSaaaaaaa RAC:bbbb S:f CIPH:cccc PGC:ddd ee s	P-TMSI RAC SMSpr CIPHERING PGC noDRXtmr

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GPDS			FTD_SB_GMM_PTMSI_VALUE	DW:UD	R,I,O	yes
				P-TMSI value in hex format			
b(4)	GPDS			FTD_SB_GMM_RAI_VALUE	W:UD	R,I,O	yes
				RAI (Routing Area Indicator) in hex format			
c(4)	GPDS			FTD_SB_GMM_CIPHERING_VALUE	S	R,I,O	yes
				Ciphering value (negotiated by GMM): OFF/GEA1/GEA2 Note! Even if the value here would show that ciphering is used, LLC may still send and receive unciphered blocks.			
d(3)	GPDS			FTD_SB_GMM_SPLIT_PG_CYCLE_VALUE	W:UD	R,I,O	yes
				SPLIT_PG_CYCLE value indicated by MS. 704 if non-DRX is used, otherwise range is 1-352. 0 is shown if SPLIT_PG_CYCLE is not in use in CCCH.			
e(2)	GPDS			FTD_SB_GMM_NON_DRX_TMR	B:UD	R,I,O	yes
				non-DRX timer indicated by MS. (The actually used value is a minimum of this and the network parameter.) 0 if non-DRX mode is used after transfer mode, otherwise range is 1-64 seconds.			
f	GPDS			FTD_SB_GMM_SMS_PRIORITY	B:UD	R,I,O	yes
				SMS radio priority, range 1-4. If MO SMS via GPRS is not allowed, x is shown.			

7.6 Display 06.05: GPRS Network parameters

S40 Data display	S40 HELP display
ACKTYPE:aaaa ACC:bb fff DRXMAX:cc g SPGC:d PM:ee	CTRL_ACKtype ACCtyp NCMOD DRX_TMR_MAX SPGC PageMod

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_MAC_CTRL_ACK_TYPE	S	R,I,O	yes
				The value of CONTROL_ACK_TYPE 4ACC: PACKET CONTROL ACKNOWLEDGEMENT is sent as 4 access bursts. CTRL: PACKET CONTROL ACKNOWLEDGEMENT is sent as RLC/MAC control block.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(2)	GPDS			FTD_SB_MAC_ACC_BURST_TYPE	B:UD	R,I,O	yes
				The value of ACCESS_BURST_TYPE, either 8 or 11 [bits].			
c(2)	GPDS			FTD_SB_MAC_DRX_TIMER_MAX	B:UD	R,I,O	yes
				The value of DRX_TIMER_MAX, range 1 - 64 seconds.			
d	GPDS			FTD_SB_MAC_SPLIT_PG_CYCLE_ON_CCCH	B:UD	R,I,O	yes
				The value of SPLIT_PG_CYCLE_CCCH_SUPPORTED, range 0-1. If PBCCH is supported, x is shown.			
e(2)	GPDS			FTD_SB_MAC_PAGE_MODE	S	R,I,O	yes
				Paging mode: NO: normal paging EX: extended paging RO: paging reorganization SB: same as before			
f(3)	GPDS			FTD_SB_MAC_NC_MODE_BROADCAST	S	R,I,O	yes
				NC mode indicated in system information. If GPRS not supported, xxx is shown. NC0: No measurement reports, MS decides of the cell re-selections NC1: Measurement reports. MS decides of the cell re-selections NC2: Measurement reports. The network commands the cell re-selections.			
g	GPDS			FTD_SB_MAC_T3168_VALUE	B:UD	R,I,O	yes
				The value of T3168 timer, range 0-7, corresponding 0.5s, 1s, , 4s.			

7.7 Display 06.06: Packet control channel parameters

If PCCCH is not supported, xxx is shown in all fields

540 Data display	540 HELP display
<pre>PBCCH a b PCCCH cc d PAG:ee REL:f PRA:gg</pre>	<pre>PBCCH BLK H PCCCH CH H PAG_BLKS REL PRACH_BL</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GPDS			FTD_SB_MAC_BS_PBCCH_BLKS	B:UD	R,I,O	yes
				Value of BS_PBCCH_BLKS, range 1-4.			
b	GSS			FTD_SB_PBCCH_HOPPING	S	R,I,O	yes
				Hopping of PBCCH H if PBCCH is hopping, otherwise empty			
c(2)	GPDS			FTD_SB_MAC_BS_PCC_CHANS	B:UD	R,I,O	yes
				Value of BS_PCC_CHANS, range 1-16.			
d	GSS			FTD_SB_PCCCH_HOPPING	S	R,I,O	yes
				Hopping of PCCCH H if PCCCH is hopping, otherwise empty (also if BS_PCC_CHANS=1)			
e(2)	GPDS			FTD_SB_MAC_BS_PAG_BLKS_RES	B:UD	R,I,O	yes
				Value of BS_PAG_BLKS_RES, range 0-12.			
f	GPDS			FTD_SB_MAC_BS_PCC_REL	B:UD	R,I,O	yes
				Value of BS_PCC_REL, range 0-1.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(2)	GPDS			FTD_SB_MAC_BS_PRACH_BKLS	B:UD	R,I,O	yes
Value of BS_PRACH_BKLS, range 0-12.							

7.8 Display 06.07: (Packet) System information parameters

S40 Data display	S40 HELP display
<pre>SI13:aaaa PSI5:b Mg Sh PSI:cc dd ee Pfsi l j k</pre>	<pre>SI13location PSI5 Nw Rev PSIschedulin PSIst PFC R4</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_PH_SI13_LOCATION	S	R,I,O	yes
The location of System information 13. NORM: SI 13 available at BCCH Norm EXT: SI 13 available at BCCH Ext							
b	GPDS			FTD_SB_MAC_PSI5_BROADCAST	B:UD	R,I,O	yes
The availability of Packet system information 5 (optional) 0: PSI 5 not supported 1: PSI 5 supported							
c(2)	GPDS			FTD_SB_MAC_PSI1_REPEAT_PERIOD	B:UD	R,I,O	yes
The value of PSI_REPEAT_PERIOD, range 1-16. If PBCCH is not supported, xx is shown.							
d(2)	GPDS			FTD_SB_MAC_PSI_COUNT_LR	B:UD	R,I,O	yes
The value of PSI_COUNT_LR, range 0-63. If PBCCH is not supported, xx is shown.							
e(2)	GPDS			FTD_SB_MAC_PSI_COUNT_HR	B:UD	R,I,O	yes
The value of PSI_COUNT_HR, range 0-63. If PBCCH is not supported, xx is shown.							
f	GPDS			FTD_SB_MAC_PSI_STATUS_IND	B:UD	R,I,O	yes
The value of PSI_STATUS_IND, range 0-1. If 1, network supports the PACKET PSI_STATUS message. If PBCCH is not supported, 0 is shown.							
g	GSS			FTD_SB_PH_MSCR	B:D	R,I,O	yes
Value of MSCR bit, range 0-1. If 0, MSC is Release 98 or older, or info not available If 1, MSC is Release 99 onwards							
h	GSS			FTD_SB_PH_SGSNR	B:D	R,I,O	yes
Value of SGSNR bit, range 0-1 If 0, SGSN is Release 98 or older, or info not available If 1, SGSN is Release 99 onwards							
i	GSS			FTD_SB_PH_SI_STATUS_IND	B:D	R,I,O	yes
The value of SI_STATUS_IND, range 0-1. If 1, network supports the PACKET SI_STATUS message. If PBCCH is supported, 0 is shown.							
j	GSS			FTD_SB_PH_EXT_UTBF	B:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	The value of NW_EXT_UTBF, range 0-1. If 1, network supports the extended UL TBF mode (Rel4).						
k	GSS			FTD_SB_PH_CCN_ACTIVE	B:D	R;I;O	yes
	The value of CCN_ACTIVE, range 0-1. If 1, network supports Cell Change Notification procedures (Rel4)						
l	GSS			FTD_SB_PH_PFC_FEATURE_MODE	B:D	R;I;O	yes
	The value of PFC_FEATURE_MODE, range 0-1. If 1, network supports packet flow context procedures.						

7.9 Display 06.08: Cell re-selection parameters (serving cell)

xx is shown in all fields if MS performs cell re-selections with GSM cell re-selection algorithm, i.e. if PBCCH is not supported and if neither PACKET MEAS ORDER nor PACKET CELL CHANGE ORDER has been received. xx is also shown in a specific field if the value is not available

S40 Data display	S40 HELP display
<pre>MIN_RXLEV:aa READY_HYS:bb RA_HYST: cc d e f gggg</pre>	<pre>MinRxLAccess READYhystere RAhysteresis H Q R TResel</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSS			FTD_SB_GPRS_RXLEV_ACC_MIN	B:D	R,I,O	yes
	The value of GPRS_RXLEV_ACCESS_MIN, range 0-63.						
b(2)	GSS			FTD_SB_GPRS_CELL_RESEL_HYST	B:D	R,I,O	yes
	The value of GPRS_CELL_RESELECT_HYSTERESIS, range 0-14 [dB].						
c(2)	GSS			FTD_SB_RA_RESEL_HYST	B:D	R,I,O	yes
	The value of RA_RESELECT_HYSTERESIS, range 0-14 [dB].						
d	GSS			FTD_SB_C31_HYST	B:D	R,I,O	yes
	The value of C31_HYST, range 0-1.						
e	GSS			FTD_SB_C32_QUAL	B:D	R,I,O	yes
	The value of C32_QUAL, range 0-1.						
f	GSS			FTD_SB_RAND_ACC_RETRY	B:D	R,I,O	yes
	The value of RANDOM_ACCESS_RETRY, range 0-1.						
g(4)	GSS			FTD_SB_T_RESEL	W:D	R,I,O	yes
	The value of T_RESEL, range 5-300 [seconds].						

7.10 Display 06.09: GPRS information of the serving cell, 1st, 2nd, and 3rd neighbor

1. row: serving cell information
2. row: 1. neighbor information
3. row: 2. neighbor information
4. row: 3. neighbor information

xx is shown in all fields if MS performs cell re-selections with GSM cell re-selection algorithm, i.e. if PBCCH is not supported and if neither PACKET MEAS ORDER nor PACKET CELL CHANGE ORDER has been received.

S40 Data display	S40 HELP display
<pre>aaabbb c ddd eeefff g hhh iiiijjj k lll mmmnnn o ppp</pre>	<pre>SCH Rx P C32 1CH Rx P C32 2CH Rx P C32 3CH Rx P C32</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_GPRS_CARRIER_SERV	S	R,I,0	yes
	Carrier number in decimal.						
b(3)	GSS			FTD_SB_GPRS_RX_LEVEL_SERV	B:D	R,I,0	yes
	Rx level in dBm, minus sign not shown if <=-100.						
c	GSS			FTD_SB_PRIOR_CLASS_SERV	S	R,I,0	yes
	PRIORITY_CLASS, range 0-7. Shown only when C31>=0, otherwise left empty. If HCS parameters are not available (optional), x is shown.						
d(3)	GSS			FTD_SB_C32_SERV	S	R,I,0	yes
	C32 value. For the serving cell, C32 equals C1. The neighbours are sorted first based on the priority class (biggest priority on top). Within each priority class the neighbours are sorted based on C32 value. The neighbors are sorted based on only C32, if all the C31 values are negative (c-fields empty) or if priorities are not available (x shown in c-fields).						
e(3)	GSS			FTD_SB_GPRS_CARRIER_1_NEIGH	S	R,I,0	yes
	Carrier number in decimal.						
f(3)	GSS			FTD_SB_GPRS_RX_LEVEL_1_NEIGH	B:D	R,I,0	yes
	Rx level in dBm, minus sign not shown if <=-100.						
g	GSS			FTD_SB_PRIOR_CLASS_1_NEIGH	S	R,I,0	yes
	PRIORITY_CLASS, range 0-7. Shown only when C31>=0, otherwise left empty. If HCS parameters are not available (optional), x is shown.						
h(3)	GSS			FTD_SB_C32_1_NEIGH	S	R,I,0	yes
	C32 value. For the serving cell, C32 equals C1. The neighbours are sorted first based on the priority class (biggest priority on top). Within each priority class the neighbours are sorted based on C32 value. The neighbors are sorted based on only C32, if all the C31 values are negative (c-fields empty) or if priorities are not available (x shown in c-fields).						
i(3)	GSS			FTD_SB_GPRS_CARRIER_2_NEIGH	S	R,I,0	yes
	Carrier number in decimal.						
j(3)	GSS			FTD_SB_GPRS_RX_LEVEL_2_NEIGH	B:D	R,I,0	yes
	Rx level in dBm, minus sign not shown if <=-100.						
k	GSS			FTD_SB_PRIOR_CLASS_2_NEIGH	S	R,I,0	yes
	PRIORITY_CLASS, range 0-7. Shown only when C31>=0, otherwise left empty. If HCS parameters are not available (optional), x is shown.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
l(3)	GSS			FTD_SB_C32_2_NEIGH	S	R,I,0	yes
	C32 value. For the serving cell, C32 equals C1. The neighbours are sorted first based on the priority class (biggest priority on top). Within each priority class the neighbours are sorted based on C32 value. The neighbors are sorted based on only C32, if all the C31 values are negative (c-fields empty) or if priorities are not available (x shown in c-fields).						
m(3)	GSS			FTD_SB_GPRS_CARRIER_3_NEIGH	S	R,I,0	yes
	Carrier number in decimal.						
n(3)	GSS			FTD_SB_GPRS_RX_LEVEL_3_NEIGH	B:D	R,I,0	yes
	Rx level in dBm, minus sign not shown if <=-100.						
o	GSS			FTD_SB_PRIOR_CLASS_3_NEIGH	S	R,I,0	yes
	PRIORITY_CLASS, range 0-7. Shown only when C31>=0, otherwise left empty. If HCS parameters are not available (optional), x is shown.						
p(3)	GSS			FTD_SB_C32_3_NEIGH	S	R,I,0	yes
	C32 value. For the serving cell, C32 equals C1. The neighbours are sorted first based on the priority class (biggest priority on top). Within each priority class the neighbours are sorted based on C32 value. The neighbors are sorted based on only C32, if all the C31 values are negative (c-fields empty) or if priorities are not available (x shown in c-fields).						

7.11 Display 06.10: GPRS information of 4th, 5th and 6th neighbor

- 1. row: 4. neighbor information
- 2. row: 5. neighbor information
- 3. row: 6. neighbor information

xx is shown in all fields if MS performs cell re-selections with GSM cell re-selection algorithm, i.e. if PBCCH is not supported and if neither PACKET MEAS ORDER nor PACKET CELL CHANGE ORDER has been received.

S40 Data display	S40 HELP display
<pre>aaabbb c ddd eeefff g hhh iiiijjj k lll</pre>	<pre>4CH Rx P C32 5CH Rx P C32 6CH Rx P C32</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_GPRS_CARRIER_4_NEIGH	S	R,I,0	yes
	Carrier number in decimal.						
b(3)	GSS			FTD_SB_GPRS_RX_LEVEL_4_NEIGH	B:D	R,I,0	yes
	Rx level in dBm, minus sign not shown if <=-100.						
c	GSS			FTD_SB_PRIOR_CLASS_4_NEIGH	S	R,I,0	yes
	PRIORITY_CLASS, range 0-7. Shown only when C31>=0, otherwise left empty. If HCS parameters are not available (optional), x is shown.						
d(3)	GSS			FTD_SB_C32_4_NEIGH	S	R,I,0	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	C32 value. The neighbours are sorted first based on the priority class (biggest priority on top). Within each priority class the neighbours are sorted based on C32 value. The neighbors are sorted based on only C32, if all the C31 values are negative (c-fields empty) or if priorities are not available (x shown in c-fields).						
e(3)	GSS			FTD_SB_GPRS_CARRIER_5_NEIGH	S	R,I,0	yes
	Carrier number in decimal.						
f(3)	GSS			FTD_SB_GPRS_RX_LEVEL_5_NEIGH	B:D	R,I,0	yes
	Rx level in dBm, minus sign not shown if <=-100.						
g	GSS			FTD_SB_PRIOR_CLASS_5_NEIGH	S	R,I,0	yes
	PRIORITY_CLASS, range 0-7. Shown only when C31>=0, otherwise left empty. If HCS parameters are not available (optional), x is shown.						
h(3)	GSS			FTD_SB_C32_5_NEIGH	S	R,I,0	yes
	C32 value. The neighbours are sorted first based on the priority class (biggest priority on top). Within each priority class the neighbours are sorted based on C32 value. The neighbors are sorted based on only C32, if all the C31 values are negative (c-fields empty) or if priorities are not available (x shown in c-fields).						
i(3)	GSS			FTD_SB_GPRS_CARRIER_6_NEIGH	S	R,I,0	yes
	Carrier number in decimal.						
j(3)	GSS			FTD_SB_GPRS_RX_LEVEL_6_NEIGH	B:D	R,I,0	yes
	Rx level in dBm, minus sign not shown if <=-100.						
k	GSS			FTD_SB_PRIOR_CLASS_6_NEIGH	S	R,I,0	yes
	PRIORITY_CLASS, range 0-7. Shown only when C31>=0, otherwise left empty. If HCS parameters are not available (optional), x is shown.						
l(3)	GSS			FTD_SB_C32_6_NEIGH	S	R,I,0	yes
	C32 value. The neighbours are sorted first based on the priority class (biggest priority on top). Within each priority class the neighbours are sorted based on C32 value. The neighbors are sorted based on only C32, if all the C31 values are negative (c-fields empty) or if priorities are not available (x shown in c-fields).						

7.12 Display 06.11: GPRS information of the serving cell and 6 neighbors

- 1. row: serving cell information
- 2. row: 1. neighbor on the left, 4. neighbor on the right
- 3. row: 2. neighbor on the left, 5. neighbor on the right
- 4. row: 3. neighbor on the left, 6. neighbor on the right

xx is shown in all fields if MS performs cell re-selections with GSM cell re-selection algorithm, i.e. if PBCCH is not supported and if neither PACKET MEAS ORDER nor PACKET CELL CHANGE ORDER has been received.

S40 Data display	S40 HELP display
<pre> a b c d e f g h i j k l m n o p q r s t u </pre>	<pre> SRyBE 1RaBE 4RaBE 2RaBE 5RaBE 3RaBE 6RaBE </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_GMM_STATE	S	R,I,O	yes
	R if MS is in READY state and therefore applies hysteresis for cell re-selection.						
b	GSS			FTD_SB_CELL_BAR_ACC_2	B:D	R,I,O	yes
	The value of CELL_BAR_ACCESS_2. x is shown if PBCCH is not supported.						
c	GSS			FTD_SB_EXC_ACC	B:D	R,I,O	yes
	The value of EXC_ACC. x is shown if PBCCH is not supported.						
d	GSS			FTD_SB_SAME_RA_AS_SRV_CELL_1_NEIGH	B:D	R,I,O	yes
	The value of SAME_RA_AS_SERVING_CELL: 1: cell belongs to the same routing area as the serving cell 0: cell belongs to the different routing area as the serving cell						
e	GSS			FTD_SB_CELL_BAR_ACC_2_1_NEIGH	B:D	R,I,O	yes
	The value of CELL_BAR_ACCESS_2. x is shown if PBCCH is not supported.						
f	GSS			FTD_SB_EXC_ACC_1_NEIGH	B:D	R,I,O	yes
	The value of EXC_ACC. x is shown if PBCCH is not supported.						
g	GSS			FTD_SB_SAME_RA_AS_SRV_CELL_2_NEIGH	B:D	R,I,O	yes
	The value of SAME_RA_AS_SERVING_CELL: 1: cell belongs to the same routing area as the serving cell 0: cell belongs to the different routing area as the serving cell						
h	GSS			FTD_SB_CELL_BAR_ACC_2_2_NEIGH	B:D	R,I,O	yes
	The value of CELL_BAR_ACCESS_2. x is shown if PBCCH is not supported.						
i	GSS			FTD_SB_EXC_ACC_2_NEIGH	B:D	R,I,O	yes
	The value of EXC_ACC. x is shown if PBCCH is not supported.						
j	GSS			FTD_SB_SAME_RA_AS_SRV_CELL_3_NEIGH	B:D	R,I,O	yes
	The value of SAME_RA_AS_SERVING_CELL: 1: cell belongs to the same routing area as the serving cell 0: cell belongs to the different routing area as the serving cell						
k	GSS			FTD_SB_CELL_BAR_ACC_2_3_NEIGH	B:D	R,I,O	yes
	The value of CELL_BAR_ACCESS_2. x is shown if PBCCH is not supported.						
l	GSS			FTD_SB_EXC_ACC_3_NEIGH	B:D	R,I,O	yes
	The value of EXC_ACC. x is shown if PBCCH is not supported.						
m	GSS			FTD_SB_SAME_RA_AS_SRV_CELL_4_NEIGH	B:D	R,I,O	yes
	The value of SAME_RA_AS_SERVING_CELL: 1: cell belongs to the same routing area as the serving cell 0: cell belongs to the different routing area as the serving cell						
n	GSS			FTD_SB_CELL_BAR_ACC_2_4_NEIGH	B:D	R,I,O	yes
	The value of CELL_BAR_ACCESS_2. x is shown if PBCCH is not supported.						
o	GSS			FTD_SB_EXC_ACC_4_NEIGH	B:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	The value of EXC_ACC. x is shown if PBCCH is not supported.						
p	GSS			FTD_SB_SAME_RA_AS_SRV_CELL_5_NEIGH	B:D	R,I,O	yes
	The value of SAME_RA_AS_SERVING_CELL: 1: cell belongs to the same routing area as the serving cell 0: cell belongs to the different routing area as the serving cell						
q	GSS			FTD_SB_CELL_BAR_ACC_2_5_NEIGH	B:D	R,I,O	yes
	The value of CELL_BAR_ACCESS_2. x is shown if PBCCH is not supported.						
r	GSS			FTD_SB_EXC_ACC_5_NEIGH	B:D	R,I,O	yes
	The value of EXC_ACC. x is shown if PBCCH is not supported.						
s	GSS			FTD_SB_SAME_RA_AS_SRV_CELL_6_NEIGH	B:D	R,I,O	yes
	The value of SAME_RA_AS_SERVING_CELL: 1: cell belongs to the same routing area as the serving cell 0: cell belongs to the different routing area as the serving cell						
t	GSS			FTD_SB_CELL_BAR_ACC_2_6_NEIGH	B:D	R,I,O	yes
	The value of CELL_BAR_ACCESS_2. x is shown if PBCCH is not supported.						
u	GSS			FTD_SB_EXC_ACC_6_NEIGH	B:D	R,I,O	yes
	The value of EXC_ACC. x is shown if PBCCH is not supported.						

7.13 Display 06.12: EGPRS specific parameters

S40 Data display	S40 HELP display
<pre>EGPRS_SUP: a PACKET_CH: b cc dd</pre>	<pre>EGPRS suppor Packet chann BEP period LQ meas mode</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_EGPRS_SUPPORT	B:D	R,I,O	yes
	1=EGPRS supported in cell; 0=not supported						
b	GSS			FTD_SB_EGPRS_PACKET_CHANNEL_REQUEST	B:D	R,I,O	yes
	1=EGPRS packet channel request supported in cell; 0=not supported						
c(2)	GSS			FTD_SB_EGPRS_BEP_PER	B:H	R,I,O	yes
	BEP_PERIOD, or BEP_PERIOD2 when received						
d(2)	GPDS			FTD_SB_EGPRS_LQ_MEAS_MODE	B:UD	R,I,O	yes
	Used link quality measurement mode						

7.14 Display 06.13: EGPRS BEP parameters

S40 Data display	S40 HELP display
<pre>GMSK BEP aa GMSK CV b 8PSK BEP cc 8PSK CV d</pre>	<pre>GMSK MEAN B GMSK CV BEP 8PSK MEAN B 8PSK CV BEP</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_EGPRS_BEP_MEAN_GPSK	B:UD	R	yes
				This field contains the mean value of the Bit Error Probability of the channel averaged over all time slots in the TBF for GMSK, refer to 3GPP TS 05.08. Range 0-31			
b	GPDS			FTD_SB_EGPRS_BEP_CV_GPSK	B:UD	R	yes
				This field contains the mean value of the Bit Error Probability of the channel averaged over all time slots in the TBF for 8 PSK, refer to 3GPP TS 05.08. Range 0-7			
c(2)	GPDS			FTD_SB_EGPRS_BEP_MEAN_8PSK	B:UD	R	yes
				This field contains the variation co-efficient for the Bit Error Probability averaged over all time slots of the TBF for GMSK, refer to 3GPP TS 05.08. Range 0-31			
d	GPDS			FTD_SB_EGPRS_BEP_CV_8PSK	B:UD	R	yes
				This field contains the variation co-efficient for the Bit Error Probability averaged over all time slots of the TBF for 8 PSK, refer to 3GPP TS 05.08. Range 0-7			

7.15 Display 06.14 Dual Transfer Mode information

S40 Data display	S40 HELP display
<pre>DTM supp aaa MAXLAPDm bb GTTP ul ccc GTTP dl ddd</pre>	<pre>DTM support MAX_LAPDm Counters for ul & dl GTTP</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_DTM_SUPP	S	R,I,O	yes
				Network support of DTM: ON : DTM is supported by the network OFF : DTM is not supported by the network			
b(2)	GSS			FTD_SB_DTM_MAX_LAPDM	B:D	R,I,O	yes
				The value of parameter MAX_LAPDm, value range 5-12 X is shown if DTM is not supported in the cell			
c(3)	GPDS			FTD_SB_DTM_GTTP_UL_CTR	B:UD	R,I,O	yes
				Counter for LLC PDUs sent via GTTP			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(3)	GPDS			FTD_SB_DTM_GTTP_DL_CTR	B:UD	R,I,O	yes
Counter for LLC PDUs received via GTTP							

7.16 Display 06.15: Dual Transfer Mode configuration

S40 Data display	S40 HELP display
TN: 01234567 CS: aaaaaaaaa Pdl bbbbbbbb Pul cccccccc	DTM channel config for CS and PS (UL+DL)

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GSS			FTD_SB_DTM_CS_TSLOT_CONF	DW:H	R,I,O	yes
Each bit can have value 1 or 0, 1 indicating that timeslot is part of CS allocation in either uplink or downlink direction. This field also shows the configuration when only CS connection exists.							
b(8)	GSS			FTD_SB_DTM_PS_DL_CONF	DW:H	R,I,O	yes
Each bit can have value 1 or 0, 1 indicating that timeslot is part of PS allocation in downlink direction.							
c(8)	GSS			FTD_SB_DTM_PS_UL_CONF	DW:H	R,I,O	yes
Each bit can have value 1 or 0, 1 indicating that timeslot is part of PS allocation in uplink direction.							

8 Group 07: GPRS Data protocol displays

8.1 Display 07.01: Information of the first active PDP context

If no PDP context is active, xx is shown in all fields. In 2G/3G products, xx is shown in all fields except NSAPI and SAPI.

S40 Data display	S40 HELP display
<pre>NSAPIIaaSAPIb RCc d e f gg h COMPij kkk .lll.mmm.nnn</pre>	<pre>NSAPI SAPI RC OtherQoS P CompPD IP IPaddress</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GPDS_NSAPI_1	B:UD	R,I,O	yes
	NSAPI of the PDP context, range 5-15.						
b	GPDS			FTD_SB_GPDS_SAPI_1	B:UD	R,I,O	yes
	The SAPI identity: 3,5,9 or 11.						
c	GPDS			FTD_SB_SN_RELC_1	B:UD	R,I,O	yes
	The negotiated reliability class of the PDP context, range 1-5.						
d	GPDS			FTD_SB_SN_DELC_1	B:UD	R,I,O	yes
	The negotiated delay class of the PDP context, range 1-4.						
e	GPDS			FTD_SB_SN_PREC_1	B:UD	R,I,O	yes
	The negotiated precedence class of the PDP context, range 1-3						
f	GPDS			FTD_SB_SN_PTPC_1	B:UD	R,I,O	yes
	The negotiated peak throughput, range 1-9.						
g(2)	GPDS			FTD_SB_SN_MTPC_1	S	R,I,O	yes
	The negotiated mean throughput, range 1-18 or B (=best effort).						
h	GPDS			FTD_SB_SN_RPRI_1	B:UD	R,I,O	yes
	The radio priority of the PDP context, range 1-4.						
i	GPDS			FTD_SB_SN_HCOMP_1	S	R,I,O	yes
	P if protocol compression (VanJacobson) isnegotiated to be usedotherwise empty.						
j	GPDS			FTD_SB_SN_DCOMP_1	S	R,I,O	yes
	D if data compression (V.42bis) is negotiated to be used otherwise empty.						
k(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_1_1	B:UD	R,I,O	yes
	The PDP address of the PDP context, part 1. Format IPv4 address.						
l(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_1_2	B:UD	R,I,O	yes
	The PDP address of the PDP context, part 2. Format IPv4 address.						
m(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_1_3	B:UD	R,I,O	yes
	The PDP address of the PDP context, part 3. Format IPv4 address.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
n(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_1_4	B:UD	R,I,O	yes
The PDP address of the PDP context, part 4. Format IPv4 address.							

8.2 Display 07.02: Information of the second active PDP context

If no PDP context is active, xx is shown in all fields. In 2G/3G products, xx is shown in all fields except NSAPI and SAPI.

S40 Data display	S40 HELP display
<pre>NSAPIaasAPIb RCc d e f gg h COMPij kkk .lll.mmm.nnn</pre>	<pre>NSAPI SAPI RC OtherQoS P CompPD IP IPaddress</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GPDS_NSAPI_2	B:UD	R,I,O	yes
NSAPI of the PDP context, range 5-15.							
b	GPDS			FTD_SB_GPDS_SAPI_2	B:UD	R,I,O	yes
SAPI of the PDP context: 3,5,9 or B (=11)							
c	GPDS			FTD_SB_SN_RELC_2	B:UD	R,I,O	yes
The negotiated reliability class of the PDP context, range 1-5.							
d	GPDS			FTD_SB_SN_DELC_2	B:UD	R,I,O	yes
The negotiated delay class of the PDP context, range 1-4.							
e	GPDS			FTD_SB_SN_PREC_2	B:UD	R,I,O	yes
The negotiated precedence class of the PDP context, range 1-3							
f	GPDS			FTD_SB_SN_PTPC_2	B:UD	R,I,O	yes
The negotiated peak throughput, range 1-9.							
g(2)	GPDS			FTD_SB_SN_MTPC_2	S	R,I,O	yes
The negotiated mean throughput, range 1-18 or B (=best effort).							
h	GPDS			FTD_SB_SN_RPRI_2	B:UD	R,I,O	yes
The radio priority of the PDP context, range 1-4.							
i	GPDS			FTD_SB_SN_HCOMP_2	S	R,I,O	yes
P if protocol compression (VanJacobsen) is negotiated to be used otherwise empty.							
j	GPDS			FTD_SB_SN_DCOMP_2	S	R,I,O	yes
D if data compression (V.42bis) is negotiated to be used otherwise empty.							
k(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_2_1	B:UD	R,I,O	yes
The PDP address of the PDP context, part 1. Format IPv4 address.							
l(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_2_2	B:UD	R,I,O	yes
The PDP address of the PDP context, part 2. Format IPv4 address.							
m(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_2_3	B:UD	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	The PDP address of the PDP context, part 3. Format IPv4 address.						
n(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_2_4	B:UD	R,I,O	yes
	The PDP address of the PDP context, part 4. Format IPv4 address.						

8.3 Display 07.03: Information of the RLC state

S40 Data display	S40 HELP display
<pre>DLa CSb cccc ULd CSe ffff ggggg N3102:hh</pre>	<pre>DL:TS CS Mod UL:TS CS Mod clo/ope N3102</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GPDS			FTD_SB_RLC_DL_SLOTS	B:UD	R,I,O	yes
	Downlink time slot count in the latest TBF configuration, range 0-8						
b	GPDS			FTD_SB_RLC_DL_CH_CODE	B:UD	R,I,O	yes
	Channel coding scheme in downlink direction, range 1-4. If no downlink TBF is active, x is shown. Appears also on display 07.03.						
c(4)	GPDS			FTD_SB_RLC_DL_MODE	S	R,I,O	yes
	RLC mode in downlink direction. If no downlink TBF is active, xxxxx is shown. ACK: RLC in acknowledged mode UNAC: RLC in unacknowledged mode						
d	GPDS			FTD_SB_RLC_UL_SLOTS	B:UD	R,I,O	yes
	Uplink time slot count in the latest TBF configuration, range 0-8.						
e	GPDS			FTD_SB_RLC_UL_CH_CODE	B:UD	R,I,O	yes
	Channel coding scheme in uplink direction, range 1-4. If no uplink TBF is active, x is shown. Appears also on display 07.03.						
f(4)	GPDS			FTD_SB_RLC_UL_MODE	S	R,I,O	yes
	RLC mode in uplink direction. If no uplink TBF is active, xxxxx is shown. ACK: RLC in acknowledged mode UNAC: RLC in unacknowledged mode						
g(5)	GPDS			FTD_SB_RLC_ENDING_MODE	S	R,I,O	yes
	xxxxx when no UL TBF is active CLOSE when UL TBF is close-ended TBF OPEN when UL TBF is open-ended TBF						
h(2)	GPDS			FTD_SB_RLC_N3102	B:UD	R,I,O	yes
	The state of N3102 counter, range 0-PAN_MAX (negative values are also shown as 0). If the counter is disabled, x is shown.						

8.4 Display 07.04: RLC parameters

xx is shown in the fields when the values are not available (e.g. no GPRS support in the cell, no GPRS attach performed).

S40 Data display	S40 HELP display
<pre>T3192:aa CVMAX:bb PAN:c d ee</pre>	<pre>T3192timer BS_CV_MAX PANDecIncMax</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_RLC_T3192	B:UD	R,I,O	yes
				The value of T3192 timer, range 0-7, corresponding 0.5s, 1s, , 4s.			
b(2)	GPDS			FTD_SB_RLC_BS_CV_MAX	B:UD	R,I,O	yes
				The value of BS_CV_MAX, range 1-15. Tells how many radio block periods the countdown procedure lasts in the end of UL TBF.			
c	GPDS			FTD_SB_RLC_PAN_DEC	B:UD	R,I,O	yes
				The value of PAN_DEC, range 0-7. If PAN_DEC and PAN_INC are equal to 0, N3102 counter is disabled.			
d	GPDS			FTD_SB_RLC_PAN_INC	B:UD	R,I,O	yes
				The value of PAN_INC, range 0-7. If PAN_DEC and PAN_INC are equal to 0, N3102 counter is disabled.			
e(2)	GPDS			FTD_SB_RLC_PAN_MAX	B:UD	R,I,O	yes
				The value of PAN_MAX, range 4-32.			

8.5 Display 07.05: RLC data block counters

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd</pre>	<pre>RxBlockCount TxBlockCount RxMissing TxRetransmit</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_RLC_BLOCKS_RECV	W:UD	R,I,O	yes
				Counter for received RLC data blocks			
b(4)	GPDS			FTD_SB_RLC_BLOCKS_SENT	W:UD	R,I,O	yes
				Counter for sent RLC data blocks			
c(4)	GPDS			FTD_SB_RLC_BLOCKS_MISS	W:UD	R,I,O	yes
				Counter for detected missing downlink data blocks			
d(4)	GPDS			FTD_SB_RLC_BLOCKS_RESENT	W:UD	R,I,O	yes
				Counter for requested re-transmissions of the uplink RLC data blocks			

8.6 Display 07.06: LLC data block counters

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd</pre>	<pre>RxPDUcnt TxPDUcnt RxMissingErr TxRetransmit</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_LLC_PDU_RECV	W:UD	R,I,O	yes
	Counter for received LLC PDUs						
b(4)	GPDS			FTD_SB_LLC_PDU_SENT	W:UD	R,I,O	yes
	Counter for sent LLC PDUs						
c(4)	GPDS			FTD_SB_LLC_PDU_MISS	W:UD	R,I,O	yes
	Counter for detected missing or erroneous?? downlink LLC PDUs						
d(4)	GPDS			FTD_SB_LLC_PDU_RESENT	W:UD	R,I,O	yes
	Counter for re-transmitted uplink LLC PDUs						

8.7 Display 07.07: LLC Ciphering parameters

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccc dddd eeee ffff</pre>	<pre>KcLSB KcMSB ulI dlI ulUI dlUI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	GPDS			FTD_SB_LLC_KC1	DW:UD	R,I,O	yes
	LSB of Kc (bits 0-31) in hex format						
b(8)	GPDS			FTD_SB_LLC_KC2	DW:UD	R,I,O	yes
	MSB of Kc (bits 32-63) in hex format						
c(4)	GPDS			FTD_SB_LLC_OC_I_UL	W:UD	R,I,O	yes
	Uplink overflow counter for I frames						
d(4)	GPDS			FTD_SB_LLC_OC_I_DL	W:UD	R,I,O	yes
	Downlink overflow counter for I frames						
e(4)	GPDS			FTD_SB_LLC_OC_UI_UL	W:UD	R,I,O	yes
	Uplink overflow counter for UI frames						
f(4)	GPDS			FTD_SB_LLC_OC_UI_DL	W:UD	R,I,O	yes
	Downlink overflow counter for UI frames						

8.8 Display 07.08: LLC parameters of the first SAPI

xx is shown in all fields if there is no LLC SAPIs activated

S40 Data display	S40 HELP display
<pre>SAPIa bbbb cccc dd eeee fff ggg</pre>	<pre>SAPI N201I U N200 T200 kU kD</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GPDS			FTD_SB_GPDS_SAPI_1	B:UD	R,I,O	yes
	The SAPI identity: 3,5,9 or 11.						
b(4)	GPDS			FTD_SB_LLC_N201_I_1	W:UD	R,I,O	yes
	The value of N201-I (maximum information field for I frames), range 140-1520.						
c(4)	GPDS			FTD_SB_LLC_N201_U_1	W:UD	R,I,O	yes
	The value of N201-U (maximum information field for U and UI frames), range 140-1520.						
d(2)	GPDS			FTD_SB_LLC_N200_1	B:UD	R,I,O	yes
	The value of N200 (maximum number of retransmissions), range 1-15.						
e(4)	GPDS			FTD_SB_LLC_T200_1	W:UD	R,I,O	yes
	The value of T200 (retransmission timeout), range 1-4095.						
f(3)	GPDS			FTD_SB_LLC_KU_1	B:UD	R,I,O	yes
	The value of kU (uplink window size), range 1-255.						
g(3)	GPDS			FTD_SB_LLC_KD_1	B:UD	R,I,O	yes
	The value of kD (downlink window size), range 1-255.						

8.9 Display 07.09: LLC parameters of the second SAPI

xx is shown in all fields if there is no LLC SAPIs activated.

S40 Data display	S40 HELP display
<pre>SAPIa bbbb cccc dd eeee fff ggg</pre>	<pre>SAPI N201I U N200 T200 kU kD</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GPDS			FTD_SB_GPDS_SAPI_2	B:UD	R,I,O	yes
	SAPI of the PDP context: 3,5,9 or B (=11)						
b(4)	GPDS			FTD_SB_LLC_N201_I_2	W:UD	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
The value of N201-I (maximum information field for I frames), range 140-1520.							
c(4)	GPDS			FTD_SB_LLC_N201_U_2	W:UD	R,I,O	yes
The value of N201-U (maximum information field for U and UI frames), range 140-1520.							
d(2)	GPDS			FTD_SB_LLC_N200_2	B:UD	R,I,O	yes
The value of N200 (maximum number of retransmissions), range 1-15.							
e(4)	GPDS			FTD_SB_LLC_T200_2	W:UD	R,I,O	yes
The value of T200 (retransmission timeout), range 1-4095.							
f(3)	GPDS			FTD_SB_LLC_KU_2	B:UD	R,I,O	yes
The value of kU (uplink window size), range 1-255.							
g(3)	GPDS			FTD_SB_LLC_KD_2	B:UD	R,I,O	yes
The value of kD (downlink window size), range 1-255.							

8.10 Display 07.10: SNDC Data counters

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd</pre>	<pre>RxNPDUCnt TxNPDUCnt RxAborted TxRetrans</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_SN_NPDU_RECV	W:UD	R,I,O	yes
Counter for received NPDUs							
b(4)	GPDS			FTD_SB_SN_NPDU_SENT	W:UD	R,I,O	yes
Counter for sent NPDUs							
c(4)	GPDS			FTD_SB_SN_NPDU_ABORT	W:UD	R,I,O	yes
Counter for aborted NPDUs receptions							
d(4)	GPDS			FTD_SB_SN_NPDU_RESENT	W:UD	R,I,O	yes
Counter for resent NPDUs							

8.11 Display 07.11: PPP information

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc</pre>	<pre>HDL_C_FCSfail MRU MTU</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_PDI_FCS_FAIL	W:UD	R,I,O	yes
	Counter for PPP HDLC FCS failures						
b(4)	GPDS			FTD_SB_PDI_MRU	W:UD	R,I,O	yes
	Negotiated PPP Maximum Receive Unit Value.						
c(4)	GPDS			FTD_SB_PDI_MTU	W:UD	R,I,O	yes
	Negotiated PPP Maximum Transmit Unit Value.						

8.12 Display 07.12: ERLC Data information_1

S40 Data display	S40 HELP display
<pre> aaaa bbbb c d </pre>	<pre> TxMCS RxMCS Resegment Pre-empt </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_ERLC_MCS_UPLINK	S	R,I,O	yes
	Used MCS for uplink. Coding 1,2,3,4,5,6,7,8,9,3P,6P						
b(4)	GPDS			FTD_SB_ERLC_MCS_DOWNLINK	S	R,I,O	yes
	Used MCS for downlink Coding 1,2,3,4,5,6,7,8,9,3P,6P						
c	GPDS			FTD_SB_ERLC_RESEGMENT	B:UD	R,I,O	yes
	Value of resegmentation bit						
d	GPDS			FTD_SB_ERLC_PRE_EMPTIVE	B:UD	R,I,O	yes
	Value of pre-emptive transmission bit						

8.13 Display 07.13: ERLC Data information_2

S40 Data display	S40 HELP display
<pre> aaaaa bbbbbb </pre>	<pre> TxWindow RxWindow </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	GPDS			FTD_SB_ERLC_WINDOW_UPLINK	W:UD	R,I,O	yes
				Used window size for uplink			
b(5)	GPDS			FTD_SB_ERLC_WINDOW_DOWNLINK	W:UD	R,I,O	yes
				Used window size for downlink			

8.14 Display 07.14: ERLC Data counters

S40 Data display	S40 HELP display
<pre>aaaaa bbbbbb</pre>	<pre>MS_OUT_MEM L_ADAPTS</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	GPDS			FTD_SB_ERLC_MS_OUT_OF_MEM	DW:UD	R,I,O	yes
				MS_OUT_OF_MEMORY counter			
b(5)	GPDS			FTD_SB_ERLC_LINK_ADAPTATIONS	DW:UD	R,I,O	yes
				Number of MCS changes during TBF			

8.15 Display 07.15: System status

In 2G only products, xx is shown in all counter fields.

S40 Data display	S40 HELP display
<pre>aa ff ggggggggggggggg bbbb ccccc dddd eeeee</pre>	<pre>Status Used context IDs SMS Data GSM IntHO</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GPDS_ATT_AND_PDP	S	R,I,O	yes
				G if MS is GSM-GPRS attached, GP if attached and PDP context created, U if UMTS-GPRS attached, UP if attached and PDP context created, otherwise empty.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(5)	GPDS			FTD_SB_GPDS_MSL_SMS_SERV_REQ_COUNTER	W:UD	R,I,0	yes
				Counter for SMS signalling service requests.			
c(5)	GPDS			FTD_SB_GPDS_MSL_DATA_SERV_REQ_COUNTER	W:UD	R,I,0	yes
				Counter for data service requests.			
d(5)	GPDS			FTD_SB_GPDS_MSL_GSM_SERV_REQ_COUNTER	W:UD	R,I,0	yes
				Counter for GSM service requests.			
e(5)	GPDS			FTD_SB_GPDS_MSL_INTSYS_HO_COUNTER	W:UD	R,I,0	yes
				Counter for inter-system handovers.			
f(2)	GPDS			FTD_SB_GPDS_CONTEXT_COUNT	B:UD	R,I,0	yes
				Number of active PDP contexts, range 0-10.			
g(12)	GPDS			FTD_SB_GPDS_ACTIVE_CIDS	S	R,I,0	yes
				Active CIDs (6 first) after each other, range 0-10 for each. Example when 4 active PDP contexts: 0 1 2 3 .			

8.16 Display 07.16: Information of the selected PDP context

To change PDP context, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 0716 (GPRS Data protocol displays; Information of the selected PDP context) to the query prompt.
5. "INPUT" prompt will be shown on the display, enter the PDP context identifier (CID) in display.
6. Confirm with the Ok button.

If change succeeded, the new PDP context information is displayed. If no PDP context is active, xx is shown in all fields. In 2G only products, xx is shown in most of the fields.

S40 Data display	S40 HELP display
<pre>aa mm SAPIbb NSAPIcc RBdd eee f gh iii .jjj.kkk.lll</pre>	<pre>CID sec SAPI NSAPI RBId Pfi R Compr IPv4-address</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GPDS_CID	B:UD	R,I,0	no
				CID of the PDP context, range 0-10.			
b(2)	GPDS			FTD_SB_GPDS_SAPI	B:UD	R,I,0	no
				SAPI of the PDP context: 1,3,5,7,9 or 11.			
c(2)	GPDS			FTD_SB_GPDS_NSAPI	B:UD	R,I,0	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	NSAPI of the PDP context, range 5-15.						
d(2)	GPDS			FTD_SB_GPDS_MSL_RBID	B:UD	R,I,O	no
	The radio bearer ID of the PDP context, range 5-32.						
e(3)	GPDS			FTD_SB_GPDS_MSL_PFIID	B:UD	R,I,O	no
	The packet flow ID of the PDP context, range 0-127.						
f	GPDS			FTD_SB_GPDS_MSL_RPRI	B:UD	R,I,O	no
	Radio priority level of the corresponding NSAPI, range 1-4.						
g	GPDS			FTD_SB_GPDS_MSL_HCOMP	S	R,I,O	yes
	Header compression to be used: V - VanJacobsen (RFC1144), D - Degermark (RFC2507), R - RoHC (RFC3095), otherwise 'x' is shown.						
h	GPDS			FTD_SB_GPDS_MSL_DCOMP	S	R,I,O	yes
	Data compression to be used: 2 - V.42bis 4 - V.44, otherwise 'x' is shown.						
i(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_V4_1	B:UD	R,I,O	no
	First byte of the PDP address in IPv4 format. If IPv6 is used 'xxx' is shown.						
j(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_V4_2	B:UD	R,I,O	no
	Second byte of the PDP address in IPv4 format. If IPv6 is used 'xxx' is shown.						
k(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_V4_3	B:UD	R,I,O	no
	Third byte of the PDP address in IPv4 format. If IPv6 is used 'xxx' is shown.						
l(3)	GPDS			FTD_SB_GPDS_PDP_ADDRESS_V4_4	B:UD	R,I,O	no
	Last byte of the PDP address in IPv4 format. If IPv6 is used 'xxx' is shown.						
m(2)	GPDS			FTD_SB_GPDS_RELATEDPRIM_CID	B:UD	R,I,O	yes
	Empty if primary context. CID of the related primary PDP context, range 0-10, if secondary context.						
INPUT(4)	GPDS			FTD_SB_GPDS_CHANGE_CONTEXT	DW:D	R,I,O	no
	Context identifier (CID), range 0-10.						

8.17 Display 07.17: QoS of the selected PDP context

To change PDP context, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 0717 (GPRS Data protocol displays; QoS of the selected PDP context) to the query prompt.
5. "INPUT" prompt will be shown on the display, enter the PDP context identifier (CID) in display.
6. Confirm with the Ok button.

If change succeeded, the new QoS information is displayed. If no PDP context is active, xx is shown in all fields

S40 Data display	S40 HELP display
<pre>aa b c d eee f g hhh iii j kk lll mmm n o p q rr</pre>	<pre>CID QoS99... ...QoS99 QoS97</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GPDS_CID	B:UD	R,I,O	no
	CID of the PDP context, range 0-10.						
b	GPDS			FTD_SB_GPDS_SM_TRAC	B:UD	R,I,O	no
	The traffic class, range 1-4.						
c	GPDS			FTD_SB_GPDS_SM_DOES	B:UD	R,I,O	no
	The delivery of the erroneous SDUs, range 1-3.						
d	GPDS			FTD_SB_GPDS_SM_DELO	B:UD	R,I,O	no
	The delivery order, range 1-2.						
e(3)	GPDS			FTD_SB_GPDS_SM_MSDU	B:UD	R,I,O	no
	Maximum SDU size, range 1-153.						
f	GPDS			FTD_SB_GPDS_SM_RBER	B:UD	R,I,O	no
	The residual Bit Error Rate (BER), range 1-9.						
g	GPDS			FTD_SB_GPDS_SM_SDER	B:UD	R,I,O	no
	The SDU error ratio, range 1-7.						
h(3)	GPDS			FTD_SB_GPDS_SM_MBRU	B:UD	R,I,O	no
	Maximum bit rate for uplink, range 1-254.						
i(3)	GPDS			FTD_SB_GPDS_SM_MBRD	B:UD	R,I,O	no
	Maximum bit rate for downlink, range 1-254.						
j	GPDS			FTD_SB_GPDS_SM_TRHP	B:UD	R,I,O	yes
	The traffic handling priority, range 1-3.						
k(2)	GPDS			FTD_SB_GPDS_SM_TRDL	B:UD	R,I,O	yes
	The transfer delay, range 1-62.						
l(3)	GPDS			FTD_SB_GPDS_SM_GBRU	B:UD	R,I,O	yes
	Guaranteed bit rate for uplink, range 1-254.						
m(3)	GPDS			FTD_SB_GPDS_SM_GBRD	B:UD	R,I,O	yes
	Guaranteed bit rate for downlink, range 1-254.						
n	GPDS			FTD_SB_GPDS_SM_RELC	B:UD	R,I,O	yes
	The negotiated reliability class, range 1-5.						
o	GPDS			FTD_SB_GPDS_SM_DELC	B:UD	R,I,O	yes
	The negotiated delay class, range 1-4.						
p	GPDS			FTD_SB_GPDS_SM_PREC	B:UD	R,I,O	yes
	The negotiated precedence class, range 1-3						
q	GPDS			FTD_SB_GPDS_SM_PTPC	B:UD	R,I,O	yes
	The negotiated peak throughput, range 1-9.						
r(2)	GPDS			FTD_SB_GPDS_SM_MTPC	B:UD	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	The negotiated mean throughput, range 1-31.						
INPUT(4)	GPDS			FTD_SB_GPDS_CHANGE_CONTEXT	DW:D	R,I,O	no
	Context identifier (CID), range 0-10.						

8.18 Display 07.18: PDCP parameters of the selected PDP context

To change PDP context, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 0718 (GPRS Data protocol displays; PDCP parameters of the selected PDP context) to the query prompt.
5. "INPUT" prompt will be shown on the display, enter the PDP context identifier (CID) in display.
6. Confirm with the Ok button.

If change succeeded, new PDCP parameters are displayed. If no PDCP radio bearer is active, xx is shown in all fields.

S40 Data display	S40 HELP display
aa b c ddddd eeee fffff ggggg hhhhh iiii jjjj	RB H L MaxWS RxDis TxDis RxSeq TxSeq RxPDU TxPDU

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GPDS_PDCP_RBID	B:UD	R,I,O	no
	The radio bearer ID of the PDP context, range 5-32.						
b	GPDS			FTD_SB_GPDS_PDCP_HEADER	B:UD	R,I,O	no
	Indicates the presence of the PDCP PDU header, range 0-1.						
c	GPDS			FTD_SB_GPDS_PDCP_RELOC	B:UD	R,I,O	no
	Indicates whether the lossless SRNS relocation is supported, range 0-1.						
d(5)	GPDS			FTD_SB_GPDS_PDCP_MAX_WS	W:UD	R,I,O	no
	Maximum window size, 0-65535.						
e(5)	GPDS			FTD_SB_GPDS_PDCP_RECV_DISC	W:UD	R,I,O	no
	Number of discarded PDUs in reception.						
f(5)	GPDS			FTD_SB_GPDS_PDCP_SENT_DISC	W:UD	R,I,O	no
	Number of discarded PDUs in transmission.						
g(5)	GPDS			FTD_SB_GPDS_PDCP_SEQ_RECV	W:UD	R,I,O	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number of PDUs received with sequence number.						
h(5)	GPDS			FTD_SB_GPDS_PDCP_SEQ_SENT	W:UD	R,I,O	no
	Number of PDUs sent with sequence number.						
i(5)	GPDS			FTD_SB_GPDS_PDCP_PDU_RECV	W:UD	R,I,O	no
	Total number of received PDUs.						
j(5)	GPDS			FTD_SB_GPDS_PDCP_PDU_SENT	W:UD	R,I,O	no
	Total number of sent PDUs.						
INPUT(4)	GPDS			FTD_SB_GPDS_CHANGE_CONTEXT	DW:D	R,I,O	no
	Context identifier (CID), range 0-10.						

8.19 Display 07.19: RFC2507 parameters of the selected PDP context

To change PDP context, perform following steps:

1. Press the Menu button
2. Scroll in the main menu loop to field test display item
3. Press the Select button
4. Select this display in input mode by entering 0719 (GPRS Data protocol displays; RFC2507 parameters of the selected PDP context) to the query prompt
5. "INPUT" prompt will be shown on the display, enter the PDP context identifier (CID) in display
6. Confirm with the Ok button

If change succeeded, new RFC2507 parameters are displayed. If RFC2507 is not active, xx is shown in all fields.

S40 Data display	S40 HELP display
<pre> aa bbbbb ccc ddddd e fff ggggg hhhhh iiiii </pre>	<pre> CID MaxPer MaxTi MaxHdr E TCP NonTCP TxCtx RxCtx </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GPDS_CID	B:UD	R,I,O	no
	CID of the PDP context, range 0-10.						
b(5)	GPDS			FTD_SB_GPDS_RFC2507_MAX_PERIOD	W:UD	R,I,O	no
	RFC2507 parameter F_MAX_PERIOD, range 1-65535.						
c(3)	GPDS			FTD_SB_GPDS_RFC2507_MAX_TIME	B:UD	R,I,O	no
	RFC2507 parameter F_MAX_TIME, range 1-255.						
d(5)	GPDS			FTD_SB_GPDS_RFC2507_MAX_HEADER	W:UD	R,I,O	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	RFC2507 parameter MAX_HEADER, range 60-65535.						
e	GPDS			FTD_SB_GPDS_RFC2507_EXP_REORD	B:UD	R,I,O	no
	RFC2507 parameter EXPECT_REORDERING, range 0-1.						
f(3)	GPDS			FTD_SB_GPDS_RFC2507_TCP_SPACE	B:UD	R,I,O	no
	RFC2507 parameter TCP_SPACE, range 3-255.						
g(5)	GPDS			FTD_SB_GPDS_RFC2507_NON_TCP_SPACE	W:UD	R,I,O	no
	RFC2507 parameter NON_TCP_SPACE, range 3-65535.						
h(5)	GPDS			FTD_SB_GPDS_RFC2507_CTX_STATE_RECV	W:UD	R,I,O	no
	Number of received context state packets.						
i(5)	GPDS			FTD_SB_GPDS_RFC2507_CTX_STATE_SENT	W:UD	R,I,O	no
	Number of sent context state packets.						
INPUT(4)	GPDS			FTD_SB_GPDS_CHANGE_CONTEXT	DW:D	R,I,O	no
	Context identifier (CID), range 0-10.						

9 Group 09: GPRS Test counter displays

9.1 Display 09.02: TBF counters

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd eeeee fffff</pre>	<pre>idle ->ULtbf trans->ULtbf idle ->DLtbf ULtbf->abrel</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	GPDS			FTD_SB_MAC_UL_TBF_IDLE_ ATTEMPT	W:UD	R,I,O	yes
Counter for UL TBF attempts in packet idle mode							
b(5)	GPDS			FTD_SB_RLC_UL_TBF_IDLE_ SUCC	W:UD	R,I,O	yes
Counter for successful UL TBFs, established in packet idle mode							
c(5)	GPDS			FTD_SB_MAC_UL_TBF_ TRANS_ ATTEMPT	W:UD	R,I,O	yes
Counter for UL TBF attempts in packet transfer mode							
d(5)	GPDS			FTD_SB_RLC_UL_TBF_ TRANS_ SUCC	W:UD	R,I,O	yes
Counter for successful UL TBFs, established in packet transfer mode							
e(5)	GPDS			FTD_SB_MAC_DL_TBF_ COUNTER	W:UD	R,I,O	yes
Counter for DL TBF establishments in packet idle mode							
f(5)	GPDS			FTD_SB_RLC_UL_TBF_ ABNORM_ REL	W:UD	R,I,O	yes
Counter for UL TBF abnormal releases, any reason							

9.2 Display 09.10: GPRS attach and detach counters

S40 Data display	S40 HELP display
<pre>aa bbb cccc dd eee</pre>	<pre>Acause A Aok NW detach</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GMM_ATTACH_FAIL_CAUSE	B:H	R,I,O	yes
				Cause of the last attach failure			
b(3)	GPDS			FTD_SB_GMM_ATTACH_ATTEMPT	W:UD	R,I,O	yes
				Counter for the attach attempts			
c(4)	GPDS			FTD_SB_GMM_ATTACH_OK	W:UD	R,I,O	yes
				Counter for the succeededl attaches			
d(2)	GPDS			FTD_SB_GMM_NTW_INIT_DET_CAUSE	B:H	R,I,O	yes
				Cause of the last network initiated detach			
e(3)	GPDS			FTD_SB_GMM_NTW_INIT_DETACH	W:UD	R,I,O	yes
				Counter for network initiated detach			

9.3 Display 09.11: Periodic routing area update counters

S40 Data display	S40 HELP display
aa bbbb cccc	Pcause P Pok

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GMM_PRAU_FAIL_CAUSE	B:H	R,I,O	yes
				Cause of the last periodic routing area update failure			
b(4)	GPDS			FTD_SB_GMM_PRAU_ATTEMPT	W:UD	R,I,O	yes
				Counter for the periodic RAU attempts			
c(4)	GPDS			FTD_SB_GMM_PRAU_OK	W:UD	R,I,O	yes
				Counter for the succeeded periodic RAUs			

9.4 Display 09.12: Routing area update counters

S40 Data display	S40 HELP display
aa bbbb cccc	Rcause R Rok

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_GMM_RAU_FAIL_CAUSE	B:H	R,I,O	yes
				Cause of the last routing area update failure			
b(4)	GPDS			FTD_SB_RAU_ATTEMPT	W:UD	R,I,O	yes
				Counter for the RAU attempts			
c(4)	GPDS			FTD_SB_RAU_OK	W:UD	R,I,O	yes
				Counter for the succeeded RAUs			

9.5 Display 09.13: PDP context counters

S40 Data display	S40 HELP display
aa bbb ccc dd ee	MO_PDP_act MO_PDP_deact MT_PDP_deact

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GPDS			FTD_SB_SM_MO_PDP_FAIL_CAUSE	B:H	R,I,O	yes
				Cause of the last MS initiated PDP context activation failure			
b(3)	GPDS			FTD_SB_SM_MO_PDP_ATTEMPT	W:UD	R,I,O	yes
				Counter for the MS initiated PDP context activation attempts			
c(3)	GPDS			FTD_SB_SM_MO_PDP_OK	W:UD	R,I,O	yes
				Counter for the succeeded MS initiated PDP context activations			
d(2)	GPDS			FTD_SB_SM_MO_PDP_DEAC_CAUSE	B:H	R,I,O	yes
				Cause of the last MS initiated PDP context deactivation			
e(2)	GPDS			FTD_SB_SM_MT_PDP_DEAC_CAUSE	B:H	R,I,O	yes
				Cause of the last Network initiated PDP context deactivation			

9.6 Display 09.14: SMS over GPRS counters

The values in this display concern only SMS transferred via GPRS. Otherwise the SMS counters in GSM displays are valid

Counters are automatically reset to zero when they exceed their maximum value.

S40 Data display	S40 HELP display
<pre>aa bbb ccc dd eee fff</pre>	<pre>Sfai MO MOok Rfai MT MTok</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSS			FTD_SB_SMS_SEND_FAIL_CAUSE_GPRS	B:H	R,I,O	yes
				Reason of last sending failure			
b(3)	GSS			FTD_SB_SMS_MO_ATT_GPRS	W:D	R,I,O	yes
				Count of MO short message attempts via GPRS			
c(3)	GSS			FTD_SB_SMS_MO_GPRS_OK	W:D	R,I,O	yes
				Count of succeeded MO short message sendings			
d(2)	GSS			FTD_SB_SMS_REC_FAIL_CAUSE_GPRS	B:H	R,I,O	yes
				Reason of last receiving failure			
e(3)	GSS			FTD_SB_SMS_MT_ATT_GPRS	W:D	R,I,O	yes
				Count of MT short message attempts via GPRS			
f(3)	GSS			FTD_SB_SMS_MT_GPRS_OK	W:D	R,I,O	yes
				Count of succeeded MT short message receptions			

9.7 Display 09.17: MS initiated cell re-selection counters

S40 Data display	S40 HELP display
<pre>CC:aaaa CP:bbbb PC:cccc PP:dddd</pre>	<pre>CCCH->CCCH CCCH->PCCCH PCCCH->CCCH PCCCH->PCCCH</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_MAC_RESEL_C_C	W:UD	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Counter for cell re-selection attempts from CCCH to CCCH in NC0 or NC1 mode							
b(4)	GPDS			FTD_SB_MAC_RESEL_C_P	W:UD	R,I,O	yes
Counter for cell re-selection attempts from CCCH to PCCCH in NC0 or NC1 mode							
c(4)	GPDS			FTD_SB_MAC_RESEL_P_C	W:UD	R,I,O	yes
Counter for cell re-selection attempts from PCCCH to CCCH in NC0 or NC1 mode							
d(4)	GPDS			FTD_SB_MAC_RESEL_P_P	W:UD	R,I,O	yes
Counter for cell re-selection attempts from PCCCH to PCCCH in NC0 or NC1 mode							

9.8 Display 09.18: Network initiated cell re-selection counters

S40 Data display	S40 HELP display
<pre>CC:aaaa bbbb CP:cccc dddd PC:eeee ffff PP:gggg hhhh</pre>	<pre>CCCH->CCCH CCCH->PCCCH PCCCH->CCCH PCCCH->PCCCH</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GPDS			FTD_SB_MAC_PCCO_C_C_ATT	W:UD	R,I,O	yes
Counter for network commanded cell re-selection attempts from CCCH to CCCH							
b(4)	GPDS			FTD_SB_MAC_PCCO_C_C_OK	W:UD	R,I,O	yes
Counter for succeeded network commanded cell re-selections from CCCH to CCCH							
c(4)	GPDS			FTD_SB_MAC_PCCO_C_P_ATT	W:UD	R,I,O	yes
Counter for network commanded cell re-selection attempts from CCCH to PCCCH							
d(4)	GPDS			FTD_SB_MAC_PCCO_C_P_OK	W:UD	R,I,O	yes
Counter for succeeded network commanded cell re-selections from CCCH to PCCCH							
e(4)	GPDS			FTD_SB_MAC_PCCO_P_C_ATT	W:UD	R,I,O	yes
Counter for network commanded cell re-selection attempts from PCCCH to CCCH							
f(4)	GPDS			FTD_SB_MAC_PCCO_P_C_OK	W:UD	R,I,O	yes
Counter for succeeded network commanded cell re-selections from PCCCH to CCCH							
g(4)	GPDS			FTD_SB_MAC_PCCO_P_P_ATT	W:UD	R,I,O	yes
Counter for network commanded cell re-selection attempts from PCCCH to PCCCH							
h(4)	GPDS			FTD_SB_MAC_PCCO_P_P_OK	W:UD	R,I,O	yes
Counter for succeeded network commanded cell re-selections from PCCCH to PCCCH							

10 Group 10: GSM DSP displays

10.1 Display 10.01: DSP Data Display 1

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeee ffff gggg hhhh</pre>	<pre>CTBT DSF BERR FC SLP CLOCK STATUSFLGS</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSM_DSP			FTD_SB_DSP_DATA_1	W:H	R	yes
	DSP specific data in hex format						
b(4)	GSM_DSP			FTD_SB_DSP_DATA_2	W:H	R	yes
	DSP specific data in hex format						
c(4)	GSM_DSP			FTD_SB_DSP_DATA_3	W:H	R	yes
	DSP specific data in hex format						
d(4)	GSM_DSP			FTD_SB_DSP_DATA_4	W:H	R	yes
	DSP specific data in hex format						
e(4)	GSM_DSP			FTD_SB_DSP_DATA_5	W:H	R	yes
	DSP specific data in hex format						
f(4)	GSM_DSP			FTD_SB_DSP_DATA_6	W:H	R	yes
	DSP specific data in hex format						
g(4)	GSM_DSP			FTD_SB_DSP_DATA_7	W:H	R	yes
	DSP specific data in hex format						
h(4)	GSM_DSP			FTD_SB_DSP_DATA_8	W:H	R	yes
	DSP specific data in hex format						

10.2 Display 10.02: DSP Data Display 2

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeee ffff gggg hhhh</pre>	<pre>C BER LAST REAS REAS MIRR PDSF</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSM_DSP			FTD_SB_DSP_DATA_9	W:H	R	yes
	DSP specific data in hex format						
b(4)	GSM_DSP			FTD_SB_DSP_DATA_10	W:H	R	yes
	DSP specific data in hex format						
c(4)	GSM_DSP			FTD_SB_DSP_DATA_11	W:H	R	yes
	DSP specific data in hex format						
d(4)	GSM_DSP			FTD_SB_DSP_DATA_12	W:H	R	yes
	DSP specific data in hex format						
e(4)	GSM_DSP			FTD_SB_DSP_DATA_13	W:H	R	yes
	DSP specific data in hex format						
f(4)	GSM_DSP			FTD_SB_DSP_DATA_14	W:H	R	yes
	DSP specific data in hex format						
g(4)	GSM_DSP			FTD_SB_DSP_DATA_15	W:H	R	yes
	DSP specific data in hex format						
h(4)	GSM_DSP			FTD_SB_DSP_DATA_16	W:H	R	yes
	DSP specific data in hex format						

10.3 Display 10.03: DSP Data Display 3

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd eeee ffff gggg hhhh </pre>	<pre> DSP DATA DISPLAY 3 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSM_DSP			FTD_SB_DSP_DATA_17	W:H	R	yes
	DSP specific data in hex format						
b(4)	GSM_DSP			FTD_SB_DSP_DATA_18	W:H	R	yes
	DSP specific data in hex format						
c(4)	GSM_DSP			FTD_SB_DSP_DATA_19	W:H	R	yes
	DSP specific data in hex format						
d(4)	GSM_DSP			FTD_SB_DSP_DATA_20	W:H	R	yes
	DSP specific data in hex format						
e(4)	GSM_DSP			FTD_SB_DSP_DATA_21	W:H	R	yes
	DSP specific data in hex format						
f(4)	GSM_DSP			FTD_SB_DSP_DATA_22	W:H	R	yes
	DSP specific data in hex format						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(4)	GSM_DSP			FTD_SB_DSP_DATA_23	W:H	R	yes
	DSP specific data in hex format						
h(4)	GSM_DSP			FTD_SB_DSP_DATA_24	W:H	R	yes
	DSP specific data in hex format						

10.4 Display 10.04: FER measurements for sub ch0: REAL, FULL and SUB values

These values are updated for every 480ms (One SACCH multiframe)

S40 Data display	S40 HELP display
<pre> aa bb cc dd ee ff gg </pre>	<pre> REAL FACCH ETCH EFACCH ERRFULL USED ERRSUB </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSM_DSP			FTD_SB_DSP_DATA_25	B:D	R,I,O	yes
	FER REAL, a counter for correct frames including TCH, FACCH, SACCH						
b(2)	GSM_DSP			FTD_SB_DSP_DATA_26	B:D	R,I,O	yes
	FER REAL, a counter for correct FACCH frames						
c(2)	GSM_DSP			FTD_SB_DSP_DATA_27	B:D	R,I,O	yes
	FER REAL, a counter for erroneous TCH frames						
d(2)	GSM_DSP			FTD_SB_DSP_DATA_28	B:D	R,I,O	yes
	FER REAL, a counter for erroneous FACCH frames						
e(2)	GSM_DSP			FTD_SB_DSP_DATA_29	B:D	R,I,O	yes
	FER FULL, a counter for erroneous frames including TCH, SACCH, FACCH and SID frames						
f(2)	GSM_DSP			FTD_SB_DSP_DATA_30	B:D	R,I,O	yes
	FER SUB, a counter for used frames						
g(2)	GSM_DSP			FTD_SB_DSP_DATA_31	B:D	R,I,O	yes
	FER SUB, a counter for erroneous frames						

10.5 Display 10.05: FER measurements for sub ch1: REAL, FULL and SUB values

These values are updated for every 480ms (One SACCH multiframe)

S40 Data display	S40 HELP display
<pre> aa bb cc dd ee ff gg </pre>	<pre> REAL FACCH ETCH EFACCH ERRFULL USED ERRSUB </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSM_DSP			FTD_SB_DSP_DATA_32	B:D	R,I,O	yes
	FER REAL, a counter for correct frames including TCH, FACCH, SACCH						
b(2)	GSM_DSP			FTD_SB_DSP_DATA_33	B:D	R,I,O	yes
	FER REAL, a counter for correct FACCH frames						
c(2)	GSM_DSP			FTD_SB_DSP_DATA_34	B:D	R,I,O	yes
	FER REAL, a counter for erroneous TCH frames						
d(2)	GSM_DSP			FTD_SB_DSP_DATA_35	B:D	R,I,O	yes
	FER REAL, a counter for erroneous FACCH frames						
e(2)	GSM_DSP			FTD_SB_DSP_DATA_36	B:D	R,I,O	yes
	FER FULL, a counter for erroneous frames including TCH, SACCH, FACCH and SID frames						
f(2)	GSM_DSP			FTD_SB_DSP_DATA_37	B:D	R,I,O	yes
	FER SUB, a counter for used frames						
g(2)	GSM_DSP			FTD_SB_DSP_DATA_38	B:D	R,I,O	yes
	FER SUB, a counter for erroneous frames						

10.6 Display 10.06: FER measuments for sub ch2: REAL, FULL and SUB values

These values are updated for every 480ms (One SACCH multiframe)

S40 Data display	S40 HELP display
<pre> aa bb cc dd ee ff gg </pre>	<pre> REAL FACCH ETCH EFACCH ERRFULL USED ERRSUB </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	GSM_DSP			FTD_SB_DSP_DATA_39	B:D	R,I,O	yes
	FER REAL, a counter for correct frames including TCH, FACCH, SACCH						
b(2)	GSM_DSP			FTD_SB_DSP_DATA_40	B:D	R,I,O	yes
	FER REAL, a counter for correct FACCH frames						
c(2)	GSM_DSP			FTD_SB_DSP_DATA_41	B:D	R,I,O	yes
	FER REAL, a counter for erroneous TCH frames						
d(2)	GSM_DSP			FTD_SB_DSP_DATA_42	B:D	R,I,O	yes
	FER REAL, a counter for erroneous FACCH frames						
e(2)	GSM_DSP			FTD_SB_DSP_DATA_43	B:D	R,I,O	yes
	FER FULL, a counter for erroneous frames including TCH, SACCH, FACCH and SID frames						
f(2)	GSM_DSP			FTD_SB_DSP_DATA_44	B:D	R,I,O	yes
	FER SUB, a counter for used frames						
g(2)	GSM_DSP			FTD_SB_DSP_DATA_45	B:D	R,I,O	yes
	FER SUB, a counter for erroneous frames						

10.7 Display 10.07: Carrier to Interference Ratio (C/I)

These values are measured every 480ms on speech channels, GPRS and EGPRS active mode channels.

Average C/I for bursts dedicated towards the MS is averaged for each 480 ms.

Value can be interpreted as Q4_16 format, and approximately be converted to C/I ratio according to these formulas:

Normal channels:

$C/I = 10 * \log(\text{value} / 16)$, only approximately linear up to 10 dB, saturates around 15 dB

EDGE channels:

$C/I = 10 * \log(\text{value} / 16)$

S40 Data display	S40 HELP display
Avg C/I aaaa	Average C/I

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSM_DSP			FTD_SB_DSP_CL_AVERAGE	B:D	R	yes
Average carrier to interference ratio, range 0 ... 28 dB							

11 Group 11: Adaptive multi-rate displays

11.1 Display 11.01: AMR1:Information of the Active Mode Set

Data display contains the information from MS multirate information signalling. From 8 possible speech codec modes at most 4 belongs to active codec mode set. Active codecs are shown in display using mode numbers which are shown as digits (0..7). Modeset display has that many digits as there are modes in active set (1-4). Highest mode is shown left so that also mode 0, if included in the ACS, is shown properly.

In addition to active codec mode set display shows thresholds and hysteresis values for mode changes according link quality. With 4 modes in active mode set three threshold/hysteresis values are needed. Number is always 1 less than number of codecs in mode set. If number of active modes is less than 4 unused threshold and hysteresis values are filled with 9's.

Even though the information needed for display is known by L3 on call setup RATSCCH signalling may override all values. That is why display information is always fetched from DSP.

S40 Data display	S40 HELP display
<pre> aaaa bbbb ccc dd e f ggg hh ii jjj kk l </pre>	<pre> cht modeset t1 h1 ii icm t2 h2 Rat t3 h3 NS </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_TYPE_OF_CURR_CH	S	R,I,0	yes
Type of current channel THRO : TCH HR subchannel 0 THR1 : TCH HR subchannel 1 AHS0 : TCH AHS subchannel 0 AHS1 : TCH AHS subchannel 1 TFR : TCH FR AFS : TCH AFS TEFR : TCH EFR F144 : TCH FR data channel, speed 14.4 kbps F96 : TCH FR data channel, speed 9.6 kbps F72 : TCH FR data channel, speed 7.2 kbps F48 : TCH FR data channel, speed 4.8 kbps F24 : TCH FR data channel, speed 2.4 kbps H480 : TCH HR data channel, speed 4.8 kbps, subch 0 H481 : TCH HR data channel, speed 4.8 kbps, subch 1 H240 : TCH HR data channel, speed 2.4 kbps, subch 0 H241 : TCH HR data channel, speed 2.4 kbps, subch 1 FA : TCH FR signaling only (FACCH) channel FAH0 : TCH HR signaling only (FACCH) channel, subch 0 FAH1 : TCH HR signaling only (FACCH) channel, subch 1 PCCC, PBCC, PAGC : GPRS packet control channel							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	PNDR: GPRS non-DRX mode (in PCCCH) PDTC: GPRS traffic channel NDRX: GPRS non-DRX mode (in CCCH) SDCC: SDCCH AGCH: AGCH CCCH: CCCH CBCH: CCCH and cell broadcast receiving on BCCH: BCCH SEAR: SEARCH NSPS: MS is in No Serv Power Save state						
b(4)	GSM_DSP			FTD_SB_AMR1_MODESET	DW:H	R	yes
	Active codec mode set, mode numbers in ACS are shown as digits 0 = 4.75 1 = 5.15 2 = 5.9 3 = 6.7 4 = 7.4 5 = 7.95 6 = 10.2 7 = 12.2 (1-4 digit hex without leading zeros)						
c(3)	GSM_DSP			FTD_SB_AMR1_TH1	W:H	R	yes
	first threshold, 999 if not in use						
d(2)	GSM_DSP			FTD_SB_AMR1_HYS1	B:H	R	yes
	first hysteresis, 99 if not in use						
e	GSM_DSP			FTD_SB_AMR1_ICMI	B:H	R	yes
	ICMI (Initial codec mode indicator) 0=not signalled. 1=signalled.						
f	GSM_DSP			FTD_SB_AMR1_ICM	B:H	R	yes
	Initial codec mode (ICM) If ICMI=0 mode selected by implicit rule If ICMI=1 signalled start mode used (shown as absolute mode 0-7)						
g(3)	GSM_DSP			FTD_SB_AMR1_TH2	W:H	R	yes
	Second threshold, 999 if not in use						
h(2)	GSM_DSP			FTD_SB_AMR1_HYS2	B:H	R	yes
	Second hysteresis, 99 if not in use						
i(2)	GSM_DSP			FTD_SB_AMR1_RATSCCH	B:H	R	yes
	Count RATSCCH messages, truncated (wrap around overflow) to 8 bits (print two digit hex value) Counter is reset at call setup and HO.						
j(3)	GSM_DSP			FTD_SB_AMR1_TH3	W:H	R	yes
	third threshold, 999 if not in use						
k(2)	GSM_DSP			FTD_SB_AMR1_HYS3	B:H	R	yes
	third hysteresis, 99 if not in use						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
I	GSM_DSP			FTD_SB_AMR1_NSCB	B:H	R	yes
Noise Suppression Control bit: 0 =noise suppression can be used; 1 =noise suppression is turned off							

11.2 Display 11.02: AMR2: Information of the mode control

First line shows in compact form current channel type and basic quality information including up and downlink AMR modes. All information in the first row is available also from Display 01.01

Three history lines are used to print mode commands, mode indication to downlink direction and mode requests. Mode indication to uplink is not that interesting as it reflects mode commands after short delay. Mode requests might differ from mode indications downlink as BTS is not required to obey mode request. It should be noted that mode information in history lines in FTD is shown using absolute modes (0-7) even though in actual inband transmission relative value within mode set is used (0-3).

With update rate 480 ms each digit in display corresponds mode related commands / indications in history.

DSP history algorithm can be modified to maintain history as different averages on the basis of the future needs without changing FTD display specification. See also executive Display 11.04: AMR4: Control AMR FTD data pre processing (Version: 1, Status: Approved)

S40 Data display	S40 HELP display
<pre>ab ccc deeee ffffggggggggg hhhhiiiiiiiiii jjjjkkkkkkkkk</pre>	<pre>UD Lev RQ CH mode cmds mode inds dl mode reqs</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSM_DSP			FTD_SB_AMR_UL_MODE	B:D	R,I,O	yes
Current absolute uplink mode on AMR channels, (0-7). 0 =4.75, 1 =5.15, 2 =5.9, 3 =6.7, 4 =7.4, 5 =7.95, 6 =10.2, 7 =12.2.							
b	GSM_DSP			FTD_SB_AMR_DL_MODE	B:D	R,I,O	yes
Current absolute downlink mode on AMR channels. See definition above.							
c(3)	GSS			FTD_SB_RX_LEVEL	B:D	R,I,O	yes
Rx level in dBm, minus sign not shown if <-100							
d	GSS			FTD_SB_RX_QUALITY	B:D	R,I,O	yes
Rx quality (sub), range is 0 - 7							
e(4)	GSS			FTD_SB_TYPE_OF_CURR_CH	S	R,I,O	yes
Type of current channel THRO : TCH HR subchannel 0 THR1 : TCH HR subchannel 1 AHS0 : TCH AHS subchannel 0 AHS1 : TCH AHS subchannel 1 TFR : TCH FR AFS : TCH AFS TEFR : TCH EFR							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	F144: TCH FR data channel, speed 14.4 kbps F96: TCH FR data channel, speed 9.6 kbps F72: TCH FR data channel, speed 7.2 kbps F48 : TCH FR data channel, speed 4.8 kbps F24 : TCH FR data channel, speed 2.4 kbps H480 : TCH HR data channel, speed 4.8 kbps, subch 0 H481 : TCH HR data channel, speed 4.8 kbps, subch 1 H240 : TCH HR data channel, speed 2.4 kbps, subch 0 H241 : TCH HR data channel, speed 2.4 kbps, subch 1 FA: TCH FR signaling only (FACCH) channel FAH0 : TCH HR signaling only (FACCH) channel, subch 0 FAH1 : TCH HR signaling only (FACCH) channel, subch 1 PCCC, PBCC, PAGC : GPRS packet control channel PNDR: GPRS non-DRX mode (in PCCCH) PDTC: GPRS traffic channel NDRX: GPRS non-DRX mode (in CCCH) SDCC : SDCCH AGCH : AGCH CCCH : CCCH CBCH : CCCH and cell broadcast receiving on BCCH : BCCH SEAR : SEARCH NSPS : MS is in No Serv Power Save state						
f(4)	GSM_DSP			FTD_SB_AMR2_MODE_CMD_HI	W:H	R	yes
	mode command history(Hex)						
g(8)	GSM_DSP			FTD_SB_AMR2_MODE_CMD_LO	DW:H	R	yes
	mode command history (Hex)						
h(4)	GSM_DSP			FTD_SB_AMR2_MODE_IND_HI	W:H	R	yes
	mode indication downlink history (Hex)						
i(8)	GSM_DSP			FTD_SB_AMR2_MODE_IND_LO	DW:H	R	yes
	mode indication downlink history (Hex)						
j(4)	GSM_DSP			FTD_SB_AMR2_MODE_REQ_HI	W:H	R	yes
	mode request history (Hex)						
k(8)	GSM_DSP			FTD_SB_AMR2_MODE_REQ_LO	DW:H	R	yes
	mode request history (Hex)						

11.3 Display 11.03: AMR3: Information of the link quality estimation

First line is same as used in 'Display 11.02: AMR2: Information of the mode control.

With update rate 480 ms each digit in display corresponds mode related commands / indication in history.

FFff, GGggg, HHhh, Iiii and Jj represent floating point values. Decimal part is marked with lower case letters in this specification and decimal point is not printed

S40 Data display	S40 HELP display
<pre>ab ccc deeee ffff ggggg hhhh iiii jj kkkklllllllll</pre>	<pre>UD Lev RQ CH LQE BFI% Fast Slow FC mode reqs</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSM_DSP			FTD_SB_AMR_UL_MODE	B:D	R,I,O	yes
	Current absolute uplink mode on AMR channels, (0-7). 0=4.75, 1=5.15, 2=5.9, 3=6.7, 4=7.4, 5=7.95, 6=10.2, 7=12.2.						
b	GSM_DSP			FTD_SB_AMR_DL_MODE	B:D	R,I,O	yes
	Current absolute downlink mode on AMR channels. See definition above.						
c(3)	GSS			FTD_SB_RX_LEVEL	B:D	R,I,O	yes
	Rx level in dBm, minus sign not shown if <-100						
d	GSS			FTD_SB_RX_QUALITY	B:D	R,I,O	yes
	Rx quality (sub), range is 0 - 7						
e(4)	GSS			FTD_SB_TYPE_OF_CURR_CH	S	R,I,O	yes
	Type of current channel THRO : TCH HR subchannel 0 THR1 : TCH HR subchannel 1 AHS0 : TCH AHS subchannel 0 AHS1 : TCH AHS subchannel 1 TFR : TCH FR AFS : TCH AFS TEFR : TCH EFR F144 : TCH FR data channel, speed 14.4 kbps F96 : TCH FR data channel, speed 9.6 kbps F72 : TCH FR data channel, speed 7.2 kbps F48 : TCH FR data channel, speed 4.8 kbps F24 : TCH FR data channel, speed 2.4 kbps H480 : TCH HR data channel, speed 4.8 kbps, subch 0 H481 : TCH HR data channel, speed 4.8 kbps, subch 1 H240 : TCH HR data channel, speed 2.4 kbps, subch 0 H241 : TCH HR data channel, speed 2.4 kbps, subch 1 FA : TCH FR signaling only (FACCH) channel FAH0 : TCH HR signaling only (FACCH) channel, subch 0 FAH1 : TCH HR signaling only (FACCH) channel, subch 1 PCCC, PBCC, PAGC : GPRS packet control channel PNDR : GPRS non-DRX mode (in PCCCH) PDTC : GPRS traffic channel NDRX : GPRS non-DRX mode (in CCCH) SDCC : SDCCH AGCH : AGCH CCCH : CCCH						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	CBCH : CCCH and cell broadcast receiving on BCCH : BCCH SEAR : SEARCH NSPS : MS is in No Serv Power Save state						
f(4)	GSM_DSP			FTD_SB_AMR3_LQE	W:D	R	yes
	Current link quality estimate (dB) (floating point number)						
g(5)	GSM_DSP			FTD_SB_AMR3_FRAME_ERASURE	DW:D	R	yes
	frame erasure % (floating point number)						
h(4)	GSM_DSP			FTD_SB_AMR3_FAST_FAD_FILTER	W:H	R	yes
	Output of the fast fading filter (floating point number)						
i(4)	GSM_DSP			FTD_SB_AMR3_SLOW_FAD_FILTER	W:H	R	yes
	slow fading filter output (floating point number)						
j(2)	GSM_DSP			FTD_SB_AMR3_FAD_COMP	B:H	R	yes
	fading compensation factor						
k(4)	GSM_DSP			FTD_SB_AMR2_MODE_REQ_HI	W:H	R	yes
	mode request history (Hex)						
l(8)	GSM_DSP			FTD_SB_AMR2_MODE_REQ_LO	DW:H	R	yes
	mode request history (Hex)						

11.4 Display 11.04: AMR4: Control AMR FTD data pre processing

When display is selected, control word can be edited. Keyboard is in "text"-mode, so hex numbers 0-F can be written. After editing of the control word is completed, request is sent to DSP.

S40 Data display	S40 HELP display
<pre>AMR FTD Control display aaaa</pre>	<pre>Use menu to control DSP AMR FTD data preprocess.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSM_DSP			FTD_SB_AMR4_CTRL_DISP	W:H	R	yes
	Control word for DSP for controlling pre processing of AMR mode control related field test displays.						
INPUT(4)	GSM_DSP			FTD_SB_AMR4_CTRL_WORD	DW:H	R	no
	Control word for DSP for controlling pre processing of AMR mode control related field test displays.						

11.5 Display 11.05: AMR5: Control AMR algorithms

When display is selected, control word can be edited. Keyboard is in "text"-mode, so hex numbers 0-F can be written. After editing of the control word is completed, request is sent to DSP.

S40 Data display	S40 HELP display
<pre>AMR Algorithm Control aaaa</pre>	<pre>Use menu to control DSP AMR algorithms</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSM_DSP			FTD_SB_AMR5_CTRL_ALGO	W:H	R	yes
Control word for DSP for controlling AMR algorithms.							
INPUT(4)	GSM_DSP			FTD_SB_AMR5_CTRL_WORD	DW:H	R	no
Control word for DSP for controlling AMR algorithms.							

11.6 Display 11.06: AMR6: Extended AMR RATSCCH display

First line shows in compact form RATSCCH related FTD counters. Both received and sent RATSCCH messages/responses are counted.

Second line has a RATSCCH delayed counter which will increment if an UL RATSCCH message is scheduled for sending, but stolen by FACCH signalling. This will delay the RATSCCH message until next speech frame.

The DL inband phase is the currently active DL inband phase (which can be changed by RATSCCH_CMIP_PHASE_CHANGE message)

Third and fourth line are so far unused

S40 Data display	S40 HELP display
<pre>abc defg h i</pre>	<pre>RArec Ack De Ph</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSM_DSP			FTD_SB_AMR_DL_RECEIVED_RATSCCH_CHANGE_CONFIG	B:H	R	no
Counter, 0-f, wrap-around, hexIncrements once every time a valid RATSCCH_CHANGE_CONFIG message is correctly decoded by phone							
b	GSM_DSP			FTD_SB_AMR_DL_RECEIVED_RATSCCH_THRES_REQ	B:H	R	no
Counter, 0-f, wrap-around, hexIncrements once every time a valid RATSCCH_CHANGE_THRESHOLD_REQUEST message is correctly decoded by phone							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c	GSM_DSP			FTD_SB_AMR_DL_RECEIVED_RATSCCH_PHASE_CMIP_CHANGE	B:H	R	no
				Counter, 0-f, wrap-around, hexIncrements once every time a valid RATSCCH_CHANGE_CMIP_PHASE_CHANGE message is correctly decoded by phone CHANGE_CONFIG, CHANGE_CMIP_PHASE, and CHANGE_THRES_REQUEST Are sent from GSM_DSP server as an unsigned 16 bit value. The 4 lowest bits are unused. MSB.....LSB: CONFIG THRES CMIP UNUSED			
d	GSM_DSP			FTD_SB_AMR_UL_SENT_RATSCCH_ACKNOWLEDGE_OK	B:H	R	no
				Counter, 0-f, wrap-around, hexIncrements once every time an ACK_OK is sent as response to received RATSCCH message			
e	GSM_DSP			FTD_SB_AMR_UL_SENT_RATSCCH_ACKNOWLEDGE_ERROR	B:H	R	no
				Counter, 0-f, wrap-around, hexIncrements once every time an ACK_ERR is sent as response to received RATSCCH message			
f	GSM_DSP			FTD_SB_AMR_UL_SENT_RATSCCH_ACKNOWLEDGE_UNKNOWN	B:H	R	no
				Counter, 0-f, wrap-around, hexIncrements once every time an ACK_UNK is sent as response to received RATSCCH message			
g	GSM_DSP			FTD_SB_AMR_UL_NOTHING_SENT_RATSCCH_DL_INVALID	B:H	R	no
				Counter, 0-f, wrap-around, hexIncrements once every time an INVALID DL RATSCCH message is received. (For example if receiving ACK_OK/ACK_ERR/ACK_UNK in DL RATSCCH) Then DL RATSCCH message is ignored and counter increments. CHANGE_CONFIG, ACKNOWLEDGE, ACKNOWLEDGE_ERROR, ACKNOWLEDGE_UNKNOWN and NOTHING_SENT Are sent from GSM_DSP server as an unsigned 16 bit value. MSB.....LSB ACK ERR UNK INVAL			
h	GSM_DSP			FTD_SB_AMR_DL_INBAND_PHASE	B:H	R	no
				The DL inband phase of the active AMR configuration 0 = Default inband phase 1 = Inverse inband phase			
i	GSM_DSP			FTD_SB_AMR_UL_DELAYED_RATSCCH	B:H	R	no
				Counter, 0-ff, wrap-around, hex If an UL RATSCCH message is delayed (for example because a FACCH has stolen a speech frame) this counter increments.			

11.7 Display 11.07: AMR6: Extended AMR RATSCCH display

First line: There are AMR specific HO counters. The counters will increment on every AMR HO with or without IEI and also if a handover fails. The HO_NULL scenario is an illegal combination of the OC/OP bits received in MDI_CHANNEL_CONFIGURE and must never increment.

Second line: Include 4 counters which are incremented every time a change occurs. The counters are (from left to right) CMC, DL CMI, CMR and UL CMI. In other words -> When a change in CMC occurs the "MC" counter will increment. Etc.

Third and fourth line are so far not used.

S40 Data display	S40 HELP display
<pre>abcd ee ff gg hh</pre>	<pre>HO MC DMI MR MI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSM_DSP			FTD_SB_AMR_HO_L3_WITH_AMR_IEI	B:H	R	no
	See below						
b	GSM_DSP			FTD_SB_AMR_HO_L3_WITHOUT_AMR_IEI	B:H	R	no
	See below						
c	GSM_DSP			FTD_SB_AMR_HO_NULL	B:H	R	no
	See below						
d	GSM_DSP			FTD_SB_AMR_HO_FAILURE	B:H	R	no
	The values of OC and OP (which determines the type of HO) are received from MCU in MDI_CHANNEL_CONFIGURE message. Can have following values (0-3 Hex): Both "a", "b", "c" and "d" are counters that are incremented in case of AMR handovers. Value 0-f, hex, wrap-around a= RM_HO_L3_WITH_AMR_IEI b= RM_HO_L3_WITHOUT_AMR_IEI c= RM_HO_NULL (imp. Combination) d= RM_HO_FAILURE Counters increment individually and wrap around at "0xf" The "c" counter must never increment, because this is invalid configuration from MCU.						
e(2)	GSM_DSP			FTD_SB_AMR_DL_CMC_INBAND_CHANGE	B:H	R	no
	Counter, 0-ff, wrap-around, hex This counter increments every time the phone decodes a DL CMC that is different from the one received 2 speech frames before.						
f(2)	GSM_DSP			FTD_SB_AMR_DL_CMI_INBAND_CHANGE	B:H	R	no
	Counter, 0-ff, wrap-around, hex This counter increments every time the phone decodes a DL CMI that is different from the one received 2 speech frames before.						
g(2)	GSM_DSP			FTD_SB_AMR_UL_CMR_INBAND_CHANGE	B:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Counter, 0-ff, wrap-around, hexThis counter increments every time the phone encodes a UL CMR that is different from the one sent 2 speech frames before.						
h(2)	GSM_DSP			FTD_SB_AMR_UL_CMI_INBAND_CHANGE	B:H	R	no
	Counter, 0-ff, wrap-around, hexThis counter increments every time the phone encodes a UL CMI that is different from the one sent 2 speech frames before.						

12 Group 15: PoC (push to talk over cellular) displays

12.1 Display 15.01: Reset PoC counters

With this display all poc counters of the field test display can be reset (i.e. all counters in this group).

To reset PoC counters, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in executive mode by entering 1501 (POC displays;reset PoC counters) to the query prompt.
5. Confirm with the Ok button.

S40 Data display	S40 HELP display
<pre> RESET POC COUNTERS </pre>	<pre> Use menu to reset poc counters </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	DSP_AUDIO			FTD_SB_DSP_POCKET_RESET_COUNTERS	S	R	yes
Reset DSP counters							
EXE	RTP			FTD_SB_RTP_RESET_COUNTERS	DW:D	R	yes
Reset RTP counters							
EXE	SIP			FTD_SB_SIP_RESET_COUNTERS	B:D	R	yes
Reset SIP counters							
EXE	POC			FTD_SB_POCKET_RESET_COUNTERS	W:H	R	yes
Reset POC Server counters							

12.2 Display 15.02: POC DSP Data Display 1

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd eeee ffff gggg hhhh </pre>	<pre> POC DSP DATA DISPLAY 1 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_1	W:H	R	yes
	DSP specific data in hex format						
b(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_2	W:H	R	yes
	DSP specific data in hex format						
c(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_3	W:H	R	yes
	DSP specific data in hex format						
d(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_4	W:H	R	yes
	DSP specific data in hex format						
e(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_5	W:H	R	yes
	DSP specific data in hex format						
f(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_6	W:H	R	yes
	DSP specific data in hex format						
g(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_7	W:H	R	yes
	DSP specific data in hex format						
h(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_8	W:H	R	yes
	DSP specific data in hex format						

12.3 Display 15.03: POC DSP Data Display 2

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd eeee ffff gggg hhhh </pre>	<pre> POC DSP DATA DISPLAY 2 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_9	W:H	R	yes
	DSP specific data in hex format						
b(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_10	W:H	R	yes
	DSP specific data in hex format						
c(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_11	W:H	R	yes
	DSP specific data in hex format						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	DSP specific data in hex format						
d(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_12	W:H	R	yes
	DSP specific data in hex format						
e(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_13	W:H	R	yes
	DSP specific data in hex format						
f(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_14	W:H	R	yes
	DSP specific data in hex format						
g(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_15	W:H	R	yes
	DSP specific data in hex format						
h(4)	DSP_AUDIO			FTD_SB_DSP_POC_DATA_16	W:H	R	yes
	DSP specific data in hex format						

12.4 Display 15.04: RTP server display

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccc d eeeee fff g hh iii jjjjj kkk l</pre>	<pre>AudTX RXpac PTX T AudRX Err S Er PRX PortR FCC R</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	RTP			FTD_SB_RTP_POC_TX_AUDIO_PACKET	W:D	R	yes
	Number of sent audio packets in decimal.						
b(5)	RTP			FTD_SB_RTP_POC_RX_UDP_IP_PACKET	W:D	R	yes
	Number of received IP/UDP packets in decimal						
c(3)	RTP			FTD_SB_RTP_POC_TX_CTRL_PACKET	W:D	R	yes
	Number of sent PoC control packets in decimal.						
d	RTP			FTD_SB_RTP_POC_TX_QOS	B:D	R	yes
	QoS type of networklink used: 0 best effort 1 streaming						
e(5)	RTP			FTD_SB_RTP_POC_RX_AUDIO_PACKET	W:D	R	yes
	Number of received audio packets in decimal						
f(3)	RTP			FTD_SB_RTP_POC_TX_FAIL	W:D	R	yes
	Send fail counter in decimal						
g	RTP			FTD_SB_RTP_POC_STATE	B:D	R	yes
	RTP Server state: 0 no session 1 connecting session 2 session up 3 session in suspend/flowcontrol 4 closing session						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(2)	RTP			FTD_SB_RTP_POC_RX_REJECT	B:H	R	yes
				Last rejection reason for received packet in hexadecimal: 00 no error 01 packet not recognized as RTP/STP 02 padding error 03 unsupported payload type 04 sequence error 05 sequence duplicate 06 extension error FF unknown error			
i(3)	RTP			FTD_SB_RTP_POC_RX_CTRL_PACKET	W:D	R	yes
				Number of received PoC control packets in decimal.			
j(5)	RTP			FTD_SB_RTP_POC_REMOTE_PORT	W:D	R	yes
				Remote port number in decimal			
k(3)	RTP			FTD_SB_RTP_POC_FLOWCONTROL	W:D	R	yes
				Flowcontrol/suspend counter in decimal			
l	RTP			FTD_SB_RTP_POC_RX_QOS	B:D	R	yes
				QoS type in terminal where data was received from: 0 best effort 1 streaming			

12.5 Display 15.05: SIP server display

S40 Data display	S40 HELP display
<pre> aaaaa bbbb ccc ddd eee ffff gg </pre>	<pre> Recvd Rinv Rejr Retrm Rresp RegTr Sess </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	SIP			FTD_SB_SIP_RECEIVED_PACKETS	W:D	R	yes
				Number of received messages in decimal.			
b(4)	SIP			FTD_SB_SIP_INVALID_PACKETS	W:D	R	yes
				Number of received invalid messages in decimal.			
c(3)	SIP			FTD_SB_SIP_REJECT_REASON	W:D	R	yes
				Rejet reason sent to network in decimal.			
d(3)	SIP			FTD_SB_SIP_RETRANSMISSIONS	W:D	R	yes
				Number of retransmissions in decimal.			
e(3)	SIP			FTD_SB_SIP_RECEIVED_RESPONSE	W:D	R	yes
				Last received response from network in decimal.			
f(4)	SIP			FTD_SB_SIP_REGISTR_TIMER_VALUE	W:D	R	yes
				Registration expiration timer value in decimal.			
g(2)	SIP			FTD_SB_SIP_SESSION_COUNT	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number of active sessions in decimal.						

12.6 Display 15.06: POC server display 1

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd eeee ffff gggg hhhh </pre>	<pre> POC SRV DATA DISPLAY 1 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	POC			FTD_SB_POC_DATA_1	W:H	R	yes
	POC Server service state: 0 logged off 1 connecting 2 registering 3 logged on 4 unregistering 5 disconnecting						
b(4)	POC			FTD_SB_POC_DATA_2	W:H	R	yes
	POC Server voice control state: 0 not registered 1 registered 2 transmitting 3 receiving						
c(4)	POC			FTD_SB_POC_DATA_3	W:H	R	yes
	POC Server 1to1 call state: 0 idle 1 establishing 2 active						
d(4)	POC			FTD_SB_POC_DATA_4	W:H	R	yes
	CN service flags received from network. See PoC Core Network SIP Rp02 specification for more information.						
e(4)	POC			FTD_SB_POC_DATA_5	W:H	R	yes
	Reserved						
f(4)	POC			FTD_SB_POC_DATA_6	W:H	R	yes
	Reserved						
g(4)	POC			FTD_SB_POC_DATA_7	W:H	R	yes
	Reserved						
h(4)	POC			FTD_SB_POC_DATA_8	W:H	R	yes
	Reserved						

12.7 Display 15.07: POC server display 2

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd eeee ffff gggg hhhh </pre>	<pre> POC SRV DATA DISPLAY 2 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	POC			FTD_SB_POC_DATA_9	W:H	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Timer states as bit mask in following order ending to LSB, each timer having 2 bits: 1. Tx timer 2. Tp timer 3. Heartbeat timer 4. RTP suspend timer 5. Reactivation timer 6. Reconnecting timer Timer states are following: 00 stopped 01 on 11 expired						
b(4)	POC			FTD_SB_POC_DATA_10	W:H	R	yes
	Heartbeat timer value received from network, in seconds.						
c(4)	POC			FTD_SB_POC_DATA_11	W:H	R	yes
	Tx timer value in seconds.						
d(4)	POC			FTD_SB_POC_DATA_12	W:H	R	yes
	Reconnecting timer value in seconds.						
e(4)	POC			FTD_SB_POC_DATA_13	W:H	R	yes
	Reactivation timer value in seconds.						
f(4)	POC			FTD_SB_POC_DATA_14	W:H	R	yes
	Reactivation timer maximum repeats.						
g(4)	POC			FTD_SB_POC_DATA_15	W:H	R	yes
	Reactivation timer repeat counter.						
h(4)	POC			FTD_SB_POC_DATA_16	W:H	R	yes
	Reserved.						

13 Group 41: WCDMA CDSP displays

13.1 Group 41 Information

The displays in this group show CDSP specific information.

13.2 Display 41.01: RACH MSG TX profile

RACH MSG TX profile shows detailed information about latest RACH message transmission procedure.

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd ee fff g hhhh iiii jk lll m n ooo</pre>	<pre>Ipow P_0 Ppm SFN As Sub T SigM SigR CD Pre M S Mpow</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WCDMA_DSP_CS			FTD_WDSP_SB_INIT_TX_PWR	W:D	R,I,O	yes
Initial transmission power, unit dBm. Value range -99 +99.							
b(3)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_PO_PARAM	W:D	R,I,O	yes
Po parameter, unit dBm. Value range -99 +99.							
c(3)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_PP_M_PARAM	W:D	R,I,O	yes
Pp_m parameter, unit dBm. Value range -99 +99.							
d(3)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_START_TIMING	W:H	R,I,O	yes
Base sfn for transmission start timing in hexadecimal format, value range 0x0 -0xFFFF							
e(2)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_FIRST_ACCESS_SLOT	B:D	R,I,O	yes
First used access slot in decimal format, value range 0 59							
f(3)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_SUBCH_MASK	W:H	R,I,O	yes
Subchannel mask in hexadecimal format, value range 0x0 0xFFFF							
g	WCDMA_DSP_CS			FTD_WDSP_SB_TX_MSG_LEN	B:D	R,I,O	yes
Message length, two values: 1: 10 ms 2: 20 ms							
h(4)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_SIGSEL_MASK	W:H	R,I,O	yes
Available signatures selection mask in hexadecimal format, value range 0x0 0xFFFF							
i(4)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_SIGSEL_RND	W:H	R,I,O	yes
Signature selection random seed in hexadecimal format, value range 0x0 0xFFFF							
j	WCDMA_DSP_CS			FTD_WDSP_SB_TX_CTRL_CH_GAIN	B:H	R,I,O	yes
Control channel gain in hexadecimal format, value range 0x0 0xF							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
k	WCDMA_DSP_CS			FTD_WDSP_SB_TX_DATA_CH_GAIN	B:H	R,I,O	yes
				Data channel gain in hexadecimal format, value range 0x0 0xF			
l(3)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_PREAMP_COUNT	W:H	R,I,O	yes
				Preamble transmission count in hexadecimal format, value range 0x0 0xFFF			
m	WCDMA_DSP_CS			FTD_WDSP_SB_TX_MSG_RES	B:D	R,I,O	yes
				Message transmission result, three values: . 0: Message not transmitted 1: Message transmitted 2: Message transmission denied			
n	WCDMA_DSP_CS			FTD_WDSP_SB_TX_DATA_CH_SF	B:D	R,I,O	yes
				Data channel spreading factor, four values: 0: SF256 1: SF128 2: SF64 3: SF32			
o(3)	WCDMA_DSP_CS			FTD_WDSP_SB_TX_MSG_PWR	W:D	R,I,O	yes
				Message transmission power, unit dBm. Value range -99 +99.			

13.3 Display 41.02: Dedicated uplink channel power control status

This display gives a quick overview of the current uplink dedicated channel power control status. From this display the operating point of the uplink power control can be seen

S40 Data display	S40 HELP display
<pre> aaa bbb ccc defgh ij kl mmmmm nnnnn ooooo </pre>	<pre> Minp Maxp Curp ADSCF GO DD Fdat Ul+ Ul- </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WCDMA_DSP_CS			FTD_SB_WDSP_TX_MIN_PWR	W:D	R,I,O	yes
				Minimum TX power during the display update period, unit dBm. Value range -99 +99.			
b(3)	WCDMA_DSP_CS			FTD_SB_WDSP_TX_MAX_PWR	W:D	R,I,O	yes
				Maximum TX power during the display update period, unit dBm. Value range -99 +99.			
c(3)	WCDMA_DSP_CS			FTD_SB_WDSP_TX_CUR_PWR	W:D	R,I,O	yes
				Current TX power at display update time, unit dBm. Value range -99 +99.			
d	WCDMA_DSP_CS			FTD_SB_WDSP_TX_PWR_CTRL_ALG	B:D	R,I,O	yes
				Current power control algorithm type, 1 = power control algorithm 1 2 = power control algorithm 2			
e	WCDMA_DSP_CS			FTD_SB_WDSP_TX_PWR_STEP	B:D	R,I,O	yes
				Current power control step size, unit dB, value range 1 .. 2.			
f	WCDMA_DSP_CS			FTD_SB_WDSP_TX_SSDT	B:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Current SSDT state values: 0: not active 1: active							
g	WCDMA_DSP_CS			FTD_SB_WDSP_TX_DIV_MODE	B:D	R,I,O	yes
TX closed loop diversity state, values: 0: not active 1: Closed loop mode 1 2: Closed loop mode 2							
h	WCDMA_DSP_CS			FTD_SB_WDSP_TX_DPCCH_FFORM	B:D	R,I,O	yes
DPCCH frame format, value range 0 5.							
i	WCDMA_DSP_CS			FTD_SB_WDSP_TX_CM_MODE	B:D	R,I,O	yes
Compressed mode used during display update period, values: 0: No compressed mode 1: Compressed mode active							
j	WCDMA_DSP_CS			FTD_SB_WDSP_TX_OOS	B:D	R,I,O	yes
Out of sync state visited during display update period, values: 0: No out of sync 1: Out of sync active							
k	WCDMA_DSP_CS			FTD_SB_WDSP_TX_MIN_PHCH_BIT_RATE	B:H	R,I,O	yes
Minimum PhCh bit rate used in the uplink frames during display update period. Value range is 0 12, shown as hexadecimal number. Value coding is as follows: Range 0: 0 Range 1-6: 2^(L - 1) * 150 Range 8-12: (L - 6) * 9600							
l	WCDMA_DSP_CS			FTD_SB_WDSP_TX_MAX_PHCH_BIT_RATE	B:H	R,I,O	yes
Maximum PhCh bit rate used in the uplink frames during display update period. Value range is 0 12, shown as hexadecimal number. Value coding is as follows: Range 0: 0 Range 1-6: 2^(m - 1) * 150 Range 8-12: (m - 6) * 9600							
m(5)	WCDMA_DSP_CS			FTD_SB_WDSP_TX_AVR_PHCH_BIT_RATE	W:D	R,I,O	yes
Average PhCH frame bit rate during display update period, value range 0 57600							
n(5)	WCDMA_DSP_CS			FTD_SB_WDSP_TX_NUM_OF_UL_INC_PWR_COMMANDS	DW:D	R,I,O	yes
Amount of derived "increase power" uplink power control commands during display update period. Value range 0 .. 99999.							
o(5)	WCDMA_DSP_CS			FTD_SB_WDSP_TX_NUM_OF_UL_DEC_PWR_COMMANDS	DW:D	R,I,O	yes
Amount of derived "decrease power" uplink power control commands during display update period. Value range 0 99999.							

13.4 Display 41.03: Dedicated downlink channel power control status

This display gives a quick overview of the current downlink dedicated channel power control status. From this display the operating point of the downlink power control can be seen

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc ddddd eeeee </pre>	<pre> MinSIR MaxSIR CurSIR Dl+ Dl- </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WCDMA_DSP_CS			FTD_SB_WDSP_TARGET_SIR_MIN	W:D	R,I,O	yes
				Minimum target SIR value during display update period. Unit is dBm / 10. Value range is -320 310.			
b(4)	WCDMA_DSP_CS			FTD_SB_WDSP_TARGET_SIR_MAX	W:D	R,I,O	yes
				Maximum target SIR value during display update period. Unit is dBm / 10 Value range is -320 310.			
c(4)	WCDMA_DSP_CS			FTD_SB_WDSP_TARGET_SIR_CURRENT	W:D	R,I,O	yes
				Current target SIR at display update time. Unit is dBm / 10. Value range is -320 310.			
d(5)	WCDMA_DSP_CS			FTD_SB_WDSP_NUM_OF_DL_INC_PWR_COMMANDS	DW:D	R,I,O	yes
				Amount of sent "increase power" downlink power control commands during display update period. Value range is 0 99999			
e(5)	WCDMA_DSP_CS			FTD_SB_WDSP_NUM_OF_DL_DEC_PWR_COMMANDS	DW:D	R,I,O	yes
				Amount of sent "decrease power" downlink power control commands during display update period. Value range is 0 99999			

13.5 Display 41.04: WCDMA AFC status

The purpose of the display is to monitor WCDMA AFC behavior (including aging algorithm).

S40 Data display	S40 HELP display
<pre>W_AFC i aaaa current bbbb cccc -> dddd</pre>	<pre>W_AFC i init current ____ Min. -> Max.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WCDMA_DSP_CS			FTD_SB_WDSP_AFC_INIT_DAC	W:D	R	yes
				Initial AFC DAC setting. Value range 0 to 2047.			
b(4)	WCDMA_DSP_CS			FTD_SB_WDSP_AFC_CURR_DAC	W:D	R	yes
				Current AFC DAC setting. Value range 0 to 2047.			
c(4)	WCDMA_DSP_CS			FTD_SB_WDSP_AFC_MIN_CURR_DAC	W:D	R	yes
				Minimum AFC DAC setting during display update period. Value range 0 to 2047.			
d(4)	WCDMA_DSP_CS			FTD_SB_WDSP_AFC_MAX_CURR_DAC	W:D	R	yes
				Maximum AFC DAC setting during display update period. Value range 0 to 2047.			

13.6 Display 41.05: CDSP load status

This display gives information about the CDSP processor load.

S40 Data display	S40 HELP display
<pre>aaaaa eeeeeee bbbbbb fffffff cccccc ggggggg dddddd hhhhhh</pre>	<pre>Act% ActCyc VLS% VlsCyc LS% LsCycl DS% DsCycl</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_ACT_PORTION	W:D	R	yes
				Amount of time spent in active mode during display update period. Value is relative portion, range 0 ... 10000.			
b(5)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_VLS_PORTION	W:D	R	yes
				Amount of time spent in very light sleep mode during display update period. Value is relative portion, range 0 ... 10000.			
c(5)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_LS_PORTION	W:D	R	yes
				Amount of time spent in light sleep mode during display update period. Value is relative portion, range 0 ... 10000.			
d(5)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_DS_PORTION	W:D	R	yes
				Amount of time spent in deep sleep mode during display update period. Value is relative portion, range 0 ... 10000.			
e(6)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_ACT_CYCLES	DW:H	R	yes
				Amount of time spent in active mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			
f(6)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_VLS_CYCLES	DW:H	R	yes
				Amount of time spent in very light sleep mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			
g(6)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_LS_CYCLES	DW:H	R	yes
				Amount of time spent in light sleep mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			
h(6)	WCDMA_DSP_CS			FTD_SB_WDSP_LOAD_DS_CYCLES	DW:H	R	yes
				Amount of time spent in deep sleep mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			

13.7 Display 41.06: Downlink receiver gain control status

This display gives information about WCDMA downlink receiver gain control operating point.

S40 Data display	S40 HELP display
<pre>aa fff bb c d e gggg hhhh iiii jjjj</pre>	<pre>RxAna RxDi BB P G B RssiA RssiD AmpEA AmpED</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_ANA_AGC_DB_COUNT	B:D	R	yes
				Analog AGC's RX_dB counter. Value range 0 27.			
b(2)	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_BB_AMP	B:D	R	yes
				Control word of BB amplifier. Value range 0 18.			
c	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_PRE_AMP	B:D	R	yes
				Gain of preamplifier. 0 = minimum gain 1 = maximum gain			
d	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_LNA	B:D	R	yes
				LNA state. 3 = LNA has maximum gain 1 = LNA has middle gain 0 = LNA has minimum gain			
e	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_LNA_BIAS	B:H	R	yes
				LNA bias state. 1 = half bias current 0 = normal bias current			
f(3)	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_DIGI_AGC_DB_COUNT	W:D	R	yes
				Digital AGC's RX_dB counter. Value range 0 511.			
g(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_RSSI_ANA_DBM	W:D	R	yes
				RSSI before FIR, range -240 +20 (-120 dBm +10 dBm) , unit dBm, format q1_16			
h(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_RSSI_DIGI_DBM	W:D	R	yes
				RSSI after FIR, range -240 +20 (-120 dBm +10 dBm) unit dBm, format q1-16			
i(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_ANA_AMP_EST	W:H	R	yes
				Amplitude estimate of analog AGC. Value range 0x0000 0xFFFF			
j(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RX_GAIN_DIGI_AMP_EST	W:H	R	yes
				Amplitude estimate of digital AGC. Value range 0x0000 0xFFFF			

13.8 Display 41.07: WCDMA rake receiver status

This display gives information about WCDMA downlink rake receiver operating point

S40 Data display	S40 HELP display
<pre>a b c dddd ee fffffffffff ggggggggggg</pre>	<pre>BS PhCH Fgr Delay MFi AllocCount AAlgCount</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WCDMA_DSP_CS			FTD_SB_WDSP_RAKE_NUM_OF_ACTIVE_BS	B:D	R	yes
Number of active BSs in rake. Value range 0 6.							
b	WCDMA_DSP_CS			FTD_SB_WDSP_RAKE_NUM_OF_ACTIVE_PHCH	B:D	R	yes
Number of active PHCHs in rake. Value range 0 3.							
c	WCDMA_DSP_CS			FTD_SB_WDSP_RAKE_NUM_OF_USED_FINGERS	B:D	R	yes
Number of allocated fingers i.e multipaths (filtered average over 50 frames). Value range 0 8.							
d(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RAKE_DELAY_SPREAD	W:D	R	yes
Time difference of 1st and last multipath used for combining, value range 0 5120, unit 0.1 chips.							
e(2)	WCDMA_DSP_CS			FTD_SB_WDSP_RAKE_ALLOCATED_MASTERS	B:H	R	yes
Currently allocated master fingers. Bit #0 (mask 0x01) = Master finger 0 Bit #1 (mask 0x02) = Master finger 1 Bit #7 (mask 0x80)= Master finger 7							
f(10)	WCDMA_DSP_CS			FTD_SB_WDSP_RAKE_ALLOC_COUNT	DW:D	R	yes
Number of finger allocations done during display update period on current PhCHs.							
g(10)	WCDMA_DSP_CS			FTD_SB_WDSP_RAKE_ALLOC_CALL_COUNT	DW:D	R	yes
Number of finger allocation algorithm calls done during display update period on current PhCHs.							

13.9 Display 41.08: WCDMA decoder status

This display gives a quick overview of the current decoder internal values regarding reception quality and sync status

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeee f ggg hh</pre>	<pre>F_TFCI T_BER BER BLER SyLost SySta SprFac SlFmt</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_FORCED_TFCI	W:H	R	yes
				Number of forced TFCI values in display update period.			
b(4)	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_TFCI_BER	W:H	R	yes
				TFCI BER averaged over display update period.			
c(4)	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_BER	W:H	R	yes
				BER used by the sync status algorithm (based on the TPC or the PILOT bits, depending on the situation). Averaged over display update period.			
d(4)	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_BLER	W:H	R	yes
				BLER in q12_16 format. This is the combined BLER for all the trch with BLER being measured, used by outer loop power control (averaged over display update period)			
e(4)	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_SYNC_LOST	W:H	R	yes
				Number of times the phone lost sync since the activation of the display.			
f	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_SYNC_STATUS	B:D	R	yes
				SYNC sync status: 0 out of sync 1 in sync			
g(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_SPREADING_FACTOR	B:D	R	yes
				Spreading factor			
h(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DEC_SLOT_FORMAT	B:D	R	yes
				Slot format used in the physical channel			

13.10 Display 41.09: Common WCDMA DSP CS scratchpad display

This display provides a generic display template that can be used to display any data on field test display. This display is needed in order to be able to support for the various needs detected in field testing. With this display quick test-specific temporary displays can be easily added to support specific problems detected in field testing. The display prompts for an index and then shows the data associated with the given index. Use the following steps to activate this display. The display is not activated if the arrow (up, down) buttons are used.

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display by giving the display number 4109 to the query prompt.
5. Test input prompt will be shown on the display. Enter scratchpad index.
6. Confirm with the Ok button.
7. Data associated with the given index is shown if the activation was successful.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccccc dddddddddddddd</pre>	<pre>Scratchpad display 4109</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	WCDMA_DSP_CS			FTD_SB_WDSP_SCRATCHPAD_DATA1	S	R	yes
				FTD data 0 12 character string			
b(12)	WCDMA_DSP_CS			FTD_SB_WDSP_SCRATCHPAD_DATA2	S	R	yes
				FTD data 0 12 character string			
c(12)	WCDMA_DSP_CS			FTD_SB_WDSP_SCRATCHPAD_DATA3	S	R	yes
				FTD data 0 12 character string			
d(12)	WCDMA_DSP_CS			FTD_SB_WDSP_SCRATCHPAD_DATA4	S	R	yes
				FTD data 0 12 character string			
INPUT(8)	WCDMA_DSP_CS			FTD_SB_WDSP_SCRATCHPAD_INDEX	DW:D	R	no
				Scratchpad index, see project specific documentation.			

13.11 Display 41.10: FDD neighbour cell summary

This displays summarises the number of cells in the active, monitored, detected and undetected sets on the 3 frequencies. Active and detected sets only contain cells on the home frequency

S40 Data display	S40 HELP display
<pre>aa bb cc dd ee ff gg hh</pre>	<pre>AH MH MM1 M2 DH UH UU1 U2</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTRA_ACTIVE	W:D	R,I,O	yes
				Number of cells in the active set			
b(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTRA_MON	W:D	R,I,O	yes
				Number of cells in intra-freq monitored set			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTER1_MON	W:D	R,I,O	yes
d(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTER2_MON	W:D	R,I,O	yes
e(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTRA_DET	W:D	R,I,O	yes
f(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTRA_UNDET	W:D	R,I,O	yes
g(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTER1_UNDET	W:D	R,I,O	yes
h(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_SUM_INTER2_UNDET	W:D	R,I,O	yes

13.12 Display 41.11: FDD ranking summary

This display shows the 4 highest ranked cells. The ranking criteria (RSCP, EcNo) will be automatically selected based on the parameters received from the network

S40 Data display	S40 HELP display
<pre>aaaaa eee i bbbbbb fff j ccccc ggg k dddddd hhh l</pre>	<pre>FREQ1 BS1 S FREQ2 BS2 S FREQ3 BS3 S FREQ4 BS4 S</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_FREQ_1	W:D	R,I,O	yes
b(5)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_FREQ_2	W:D	R,I,O	yes
c(5)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_FREQ_3	W:D	R,I,O	yes
d(5)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_FREQ_4	W:D	R,I,O	yes
e(3)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_BSID_1	W:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
f(3)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_BSID_2	W:D	R,I,O	yes
	Cell 2 BS ID						
g(3)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_BSID_3	W:D	R,I,O	yes
	Cell 3 BS ID						
h(3)	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_BSID_4	W:D	R,I,O	yes
	Cell 4 BS ID						
i	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_SYSTEM_1	S	R,I,O	yes
	FDD home cell = "W", FDD neighbour cell = "w" GSM neighbour cell = "g" Data not available = "-" In case data is not available also corresponding frequency and BS ID field values are meaningless.						
j	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_SYSTEM_2	S	R,I,O	yes
	FDD home cell = "W", FDD neighbour cell = "w" GSM neighbour cell = "g" Data not available = "-" In case data is not available also corresponding frequency and BS ID field values are meaningless.						
k	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_SYSTEM_3	S	R,I,O	yes
	FDD home cell = "W", FDD neighbour cell = "w" GSM neighbour cell = "g" Data not available = "-" In case data is not available also corresponding frequency and BS ID field values are meaningless.						
l	WCDMA_DSP_CS			FTD_SB_WDSP_RANK_SYSTEM_4	S	R,I,O	yes
	FDD home cell = "W", FDD neighbour cell = "w" GSM neighbour cell = "g" Data not available = "-" In case data is not available also corresponding frequency and BS ID field values are meaningless.						

13.13 Display 41.12: FDD Frequency summary

This display shows the RSSI measured on the 3 FDD frequencies being used by the UE

S40 Data display	S40 HELP display
<pre>aaaaa dddd bbbbbb eeee cccccc ffff</pre>	<pre>INTRA RSSI INTR1 RSSI INTR2 RSSI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WCDMA_DSP_CS			FTD_SB_WDSP_FREQ_INTRA	W:D	R,I,O	yes
	Frequency code of home cell, center frequency is value / 5.						
b(5)	WCDMA_DSP_CS			FTD_SB_WDSP_FREQ_INTER1	W:D	R,I,O	yes
	Frequency code of measured frequency 1, center frequency is value / 5.						
c(5)	WCDMA_DSP_CS			FTD_SB_WDSP_FREQ_INTER2	W:D	R,I,O	yes
	Frequency code of measured frequency 2, center frequency is value / 5.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RSSI_INTRA	W:D	R,I,O	yes
	INTRA RSSI * -10						
e(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RSSI_INTER1	W:D	R,I,O	yes
	INTER1 RSSI * -10						
f(4)	WCDMA_DSP_CS			FTD_SB_WDSP_RSSI_INTER2	W:D	R,I,O	yes
	INTER2 RSSI * -10						

13.14 Display 41.13: FDD intra frequency neighbour summary

This displays shows the status of eight best ranked neighbour cells on home cell frequency

S40 Data display	S40 HELP display
<pre> abbbccdeeff ghhhi i jkkkl mnnnooppqqr stttuuvwwxx </pre>	<pre> SBs1EcSBs2Ec SBs1EcSBs2Ec SBs1EcSBs2Ec SBs1EcSBs2Ec </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_1	S	R,I,O	yes
	BS status a = Active set, STTD not active on PCCPCH. m = Monitored set, STTD not active on PCCPCH. d = Detected set, STTD not active on PCCPCH. u = Undetected, STTD not active on PCCPCH. n = Not listed or detected, STTD not active on PCCPCH. A = Active set, STTD active on PCCPCH. M = Monitored set, STTD active on PCCPCH. D = Detected set, STTD active on PCCPCH. U = Undetected, STTD active on PCCPCH. N = Not listed or detected, STTD active on PCCPCH.						
b(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_1	W:D	R,I,O	yes
	BS ID on INTRA						
c(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_1	W:D	R,I,O	yes
	Cell Ec/No * -1						
d	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_2	S	R,I,O	yes
	BS status						
e(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_2	W:D	R,I,O	yes
	BS ID on INTRA						
f(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_2	W:D	R,I,O	yes
	Cell Ec/No * -1						
g	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_3	S	R,I,O	yes
	BS status						
h(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_3	W:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	BS ID on INTRA						
i(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_3	W:D	R,I,O	yes
	Cell Ec/No * -1						
j	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_4	S	R,I,O	yes
	BS status						
k(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_4	W:D	R,I,O	yes
	BS ID on INTRA						
l(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_4	W:D	R,I,O	yes
	Cell Ec/No * -1						
m	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_5	S	R,I,O	yes
	BS status						
n(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_5	W:D	R,I,O	yes
	BS ID on INTRA						
o(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_5	W:D	R,I,O	yes
	Cell Ec/No * -1						
p	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_6	S	R,I,O	yes
	BS status						
q(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_6	W:D	R,I,O	yes
	BS ID on INTRA						
r(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_6	W:D	R,I,O	yes
	Cell Ec/No * -1						
s	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_7	S	R,I,O	yes
	BS status						
t(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_7	W:D	R,I,O	yes
	BS ID on INTRA						
u(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_7	W:D	R,I,O	yes
	Cell Ec/No * -1						
v	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_STATUS_8	S	R,I,O	yes
	BS status						
w(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_BSID_8	W:D	R,I,O	yes
	BS ID on INTRA						
x(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTRA_ECNO_8	W:D	R,I,O	yes
	Cell Ec/No * -1						

13.15 Display 41.14: FDD inter frequencies 1 and 2 neighbour summary

These two displays show the status of eight best ranked neighbour cells on inter frequencies 1 and 2. Display 41.14 shows inter frequency 1 summary and 41.15 inter frequency 2 summary.

where "x" denotes the number of the inter frequency., x=1 in display 41.14 and x=2 in display 41.15.

S40 Data display	S40 HELP display
abbbccdeeeff ghhhijkkkl mnnnoopqqrr stttuuvwwxxx	SBs1EcSBs2Ec SBs1EcSBs2Ec SBs1EcSBs2Ec SBs1EcSBs2Ec

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_1	S	R,I,O	yes
	BS status a = Active set, STTD not active on PCCPCH. m = Monitored set, STTD not active on PCCPCH. d = Detected set, STTD not active on PCCPCH. u = Undetected, STTD not active on PCCPCH. n = Not listed or detected, STTD not active on PCCPCH. A = Active set, STTD active on PCCPCH. M = Monitored set, STTD active on PCCPCH. D = Detected set, STTD active on PCCPCH. U = Undetected, STTD active on PCCPCH. N = Not listed or detected, STTD active on PCCPCH.						
b(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_1	W:D	R,I,O	yes
	BS ID on INTERx						
c(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_1	W:D	R,I,O	yes
	Cell Ec/No * -1						
d	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_2	S	R,I,O	yes
	BS status						
e(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_2	W:D	R,I,O	yes
	BS ID on INTERx						
f(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_2	W:D	R,I,O	yes
	Cell Ec/No * -1						
g	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_3	S	R,I,O	yes
	BS status						
h(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_3	W:D	R,I,O	yes
	BS ID on INTERx						
i(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_3	W:D	R,I,O	yes
	Cell Ec/No * -1						
j	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_4	S	R,I,O	yes
	BS status						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
k(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_4	W:D	R,I,0	yes
	BS ID on INTERx						
l(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_4	W:D	R,I,0	yes
	Cell Ec/No * -1						
m	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_5	S	R,I,0	yes
	BS status						
n(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_5	W:D	R,I,0	yes
	BS ID on INTERx						
o(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_5	W:D	R,I,0	yes
	Cell Ec/No * -1						
p	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_6	S	R,I,0	yes
	BS status						
q(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_6	W:D	R,I,0	yes
	BS ID on INTERx						
r(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_6	W:D	R,I,0	yes
	Cell Ec/No * -1						
s	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_7	S	R,I,0	yes
	BS status						
t(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_7	W:D	R,I,0	yes
	BS ID on INTERx						
u(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_7	W:D	R,I,0	yes
	Cell Ec/No * -1						
v	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_STATUS_8	S	R,I,0	yes
	BS status						
w(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_BSID_8	W:D	R,I,0	yes
	BS ID on INTERx						
x(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER1_ECNO_8	W:D	R,I,0	yes
	Cell Ec/No * -1						

13.16 Display 41.15: FDD inter frequencies 1 and 2 neighbour summary

These two displays show the status of eight best ranked neighbour cells on inter frequencies 1 and 2. Display 41.14 shows inter frequency 1 summary and 41.15 inter frequency 2 summary.

where "x" denotes the number of the inter frequency., x=1 in display 41.14 and x=2 in display 41.15.

S40 Data display	S40 HELP display
abbbccdeeeff ghhhijkkkl mnnnooppqqr stttuuvvwxx	SBs1EcSBs2Ec SBs1EcSBs2Ec SBs1EcSBs2Ec SBs1EcSBs2Ec

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_1	S	R,I,O	yes
				BS status a = Active set, STTD not active on PCCPCH. m = Monitored set, STTD not active on PCCPCH. d = Detected set, STTD not active on PCCPCH. u = Undetected, STTD not active on PCCPCH. n = Not listed or detected, STTD not active on PCCPCH. A = Active set, STTD active on PCCPCH. M = Monitored set, STTD active on PCCPCH. D = Detected set, STTD active on PCCPCH. U = Undetected, STTD active on PCCPCH. N = Not listed or detected, STTD active on PCCPCH.			
b(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_1	W:D	R,I,O	yes
				BS ID on INTERx			
c(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_1	W:D	R,I,O	yes
				Cell Ec/No * -1			
d	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_2	S	R,I,O	yes
				BS status			
e(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_2	W:D	R,I,O	yes
				BS ID on INTERx			
f(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_2	W:D	R,I,O	yes
				Cell Ec/No * -1			
g	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_3	S	R,I,O	yes
				BS status			
h(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_3	W:D	R,I,O	yes
				BS ID on INTERx			
i(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_3	W:D	R,I,O	yes
				Cell Ec/No * -1			
j	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_4	S	R,I,O	yes
				BS status			
k(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_4	W:D	R,I,O	yes
				BS ID on INTERx			
l(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_4	W:D	R,I,O	yes
				Cell Ec/No * -1			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
m	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_5	S	R,I,0	yes
	BS status						
n(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_5	W:D	R,I,0	yes
	BS ID on INTERx						
o(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_5	W:D	R,I,0	yes
	Cell Ec/No * -1						
p	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_6	S	R,I,0	yes
	BS status						
q(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_6	W:D	R,I,0	yes
	BS ID on INTERx						
r(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_6	W:D	R,I,0	yes
	Cell Ec/No * -1						
s	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_7	S	R,I,0	yes
	BS status						
t(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_7	W:D	R,I,0	yes
	BS ID on INTERx						
u(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_7	W:D	R,I,0	yes
	Cell Ec/No * -1						
v	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_STATUS_8	S	R,I,0	yes
	BS status						
w(3)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_BSID_8	W:D	R,I,0	yes
	BS ID on INTERx						
x(2)	WCDMA_DSP_CS			FTD_SB_WDSP_DETECT_INTER2_ECNO_8	W:D	R,I,0	yes
	Cell Ec/No * -1						

13.17 Display 41.16: FDD mode GSM cell detection summary

Displays the top 4 GSM cells showing the frequency code, measured RSSI and if the BSIC has been verified.

S40 Data display	S40 HELP display
<pre> aaaa eeee i bbbb ffff j cccc gggg k dddd hhhh l </pre>	<pre> GSM1 RSSI V GSM2 RSSI V GSM3 RSSI V GSM4 RSSI V </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_FREQ_1	W:D	R,I,O	yes
	GSM Cell 1 frequency code						
b(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_FREQ_2	W:D	R,I,O	yes
	GSM Cell 2 frequency code						
c(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_FREQ_3	W:D	R,I,O	yes
	GSM Cell 3 frequency code						
d(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_FREQ_4	W:D	R,I,O	yes
	GSM Cell 4 frequency code						
e(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_RSSI_1	W:D	R,I,O	yes
	Cell 1 RSSI *-10						
f(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_RSSI_2	W:D	R,I,O	yes
	Cell 2 RSSI *-10						
g(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_RSSI_3	W:D	R,I,O	yes
	Cell 3 RSSI *-10						
h(4)	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_RSSI_4	W:D	R,I,O	yes
	Cell 4 RSSI *-10						
i	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_STATUS_1	S	R,I,O	yes
	Cell 1 verified status V =verified, N = Not verified						
j	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_STATUS_2	S	R,I,O	yes
	Cell 2 verified status V =verified, N = Not verified						
k	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_STATUS_3	S	R,I,O	yes
	Cell 3 verified status V =verified, N = Not verified						
l	WCDMA_DSP_CS			FTD_SB_WDSP_GSM_STATUS_4	S	R,I,O	yes
	Cell 4 verified status V =verified, N = Not verified						

13.18 Display 41.17: FDD detailed cell info (interactive)

This display prompts for a cell frequency code and BSID and shows info about the selected cell.

Use the following steps to activate this display in interactive mode. The display is not activated if the arrow (up, down) buttons are used.

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item
3. Press the Select button.
4. Select this display by giving the display number 4117 to the query prompt.

5. Test input prompt will be shown on the display. Enter frequency code and BSID as specified in the table below.
6. Confirm with the Ok button.
7. Info about the cell is shown if the activation was successful.

S40 Data display	S40 HELP display
<pre>aaaaa bbbb ccc dd e f g hhhhh i jjj kkkk</pre>	<pre>Freq RSSI Bs RO S D T Time SCPICH EcNO RSCP</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_FREQ	W:D	R,I,O	yes
				Frequency code			
b(4)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_RSSI	W:D	R,I,O	yes
				RSSI * -10			
c(3)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_BSID	W:D	R,I,O	yes
				BS ID			
d(2)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_RANK	W:D	R,I,O	yes
				cell ranking order			
e	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_STATUS	S	R,I,O	yes
				BS status A = Active set M = Monitored set D = Detected set U = Undetected N = Not listed or detected			
f	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_SYNC	S	R,I,O	yes
				Cell synchronization status: N = Not synchronized, S = Synchronized D = SFN Decoded			
g	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_STTD	S	R,I,O	yes
				Cell tx diversity status: - = STTD not used on PCCPCH S = STTD used on PCCPCH.			
h(5)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_TIMING	W:D	R,I,O	yes
				Cell frame timing in relation to WCDMA system clock.			
i	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_SCPICH	S	R,I,O	yes
				SCPICH measurement status: - = SCPICH not used S = SCPICH used			
j(3)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_H	W:D	R,I,O	yes
				EcNo * -10			
k(4)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_DETAIL_G	W:D	R,I,O	yes
				RSCP * -10			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
INPUT(8)	WCDMA_DSP_CS			FTD_SB_WDSP_CELL_INPUT	DW:D	R,I,O	no
Format xxxxyyyy, where xxxxx: frequency code (decimal)yyy: BSID (decimal)							

13.19 Display 41.18: FDD HSDPA

This display shows the HSDPA L1 information

S40 Data display	S40 HELP display
<pre> HS-SCCH a kBit/s bbbbb CQI cc U ddd B eee </pre>	<pre> No. HS-SCCH Bit rate CQI Util BREL </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WCDMA_DSP_CS			FTD_SB_WDSP_HS_SCCH	W:D	R,I,O	yes
Number of configured HS-SCCH channels [0..4]							
b(5)	WCDMA_DSP_CS			FTD_SB_WDSP_HS_BITRATE	W:D	R,I,O	yes
L1 Data rate in kBit/s [0..7200]							
c(2)	WCDMA_DSP_CS			FTD_SB_WDSP_HS_CQI	W:D	R,I,O	yes
Filtered CQI value [0..31]							
d(3)	WCDMA_DSP_CS			FTD_SB_WDSP_HS_UTIL	W:D	R,I,O	yes
Percentage of all HS-DSCH subframes received compared to total subframes available[0..100]							
e(3)	WCDMA_DSP_CS			FTD_SB_WDSP_HS_BLER	W:D	R,I,O	yes
Percentage of HS-DSCH subframes received in error compared to all received subframes [0..100]							

13.20 Display 41.19: FDD HSUPA

This display shows the HSUPA L1 information

S40 Data display	S40 HELP display
<pre> SG aaa UPH bb </pre>	<pre> SG x10 UPH </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WCDMA_ DSP_CS			FTD_SB_WDSP_EDCH_SG	W:D	R,I,O	yes
	Serving Grant * 10. 380 is ZERO_GRANT 25.331 10.3.6.97						
b(2)	WCDMA_ DSP_CS			FTD_SB_WDSP_EDCH_UPH	W:D	R,I,O	yes
	Uplink Power Headroom 25.215 5.1.14						

14 Group 46: WCDMA RAN System displays

14.1 Display 46.01: RRC Global Status

This screen shows Global RRC status

S40 Data display	S40 HELP display
<pre>aaaaaaaaa Dom CS:bPS:c ddddddddddddd Cip CS:ePS:f</pre>	<pre>RRCGlobalSt Domain Rel drop cause Ciph on/off</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(9)	WRAN			FTD_SB_RRC_GLOBAL_STATE	S	R,0	yes
				RRC Global State 00Z, idle-pch, cell-dch, cell-fach, cell-pch, ura-pch			
b	WRAN			FTD_SB_RRC_GLOBAL_ACTIVE_DOMAIN_CS	B:D	R,0	yes
				RRC Active Domain - CS 1/0			
c	WRAN			FTD_SB_RRC_GLOBAL_ACTIVE_DOMAIN_PS	B:D	R,0	yes
				RRC Active Domain - PS 1/0			
d(12)	WRAN			FTD_SB_RRC_CALL_RELEASE_DROP_CAUSE	S	R,0	yes
				Last Call Drop/Release Cause			
e	WRAN			FTD_SB_RRC_CS_DOMAIN_CIPHERING	B:D	R,0	yes
				Ciphering - CS Domain on/off - 1/0			
f	WRAN			FTD_SB_RRC_PS_DOMAIN_CIPHERING	B:D	R,0	yes
				Ciphering - PS Domain on/off - 1/0			

14.2 Display 46.02: PEER message MSC

This screen shows an MSC of last 7 PEER messages Message order runs vertically. The oldest message is blanked out.

ASUp - Active Set Update (C - Complete, F - Failure)

ADD - Assistance Data Delivery CCO - Cell Change Order From UTRAN (F - Failure)

CU - Cell Update (Cnf - Confirm)

CtCk - Counter Check (R - Response)

HOFU - Handover From UTRAN Command (F - Failure)

HOTU - Handover To UTRAN Command (C - Complete)

IRHI - Inter RAT Handover Info

- MeCn - Measurement Control (F - Failure)
- PAGEx - Paging Type x
- PCRC - Physical Channel Reconfiguration (C - Complete, F - Failure)
- PSCA - Physical Shared Channel Allocation
- PCRq - PUSCH Capacity Request
- RBRC - Radio Bearer Reconfiguration (C - Complete, F - Failure)
- RBRI - Radio Bearer Release (C - Complete, F - Failure)
- RBSt - Radio Bearer Setup (C - Complete, F - Failure)
- RCRej - RRC Connection Reject
- RCRI - RRC Connection Release (C - Complete)
- RCReq - RRC Connection Request
- RCSt - RRC Connection Setup (C - Complete)
- RFI - RRC Failure Info
- RS - RRC Status
- SecM - Security Mode Command (C - Complete, F - Failure)
- SgCR - Signalling Connection Release (I - Indication)
- SICI - System Information Change Indication
- TCRC - Transport Channel Reconfiguration (C - Complete, F - Failure)
- TFCC - Transport Format Combination Control (F - Failure)
- UECEq - UE Capability Enquiry
- UECI - UE Capability Information (C - Confirm)
- UPCC - Uplink Physical Channel Control
- UraU - URA Update (C - Confirm)
- UMI - UTRAN Mobility Information (C - Confirm, F - Failure)

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb cccc ddddd eeee fffff ggggg hhhhh</pre>	<pre>MSC Showing Last 7 Msgs Oldest Msg Is Blanked</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_RRC_PEER_MSG_1_ID	S	R,0	yes
				PEER Message ID			
b(5)	WRAN			FTD_SB_RRC_PEER_MSG_5_ID	S	R,0	yes
				PEER Message ID			
c(5)	WRAN			FTD_SB_RRC_PEER_MSG_2_ID	S	R,0	yes
				PEER Message ID			
d(5)	WRAN			FTD_SB_RRC_PEER_MSG_6_ID	S	R,0	yes
				PEER Message ID			
e(5)	WRAN			FTD_SB_RRC_PEER_MSG_3_ID	S	R,0	yes
				PEER Message ID			
f(5)	WRAN			FTD_SB_RRC_PEER_MSG_7_ID	S	R,0	yes
				PEER Message ID			
g(5)	WRAN			FTD_SB_RRC_PEER_MSG_4_ID	S	R,0	yes
				PEER Message ID			
h(5)	WRAN			FTD_SB_RRC_PEER_MSG_8_ID	S	R,0	yes
				PEER Message ID			

14.3 Display 46.03: RNTI Values

This screen shows current RNTI values

S40 Data display	S40 HELP display
<pre>RNTI Values USRNCID aaa USRNTI bbbbb C-RNTI cccc</pre>	<pre>RNTI Values USRNCID USRNTI C-RNTI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_U_RNTI_SRNC_IDENTITY	W:H	R,0	yes
				U-RNTI SRNC Identity 0..FFF			
b(5)	WRAN			FTD_SB_RRC_U_RNTI_SRNTI	DW:H	R,0	yes
				U-RNTI SRNTI 0..FFFF			
c(4)	WRAN			FTD_SB_RRC_C_RNTI	W:H	R,0	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	C-RNTI 0..FFFF						

14.4 Display 46.04: Ciphering Capability

This screen is used to set and display the Ciphering capability - possible inputs are shown on the help text

S40 Data display	S40 HELP display
<pre>UEA0 Cipher: aaaaaaa UEA1 Cipher: bbbbbbbb</pre>	<pre>NoCiph -0 UEA0 -1 UEA1 -2 UEA0&UEA1 -3</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	WRAN			FTD_SB_RRC_UEA0_CIPHER_FLAG	S	R,0	yes
Ciphering capability flag to show if UEA0 is ENABLED or DISABLED							
b(8)	WRAN			FTD_SB_RRC_UEA1_CIPHER_FLAG	S	R,0	yes
Ciphering capability flag to show if UEA1 is ENABLED or DISABLED							
INPUT	WRAN			FTD_SB_INPUT_rrc_ftd_flag_uea_ciphering_capability	DW:D	R,0	no
callback function subblock identity							

14.5 Display 46.05: Cell Selection - Screen 2

This screen shows the current PLMN information

S40 Data display	S40 HELP display
<pre>PLMN: aaaaaa bbbbbbcccccc Freq: dddd Scram: eee</pre>	<pre>PLMN Number SrchTyp Trig Frequency ScrambleCode</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	WRAN			FTD_SB_RRC_PLMN_NUMBER	DW:H	R,0	yes
PLMN Number - 0..FFFFFF							
b(6)	WRAN			FTD_SB_RRC_PLMN_SEARCH_TYPE	S	R,0	yes
Type of search used to find PLMN nonini, init, candid, allcel, emerge, PLMN							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(6)	WRAN			FTD_SB_RRC_PLMN_SEARCH_TRIGGER	S	R,0	yes
		Type of trigger used to find PLMN - L1trig, statch, intRat					
d(5)	WRAN			FTD_SB_RRC_PLMN_FREQ	W:D	R,0	yes
		PLMN frequency					
e(3)	WRAN			FTD_SB_RRC_PLMN_SCR_CODE	W:D	R,0	yes
		PLMN scramble code					

14.6 Display 46.06: FDD BTS Carrier Lock Mode

This screen is used in BTS carrier lock mode to retrieve FDD Frequency and Scrambling code. The frequency and scrambling code is entered as one decimal value. Both frequency and scrambling code are five digits. e.g. entered value on FTD is '1060000040', where '10600' is the BTS test frequency and '00040' is the test scrambling code. To clear the BTS test mode user enters '0000000000'.

S40 Data display	S40 HELP display
<pre>BtsCarrierlck Freq: aaaaa Scra bbbbb</pre>	<pre>BtsCarrierlck URAFCH:5 dig pScram:5 dig</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_RRC_BTS_CARRIER_LOCK_FREQ	W:D	R,0	yes
		FDD Frequency to use in BTS carrier lock mode					
b(5)	WRAN			FTD_SB_RRC_BTS_CARRIER_LOCK_SCR_CODE	W:D	R,0	yes
		FDD scrambling code to use in BTS carrier lock mode					
INPUT (10)	WRAN			FTD_SB_INPUT_rrc_ftd_wcdma_bts_freq_lock_mode	DW:D	R,0	no
		callback function subblock identity					

14.7 Display 46.07: Counter Reset

This screen is used to reset counters

S40 Data display	S40 HELP display
<pre>Reset All Counters</pre>	<pre>Input: Reset Counters Reset 1 Quit 0</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
INPUT	WRAN			FTD_SB_INPUT_rrc_ftd_reset_counters	DW:D	R,0	no
callback function subblock identity							

14.8 Display 46.08: Call Failure Reasons

This screen shows Counts for each call failure reason

S40 Data display	S40 HELP display
<pre> aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk lll </pre>	<pre> RLF HOFU RLC ABR NORM S7F CONF 300 CRT 302 OOS Uns </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_RADIO_LINK_FAILURE_COUNT	W:D	R,0	yes
Number of Radio link Failures							
b(3)	WRAN			FTD_SB_RRC_HO_FROM_UTRAN_COUNT	W:D	R,0	yes
Number of Handover to UTRAN							
c(3)	WRAN			FTD_SB_RRC_RLC_LINK_ERROR_COUNT	W:D	R,0	yes
Number of RLC link Error							
d(3)	WRAN			FTD_SB_RRC_RELEASE_REQ_COUNT	W:D	R,0	yes
Number of upper layer triggered release							
e(3)	WRAN			FTD_SB_RRC_NORMAL_REL_COUNT	W:D	R,0	yes
Number of normal release							
f(3)	WRAN			FTD_SB_RRC_SIB7_RECEPTION_FAIL_COUNT	W:D	R,0	yes
Number of RLC link Error							
g(3)	WRAN			FTD_SB_RRC_CONFIG_FAILURE_COUNT	W:D	R,0	yes
Number of configuration failures							
h(3)	WRAN			FTD_SB_RRC_V300_GR_N300_COUNT	W:D	R,0	yes
Number of V300 > N300 failures							
i(3)	WRAN			FTD_SB_RRC_T314_T315_TIMEOUT_COUNT	W:D	R,0	yes
Number of Connection Reestablishment Timers Timeouts failures-T314/T315							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
j(3)	WRAN			FTD_SB_RRC_V302_GR_N302_COUNT	W:D	R,0	yes
				Number of V302 > N302 failures			
k(3)	WRAN			FTD_SB_RRC_T316_T317_T307_COUNT	W:D	R,0	yes
				Number of Out of Service Timer Timeout failures-T316/T317/T307			
l(3)	WRAN			FTD_SB_RRC_UNSPECIFIC_FAILURE_COUNT	W:D	R,0	yes
				Number of unspecific failures			

14.9 Display 46.09: L1 State

This screen shows L1 State

S40 Data display	S40 HELP display
PCCPCH : a SCCPCH : b RACH : c DPCH : d	PCCPCHon/off SCCPCHon/off RACH on/off DPCH on/off

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WRAN			FTD_SB_RRC_PCCPCH_STATE	B:D	R,0	yes
				PCCPCH State			
b	WRAN			FTD_SB_RRC_SCCPCH_STATE	B:D	R,0	yes
				SCCPCH State			
c	WRAN			FTD_SB_RRC_RACH_STATE	B:D	R,0	yes
				RACH State			
d	WRAN			FTD_SB_RRC_DPCH_STATE	B:D	R,0	yes
				DPCH State			

14.10 Display 46.10: Cell Reselection - Screen 1

This screen shows reselection OK and Fail counters

S40 Data display	S40 HELP display
aaaaa bbbbb ccccc ddddd eeeee fffff ggggg hhhhh	Resel: Idle Connected UMTS->GSM GSM->UMTS

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_RRC_IDLE_RESELECTION_OK_COUNT	W:D	R,0	yes
				Number of successful Idle mode reselections			
b(5)	WRAN			FTD_SB_RRC_IDLE_RESELECTION_FAIL_COUNT	W:D	R,0	yes
				Number of unsuccessful Idle mode reselections			
c(5)	WRAN			FTD_SB_RRC_CON_RESELECTION_OK_COUNT	W:D	R,0	yes
				Number of successful Connected mode reselections			
d(5)	WRAN			FTD_SB_RRC_CON_RESELECTION_FAIL_COUNT	W:D	R,0	yes
				Number of unsuccessful Connected mode reselections			
e(5)	WRAN			FTD_SB_RRC_UMTS_TO_GSM_OK_COUNT	W:D	R,0	yes
				Number of successful UMTS to GSM reselections			
f(5)	WRAN			FTD_SB_RRC_UMTS_TO_GSM_FAIL_COUNT	W:D	R,0	yes
				Number of unsuccessful UMTS to GSM reselections			
g(5)	WRAN			FTD_SB_RRC_GSM_TO_UMTS_OK_COUNT	W:D	R,0	yes
				Number of successful GSM to UMTS reselections			
h(5)	WRAN			FTD_SB_RRC_GSM_TO_UMTS_FAIL_COUNT	W:D	R,0	yes
				Number of unsuccessful GSM to UMTS reselections			

14.11 Display 46.11: Radio Access Bearer Information

This screen shows Radio Access Bearers currently setup

S40 Data display	S40 HELP display
<pre> aaabcccdeeeef ggghiiiijkkkl SRBs : mm nn oo pp </pre>	<pre> Current RABs And Domain Current SRBs </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_RAB_ID1	B:D	R,0	yes
				Radio Access Bearer ID			
b	WRAN			FTD_SB_RRC_RAB_ID1_DOMAIN	S	R,0	yes
				Domain - PS, CS			
c(3)	WRAN			FTD_SB_RRC_RAB_ID2	B:D	R,0	yes
				Radio Access Bearer ID			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d	WRAN			FTD_SB_RRC_RAB_ID2_ DOMAIN	S	R,0	yes
	Domain - PS, CS						
e(3)	WRAN			FTD_SB_RRC_RAB_ID3	B:D	R,0	yes
	Radio Access Bearer ID						
f	WRAN			FTD_SB_RRC_RAB_ID3_ DOMAIN	S	R,0	yes
	Domain - PS, CS						
g(3)	WRAN			FTD_SB_RRC_RAB_ID4	B:D	R,0	yes
	Radio Access Bearer ID						
h	WRAN			FTD_SB_RRC_RAB_ID4_ DOMAIN	S	R,0	yes
	Domain - PS, CS						
i(3)	WRAN			FTD_SB_RRC_RAB_ID5	B:D	R,0	yes
	Radio Access Bearer ID						
j	WRAN			FTD_SB_RRC_RAB_ID5_ DOMAIN	S	R,0	yes
	Domain - PS, CS						
k(3)	WRAN			FTD_SB_RRC_RAB_ID6	B:D	R,0	yes
	Radio Access Bearer ID						
l	WRAN			FTD_SB_RRC_RAB_ID6_ DOMAIN	S	R,0	yes
	Domain - PS, CS						
m(2)	WRAN			FTD_SB_RRC_SRB_ID1	B:D	R,0	yes
	Signalling Radio Bearer ID						
n(2)	WRAN			FTD_SB_RRC_SRB_ID2	B:D	R,0	yes
	Signalling Radio Bearer ID						
o(2)	WRAN			FTD_SB_RRC_SRB_ID3	B:D	R,0	yes
	Signalling Radio Bearer ID						
p(2)	WRAN			FTD_SB_RRC_SRB_ID4	B:D	R,0	yes
	Signalling Radio Bearer ID						

14.12 Display 46.12: Radio Bearer Information

This screen shows all Radio Bearers associated with a RAB id. The RAB id and the associated domain are entered as a single decimal value. The RAB id is the first three digits and the domain is input as the last digit, 1 for PS and 0 for CS.

S40 Data display	S40 HELP display
<pre>RAB_ID:aaab cc dd ee ff gg hh ii jj Re-Est:kkkkk</pre>	<pre>Input RABid P/C P/C:1/0 RBs associated</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_RAB_ID	B:D	R,0	yes
	Radio Access Bearer ID						
b	WRAN			FTD_SB_RRC_RAB_ID_DOMAIN	S	R,0	yes
	Domain - PS, CS						
c(2)	WRAN			FTD_SB_RRC_RB_ID1	B:D	R,0	yes
	Radio Bearer ID						
d(2)	WRAN			FTD_SB_RRC_RB_ID2	B:D	R,0	yes
	Radio Bearer ID						
e(2)	WRAN			FTD_SB_RRC_RB_ID3	B:D	R,0	yes
	Radio Bearer ID						
f(2)	WRAN			FTD_SB_RRC_RB_ID4	B:D	R,0	yes
	Radio Bearer ID						
g(2)	WRAN			FTD_SB_RRC_RB_ID5	B:D	R,0	yes
	Radio Bearer ID						
h(2)	WRAN			FTD_SB_RRC_RB_ID6	B:D	R,0	yes
	Radio Bearer ID						
i(2)	WRAN			FTD_SB_RRC_RB_ID7	B:D	R,0	yes
	Radio Bearer ID						
j(2)	WRAN			FTD_SB_RRC_RB_ID8	B:D	R,0	yes
	Radio Bearer ID						
k(5)	WRAN			FTD_SB_RRC_RAB_RE_EST_TIMER	S	R,0	yes
	Radio Access Bearer Re-establishment Timer (T314/T315)						
INPUT(4)	WRAN			FTD_SB_INPUT_rrc_ftd_rab_id_set	DW:D	R,0	no
	callback function subblock identity						

14.13 Display 46.13: Radio Bearer Information

This screen takes an input Radio Bearer id and shows associated information

S40 Data display	S40 HELP display
<pre>RB_ID: aa Domain:bbbb Re-EST:cccc Status:dddd</pre>	<pre>Input RBid Domain Re-est Timer Status</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WRAN			FTD_SB_RRC_RB_ID	B:D	R,0	yes
	Radio Bearer ID						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(5)	WRAN			FTD_SB_RRC_RB_DOMAIN	S	R,0	yes
	Domain - PS, CS, SRB						
c(5)	WRAN			FTD_SB_RRC_RB_RE_EST_TIMER	S	R,0	yes
	Radio Bearer Re-establishment Timer (T314/T315)						
d(5)	WRAN			FTD_SB_RRC_RB_STATUS	S	R,0	yes
	RB Status - Start, Stop						
INPUT(2)	WRAN			FTD_SB_INPUT_rrc_ftd_rb_id_set	DW:D	R,0	no
	callback function subblock identity						

14.14 Display 46.14: DPCH Change Count

Display number of successful HHOs and channel reconfigurations

S40 Data display	S40 HELP display
<pre>aaa bbb</pre>	<pre>HHO Count DPCH Reconf Count</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_SUCCESSFUL_HHOS	B:H	R	yes
	Number of successful HHOs						
b(3)	WRAN			FTD_SB_SUCCESSFUL_DPCH_RECONFIGS	B:H	R	yes
	Number of successful DPCH reconfigs						

14.15 Display 46.15: Tracker Feature Enable/Disable

Sets Forced InterSystem Mode - IS resel fail, ISHO blind/fallback and CCO blind/fallback

S40 Data display	S40 HELP display
<pre>TRACKER FEATURE ENABLE / DISABLE</pre>	<pre>TRACKER FEATURE ENABLE / DISABLE</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
INPUT(8)	WRAN			FTD_SB_INPUT_WPH_SET_IS_MODE	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	callback function	subblock identity					

14.16 Display 46.27: Voice RLC-U Information

This screen shows Voice RLC-U information. This includes the number of RB's used, whether or not DTX is supported and the Frame Rate

S40 Data display	S40 HELP display
<pre>RB: a DTX: b FR: ccdd</pre>	<pre>RB's DTX FRAME RATE</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WRAN			FTD_SB_W_MAC_VOICE_NUMBER_OF_RADIO_BEARERS_USED	B:D	R	yes
This parameter reflects the number of radio bearers used. This will have a range of 1-3 and is represented as a single digit decimal value							
b	WRAN			FTD_SB_W_MAC_VOICE_DTX_SUPPORTED	B:D	R	yes
This Boolean flag shows whether DTX is supported or not. This is represented as a single digit decimal value as follows: 0 - DTX Not Supported 1 - DTX Supported							
c(2)	WRAN			FTD_SB_W_MAC_VOICE_FRAME_RATE_WHOLE_PART	W:D	R	yes
This field shows the voice frame rate representing the whole part of the 3-digit frame rate which is represented as a single digit decimal value. It may represent the whole part of one of the following valid frame rate values: 4.57, 5.15, 5.90, 6.70, 7.40, 7.95, 10.2, 12.2							
d(2)	WRAN			FTD_SB_W_MAC_VOICE_FRAME_RATE_FRAC_PART	W:D	R	yes
This field shows the voice frame rate representing the fractional part of the 3-digit frame rate which is represented as a 2 digit decimal value. It may represent the fractional part of one of the following valid frame rate values: 4.57, 5.15, 5.90, 6.70, 7.40, 7.95, 10.2, 12.2							

14.17 Display 46.28: DTX Enable/Disable input

This screen shall form the input to Enable or Disable DTX

S40 Data display	S40 HELP display
<pre>DTX_ENABLE 1_TO_ENABLE 0_TO_DISABLE a</pre>	<pre>Enter DTX 1 TO ENABLE 0 TO DISABLE</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WRAN			FTD_SB_W_MAC_DTX_ENABLE_DISABLE_INPUT	B:D	R	yes
This screen require a single digit decimal input to either enable or disable DTX. This may be done by entering the digit 1 or 0, having the following effect: 0 - Disable DTX 1 - Enable DTX							
INPUT	WRAN			FTD_SB_INPUT_DTX_ENABLE_DISABLE	DW:D	R	no
callback function subblock identity							

14.18 Display 46.60: 3G to 2G Reselections

This is used to display information helpful in analysing 3G to 2G reselections

S40 Data display	S40 HELP display
<pre>aaa bbb ccc dddd eee f ggg hhh iii jjj k</pre>	<pre>SCR ECNO NEW ACN RSI V Suit P-F Resl P-F M</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_PRI_SCR_CODE_TYPE	W:D	R	yes
Primary Scrambling Code							
b(3)	WRAN			FTD_SB_ECNO_VALUE	B:D	R	yes
ECNO Value							
c(3)	WRAN			FTD_SB_NEW_RAT_CELL_IND_COUNT	B:D	R	yes
Count of inter-RAT new cell inds							
d(4)	WRAN			FTD_SB_GSM_ARFCNO	W:D	R,	yes
Strongest GSM ARFCN							
e(3)	WRAN			FTD_SB_STATUS_RSSI0	W:D	R	yes
Status RSSI level							
f	WRAN			FTD_SB_VERIFICATION_STATUS	B:D	R	yes
0 indicates that the ARFCN is not verified, 1 indicates that the ARFCN is verified							
g(3)	WRAN			FTD_SB_SUCCESS_GSM_SUITABILITY_CHECK_COUNT	B:D	R	yes
Count of Successfull GSM Suitability Checks							
h(3)	WRAN			FTD_SB_FAILED_GSM_SUITABILITY_CHECK_COUNT	B:D	R	yes
Count of failed GSM Suitability Checks							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
i(3)	WRAN			FTD_SB_SUCCESS_GSM_INTER_RESELECTION_COUNT	B:D	R	yes
				Count of successful GSM inter-RAT reselections			
j(3)	WRAN			FTD_SB_FAILED_GSM_INTER_RESELECTION_COUNT	B:D	R	yes
				Count of failed GSM inter-RAT reselections			
k	WRAN			FTD_SB_MODE_STATE	W:D	R	yes
				0 indicates 3G selected cell, 1 indicates 2G selected state			

14.19 Display 46.61: 3G to 2G ISHO #1

This is used to display information helpful in analysing 3G to 2G ISHO

S40 Data display	S40 HELP display
<pre> aaa bbb c dddd eee f ggg hhh iii jjj k </pre>	<pre> SCR ECNO CM ARFCN RSI V HO P-F F'BACK P-F M </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_PRI_SCR_CODE_TYPE	W:D	R	yes
				Primary Scrambling Code			
b(3)	WRAN			FTD_SB_ECNO_VALUE	B:D	R	yes
				ECNO Value			
c	WRAN			FTD_SB_CM_STATUS	B:D	R	yes
				Status of compressed mode patterns for RSSI, Initial BSIC verification & BSIC refresh			
d(4)	WRAN			FTD_SB_GSM_ARFCNO	W:D	R,	yes
				Strongest GSM ARFCN			
e(3)	WRAN			FTD_SB_STATUS_RSSI0	W:D	R	yes
				Status RSSI level			
f	WRAN			FTD_SB_VERIFICATION_STATUS	B:D	R	yes
				0 indicates that the ARFCN is not verified, 1 indicates that the ARFCN is verified			
g(3)	WRAN			FTD_SB_SUCCESS_HO_ATTEMPS	B:D	R	yes
				Count of succesful handover attempns			
h(3)	WRAN			FTD_SB_FAILED_HO_ATTEMPS	B:D	R	yes
				Count of failed handover attempns			
i(3)	WRAN			FTD_SB_SUCCESS_FALLBACK_ATTEMPS	B:D	R	yes
				Count of succesful fallback attempns			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
j(3)	WRAN			FTD_SB_FAILED_FALLBACK_ ATTEMPS	B:D	R	yes
	Count of failed fallback attemps						
k	WRAN			FTD_SB_MODE_STATE	W:D	R	yes
	0 indicates 3G selected cell, 1 indicates 2G selected state						

14.20 Display 46.62: 3G to 2G ISHO #2

List of strongest GSM cells containing ARFCN, verification status, RSSI level

S40 Data display	S40 HELP display
<pre> aaaa bbb c dddd eee f gggg hhh i jjjj kkk l </pre>	<pre> AFCN0 RSI0 V AFCN1 RSI1 V AFCN2 RSI2 V AFCN3 RSI3 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_GSM_ARFCN0	W:D	R,	yes
	Strongest GSM ARFCN						
b(3)	WRAN			FTD_SB_STATUS_RSSI0	W:D	R	yes
	Status RSSI level						
c	WRAN			FTD_SB_VERIFICATION_ STATUS	B:D	R	yes
	0 indicates that the ARFCN is not verified, 1 indicates that the ARFCN is verified						
d(4)	WRAN			FTD_SB_GSM_ARFCN1	W:D	R	yes
	Strongest GSM ARFCN 1						
e(3)	WRAN			FTD_SB_STATUS_RSSI1	W:D	R	yes
	Status RSSI level 1						
f	WRAN			FTD_SB_VERIFICATION_ STATUS1	B:D	R	yes
	0 indicates the ARFCN is not verified, 1 indicates the ARFCN is verified						
g(4)	WRAN			FTD_SB_GSM_ARFCN2	W:D	R	yes
	Strongest GSM ARFCN 2						
h(3)	WRAN			FTD_SB_STATUS_RSSI2	W:D	R	yes
	Status RSSI level 2						
i	WRAN			FTD_SB_VERIFICATION_ STATUS2	B:D	R	yes
	0 indicates the ARFCN is not verified, 1 indicates the ARFCN is verified						
j(4)	WRAN			FTD_SB_GSM_ARFCN3	W:D	R	yes
	Strongest GSM ARFCN 3						
k(3)	WRAN			FTD_SB_STATUS_RSSI3	W:D	R	yes
	Status RSSI level 3						
l	WRAN			FTD_SB_VERIFICATION_ STATUS3	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
0 indicates the ARFCN is not verified, 1 indicates the ARFCN is verified							

14.21 Display 46.63: 3G to 2G ISHO #3

List of strongest GSM cells containing ARFCN, verification status, RSSI level

S40 Data display	S40 HELP display
<pre> aaaa bbb c dddd eee f gggg hhh i jjjj kkk l </pre>	<pre> AFCN4 RSI4 V AFCN5 RSI5 V AFCN6 RSI6 V AFCN7 RSI7 V </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_GSM_ARFCN4	W:D	R	yes
	Strongest GSM ARFCN 4						
b(3)	WRAN			FTD_SB_STATUS_RSSI4	W:D	R	yes
	Status RSSI level 4						
c	WRAN			FTD_SB_VERIFICATION_STATUS4	B:D	R	yes
	0 indicates the ARFCN is not verified, 1 indicates the ARFCN is verified						
d(4)	WRAN			FTD_SB_GSM_ARFCN5	W:D	R	yes
	Strongest GSM ARFCN 5						
e(3)	WRAN			FTD_SB_STATUS_RSSI5	W:D	R	yes
	Status RSSI level 5						
f	WRAN			FTD_SB_VERIFICATION_STATUS5	B:D	R	yes
	0 indicates the ARFCN is not verified, 1 indicates the ARFCN is verified						
g(4)	WRAN			FTD_SB_GSM_ARFCN6	W:D	R	yes
	Strongest GSM ARFCN 6						
h(3)	WRAN			FTD_SB_STATUS_RSSI6	W:D	R	yes
	Status RSSI level 6						
i	WRAN			FTD_SB_VERIFICATION_STATUS6	B:D	R	yes
	0 indicates the ARFCN is not verified, 1 indicates the ARFCN is verified						
j(4)	WRAN			FTD_SB_GSM_ARFCN7	W:D	R	yes
	Strongest GSM ARFCN 7						
k(3)	WRAN			FTD_SB_STATUS_RSSI7	W:D	R	yes
	Status RSSI level 7						
l	WRAN			FTD_SB_VERIFICATION_STATUS7	B:D	R	yes
	0 indicates the ARFCN is not verified, 1 indicates the ARFCN is verified						

15 Group 47: WCDMA RRC displays

15.1 Display 47.01: RRC Global State Change Counters

This screen shows Global RRC state Change Countes

S40 Data display	S40 HELP display
<pre>ST Chg Count aaaaa bbbbb ccccc ddddd eeeee fffff</pre>	<pre>St Chg Count D->F F->D F->CP F->UP D->CP D->UP</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_RRC_DCH_TO_FACH_COUNT	W:D	R,0	yes
				Number of state changes from DCH to FACH			
b(5)	WRAN			FTD_SB_RRC_FACH_TO_DCH_COUNT	W:D	R,0	yes
				Number of state changes from FACH to DCH			
c(5)	WRAN			FTD_SB_RRC_FACH_TO_CELLPCH_COUNT	W:D	R,0	yes
				Number of state changes from FACH to CELL_PCH			
d(5)	WRAN			FTD_SB_RRC_FACH_TO_URAPCH_COUNT	W:D	R,0	yes
				Number of state changes from FACH to URA_PCH			
e(5)	WRAN			FTD_SB_RRC_DCH_TO_CELLPCH_COUNT	W:D	R,0	yes
				Number of state changes from DCH to CELL_PCH			
f(5)	WRAN			FTD_SB_RRC_DCH_TO_URAPCH_COUNT	W:D	R,0	yes
				Number of state changes from DCH to URA_PCH			

15.2 Display 47.02: Counters for Timeouts - Screen 1

This screen shows the number timeouts for RRC timers

S40 Data display	S40 HELP display
<pre>TimerCounter aaa bbb ccc ddd eee fff ggg hhh iii</pre>	<pre>TimerCounter 300I312I 301 302 304 305 307 308 309</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_T300_IDLE_	W:D	R,0	yes
				TIMEOUT_COUNT			
T300 timeout counter							
b(3)	WRAN			FTD_SB_RRC_T312_IDLE_	W:D	R,0	yes
				TIMEOUT_COUNT			
T312 timeout counter							
c(3)	WRAN			FTD_SB_RRC_T301_	W:D	R,0	yes
				TIMEOUT_COUNT			
T301 timeout counter							
d(3)	WRAN			FTD_SB_RRC_T302_	W:D	R,0	yes
				TIMEOUT_COUNT			
T302 timeout counter							
e(3)	WRAN			FTD_SB_RRC_T304_	W:D	R,0	yes
				TIMEOUT_COUNT			
T304 timeout counter							
f(3)	WRAN			FTD_SB_RRC_T305_	W:D	R,0	yes
				TIMEOUT_COUNT			
T305 timeout counter							
g(3)	WRAN			FTD_SB_RRC_T307_	W:D	R,0	yes
				TIMEOUT_COUNT			
T307 timeout counter							
h(3)	WRAN			FTD_SB_RRC_T308_	W:D	R,0	yes
				TIMEOUT_COUNT			
T308 timeout counter							
i(3)	WRAN			FTD_SB_RRC_T309_	W:D	R,0	yes
				TIMEOUT_COUNT			
T309 timeout counter							

15.3 Display 47.03: Counters for Timeouts - Screen 2

This screen shows the number timeouts for RRC timers

S40 Data display	S40 HELP display
<pre> TimerCounter aaa bbb ccc ddd eee fff ggg hhh </pre>	<pre> TimerCounter 310 311 312 313 314 315 316 317 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_T310_	W:D	R,0	yes
				TIMEOUT_COUNT			
T310 timeout counter							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(3)	WRAN			FTD_SB_RRC_T311_	W:D	R,0	yes
				TIMEOUT_COUNT			
T311 timeout counter							
c(3)	WRAN			FTD_SB_RRC_T312_	W:D	R,0	yes
				TIMEOUT_COUNT			
T312 timeout counter							
d(3)	WRAN			FTD_SB_RRC_T313_	W:D	R,0	yes
				TIMEOUT_COUNT			
T313 timeout counter							
e(3)	WRAN			FTD_SB_RRC_T314_	W:D	R,0	yes
				TIMEOUT_COUNT			
T314 timeout counter							
f(3)	WRAN			FTD_SB_RRC_T315_	W:D	R,0	yes
				TIMEOUT_COUNT			
T315 timeout counter							
g(3)	WRAN			FTD_SB_RRC_T316_	W:D	R,0	yes
				TIMEOUT_COUNT			
T316 timeout counter							
h(3)	WRAN			FTD_SB_RRC_T317_	W:D	R,0	yes
				TIMEOUT_COUNT			
T317 timeout counter							

15.4 Display 47.04: Peer Message Count- Screen1

This screen shows Count for Peer Messages

S40 Data display	S40 HELP display
<pre> aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk lll </pre>	<pre> MIB PMIB S1 S2 S3 PS3 S4 PS4 S5 S6 S7 S8 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_MIB_COUNT	W:D	R,0	yes
				MIB Message Count			
b(3)	WRAN			FTD_SB_RRC_PMIB_COUNT	W:D	R,0	yes
				MIB Message Count			
c(3)	WRAN			FTD_SB_RRC_SIB1_COUNT	W:D	R,0	yes
				SIB1 Message Count			
d(3)	WRAN			FTD_SB_RRC_SIB2_COUNT	W:D	R,0	yes
				SIB2 Message Count			
e(3)	WRAN			FTD_SB_RRC_SIB3_COUNT	W:D	R,0	yes
				SIB3 Message Count			
f(3)	WRAN			FTD_SB_RRC_PSIB3_COUNT	W:D	R,0	yes
				SIB3 Message Count			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(3)	WRAN			FTD_SB_RRC_SIB4_COUNT	W:D	R,0	yes
	SIB4 Message Count						
h(3)	WRAN			FTD_SB_RRC_PSIB4_COUNT	W:D	R,0	yes
	SIB4 Message Count						
i(3)	WRAN			FTD_SB_RRC_SIB5_COUNT	W:D	R,0	yes
	SIB5 Message Count						
j(3)	WRAN			FTD_SB_RRC_SIB6_COUNT	W:D	R,0	yes
	SIB6 Message Count						
k(3)	WRAN			FTD_SB_RRC_SIB7_COUNT	W:D	R,0	yes
	SIB7 Message Count						
l(3)	WRAN			FTD_SB_RRC_SIB8_COUNT	W:D	R,0	yes
	SIB8 Message Count						

15.5 Display 47.05: Peer Message Count- Screen2

This screen shows Peer Message Count

S40 Data display	S40 HELP display
<pre> aaa bbb ccc ddd eee fff ggg hhh iii jjj </pre>	<pre> S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_SIB9_COUNT	W:D	R,0	yes
	SIB9 Message Count						
b(3)	WRAN			FTD_SB_RRC_SIB10_COUNT	W:D	R,0	yes
	SIB10 Message Count						
c(3)	WRAN			FTD_SB_RRC_SIB11_COUNT	W:D	R,0	yes
	SIB11 Message Count						
d(3)	WRAN			FTD_SB_RRC_SIB12_COUNT	W:D	R,0	yes
	SIB12 Message Count						
e(3)	WRAN			FTD_SB_RRC_SIB13_COUNT	W:D	R,0	yes
	SIB13 Message Count						
f(3)	WRAN			FTD_SB_RRC_SIB14_COUNT	W:D	R,0	yes
	SIB14 Message Count						
g(3)	WRAN			FTD_SB_RRC_SIB15_COUNT	W:D	R,0	yes
	SIB15 Message Count						
h(3)	WRAN			FTD_SB_RRC_SIB16_COUNT	W:D	R,0	yes
	SIB16 Message Count						
i(3)	WRAN			FTD_SB_RRC_SIB17_COUNT	W:D	R,0	yes
	SIB17 Message Count						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
j(3)	WRAN			FTD_SB_RRC_SIB18_COUNT	W:D	R,0	yes
	SIB18 Message Count						

15.6 Display 47.06: Peer Message Count-Screen3

This screen shows Peer Message Count

S40 Data display	S40 HELP display
<pre> aaa bbb ccc ddd eee fff ggg hhh </pre>	<pre> RCReq RCRej RCSt RCStC RCR1 RCR1C Page1 Page2 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_CONRQ_COUNT	W:D	R,0	yes
	RRC Connection Request Message Count						
b(3)	WRAN			FTD_SB_RRC_CONREJ_COUNT	W:D	R,0	yes
	RRC Connection Reject Message Count						
c(3)	WRAN			FTD_SB_RRC_CONSET_COUNT	W:D	R,0	yes
	RRC Connection Setup Message Count						
d(3)	WRAN			FTD_SB_RRC_CONSC_COUNT	W:D	R,0	yes
	RRC Connection Setup Complete Message Count						
e(3)	WRAN			FTD_SB_RRC_CONREL_COUNT	W:D	R,0	yes
	RRC Connection Release Message Count						
f(3)	WRAN			FTD_SB_RRC_CNRLC_COUNT	W:D	R,0	yes
	RRC Connection Release Complete Message Count						
g(3)	WRAN			FTD_SB_RRC_PAGE1_COUNT	W:D	R,0	yes
	Paging Type1 Message Count						
h(3)	WRAN			FTD_SB_RRC_PAGE2_COUNT	W:D	R,0	yes
	Paging Type2 Message Count						

15.7 Display 47.07: Peer Message Count-Screen4

This screen shows Peer Message Count

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk lll</pre>	<pre>RBSt /ComFail RBRC /ComFail RBRL /ComFail TCR /ComFail</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_RBSET_COUNT	W:D	R,0	yes
				Radio Bearer Setup Message Count			
b(3)	WRAN			FTD_SB_RRC_RBSTC_COUNT	W:D	R,0	yes
				Radio Bearer Setup Complete Message Count			
c(3)	WRAN			FTD_SB_RRC_RBSTF_COUNT	W:D	R,0	yes
				Radio Bearer Setup Failure Message Count			
d(3)	WRAN			FTD_SB_RRC_RBRC_COUNT	W:D	R,0	yes
				Radio Bearer Reconfiguration Message Count			
e(3)	WRAN			FTD_SB_RRC_RBRCC_COUNT	W:D	R,0	yes
				Radio Bearer Reconfiguration Complete Message Count			
f(3)	WRAN			FTD_SB_RRC_RBRCF_COUNT	W:D	R,0	yes
				Radio Bearer Reconfiguration Failure Message Count			
g(3)	WRAN			FTD_SB_RRC_RBRL_COUNT	W:D	R,0	yes
				Radio Bearer Release Message Count			
h(3)	WRAN			FTD_SB_RRC_RBRLC_COUNT	W:D	R,0	yes
				Radio Bearer Release Complete Message Count			
i(3)	WRAN			FTD_SB_RRC_RBRLF_COUNT	W:D	R,0	yes
				Radio Bearer Release Failure Message Count			
j(3)	WRAN			FTD_SB_RRC_TCR_COUNT	W:D	R,0	yes
				Transport Channel Reconfiguration Message Count			
k(3)	WRAN			FTD_SB_RRC_TCHRC_COUNT	W:D	R,0	yes
				Transport Channel Reconfiguration Complete Message Count			
l(3)	WRAN			FTD_SB_RRC_TCHRF_COUNT	W:D	R,0	yes
				Transport Channel Reconfiguration Failure Message Count			

15.8 Display 47.08: Peer Message Count-Screen5

This screen shows Peer Message Count

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eee fff ggg hhh iii jjj</pre>	<pre>PCRC/ComFail ASUP/ComFail HOTU/ComFail HOFU/ComFail</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_PCRC_COUNT	W:D	R,0	yes
	Physical Channel Reconfiguration Message Count						
b(3)	WRAN			FTD_SB_RRC_PCHRC_COUNT	W:D	R,0	yes
	Physical Channel Reconfiguration Complete Message Count						
c(3)	WRAN			FTD_SB_RRC_PCHRF_COUNT	W:D	R,0	yes
	Physical Channel Reconfiguration Failure Message Count						
d(3)	WRAN			FTD_SB_RRC_ASUP_COUNT	W:D	R,0	yes
	Active Set Update Message Count						
e(3)	WRAN			FTD_SB_RRC_ASUPC_COUNT	W:D	R,0	yes
	Active Set Update Complete Message Count						
f(3)	WRAN			FTD_SB_RRC_ASUPF_COUNT	W:D	R,0	yes
	Active Set Update Failure Message Count						
g(3)	WRAN			FTD_SB_RRC_HOTUT_COUNT	W:D	R,0	yes
	Handover to UTRAN Message Count						
h(3)	WRAN			FTD_SB_RRC_HOTUC_COUNT	W:D	R,0	yes
	Handover to UTRAN Complete Message Count						
i(3)	WRAN			FTD_SB_RRC_HFUG_COUNT	W:D	R,0	yes
	Handover from UTRAN Message Count						
j(3)	WRAN			FTD_SB_RRC_HOFUF_COUNT	W:D	R,0	yes
	Handover from UTRAN Failure Message Count						

15.9 Display 47.09: Peer Message Count-Screen6

This screen shows Peer Message count

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk lll</pre>	<pre>CU CNF CTCK IDT DDT UDT MEC MCF MERP SECM/ComFail</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_CELUP_COUNT	W:D	R,0	yes
		Cell Update Message Count					
b(3)	WRAN			FTD_SB_RRC_CUCNF_COUNT	W:D	R,0	yes
		Cell Update Confirm Message Count					
c(3)	WRAN			FTD_SB_RRC_CTCK_COUNT	W:D	R,0	yes
		Counter Check Message Count					
d(3)	WRAN			FTD_SB_RRC_IDT_COUNT	W:D	R,0	yes
		Initial Direct Transfer Message Count					
e(3)	WRAN			FTD_SB_RRC_DDT_COUNT	W:D	R,0	yes
		Downlink Direct Transfer Message Count					
f(3)	WRAN			FTD_SB_RRC_UDT_COUNT	W:D	R,0	yes
		Uplink Direct Transfer Message Count					
g(3)	WRAN			FTD_SB_RRC_MECON_COUNT	W:D	R,0	yes
		Measurement Control Message Count					
h(3)	WRAN			FTD_SB_RRC_MECOF_COUNT	W:D	R,0	yes
		Measurement Control Failure Message Count					
i(3)	WRAN			FTD_SB_RRC_MEREP_COUNT	W:D	R,0	yes
		Measurement Report Message Count					
j(3)	WRAN			FTD_SB_RRC_SECM_COUNT	W:D	R,0	yes
		Security Mode Command Message Count					
k(3)	WRAN			FTD_SB_RRC_SECMC_COUNT	W:D	R,0	yes
		Security Mode Complete Message Count					
l(3)	WRAN			FTD_SB_RRC_SECMF_COUNT	W:D	R,0	yes
		Security Mode Failure Message Count					

15.10 Display 47.10: Peer Message Count-Screen7

This screen shows Peer Message Count

S40 Data display	S40 HELP display
<pre> aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk </pre>	<pre> SgCR/IndUECE URAU/cnfRRCS UTMI/cnfFail CCOFU/CCOFUF </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RRC_SGCR_COUNT	W:D	R,0	yes
		Signalling Connection Release Message Count					
b(3)	WRAN			FTD_SB_RRC_SGCRI_COUNT	W:D	R,0	yes
		Signalling Connection Release Indication Message Count					
c(3)	WRAN			FTD_SB_RRC_UECEQ_COUNT	W:D	R,0	yes
		UE Capability Enquiry Message Count					
d(3)	WRAN			FTD_SB_RRC_URAU_P_COUNT	W:D	R,0	yes
		URA Update Message Count					
e(3)	WRAN			FTD_SB_RRC_RRCST_COUNT	W:D	R,0	yes
		RRC Status Message Count					
f(3)	WRAN			FTD_SB_RRC_URAU_C_COUNT	W:D	R,0	yes
		URA Update Confirm Message Count					
g(3)	WRAN			FTD_SB_RRC_UTMI_COUNT	W:D	R,0	yes
		UTRAN Mobility Information Message Count					
h(3)	WRAN			FTD_SB_RRC_UMIC_COUNT	W:D	R,0	yes
		UTRAN Mobility Information Confirm Message Count					
i(3)	WRAN			FTD_SB_RRC_UMIF_COUNT	W:D	R,0	yes
		UTRAN Mobility Information Failure Message Count					
j(3)	WRAN			FTD_SB_RRC_CCOFU_COUNT	W:D	R,0	yes
		CellChangeOrderFromUTRAN message Count					
k(3)	WRAN			FTD_SB_RRC_CCOFUF_COUNT	W:D	R,0	yes
		CellChangeOrderFromUTRANFailure message Count					

15.11 Display 47.11: FDD HSDPA

This display shows the HSDPA L3 Identifier information

S40 Data display	S40 HELP display
<pre>HSDPA Ident HRNTI aaaaa SCR bbbbk</pre>	<pre>HSDPA Identifier</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_HSDPA_H_RNTI	W:D	R,I,0	yes
		Network assigned H_RNTI					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(5)	WRAN			FTD_SB_HSDPA_PRIMARY_SCR_CODE	W:D	R,I,O	yes
Scrambling code for HSDPA serving RL							

15.12 Display 47.12: FDD HSDPA

This display shows HSDPA L3 HS_SCCH information

S40 Data display	S40 HELP display
<pre>Ch1 aaaaa Ch2 bbbbb Ch3 ccccc Ch4 ddddd</pre>	<pre>HSDPA HSSCCH Ch.lisation Codes</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_HSDPA_HS_SCCH_CHANNELISATION_CODE1	W:D	R,I,O	yes
HS_SCCH Channelisation Code 1							
b(5)	WRAN			FTD_SB_HSDPA_HS_SCCH_CHANNELISATION_CODE2	W:D	R,I,O	yes
HS_SCCH Channelisation Code 2							
c(5)	WRAN			FTD_SB_HSDPA_HS_SCCH_CHANNELISATION_CODE3	W:D	R,I,O	yes
HS_SCCH Channelisation Code 3							
d(5)	WRAN			FTD_SB_HSDPA_HS_SCCH_CHANNELISATION_CODE4	W:D	R,I,O	yes
HS_SCCH Channelisation Code 4							

15.13 Display 47.13: FDD HSDPA

This display shows HSDPA L3 Measurement Feedback Information

S40 Data display	S40 HELP display
<pre>Cycle aaaaa Rep b dCQI c</pre>	<pre>Measurement Feedback Info</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_HSDPA_CQI_FEEDBACK_CYCLE	W:D	R,I,O	yes
Actual value in milliseconds							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b	WRAN			FTD_SB_HSDPA_CQI_REPETITION_FACTOR	W:D	R,I,O	yes
	CQI Repetition factor						
c	WRAN			FTD_SB_HSDPA_CQI_DELTA_CQI	W:D	R,I,O	yes
	Delta CQI						

15.14 Display 47.14: FDD HSDPA

This display shows HSDPA L3 HARQ Memory Partition Type Information

S40 Data display	S40 HELP display
<pre>HQ MemType a</pre>	<pre>HarQ Memory Type 0 - Impl. 1 - Expl.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_PARTITION_TYPE	W:D	R,I,O	yes
	HARQ Memory Partition Type0 =Implicit, 1 = Explicit						

15.15 Display 47.15: FDD HSDPA

This display shows HSDPA L3 HARQ Memory Size Information - Processes 1 - 4

S40 Data display	S40 HELP display
<pre>HQ1 aaaaaaaaa HQ2 bbbbbbbb HQ3 cccccccc HQ4 dddddddd</pre>	<pre>HarQ Memory Sizes 1 - 4</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS1	DW:H	R,I,O	yes
	HARQ Memory Size						
b(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS2	DW:H	R,I,O	yes
	HARQ Memory Size						
c(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS3	DW:H	R,I,O	yes
	HARQ Memory Size						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS4	DW:H	R,I,O	yes
HARQ Memory Size							

15.16 Display 47.16: FDD HSDPA

This display shows HSDPA L3 HARQ Memory Size Information - Processes 5 - 8

S40 Data display	S40 HELP display
<pre>HQ5 aaaaaaaa HQ6 bbbbbbbb HQ7 cccccccc HQ8 dddddddd</pre>	<pre>HarQ Memory Sizes 5 - 8</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS5	DW:H	R,I,O	yes
HARQ Memory Size							
b(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS6	DW:H	R,I,O	yes
HARQ Memory Size							
c(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS7	DW:H	R,I,O	yes
HARQ Memory Size							
d(8)	WRAN			FTD_SB_HSDPA_HARQ_MEMORY_SIZE_PROCESS8	DW:H	R,I,O	yes
HARQ Memory Size							

15.17 Display 47.17: FDD HSDPA

This display shows HSDPA L3 DPCH Power Control Information

S40 Data display	S40 HELP display
<pre>dAck a dNack b Rep c</pre>	<pre>DPCH PwrCtrl</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WRAN			FTD_SB_HSDPA_DPCH_PWRCTRL_DELTA_ACK	W:D	R,I,O	yes
DPCH Power Control - deltaAck value							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b	WRAN			FTD_SB_HSDPA_DPCH_PWRCTRL_DELTA_NACK	W:D	R,I,O	yes
				DPCH Power Control - deltaNack value			
c	WRAN			FTD_SB_HSDPA_DPCH_PWRCTRL_ACKNACK_REPETITION_FACTOR	W:D	R,I,O	yes
				DPCH Power Control - ACK/NACKRepetition Factor			

15.18 Display 47.18: FDD HSUPA L3

This display shows HSUPA EDCH attributes info

S40 Data display	S40 HELP display
<pre>EDCH Attr. EDCH Stat: a EDCH Cat : b EDCH TTI : c</pre>	<pre>EDCH Attr. Tx Status Category TTI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WRAN			FTD_SB_EDCH_STATUS	W:D	R,I,O	
				Configuration Status for EDCH 0 : EDCH isn't active, 1 : EDCH is activated			
b	WRAN			FTD_SB_EDCH_CAT	W:D	R,I,O	
				EDCH UE Category based on radio access capability defined in TS.25.306 (Cat1-Cat6). Cat0 is when EDCH inactive			
c	WRAN			FTD_SB_EDCH_TTI	W:D	R,I,O	
				Configured EDCH UE Transmission Time Interval 0 : 2ms, 1: 10ms			

15.19 Display 47.19: FDD HSUPA L3

This display shows HSUPA EDCH UE identifier.

S40 Data display	S40 HELP display
<pre>EDCH UE ID P-ERNTI:aaaa S_ERNTI:bbbb</pre>	<pre>EDCH UE ID Prim. ERNTI Secon. ERNTI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_EDCH_PERNTI	W:H	R,I,O	
				Network assigned Primary EDCH RNTI			
b(4)	WRAN			FTD_SB_EDCH_SERNTI	W:H	R,I,O	
				Network assigned Secondary EDCH RNTI			

15.20 Display 47.20: FDD HSUPA L3

This display shows HSUPA Radio Link status for EDCH transmission.

Note: Radio Link Status is set as follow

EMPTY: Cell isn't configured as EDCH Serving Cell.

ServingRLS: RL is configured as Serving Radio Link Set.

Otherwise NonServingRLS.

S40 Data display	S40 HELP display
<pre>C1aaaa Sbbbb C2cccc Sdddd C3eeee Sffff C4gggg Shhhh</pre>	<pre>Prim.Scraml Code/Status Cells 1-4</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_EDCH_CELL_1	W:D	R,I,O	
	Primary Scrambling code for EDCH First Cell						
b(4)	WRAN			FTD_SB_EDCH_CELL_STATE_1	S	R,I,O	
	Status for Radio Link in the first cell						
c(4)	WRAN			FTD_SB_EDCH_CELL_2	W:D	R,I,O	
	Primary Scrambling code for EDCH 2nd Cell						
d(4)	WRAN			FTD_SB_EDCH_CELL_STATE_2	S	R,I,O	
	Status for Radio Link in the 2nd cell						
e(4)	WRAN			FTD_SB_EDCH_CELL_3	W:D	R,I,O	
	Primary Scrambling code for EDCH 3rd Cell						
f(4)	WRAN			FTD_SB_EDCH_CELL_STATE_3	S	R,I,O	
	Status for Radio Link in the 3rd cell						
g(4)	WRAN			FTD_SB_EDCH_CELL_4	W:D	R,I,O	
	Primary Scrambling code for EDCH 4th Cell						
h(4)	WRAN			FTD_SB_EDCH_CELL_STATE_4	S	R,I,O	
	Status for Radio Link in the 4th cell						

15.21 Display 47.21: FDD HSUPA L2

This display shows HSUPA EDCH L2 Information.

S40 Data display	S40 HELP display
<pre>EDCH Tx Info ULRate :aaaa ReTx :bbbb Hbit :cccc</pre>	<pre>EDCH Tx Info ULRate0-3600 ReTx 0-150 Hbit 0-10</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_EDCH_DATA_RATE	W:D	R,I,O	
Uplink Scheduled EDCH Data Rate. Range 0-3600 Kbps.							
b(4)	WRAN			FTD_SB_EDCH_RETRANS	W:D	R,I,O	
EDCH Retransmission ratio. Range 0-150. The value is average value scaled into valid range.							
c(4)	WRAN			FTD_SB_EDCH_HAPPY_BIT	W:D	R,I,O	
EDCH Average Happy Bit. Range 0-10. The value is average value multiplied by 10.							

16 Group 48: WCDMA RLC displays

16.1 Display 48.01: Set AM Bearer ID

Set the RLC AM bearer ID for which the AM info will be displayed

S40 Data display	S40 HELP display
<pre>Radio Bearer: aa SAP : bbbb Mode : cc</pre>	<pre>Use to set AM bearer for display</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WRAN			FTD_SB_RLC_FTD_SELECTED_AM_RADIO_BEARER	B:D	R,0	yes
AM radio bearer for which data is to be displayed. It is uint8 data. It can be 1 - 32.							
b(4)	WRAN			FTD_SB_RLC_FTD_SAP_USER	S	R,0	yes
RLC SAP user for selected radio bearer. It is string data. It can be "RRC" or "PDCP".							
c(2)	WRAN			FTD_SB_RLC_FTD_MODE	S	R,0	yes
RLC mode for selected radio bearer. It is string data. It can be "AM" or "UM".							
INPUT(2)	WRAN			FTD_SB_INPUT_RLC_FTD_AM_BEARER_SELECT	DW:D	R,0	no
callback function subblock identity							

16.2 Display 48.02: RLC AM State information

This screen displays state information for the AM bearer selected using display 48.01

S40 Data display	S40 HELP display
<pre>Am Flow Ctrl UL Flow aaa DL Flow bbb</pre>	<pre>AM Flow Ctrl Status OFF/ON</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RLC_FTD_AM_UL_FLOW_CTRL	S	R,0	yes
AM Uplink flow control status. It is string data. It can be "ON" or "OFF".							
b(3)	WRAN			FTD_SB_RLC_FTD_AM_DL_FLOW_CTRL	S	R,0	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	AM Downlink flow control status. It is string data. It can be "ON" or "OFF".						

16.3 Display 48.03: RLC AM Counters 1

This screen displays counters for the AM bearer selected using display 48.01

S40 Data display	S40 HELP display
<pre>AM Data PDU TX: aaaaaa ReTx bbbbbb RX: cccccc</pre>	<pre>AM Data PDUs Transmitted ReTransmitd Received</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	WRAN			FTD_SB_RLC_FTD_AM_DATA_PDU_TXD	DW:D	R	yes
Number of the transmitted AMD PDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							
b(6)	WRAN			FTD_SB_RLC_FTD_AM_DATA_PDU_RETXD	DW:D	R	yes
Number of the re-transmitted AMD PDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							
c(6)	WRAN			FTD_SB_RLC_FTD_AM_DATA_PDU_RXD	DW:D	R	yes
Number of the received AMD PDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							

16.4 Display 48.04: RLC AM Counters 2

This screen displays counters for the AM bearer selected using display 48.01

S40 Data display	S40 HELP display
<pre>AM Ctrl PDUs : TX: aaaaaa RX: bbbbbb</pre>	<pre>AM Control PDUs Transmitted Received</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	WRAN			FTD_SB_RLC_FTD_AM_CTRL_PDU_TXD	DW:D	R	yes
Number of the transmitted Control PDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							
b(6)	WRAN			FTD_SB_RLC_FTD_AM_CTRL_PDU_RXD	DW:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Number of the received Control PDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							

16.5 Display 48.05: RLC AM Counters 3

This screen displays counters for the AM bearer selected using display 48.01

S40 Data display	S40 HELP display
<pre>TX: AM SDU: Req aaaaaa Disc bbbbbb Ack cccccc</pre>	<pre>Tx AM SDUs Requested Discarded Acked</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	WRAN			FTD_SB_RLC_FTD_AM_TX_SDU_REQUESTED	DW:D	R	yes
Number of the requested AM Tx SDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							
b(6)	WRAN			FTD_SB_RLC_FTD_AM_TX_SDU_DISCARDED	DW:D	R	yes
Number of the discarded AM Tx SDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							
c(6)	WRAN			FTD_SB_RLC_FTD_AM_TX_SDU_ACKED	DW:D	R	yes
Number of the acknowledged AM Tx SDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							

16.6 Display 48.06: RLC AM Counters 4

This screen displays counters for the AM bearer selected using display 48.01

S40 Data display	S40 HELP display
<pre>Rejected AM PDUs Data aaaaaa Ctrl bbbbbb</pre>	<pre>Rejected AM PDUs: Data Control</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	WRAN			FTD_SB_RLC_FTD_AM_REJECTED_DATA_PDUS	DW:D	R	yes
Number of the rejected AMD PDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(6)	WRAN			FTD_SB_RLC_FTD_AM_REJECTED_CTRL_PDUS	DW:D	R	yes
Number of the rejected AM Status PDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							

16.7 Display 48.07: RLC AM Counters 5

This screen displays counters for the AM bearer selected using display 48.01

S40 Data display				S40 HELP display			
Delivered AM SDU: aaaaaa Resets bbbbbb				Delivered AM SDUs Number of Resets			

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	WRAN			FTD_SB_RLC_FTD_AM_DELIVERED_SDUS	DW:D	R	yes
Number of the delivered AM SDUs. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							
b(6)	WRAN			FTD_SB_RLC_FTD_AM_NUM_OF_RESETS	DW:D	R	yes
Number of times of the AM resets. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							

16.8 Display 48.08: RLC AM Counters 6

This screen displays counters for the AM bearer selected using display 48.01

S40 Data display				S40 HELP display			
Re-Estabs AM aaaaaa Reconfigs AM bbbbbb				Number of AM Re-Estabs Number of AM Reconfigure			

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	WRAN			FTD_SB_RLC_FTD_AM_NUM_OF_REESTABLISHMENTS	DW:D	R	yes
Number of times of the AM re-establishments. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.							
b(6)	WRAN			FTD_SB_RLC_FTD_AM_NUM_OF_RECONFIGS	DW:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind	
		Number of times of the AM resets. It is uint32 data displayed as 6 decimal digits. It can be 0 - 4294967295 but displayed 0 - 999999.						

16.9 Display 48.09: RLC AM Tx Buffer Occupancy

This screen displays the Tx buffer occupancy (in %) of the AM bearer selected using display 48.01

S40 Data display	S40 HELP display
<pre>AM TX:Buffer Occupancy Current:aaa Peak: bbb</pre>	<pre>AM Tx Buffer Occupancy Current % Peak %</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_RLC_FTD_AM_TX_BFR_OCC	B:D	R	yes
Current buffer occupancy of the AM Tx buffer. It is uint8 data displayed as 3 decimal digits. It can be 0 - 100%.							
b(3)	WRAN			FTD_SB_RLC_FTD_AM_TX_BFR_OCC_PEAK	B:D	R	yes
Peak buffer occupancy of the AM Tx buffer. It is uint8 data displayed as 3 decimal digits. It can be 0 - 100%.							

16.10 Display 48.10: RLC AM Throughput

This display shows data throughput in RLC level for a particular AM Radio Bearer selected using display 48.01

S40 Data display	S40 HELP display
<pre>RLC Data Thr UL : aaaaa DL : bbbbb</pre>	<pre>RLC Data Thr UL:0-3600 DL:0-14400</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WRAN			FTD_SB_RLC_UL_THROUGHPUT	DW:D	R,I,O	
RLC UL throughput							
b(5)	WRAN			FTD_SB_RLC_DL_THROUGHPUT	DW:D	R,I,O	
RLC DL throughput..							

17 Group 49: WCDMA MAC displays

17.1 Display 49.01: Basic Radio Bearer Information

This screen shows the number of active UL and DL Radio Bearers and the RB ID Bit-Fields

S40 Data display	S40 HELP display
<pre>UL aaaaaaaa bb cccccccc DL dddddddd ee ffffffff</pre>	<pre>UL Sub Id 1 Sub Id 2 DL Sub Id 1 Sub Id 2</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	WRAN			FTD_SB_W_MAC_UL_RB_ SUB_ID_1	DW:H	R	yes
This field shows the Active Up-Link Radio Bearer Id bit-field, Sub_Id_1, as an 8 digit hexadecimal value. This will have a range of 0-FFFFFFF. When this hex value is converted into a bit-field, a 1 will represent an active RB for this SUB ID and 0 an inactive RB for this Sub ID. The RB shall be indicated by its position in the bit-field. e.g the Least Significant Bit (LSB) will represent RB 1, the Most Significant Bit (MSB) will represent RB 32.							
b(2)	WRAN			FTD_SB_W_MAC_NUM_ ACTIVE_UL_RB	B:D	R	yes
This field shows the number of active up-link radio bearers having a range of 0-32 represented as an integer							
c(8)	WRAN			FTD_SB_W_MAC_UL_RB_ SUB_ID_2	DW:H	R	yes
This field shows the Active Up-Link Radio Bearer Id bit-field, Sub_Id_2, as an 8 digit hexadecimal value. This will have a range of 0-FFFFFFF. When this hex value is converted into a bit-field, a 1 will represent an active RB for this SUB ID and 0 an inactive RB for this Sub ID. The RB shall be indicated by its position in the bit-field. e.g the Least Significant Bit (LSB) will represent RB 1, the Most Significant Bit (MSB) will represent RB 32.							
d(8)	WRAN			FTD_SB_W_MAC_DL_RB_ SUB_ID_1	DW:H	R	yes
This field shows the Active Down-Link Radio Bearer Id bit-field, Sub_Id_1, as an 8 digit hexadecimal value. This will have a range of 0-FFFFFFF. When this hex value is converted into a bit-field, a 1 will represent an active RB for this SUB ID and 0 an inactive RB for this Sub ID. The RB shall be indicated by its position in the bit-field. e.g the Least Significant Bit (LSB) will represent RB 1, the Most Significant Bit (MSB) will represent RB 32.							
e(2)	WRAN			FTD_SB_W_MAC_NUM_ ACTIVE_DL_RB	W:D	R	yes
This field shows the number of active down-link radio bearers having a range of 0-32, represented as an integer							
f(8)	WRAN			FTD_SB_W_MAC_DL_RB_ SUB_ID_2	DW:H	R	yes
This field shows the Active Down-Link Radio Bearer Id bit-field, Sub_Id_2, as an 8 digit hexadecimal value. This will have a range of 0-FFFFFFF. When this hex value is converted into a bit-field, a 1 will represent an active RB for this SUB ID and 0 an inactive RB for this Sub ID. The RB shall be indicated by its position in the bit-field. e.g the Least Significant Bit (LSB) will represent RB 1, the Most Significant Bit (MSB) will represent RB 32.							

17.2 Display 49.02: Basic DCH Information

This screen shows the number of UL and DL DCH's and their corresponding DCH ID Bit-Field

S40 Data display	S40 HELP display
<pre>aa bbbbbb cc ddddddd ee ffffffff</pre>	<pre>UL ULDCH Id DL DLDCH Id FR FREE DCH</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WRAN			FTD_SB_W_MAC_ACTIVE_UL_DCH	W:D	R	yes
This field shows the number of active up-link DCH's having a range of 0-32, represented as an integer							
b(8)	WRAN			FTD_SB_W_MAC_ACTIVE_UL_DCH_ID_BITFIELD	DW:H	R	yes
This field shows the Active Up-Link DCH Id bit-field, as an 8 digit hexadecimal value. This will have a range of 0-FFFFFFF. When this hex value is converted into a bit-field, a 1 will represent an active DCH and a 0 an inactive DCH. The DCH shall be indicated by its position in the bit-field. e.g the Least Significant Bit (LSB) will represent DCH 1, the Most Significant Bit (MSB) will represent DCH 32.							
c(2)	WRAN			FTD_SB_W_MAC_ACTIVE_DL_DCH	W:D	R	yes
This field shows the number of active down-link DCH's having a range of 0-32, represented as an integer							
d(8)	WRAN			FTD_SB_W_MAC_ACTIVE_DL_DCH_ID_BITFIELD	DW:H	R	yes
This field shows the Active Down-Link DCH Id bit-field, as an 8 digit hexadecimal value. This will have a range of 0-FFFFFFF. When this hex value is converted into a bit-field, a 1 will represent an active DCH and a 0 an inactive DCH. The DCH shall be indicated by its position in the bit-field. e.g the Least Significant Bit (LSB) will represent DCH 1, the Most Significant Bit (MSB) will represent DCH 32.							
e(2)	WRAN			FTD_SB_W_MAC_FREE_DCH	W:D	R	yes
This field shows the number of configured DCH's that do not have RB's attached. This field has a range of 0-32, represented as an integer.							
f(8)	WRAN			FTD_SB_W_MAC_FREE_DCH_ID_BITFIELD	DW:H	R	yes
This field shows the unconnected DCH Id bit-field as an 8 digit hexadecimal value. These are the DCH's that are configured but no UL or DL RB is connected to them. When this hex value is converted into a bit-field, a 1 will represent an active DCH and a 0 an inactive DCH. The DCH shall be indicated by its position in the bit-field. e.g the Least Significant Bit (LSB) will represent DCH 1, the Most Significant Bit (MSB) will represent DCH 32.							

17.3 Display 49.04: Radio Bearer ID and SUB ID input

This screen shall form the input for the Radio Bearer ID and sub ID. This will be formed of a 2 digit decimal value of the RB ID (XX, range 1-32) followed by a single digit for the Sub ID (Y being either 1 or 2), input as XXY

S40 Data display	S40 HELP display
<pre>ENTER RB ID AND SUB ID: aaa</pre>	<pre>Enter RB ID and SUB ID as XXY</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WRAN			FTD_SB_W_MAC_RB_SUB_ID_INPUT	B:D	R	yes
This 3 digit decimal input requests the 2 digit RB-ID, having a range of 0-32, followed by the single digit Sub-ID, which can be either 1 or 2							
INPUT(3)	WRAN			FTD_SB_INPUT_RB_AND_SUBID_SET	DW:D	R	no
callback function subblock identity							

17.4 Display 49.05: Radio Bearer Information

This screen shall display the Radio Bearer Information including both UL and DL information

S40 Data display	S40 HELP display
<pre>aa b c d e f gg h i j kk l mm n o</pre>	<pre>AS M CS Ci P TTu Id CTs V SS DEDIn TTd ID CTs V</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WRAN			FTD_SB_W_MAC_RB_ACTIVE_STATUS	S	R	yes
Represents the RB's Active status using 2 characters. These characters represent the following status: UL - Up-Link DL - Down-Link UD - Up-Link and Down-Link NO - Representing none of the above i.e. no active status							
b	WRAN			FTD_SB_W_MAC_RB_RLC_MODE	S	R	yes
The RLC mode is represented by a single character which reflects the following valid information on the display about the RB RLC mode: M - Main, V - Voice C - CSD L - Loopback							
c	WRAN			FTD_SB_W_MAC_RB_RLC_CONNECTED_STATUS	S	R	yes
This field represents the RLC Connected status which is represented as a single character and is used to represent the following information C - Connected U - Unconnected							
d	WRAN			FTD_SB_W_MAC_RB_CIPHERING_STATUS	S	R	yes
This field informs us if ciphering for this radio bearer is Enabled or Disabled. This is represented as a single character as follows E - Ciphering Enabled D - Ciphering Disabled							
e	WRAN			FTD_SB_W_MAC_RB_UL_PRIORITY	B:D	R	yes
This parameter represents the RB UL information priority as a decimal value which has a range of 1-8							
f	WRAN			FTD_SB_W_MAC_RB_UL_MAPPED_TCH_TYPE	S	R	yes
The UL Mapped Traffic Channel Type is represented as a single character as follows R - RACH D - DCH							
g(2)	WRAN			FTD_SB_W_MAC_RB_UL_MAPPED_TCH_ID	W:D	R	yes
This field represents the UL Mapped TCH ID as a 2 digit decimal value. If the UL Mapped Traffic Channel Type is DCH then this has a range of 1-32							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h	WRAN			FTD_SB_W_MAC_RB_UL_CT_ STATUS	B:D	R	yes
				The UL CT Status flag for the RB is represented as a single digit decimal values which shows the following information: 0 - Not Present 1 - Present			
i	WRAN			FTD_SB_W_MAC_RB_UL_CT_ VALUE	B:H	R	yes
				The UL CT Value has a range of 0-15. This is represented on the display as a single digit Hexadecimal Value having a range 0-F			
j	WRAN			FTD_SB_W_MAC_RB_UL_ SIZES_STATUS	S	R	yes
				The Sizes Status field is represented as a single character showing the following information: A - All Sizes E - Explicit C - Configured			
k(2)	WRAN			FTD_SB_W_MAC_RB_UL_ DEDBR_INSTANCE	B:D	R	yes
				This field represents the DEDBR Instance and has the range 0-63. This is represented as a two digit decimal value on the display			
l	WRAN			FTD_SB_W_MAC_RB_DL_ MAPPED_TCH_TYPE	S	R	yes
				The DL Mapped Traffic Channel Type or FACH is represented by a single character which shows the following information: F - FACH D - DCH			
m(2)	WRAN			FTD_SB_W_MAC_RB_DL_ MAPPED_TCH_ID	W:D	R	yes
				If the DL Mapped traffic Channel type is DCH then this field represents a 32 bit mapped traffic channel ID, having a range of 1-32. This is represented as a 2 digit decimal value			
n	WRAN			FTD_SB_W_MAC_RB_DL_CT_ STATUS	B:D	R	yes
				The DL CT Status flag for the RB is represented as a single digit decimal values which shows the following information: 0 - Not Present 1 - Present			
o	WRAN			FTD_SB_W_MAC_RB_DL_CT_ VALUE	B:H	R	yes
				The DL CT Value has a range of 0-15. This is represented on the display as a single digit Hexadecimal Value having a range 0-F			

17.5 Display 49.06: Input DCH ID

This screen forms the input screen for the DCH ID in order to display the information related to the DCH on other display screens. The input is a 2-digit decimal value with a range of 1-32

S40 Data display	S40 HELP display
Enter DCH ID aa	DCH_ID 2 digit decimal values

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WRAN			FTD_SB_W_MAC_DCH_ID_ INPUT	B:D	R	yes
				This field represents a 2 digit decimal value representing the DCH ID which has a range of 1-32			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
INPUT(2)	WRAN			FTD_SB_INPUT_DCH_ID_ SET	DW:D	R	no
callback function subblock identity							

17.6 Display 49.07: DCH Information

This screen shows the UL and DL DCH information for a DCH ID

S40 Data display	S40 HELP display
<pre>a bbbbbbbb c c dddddddd e ffffffff g g hhhhhhhh</pre>	<pre>UAS Sub Id 1 TTI Sub Id 2 DAS Sub Id 1 TTI Sub Id 2</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	WRAN			FTD_SB_W_MAC_DCH_UL_ ACTIVE_STATUS	S	R	yes
This field represents the DCH UL Active status using a single character showing the following information: A - Active Inactive							
b(8)	WRAN			FTD_SB_W_MAC_DCH_UL_ RB_SUBID_1	DW:H	R	yes
This field is represented as an 8-digit hexadecimal value which represents the 32-bit bit-field of the UL RB sub id 1							
c(2)	WRAN			FTD_SB_W_MAC_DCH_UL_ TTI	B:D	R	yes
This field represents the UL TTI field as a two digit decimal value. The valid values for this field are 10, 20, 40 and 80 ms							
d(8)	WRAN			FTD_SB_W_MAC_DCH_UL_ RB_SUBID_2	DW:H	R	yes
This field is represented as an 8-digit hexadecimal value which represents the 32-bit bit-field of the UL RB sub id 2							
e	WRAN			FTD_SB_W_MAC_DCH_DL_ ACTIVE_STATUS	S	R	yes
This field represents the DCH DL Active status using a single character showing the following information: A - Active Inactive							
f(8)	WRAN			FTD_SB_W_MAC_DCH_DL_ RB_SUBID_1	DW:H	R	yes
This field is represented as an 8-digit hexadecimal value which represents the 32-bit bit-field of the DL RB sub id 1							
g(2)	WRAN			FTD_SB_W_MAC_DCH_DL_ TTI	B:D	R	yes
This field represents the DL TTI field as a two digit decimal value. The valid values for this field are 10, 20, 40 and 80 ms							
h(8)	WRAN			FTD_SB_W_MAC_DCH_DL_ RB_SUBID_2	DW:H	R	yes
This field is represented as an 8-digit hexadecimal value which represents the 32-bit bit-field of the DL RB sub id 2							

18 Group 50: WCDMA WPH displays

18.1 Display 50.01: WPH Connection counts

Count number of successful and unsuccessful connections. DPCH field also counts number of fallbacks.

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd eeee ffff gggg hhh iii </pre>	<pre> Connection Status Report </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_SUCCESSFUL_PCCPCH_CONNECTS	B:H	R	yes
				Number of successful PCCPCH connections			
b(4)	WRAN			FTD_SB_FAILED_PCCPCH_CONNECTS	B:H	R	yes
				Number of failed PCCPCH connections			
c(4)	WRAN			FTD_SB_SUCCESSFUL_PRACH_CONNECTS	B:H	R	yes
				Number of successful PRACH connections			
d(4)	WRAN			FTD_SB_FAILED_PRACH_CONNECTS	B:H	R	yes
				Number of failed PRACH connections			
e(4)	WRAN			FTD_SB_SUCCESSFUL_SCCPCH_CONNECTS	B:H	R	yes
				Number of successful SCCPCH connections			
f(4)	WRAN			FTD_SB_FAILED_SCCPCH_CONNECTS	B:H	R	yes
				Number of failed SCCPCH connections			
g(4)	WRAN			FTD_SB_SUCCESSFUL_DPCH_CONNECTS	B:H	R	yes
				Number of successful DPCH connections			
h(3)	WRAN			FTD_SB_FALLBACK_DPCH_CONNECTS	B:H	R	yes
				Number of fallback DPCH connections			
i(3)	WRAN			FTD_SB_FAILED_FALLBACK_DPCH_CONNECTS	B:H	R	yes
				Number of failed DPCH connections			

18.2 Display 50.10: WPH L1 Received Error Codes

This display presents error information (specifically, error code values) received from L1 by WPH

S40 Data display	S40 HELP display
<pre>aaaa bbbb / cccc dddddddd eeeeeeee</pre>	<pre>Process ID Err typ/subt Main err cod Xtra err cod</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_WPH_L1_OS_TASK_ID	W:H	R	yes
				Identification number of L1 o/s process			
b(4)	WRAN			FTD_SB_WPH_L1_ERROR_TYPE	W:H	R	yes
				L1 error type			
c(4)	WRAN			FTD_SB_WPH_L1_ERROR_SUBTYPE	W:H	R	yes
				L1 error subtype			
d(8)	WRAN			FTD_SB_WPH_L1_MAIN_ERROR_CODE	DW:H	R	yes
				L1 main error code			
e(8)	WRAN			FTD_SB_WPH_L1_EXTRA_ERROR_CODE	DW:H	R	yes
				L1 extra error code			

18.3 Display 50.11: WPH L1 Received Error Timestamp

This display presents error information (specifically, timestamps and extra information) received from L1 by WPH

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbb cccc dddd eeee</pre>	<pre>TIMESTAMP EXTRA DEBUG INFORMATION</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	WRAN			FTD_SB_WPH_L1_TIMESTAMP	DW:H	R	yes
				Error code DSP timestamp			
b(4)	WRAN			FTD_SB_WPH_L1_EXTRA_DEBUG_INFO1	W:H	R	yes
				Additional DSP debug information			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(4)	WRAN			FTD_SB_WPH_L1_EXTRA_DEBUG_INFO2	W:H	R	yes
	Additional DSP debug information						
d(4)	WRAN			FTD_SB_WPH_L1_EXTRA_DEBUG_INFO3	W:H	R	yes
	Additional DSP debug information						
e(4)	WRAN			FTD_SB_WPH_L1_EXTRA_DEBUG_INFO4	W:H	R	yes
	Additional DSP debug information						

18.4 Display 50.12: WPH L1 Pid list before error

This provides access to the PID list immediately preceding the event which generated the error. The user is prompted to enter the offset, where 0 corresponds to the most recently saved PID. The specified PID is shown together with the seven immediately preceding it (4 PID indices are shown to indicate what's on the display, and the ordering). Entering values which are too large will result in the oldest 8 PIDs being shown.

S40 Data display	S40 HELP display
<pre>aaaa<bb cccc dddd<ee ffff gggg hh>iiii jjjj kk>llll</pre>	<pre>PID List 4-digit PIDs 2-digit show PID indices</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_WPH_L1_PID0	W:H	R	yes
	L1 Process id						
b(2)	WRAN			FTD_SB_WPH_L1_PID_INDEX_ID1	B:D	R	yes
	This indicates the index of the value being pointed at.						
c(4)	WRAN			FTD_SB_WPH_L1_PID4	W:H	R	yes
	L1 Process id						
d(4)	WRAN			FTD_SB_WPH_L1_PID1	W:H	R	yes
	L1 Process id						
e(2)	WRAN			FTD_SB_WPH_L1_PID_INDEX_ID2	B:D	R	yes
	This indicates the index of the value being pointed at.						
f(4)	WRAN			FTD_SB_WPH_L1_PID5	W:H	R	yes
	L1 Process id						
g(4)	WRAN			FTD_SB_WPH_L1_PID2	W:H	R	yes
	L1 Process id						
h(2)	WRAN			FTD_SB_WPH_L1_PID_INDEX_ID3	B:D	R	yes
	This indicates the index of the value being pointed at.						
i(4)	WRAN			FTD_SB_WPH_L1_PID6	W:H	R	yes
	L1 Process id						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
j(4)	WRAN			FTD_SB_WPH_L1_PID3	W:H	R	yes
	L1 Process id						
k(2)	WRAN			FTD_SB_WPH_L1_PID_INDEX_ID4	B:D	R	yes
	This indicates the index of the value being pointed at.						
l(4)	WRAN			FTD_SB_WPH_L1_PID7	W:H	R	yes
	L1 Process id						
INPUT(4)	WRAN			FTD_SB_INPUT_WPH_L1_GET_PID_INDEX	DW:D	R	no
	callback function subblock identity						

18.5 Display 50.13: WPH L1 Rx signal list before error

This provides access to the Rx Signal list immediately preceding the event which generated the error. The user is prompted to enter the offset, where 0 corresponds to the most recently saved Rx Signal. The specified Rx Signal is shown together with the seven immediately preceding it (4 indices are shown to indicate which are on the display, and the ordering). Entering values which are too large will result in the oldest 8 Rx Signals being shown

S40 Data display	S40 HELP display
<pre>aaaa<bb cccc dddd<ee ffff gggg hh>iiii jjjj kk>llll</pre>	<pre>RxSig List 4digit SIGID 2-digit show indices</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID1	W:H	R	yes
	This displays an internal L1 signal id						
b(2)	WRAN			FTD_SB_WPH_L1_RX_SIGID_INDEX_ID1	B:D	R	yes
	This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.						
c(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID5	W:H	R	yes
	This displays an internal L1 signal id						
d(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID2	W:H	R	yes
	This displays an internal L1 signal id						
e(2)	WRAN			FTD_SB_WPH_L1_RX_SIGID_INDEX_ID2	B:D	R	yes
	This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.						
f(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID6	W:H	R	yes
	This displays an internal L1 signal id						
g(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID3	W:H	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	This displays an internal L1 signal id						
h(2)	WRAN			FTD_SB_WPH_L1_RX_SIGID_INDEX_ID3	B:D	R	yes
	This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.						
i(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID7	W:H	R	yes
	This displays an internal L1 signal id						
j(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID4	W:H	R	yes
	This displays an internal L1 signal id						
k(2)	WRAN			FTD_SB_WPH_L1_RX_SIGID_INDEX_ID4	B:D	R	yes
	This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.						
l(4)	WRAN			FTD_SB_WPH_L1_RX_SIGNALID8	W:H	R	yes
	This displays an internal L1 signal id						
INPUT(8)	WRAN			FTD_SB_INPUT_WPH_L1_GET_RXSIG_INDEX	DW:D	R	no
	callback function subblock identity						

18.6 Display 50.14: WPH L1 Tx signal list before error

This provides access to the Tx Signal list immediately preceding the event which generated the error. The user is prompted to enter the offset, where 0 corresponds to the most recently saved Tx Signal. The specified Tx Signal is shown together with the seven immediately preceding it (4 indices are shown to indicate which are on the display, and the ordering). Entering values which are too large will result in the oldest 8 Tx Signals being shown

S40 Data display	S40 HELP display
<pre>aaaa<bb cccc dddd<ee ffff gggg hh>iiii jjjj kk>llll</pre>	<pre>TxSig List 4digit SIGID 2-digit show indices</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID1	W:H	R	yes
	This displays an internal L1 signal id						
b(2)	WRAN			FTD_SB_WPH_L1_TX_SIGID_INDEX_ID1	B:D	R	yes
	This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.						
c(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID5	W:H	R	yes
	This displays an internal L1 signal id						
d(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID2	W:H	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
This displays an internal L1 signal id							
e(2)	WRAN			FTD_SB_WPH_L1_TX_SIGID_INDEX_ID2	B:D	R	yes
This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.							
f(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID6	W:H	R	yes
This displays an internal L1 signal id							
g(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID3	W:H	R	yes
This displays an internal L1 signal id							
h(2)	WRAN			FTD_SB_WPH_L1_TX_SIGID_INDEX_ID3	B:D	R	yes
This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.							
i(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID7	W:H	R	yes
This displays an internal L1 signal id							
j(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID4	W:H	R	yes
This displays an internal L1 signal id							
k(2)	WRAN			FTD_SB_WPH_L1_TX_SIGID_INDEX_ID4	B:D	R	yes
This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.							
l(4)	WRAN			FTD_SB_WPH_L1_TX_SIGNALID8	W:H	R	yes
This displays an internal L1 signal id							
INPUT(8)	WRAN			FTD_SB_INPUT_WPH_L1_GET_TXSIG_INDEX	DW:D	R	no
callback function subblock identity							

18.7 Display 50.15: WPH L1 list of previous warnings received before error

This provides access to the previous warning list immediately preceding the event which generated the error. The user is prompted to enter the offset, where 0 corresponds to the most recently saved warning. The specified warning is shown together with the one immediately preceding it (2 indices are shown to indicate which are on the display). Entering values which are too large will result in the oldest warnings being shown

S40 Data display	S40 HELP display
<pre>aa bbbbbbbb cccccccc dd eeeeeeee ffffff</pre>	<pre>Warning List Indices & main error xtra error</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	WRAN			FTD_SB_WPH_L1_WARNING_INDEX_ID1	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.							
b(8)	WRAN			FTD_SB_WPH_L1_MAIN_ERROR_CODE1	DW:H	R	yes
This displays an internal L1 signal id							
c(8)	WRAN			FTD_SB_WPH_L1_EXTRA_ERROR_CODE1	DW:H	R	yes
This displays an internal L1 signal id							
d(2)	WRAN			FTD_SB_WPH_L1_WARNING_INDEX_ID2	B:D	R	yes
This is used as an aide-memoire for the user; it indicates the index of the signal id being pointed at.							
e(8)	WRAN			FTD_SB_WPH_L1_MAIN_ERROR_CODE2	DW:H	R	yes
This displays an internal L1 signal id							
f(8)	WRAN			FTD_SB_WPH_L1_EXTRA_ERROR_CODE2	DW:H	R	yes
This displays an internal L1 signal id							
INPUT(8)	WRAN			FTD_SB_INPUT_WPH_L1_GET_WARN_INDEX	DW:D	R	no
callback function subblock identity							

19 Group 61: Common EM (Energy Management) displays

19.1 Display 61.01: Basic EM information

S40 Data display	S40 HELP display
<pre> aaaaaaaaa bb ccc ddd eeee fff gggg hhh iii jjjj kkk </pre>	<pre> Version Bars Mon Bat Volt Temp Cap Sby ChMo CS ChTy </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(9)	ENERGY			EM_SB_FTD_VERSIONNO	S	R	no
	EM version number:Eg: 05.04.070						
b(2)	ENERGY			EM_SB_FTD_NUMBER_OF_BAT_BARS	B:D	R	yes
	Number of battery bars (1 to 8 decimal)						
c(3)	ENERGY			EM_SB_FTD_STATUS	S	R	yes
	Battery monitor SW status: ??? Cha = Charging Mon = Monitoring Rst = Restart batmon4 Set = Settle after charging Res = Reset batmon4 Ser = Service Sto = Stopped Dis = Disable						
d(3)	ENERGY			EM_SB_FTD_BAT_TYPE	S	R	no
	Battery type: ??? SB = Service battery Ni = Nickel battery Err = Error 4L1 = 4.1 v littium battery 4L2 = 4.2 v littium battery						
e(4)	ENERGY			EM_SB_FTD_INST_BAT_VOLT	W:D	R	yes
	Instantaneous battery voltage in mV (0 to 9999 decimal)						
f(3)	ENERGY			EM_SB_FTD_CURRENT_BAT_TEMP	W:D	R	yes
	Current battery temperature in kelvin (0 to 999 decimal)						
g(4)	ENERGY			EM_SB_FTD_BAT_CAPACITY	W:D	R	no
	Battery capacity in mAh (0 to 9999 decimal)						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(3)	ENERGY			EM_SB_FTD_REMAIN_STBY_HOURS	W:D	R	yes
	Remaining standby time to battery low in hours (0 to 999 decimal)						
i(3)	ENERGY			EM_SB_FTD_PRESENT_CHA_MODE	S	R	yes
	Present charging state: Not = Not charging Ini = Initialization TCh = Temperature check LiC = Lithium charging Dis = Disabled Dch = Discharging Dco = Disconnected Pow = Power Col = Cold charging Hot = Hot charging Mai = Maintenance charging BEr = Battery error NiC = Nickel charging CPa = Control paused CDi = Control disabled						
j(4)	ENERGY			EM_SB_FTD_CS_STATE	S	R	yes
	CS state): ???? Idle NSPS SCAN SIGN = Signalling Call CSD HSCS = HSCSD GPRS Data EDGE						
k(3)	ENERGY			EM_SB_FTD_PRESENT_CHR_TYPE	S	R	yes
	Present charger type: ??? TEr = Temperature error 2Wi = 2 wire charger 3Wi = 3 wire charger AC7 = ACP7 charger VEr = Voltage error CEr = Current error						

19.2 Display 61.02: Basic BATMON4 information

S40 Data display	S40 HELP display
<pre>aaaa bbbbbb cccc dddd ee ffff ggg hhh iiii jjj kkk</pre>	<pre>VInst tRem VOff VOn Flg Vdmf BPw Sta VCh WCn WInt</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	ENERGY			EM_SB_FTD_INST_BAT_VOLT	W:D	R	yes
				Instantaneous battery voltage in mV (0 to 9999 decimal)			
b(6)	ENERGY			EM_SB_FTD_REMAIN_STBY_MINUTES	DW:D	R	yes
				Remaining standby time estimate in minutes (0 to 999999 decimal).			
c(4)	ENERGY			EM_SB_FTD_EST_TX_OFF	W:D	R	yes
				Estimated Tx-Off battery voltage in mV (0 to 9999 decimal).			
d(4)	ENERGY			EM_SB_FTD_MEAS_TX_ON	W:D	R	yes
				Measured Tx-On synchronized battery voltage in mV (0 to 9999 decimal).			
e(2)	ENERGY			EM_SB_FTD_MISC_MON_INT_FLAGS1	B:H	R	yes
				Miscellaneous Battery Monitor flags in bitfields (00 to FF hexadecimal).			
f(4)	ENERGY			EM_SB_FTD_DMF_BAT_VOLT	W:D	R	yes
				Double median filtered battery voltage in mV (0 to 9999 decimal)			
g(3)	ENERGY			EM_SB_FTD_BAT_POW_IND	S	R	yes
				Battery Power Indication: "Ok" "Low" "LFB" (= Low For Boot) "Emp" (= Empty)			
h(3)	ENERGY			EM_SB_FTD_STATUS	S	R	yes
				Battery monitor SW status: ??? Cha = Charging Mon = Monitoring Rst = Restart batmon4 Set = Settle after charging Res = Reset batmon4 Ser = Service Sto = Stopped Dis = Disable			
i(4)	ENERGY			EM_SB_FTD_CALC_VOLT_LEVEL	W:D	R	yes
				Calculated voltage level "Check" voltage in mV (0 to 9999 decimal).			
j(3)	ENERGY			EM_SB_FTD_NUMBER_BAT_LOW_WARN	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number of battery low warnings (0 to 999 decimal).						
k(3)	ENERGY			EM_SB_FTD_WARN_COUNT	W:D	R	yes
	Present warning interval counter (0 to 999 decimal).						

19.3 Display 61.03: Advanced BATMON4 algorithm information

S40 Data display	S40 HELP display
<pre> aaaa b ccccc d eeeee ff ggggggggggggg hhhhhhhhhhh </pre>	<pre> Vdmf F11 Ips F12 Ilo Cap Cap change Remain cap </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	ENERGY			EM_SB_FTD_DMF_BAT_VOLT	W:D	R	yes
	Double median filtered battery voltage in mV (0 to 9999 decimal)						
b	ENERGY			EM_SB_FTD_MISC_MON_INT_FLAGS2	B:H	R	yes
	Miscellaneous BatMon4 internal flags as 4 bit bitfield (0 to F hexadecimal). Fields (bit 0 = lsb): [3-2] : Settle Delay Mode.						
c(5)	ENERGY			EM_SB_FTD_CURRENT_MON_EST1	DW:D	R	yes
	Total battery current mA units (0 to 99999 decimal).						
d	ENERGY			EM_SB_FTD_MISC_MON_INT_FLAGS3	B:H	R	yes
	Misc BatMon4 internal flags as 4 bit bitfield (0 to F hexadecimal). Bitfields (bit 0 = lsb): [0] : 0=Standby, 1=Non-Standby.						
e(5)	ENERGY			EM_SB_FTD_CURRENT_MON_EST2	W:D	R	
	Total phone current (Iload) estimated by BatMon4 in the Non-Standby algorithm part from measured voltage drop in 0.1 mV units (0 to 99999 decimal).						
f(2)	ENERGY			EM_SB_FTD_REMAIN_PROMILLE	B:D	R	
	Batmon5 remaining standby capacity (%%)						
g(11)	ENERGY			EM_SB_FTD_DELTA_CAPACITY	W:D	R	
	Batmon5 Last capacity change (+/- mAs)						
h(10)	ENERGY			EM_SB_FTD_REMAIN_CAPACITY	W:D	R	
	BatMon5 remaining standby capacity (mAs)						

19.4 Display 61.04: Battery Monitor setup and log information

S40 Data display	S40 HELP display
<pre>aaa bbbbb cccc dddd eeee iiii ffff gg hhhh</pre>	<pre>BImp ChaAmnt Vfull Vlow VBoot VCur V@Lo Adj Err</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	ENERGY			EM_SB_FTD_BAT_IMP	W:D	R	yes
	Battery impedance in mOhm (0 to 999 decimal).						
b(5)	ENERGY			EM_SB_FTD_CHARGED_AMOUNT	W:D	R	yes
	Charged amount (-9999 to +9999 decimal)						
c(4)	ENERGY			EM_SB_FTD_BAT_FULL_THRES	W:D	R	yes
	Battery full voltage threshold used by the BatMon4 algorithm in mV (0 to 9999 decimal).						
d(4)	ENERGY			EM_SB_FTD_BAT_LOW_THRES	W:D	R	yes
	Battery low voltage threshold used by the BatMon4 algorithm in mV (0 to 9999 decimal).						
e(4)	ENERGY			EM_SB_FTD_BAT_BOOT_VOLT	W:D	R	yes
	"Boot" battery voltage used for Battery Monitor initialisation in mV (0 to 9999 decimal).						
f(4)	ENERGY			EM_SB_FTD_VOLT_AT_FIRST_BAT_LOW	W:D	R	yes
	Voltage level at first battery low warning in mV (0 to 9999 decimal).						
g(2)	ENERGY			EM_SB_FTD_MON_ALG_ADJ	B:H	R	yes
	Number of BatMon4 algorithm parameter adjustments since last reset/restart of the BatMon4 algorithm (0 to FF hexadecimal).						
h(4)	ENERGY			EM_SB_FTD_PARAM_ERRORS	W:H	R	yes
	BatMon4 algorithm parameter error mask as bitmap (0000 to FFFF hexadecimal).						
i(4)	ENERGY			EM_SB_FTD_MON_VOLT	W:D	R	
	Current BatMon4 model voltage in mV (0 to 9999 decimal).						

19.5 Display 61.05: PSM (Phone State Monitor) information 1

MSB

- Bit31 = Data cable active
- Bit30 = Camera active
- Bit29 = Cover power active
- Bit28 = Bluetooth active
- Bit27-Bit17 = Not used
- Bit16 = Touchpad active
- Bit15 = USB active
- Bit14 = Flashlight active

- Bit13 = MIDI active
- Bit12 = ADSP active
- Bit11 = VRR active
- Bit10 = IHF active
- Bit9 = MP3 active
- Bit8 = GPS active
- Bit7 = Video active
- Bit6 = Radio active
- Bit5 = DC out active
- Bit4 = Irda active
- Bit3 = Buzzer active
- Bit2 = Vibra active
- Bit1 = Keyboard light active
- Bit0 = Display light active

LSB

S40 Data display	S40 HELP display
<pre>M aaaaaaaaa bbbbbbbb cccccccc dddddddd L</pre>	<pre>ActInf byte4 byte3 byte2 byte1</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ENERGY			EM_SB_FTD_ACTIVITY_BYTE4	S	R	yes
				External activity information MSB			
b(8)	ENERGY			EM_SB_FTD_ACTIVITY_BYTE3	S	R	yes
				External activity information 2nd MSB			
c(8)	ENERGY			EM_SB_FTD_ACTIVITY_BYTE2	S	R	yes
				Internal activity information 2nd LSB			
d(8)	ENERGY			EM_SB_FTD_ACTIVITY_BYTE1	S	R	yes
				Internal activity information LSB			

19.6 Display 61.06: PSM (Phone State Monitor) information 2

S40 Data display	S40 HELP display
<pre>Ib aaaaa mA Ip bbbbb mA If ccccc mA Cd ddddd mAh</pre>	<pre>Ib Ibattery Ip Iphone If Ifeature Cd disAmount</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	ENERGY			EM_SB_FTD_BAT_CURRENT	W:D	R	yes
	Battery current in mA (-2000 to +2000 decimal)						
b(5)	ENERGY			EM_SB_FTD_PHONE_CURRENT	W:D	R	yes
	Phone current in mA (0 to 2000 decimal)						
c(5)	ENERGY			EM_SB_FTD_FEATURE_CURRENT	W:D	R	yes
	Feature current in mA (0 to 2000 decimal)						
d(5)	ENERGY			EM_SB_FTD_DISCHARGE_AMOUNT	W:D	R	yes
	Discharge amount in mAs (0 to 2000 decimal)						

19.7 Display 61.07: PSM (Phone State Monitor) information 3

S40 Data display	S40 HELP display
<pre>aaa bbb CSst cccc CSpro ddddd BMst eeeee</pre>	<pre>CSIdle ActSW CS state CS protocol Batmon state</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	ENERGY			EM_SB_FTD_CS_IDLE_ACTIVITY	B:D	R	yes
	CS idle activity (0 to 255 decimal)						
b(3)	ENERGY			EM_SB_FTD_ACTIVE_SW_FEATURE	B:D	R	yes
	Active sw features (0 to 255 decimal)						
c(4)	ENERGY			EM_SB_FTD_CS_STATE	S	R	yes
	CS state: ???? Idle NSPS SCAN SIGN = Signalling						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Call CSD HSCS = HSCSD GPRS Data EDGE						
d(5)	ENERGY			EM_SB_FTD_CS_PROTOCOL	S	R	yes
	CS protocol: ????? GSM TDMA CDMA AMPS PDC WCDMA NMT TETRA						
e(5)	ENERGY			EM_SB_FTD_BATMON4_STATE	S	R	yes
	Batmon4 state: IDLE TALK FEAT DATA TRANS PACKD						

19.8 Display 61.08: Basic charging information

S40 Data display	S40 HELP display
<pre> aaa bbb cccc d eeee ffff g hhhh iiii jjj kkk llll </pre>	<pre> ChMD Ch Vbat # ChSt Ichr F AvgCh CIch PWM bTp time </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	ENERGY			EM_SB_FTD_PRESENT_CHA_MODE	S	R	yes
	Present charging state: Not = Not charging Ini = Initialization TCh = Temperature check LiC = Lithium charging Dis = Disabled						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Dch = Discharging Dco = Disconnected Pow = Power Col = Cold charging Hot = Hot charging Mai = Maintenance charging BEr = Battery error NiC = Nickel charging CPa = Control paused CDi = Control disabled						
b(3)	ENERGY			EM_SB_FTD_PRESENT_CHR_ TYPE	S	R	yes
	Present charger type: ??? TEr = Temperature error 2Wi = 2 wire charger 3Wi = 3 wire charger AC7 = ACP7 charger VEr = Voltage error CEr = Current error						
c(4)	ENERGY			EM_SB_FTD_CHA_INST_ BAT_VOLT	W:D	R	yes
	Instantaneous battery voltage in mV (0 to 9999 decimal)						
d	ENERGY			EM_SB_FTD_NUMBER_CHR_ CHECKS	B:D	R	yes
	Number of charger checks (0 to 9 decimal)						
e(4)	ENERGY			EM_SB_FTD_CHR_REC_ STATE	S	R	yes
	Charger recognition state: ???? NoCh = No charger connected ByCk = Battery type check BeCk = Battery temp check CkV7 = Check VCHAR for ACP7 CkI7 = Check ICHAR from ACP7 CkI8 = Check ICHAR from ACP8 or ACP9 Ck3W = Check for 3 wire charger MxCk = Done maximum number of charger checks ChPa = Charger info paused ChDi = Charger info disabled ChOK = Charger OK ChNo = Charger not OK						
f(4)	ENERGY			EM_SB_FTD_INST_CHR_ CURRENT	W:D	R	yes
	Instantaneous charger current in mA (0 to 9999 decimal)						
g	ENERGY			EM_SB_FTD_BAT_FULL_ FLAG	B:D	R	yes
	Battery full flag (0 or 1)						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(5)	ENERGY			EM_SB_FTD_AVERAGE_CHR_VOLT	W:D	R	yes
				Average Vchar in mV (0 to 65535 decimal)			
i(4)	ENERGY			EM_SB_FTD_CALC_CHR_CURRENT	W:D	R	yes
				Calculated Ichar in mA (0 to 9999 decimal)			
j(3)	ENERGY			EM_SB_FTD_SW_PWM_VALUE	B:D	R	yes
				SW PWM value (0 to 255 decimal)			
k(3)	ENERGY			EM_SB_FTD_CURRENT_BAT_TEMP	W:D	R	yes
				Current battery temperature in kelvin (0 to 999 decimal)			
l(4)	ENERGY			EM_SB_FTD_CHA_TIME	W:D	R	yes
				Charge time in 'hhmm' format (85 minutes is e.g. shown as 125)			

19.9 Display 61.09: Extended charging information

S40 Data display	S40 HELP display
<pre> aaa bbb c ddd eee fff ggg hhhh i jjj k llll </pre>	<pre> Chr Old ChM Mod Old HPW PWM OSV Frq O B CSV </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	ENERGY			EM_SB_FTD_PRESENT_CHR_TYPE	S	R	yes
				Present charger type: ??? TEr = Temperature error 2Wi = 2 wire charger 3Wi = 3 wire charger AC7 = ACP7 charger VEr = Voltage error CEr = Current error			
b(3)	ENERGY			EM_SB_FTD_PREVIOUS_CHR_TYPE	S	R	yes
				Previous charger type: ??? TEr = Temperature error 2Wi = 2 wire charger 3Wi = 3 wire charger AC7 = ACP7 charger VEr = Voltage error CEr = Current error			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c	ENERGY			EM_SB_FTD_CHA_MODE	B:D	R	yes
	Constant Voltage Charging method (0 to 9 decimal)						
d(3)	ENERGY			EM_SB_FTD_PRESENT_CHA_MODE	S	R	yes
	Present charging state: Not = Not charging Ini = Initialization TCh = Temperature check LiC = Lithium charging Dis = Disabled Dch = Discharging Dco = Disconnected Pow = Power Col = Cold charging Hot = Hot charging Mai = Maintenance charging BEr = Battery error NiC = Nickel charging CPa = Control paused CDi = Control disabled						
e(3)	ENERGY			EM_SB_FTD_PREVIOUS_CHA_MODE	S	R	yes
	Previous charging mode: ??? Not = Not charging Ini = Initialization TCh = Temperature check LiC = Lithium charging Dis = Disabled Dch = Discharging Dco = Disconnected Pow = Power Col = Cold charging Hot = Hot charging Mai = Maintenance charging BEr = Battery error NiC = Nickel charging CPa = Control paused CDi = Control disabled						
f(3)	ENERGY			EM_SB_FTD_HW_PWM_VALUE	B:D	R	yes
	HW PWM value (0 to 255 decimal)						
g(3)	ENERGY			EM_SB_FTD_SW_PWM_VALUE	B:D	R	yes
	SW PWM value (0 to 255 decimal)						
h(4)	ENERGY			EM_SB_FTD_OS_PWM_BAT_VOLT	W:D	R	yes
	Open switch PWM battery voltage in mV (0 to 9999 decimal)						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
i	ENERGY			EM_SB_FTD_PWM_FREQ	B:H	R	yes
	HW PWM frequency (0 to 3 decimal)						
j(3)	ENERGY			EM_SB_FTD_OVV_LIMIT	S	R	yes
	OVer Voltage limit ??? 3v6 = 3.6 volt 5v1 = 5.1 volt 5v3 = 5.3 volt						
k	ENERGY			EM_SB_FTD_BUB_CHARGING	B:D	R	yes
	Back-Up Battery charging status (0 to 2 decimal): 0 = software control (Should not happen) 1 = disabled 2 = enabled						
l(4)	ENERGY			EM_SB_FTD_CS_PWM_BAT_VOLT	W:D	R	yes
	Close switch PWM battery voltage in mV (0 to 9999 decimal)						

19.10 Display 61.10: Extended charging information 2

S40 Data display	S40 HELP display
<pre> aaa bbb ccc ddd eee fff gggg hhh iii </pre>	<pre> -DV s-DV dvt CA Vbd BT sum MaT dvt </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	ENERGY			EM_SB_FTD_OS_DV_DETECT	B:D	R	yes
	Open switch -dv detect rule (0 to 100 decimal)						
b(3)	ENERGY			EM_SB_FTD_SLOW_DV_DETECT	B:D	R	yes
	Slow -dv detect rule (0 to 100 decimal)						
c(3)	ENERGY			EM_SB_FTD_DV_OVER_TIME_DETECT	B:D	R	yes
	-dv over time detect rule (0 to 100 decimal)						
d(3)	ENERGY			EM_SB_FTD_CHARGE_AMOUNT_DETECT	B:D	R	yes
	Charge amount detect rule (0 to 100 decimal)						
e(3)	ENERGY			EM_SB_FTD_BAT_VOLT_DETECT	B:D	R	yes
	Battery voltage detect rule (0 to 100 decimal)						
f(3)	ENERGY			EM_SB_FTD_BAT_TEMP_DETECT	B:D	R	yes
	Battery temperature detect rule (0 to 100 decimal)						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(4)	ENERGY			EM_SB_FTD_FUZZY_SUM	W:D	R	yes
	Fuzzy sum (0 to 9999 decimal)						
h(3)	ENERGY			EM_SB_FTD_MAINTENANCE_CHA_TIME	W:D	R	yes
	Maintenance charging time in seconds (0 to 999 decimal)						
i(3)	ENERGY			EM_SB_FTD_OS_DV_OVER_TIME	W:D	R	yes
	Open switch dv over time in seconds (0 to 999 decimal)						

19.11 Display 61.11: Configuration parameters etc.

S40 Data display	S40 HELP display
<pre>aaaaa bb c ddd eeee ffff</pre>	<pre>tBar BF CBar CImIn CSafe CEmpty</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	ENERGY			EM_SB_FTD_CALC_BAT_BAR	W:D	R	no
	Calculated time per battery bar in minutes (0 to 99999 decimal).						
b(2)	ENERGY			EM_SB_FTD_CONF_BAT_FOOTPRINT	W:D	R	no
	Id of configured battery footprint. BxB = 1 BxC = 2 BxD = 3 BxN = 4 BL_4C = 11 BL_5C = 12						
c	ENERGY			EM_SB_FTD_CONF_BAT_BARS	B:D	R	no
	Configured number of batt. bars.						
d(3)	ENERGY			EM_SB_FTD_CONF_MIN_CURRENT	W:D	R	no
	Configured minimum standby current for least power consuming phone protocol supported in 0.1 mA units (0 to 999).						
e(4)	ENERGY			EM_SB_FTD_CONF_BAT_SAFETY_LEVEL	W:D	R	no
	Configured Battery Monitor battery low "Safety Net" voltage level in mV (0 to 9999 decimal).						
f(4)	ENERGY			EM_SB_FTD_CONF_BAT_EMPTY_LEVEL	W:D	R	no
	Configured Battery Monitor "Battery Empty" voltage level in mV (0 to 9999 decimal).						

19.12 Display 61.12: Varying EM information 1

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccccc dddddddddddddd</pre>	<pre>Varying EM displays 1-4 Can chg.from rel. to rel.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	ENERGY			EM_SB_FTD_STRING1	S	R	yes
	Varying field test display 1						
b(12)	ENERGY			EM_SB_FTD_STRING2	S	R	yes
	Varying field test display 2						
c(12)	ENERGY			EM_SB_FTD_STRING3	S	R	yes
	Varying field test display 3						
d(12)	ENERGY			EM_SB_FTD_STRING4	S	R	yes
	Varying field test display 4						

19.13 Display 61.13: Varying EM information 2

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccccc dddddddddddddd</pre>	<pre>Varying EM displays 5-8 Can chg.from rel. to rel.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	ENERGY			EM_SB_FTD_STRING5	S	R	yes
	Varying field test display 5						
b(12)	ENERGY			EM_SB_FTD_STRING6	S	R	yes
	Varying field test display 6						
c(12)	ENERGY			EM_SB_FTD_STRING7	S	R	yes
	Varying field test display 7						
d(12)	ENERGY			EM_SB_FTD_STRING8	S	R	yes
	Varying field test display 8						

20 Group 62: Common general displays

20.1 Display 62.01: Reasons for SW resets

ADSP and CDSP reset reasons:

STARTUP_FAILED: DSP startup was attempted, but a timeout occurred

NO RESPONSE: DSP stopped responding

ERROR: DSP detected a fatal error and asked reset

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbbbbbbbb cccccccccc</pre>	<pre>Reset reason Task name System</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_LAST_RESET_REASON	B:H	R	no
Last reset reason shown as HEX number (Monitor Server 025.004): MON_FTD_RESET_UNKNOWN: 0x00000001 MON_FTD_RESET_POWER_OFF_CHARGER_CONNECTED: 0x00000002 MON_FTD_RESET_POWER_OFF_KEY_PRESSED: 0x00000003 MON_FTD_RESET_SW_RESET_REQUESTED: 0x00000004 MON_FTD_RESET_INT_ERROR: 0x00000005 MON_FTD_RESET_STACK_OVERFLOW: 0x00000006 MON_FTD_RESET_WD_RESET_REQUESTED: 0x00000007 MON_FTD_RESET_DIV_BY_ZERO: 0x00000008 MON_FTD_RESET_DSP_NO_RESPONSE_ERROR: 0x00000009 MON_FTD_RESET_DSP_ERROR: 0x0000000A MON_FTD_RESET_DSP_INVALID_MSG_ERROR: 0x0000000B MON_FTD_RESET_PRODUCTION_RESET: 0x0000000C MON_FTD_RESET_ASSERTION_FAILED: 0x0000000D MON_FTD_RESET_UNDEFINED_INSTRUCTION: 0x0000000E MON_FTD_RESET_IO_ABORT: 0x0000000F MON_FTD_RESET_NULL_ACCESS: 0x00000010 MON_FTD_RESET_ADDRESS_ERROR: 0x00000011 MON_FTD_RESET_ALIGNMENT_ERROR: 0x00000012 MON_FTD_RESET_FLASH_WRITE_PROTECTION: 0x00000013 MON_FTD_RESET_CBUS_ERROR: 0x00000014 MON_FTD_RESET_POWER_OFF_RTC: 0x00000015 MON_FTD_RESET_OS_FATAL_HANDLER: 0x00000016 MON_FTD_RESET_FLASH_BLOCK_OVERFLOW: 0x00000017 MON_FTD_RESET_DSP_STARTUP_FAILED: 0x00000018 MON_FTD_RESET_ASIC_WD_RESET: 0x00000019							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
		MON_FTD_RESET_EPOC_RESET: 0x0000001A MON_FTD_RESET_ADSP_NO_RESPONSE_ERROR: 0x0000001B MON_FTD_RESET_ADSP_ERROR: 0x0000001C MON_FTD_RESET_ADSP_INVALID_MSG_ERROR: 0x0000001D MON_FTD_RESET_ADSP_STARTUP_FAILED: 0x0000001E MON_FTD_RESET_ABORT_EBUSC: 0x0000001F MON_FTD_RESET_ABORT_PREFETCH: 0x00000020 MON_FTD_RESET_ABORT_DATA: 0x00000021					
b(12)	MON			FTD_SB_TASK_BEFORE_RESET	S	R	no
	Name of running task before reset Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
c(9)	MON			FTD_SB_SYSTEM_BEFORE_RESET	S	R	no
	Name of the active system (GSM, TDMA, CDMA, WCDMA) before reset						

20.2 Display 62.02: Counters for resets 1

Counters are stored to permanent memory.

These counters are not PPC counters, except FTD_SB_PPC_ASIC_WD_RESET

S40 Data display	S40 HELP display
<pre>aa bb cc jj dd ee ff kk gg hh ii</pre>	<pre>UnkChaKeyBOF SW IntStaUna WD DivAWD</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_UNKNOWN_RESET	W:D	R	no
	UNKNOWN						
b(2)	MON			FTD_SB_POFF_CHARGER_CNN	W:D	R	no
	POWER_OFF_CHARGER_CONNECTED (charger connected when powering off)						
c(2)	MON			FTD_SB_POFF_KEY	W:D	R	no
	POWER_OFF_KEY_PRESSED (too fast power off/on)						
d(2)	MON			FTD_SB_SW_RESET	W:D	R	no
	SW_RESET_REQUESTED						
e(2)	MON			FTD_SB_INTERNAL_ERROR	W:D	R	no
	INT_ERROR						
f(2)	MON			FTD_SB_STACK_OF_RESET	W:D	R	no
	STACK_OVERFLOW						
g(2)	MON			FTD_SB_WATCHDOG_RESET	W:D	R	no
	WD_RESET_REQUESTED						
h(2)	MON			FTD_SB_DIV_BY_0_RESET	W:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
i(2)	MON			FTD_SB_PPC_ASIC_WD_ RESET	B:D	R	no
	PPC number 18 : ASIC watchdog reset counter.						
j(2)	MON			FTD_SB_FLASH_BLOCK_ OVERFLOW	W:D	R	no
	FLASH_BLOCK_OVERFLOW						
k(2)	MON			FTD_SB_UNHANDLED_ ABORT_RESET	W:D	R	no
	UNHANDLED_ABORT						

20.3 Display 62.03: Counters for resets 2

Counters are stored to permanent memory.

These counters are not PPC counters.

S40 Data display	S40 HELP display
<pre>aa bb cc dd ee ff gg hh ii jj kk</pre>	<pre>Prod As Un IO Null Add Alig Flas CBus OSF E</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_PRODUCTION_ RESET	W:D	R	no
	PRODUCTION_RESET						
b(2)	MON			FTD_SB_ASSERTFAIL_RESET	W:D	R	no
	ASSERTION_FAILED						
c(2)	MON			FTD_SB_UNDEFINSTR_ RESET	W:D	R	no
	UNDEFINED_INSTRUCTION						
d(2)	MON			FTD_SB_IO_ABORT_RESET	W:D	R	no
	IO_ABORT						
e(2)	MON			FTD_SB_NULLPOINTER_ RESET	W:D	R	no
	NULL_ACCESS						
f(2)	MON			FTD_SB_ADDR_ERROR_ RESET	W:D	R	no
	ADDRESS_ERROR						
g(2)	MON			FTD_SB_ALIGNMENT_ RESET	W:D	R	no
	ALIGNMENT_ERROR						
h(2)	MON			FTD_SB_FLASH_WRITE_ RESET	W:D	R	no
	FLASH_WRITE_PROTECTION						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
i(2)	MON			FTD_SB_CBUS_RESET	W:D	R	no
	CBUS_ERROR						
j(2)	MON			FTD_SB_OS_FATAL_RESET	W:D	R	no
	OS_FATAL_HANDLER						
k(2)	MON			FTD_SB_EPOC_RESET	W:D	R	no
	EPOC_RESET						

20.4 Display 62.04: Counters for DSP resets

Counters are stored to permanent memory.

These counters are not PPCs.

ADSP reset reasons:

STARTUP_FAILED: DSP startup was attempted, but a timeout occurred

NO RESPONSE: DSP stopped responding

ERROR: DSP detected a fatal error and asked reset

S40 Data display	S40 HELP display
<pre>aa bb cc jj dd ee ff kk ll gg hh ii</pre>	<pre>GSM..... A. TDMA..... D. S. WCDMA, ... P.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_GSMdsp_STARTUP_FAILED	W:D	R	no
	GSM DSP startup fail counter						
b(2)	MON			FTD_SB_GSMdsp_NO_RESPONSE	W:D	R	no
	GSM DSP no response (dead) counter						
c(2)	MON			FTD_SB_GSMdsp_ERROR	W:H	R	yes
	GSM resets						
d(2)	MON			FTD_SB_TDMADSP_STARTUP_FAILED	W:D	R	no
	TDMA DSP startup fail counter						
e(2)	MON			FTD_SB_TDMADSP_NO_RESPONSE	W:D	R	no
	TDMA DSP no response (dead) counter						
f(2)	MON			FTD_SB_TDMADSP_ERROR	W:H	R	yes
	TDMA resets						
g(2)	MON			FTD_SB_WCDMADSP_STARTUP_FAILED	W:D	R	no
	WCDMA DSP startup fail counter						
h(2)	MON			FTD_SB_WCDMADSP_NO_RESPONSE	W:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
WCDMA DSP no response (dead) counter							
i(2)	MON			FTD_SB_WCDMADSP_ERROR	W:H	R	yes
WCDMA resets							
j(2)	MON			FTD_SB_ADSP_STARTUP_FAILED	W:D	R	no
ADSP startup fail counter							
k(2)	MON			FTD_SB_ADSP_NO_RESPONSE	W:D	R	no
ADSP no response (dead) counter							
l(2)	MON			FTD_SB_ADSP_ERROR	W:H	R	yes
Application resets							

20.5 Display 62.08: Reliability Test Display

This display can be used to set phone into test state for reliability stressing. To activate this functionality execute this display by selecting R&D test Displays from main menu and entering the display number to the query.

S40 Data display	S40 HELP display
RELIABILITY STRESSING ON	Act.via menu DE-act. via PWR-key / Remove batt.

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	MTC			MTC_STATE_REQ	B:D	R	no
Set MS to test stateValue: MTC_TEST							

20.6 Display 62.10: Information about MCU and DSP software versions

S40 Data display	S40 HELP display
aaaaaaaaaaaa bbbbbb cccc DSP : dddddddddddd	MCU Version MCU Date Chk DSP Version

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	INFO			FTD_SB_MCU_VERSION	S	R	yes
Version number of MCU SW (e.g. 2.081)							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(6)	INFO			FTD_SB_VERSION_DATE	S	R	yes
	Date of version.c Format of the date should be DDMMYY.						
c(4)	INFO			FTD_SB_MCU_CHECKSUM	W:H	R	yes
	MCU SW checksum						
d(12)	INFO			FTD_SB_DSP_VERSION	S	R	yes
	Version of currently active DSP software (GSM, TDMA,)						

20.7 Display 62.11: Information about HW version

S40 Data display	S40 HELP display
HW : aaaa	HW version

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	INFO			FTD_SB_HW_VERSION	S	R	yes
	Hardware version						

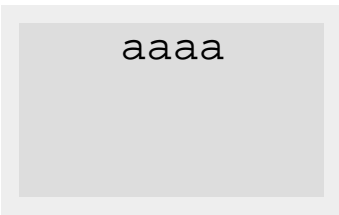
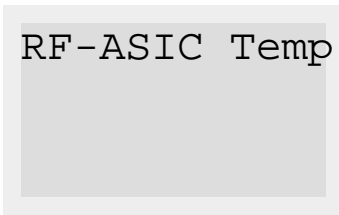
20.8 Display 62.12: Information about PPM

S40 Data display	S40 HELP display
aaaaaaaaaaaa bbbbbbbb	PPM TEXTS

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	INFO			FTD_SB_PPM_VERSION	S	R	yes
	PPM version (e.g. 2.081B)						
b(7)	INFO			FTD_SB_TEXT_VERSION	S	R	yes
	Language package version						

20.9 Display 62.40: RF_ASIC Temperature

S40 Data display	S40 HELP display
	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSM_DSP			FTD_SB_RF_ASIC_TEMP	W:H	R	yes
Temperature in degrees Celsius. Can be positive (+) or negative (-) integer value. Format sccc, where s is '+' or '-'.							

21 Group 63: Common OS status displays

21.1 Display 63.01: OS Block usage statistics (Blocks 1-8)

1. row: Block set 1, block set 2
2. row: Block set 3, block set 4
3. row: Block set 5, block set 6
4. row: Block set 7, block set 8

Note! The max value of the above fields is FF (255) even though the OS limits the maximum number of blocks in the block set to FFFF (65535).. FTD will show FF in case of the field value exceeds FF.

S40 Data display	S40 HELP display
<pre>aa bb cc dd ee ff gg hh ii jj kk ll mm nn oo pp</pre>	<pre>ResF1 ResF2 ResF3 ResF4 ResF5 ResF6 ResF7 ResF8</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_BLOCK_RES_SET1	B:H	R	no
	Number of reserved blocks, set 1						
b(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET1	B:H	R	no
	Number of free blocks in worst case, set 1						
c(2)	MON			FTD_SB_BLOCK_RES_SET2	B:H	R	no
	Number of reserved blocks, set 2						
d(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET2	B:H	R	no
	Number of free blocks in worst case, set 2						
e(2)	MON			FTD_SB_BLOCK_RES_SET3	B:H	R	no
	Number of reserved blocks, set 3						
f(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET3	B:H	R	no
	Number of free blocks in worst case, set 3						
g(2)	MON			FTD_SB_BLOCK_RES_SET4	B:H	R	no
	Number of reserved blocks, set 4						
h(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET4	B:H	R	no
	Number of free blocks in worst case, set 4						
i(2)	MON			FTD_SB_BLOCK_RES_SET5	B:H	R	no
	Number of reserved blocks, set 5						
j(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET5	B:H	R	no
	Number of free blocks in worst case, set 5						
k(2)	MON			FTD_SB_BLOCK_RES_SET6	B:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
l(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET6	B:H	R	no
				Number of free blocks in worst case, set 6			
m(2)	MON			FTD_SB_BLOCK_RES_SET7	B:H	R	no
				Number of reserved blocks, set 7			
n(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET7	B:H	R	no
				Number of free blocks in worst case, set 7			
o(2)	MON			FTD_SB_BLOCK_RES_SET8	B:H	R	no
				Number of reserved blocks, set 8			
p(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET8	B:H	R	no
				Number of free blocks in worst case, set 8			

21.2 Display 63.02: OS Block usage statistics (Blocks 9-16)

1. row: Block set 9, block set 10
2. row: Block set 11, block set 12
3. row: Block set 13, block set 14
4. row: Block set 15, block set 16

S40 Data display	S40 HELP display
<pre>aa bb cc dd ee ff gg hh ii jj kk ll mm nn oo pp</pre>	<pre>ResF9 ResF10 ResF11ResF12 ResF13ResF14 ResF15ResF16</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_BLOCK_RES_SET9	B:H	R	no
				Number of reserved blocks, set 9			
b(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET9	B:H	R	no
				Number of free blocks in worst case, set 9			
c(2)	MON			FTD_SB_BLOCK_RES_SET10	B:H	R	no
				Number of reserved blocks, set 10			
d(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET10	B:H	R	no
				Number of free blocks in worst case, set 10			
e(2)	MON			FTD_SB_BLOCK_RES_SET11	B:H	R	no
				Number of reserved blocks, set 11			
f(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET11	B:H	R	no
				Number of free blocks in worst case, set 11			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(2)	MON			FTD_SB_BLOCK_RES_SET12	B:H	R	no
	Number of reserved blocks, set 12						
h(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET12	B:H	R	no
	Number of free blocks in worst case, set 12						
i(2)	MON			FTD_SB_BLOCK_RES_SET13	B:H	R	no
	Number of reserved blocks, set 13						
j(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET13	B:H	R	no
	Number of free blocks in worst case, set 13						
k(2)	MON			FTD_SB_BLOCK_RES_SET14	B:H	R	no
	Number of reserved blocks, set 14						
l(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET14	B:H	R	no
	Number of free blocks in worst case, set 14						
m(2)	MON			FTD_SB_BLOCK_RES_SET15	B:H	R	no
	Number of reserved blocks, set 15						
n(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET15	B:H	R	no
	Number of free blocks in worst case, set 15						
o(2)	MON			FTD_SB_BLOCK_RES_SET16	B:H	R	no
	Number of reserved blocks, set 16						
p(2)	MON			FTD_SB_FREE_BL_WORST_CASE_SET16	B:H	R	no
	Number of free blocks in worst case, set 16						

21.3 Display 63.03: OS block allocation errors

Note: This display is only valid when the counter for failed deallocations is not zero.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbb cccccccccccc dd ee fff gg hh </pre>	<pre> Ptr Cntr Task OWrOut SetO Mod Big </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_POINTER_TO_DEALLOC	DW:H	R	no
	Pointer to memory where double deallocation was called, in hex format. Valid only when double dellocation has happened.						
b(3)	MON			FTD_SB_PPC_DMM_OVER_DEALLOC	W:H	R	no
	Counter for failed deallocations.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(12)	MON			FTD_SB_TASK_DOUBLE_DEALLOC	S	R	no
				Name of task that last tried to double deallocate a block. Valid only when double dellocation has happened.Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
d(2)	MON			FTD_SB_DYNMEM_OVERWRITE	W:H	R	no
				Counter for overwrites			
e(2)	MON			FTD_SB_DYNMEM_EXHAUSTED	W:H	R	no
				Counter for out of memory			
f(3)	MON			FTD_SB_DYNMEM_INTERNAL	W:H	R	no
				Counter for internal DYNMEM errors			
g(2)	MON			FTD_SB_MODIFIED_POINTER	W:H	R	no
				Counter for modified block pointer			
h(2)	MON			FTD_SB_DYNMEM_BIG_BLOCK	W:H	R	no
				Counter for too big block			

21.4 Display 63.04: Memory status before reset

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbbb</pre>	<pre>Status of Block sets</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_BLOCK_SET_STATUS_1	S	R	no
				Status of each block set before reset. First position contains the status of block set 1, second position the status of block set 2 and so on. Possible values for each block set are: 0 : status OK 1 : block set full 2 : (de)allocation error or total memory corruption Note: This display is only valid when a unknown or a stack overflow interrupt has occurred.			
b(12)	MON			FTD_SB_BLOCK_SET_STATUS_2	S	R	no
				See FTD_SB_BLOCK_SET_STATUS_1 description.			

21.5 Display 63.05: OS pre-reset error status

S40 Data display	S40 HELP display
<pre>aa bb cccccc P1 dddddddd P2 eeeeeeee P3 ffffffff</pre>	<pre>OS PRE-RESET ERROR</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_OS_PRE_RESET_ERROR_STATUS	B:H	R	no
				Status code byte, 00 == no error, other values in os_trace_data.txt (OS_RESPONSES)			
b(2)	MON			FTD_SB_OS_PRE_RESET_ERROR_FUNCTION_ID	B:H	R	no
				OS function id where error/warn/remark occurred, values in os_trace_data.txt (MONITOR_HOOK_IDS)			
c(6)	MON			FTD_SB_OS_PRE_RESET_ERROR_TASK	S	R	no
				Task name Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
d(8)	MON			FTD_SB_OS_PRE_RESET_ERROR_PARAMETER_1	DW:H	R	no
				Parameter 1, 32-bit hex number. See dct4_osmo_interpretation.txt			
e(8)	MON			FTD_SB_OS_PRE_RESET_ERROR_PARAMETER_2	DW:H	R	no
				Parameter 2, 32-bit hex number. See dct4_osmo_interpretation.txt			
f(8)	MON			FTD_SB_OS_PRE_RESET_ERROR_PARAMETER_3	DW:H	R	no
				Parameter 3, 32-bit hex number. See dct4_osmo_interpretation.txt			

21.6 Display 63.06: OS current error status

S40 Data display	S40 HELP display
<pre>aa bb cccccc P1 dddddddd P2 eeeeeeee P3 ffffffff</pre>	<pre>OS CURRENT ERROR</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_OS_CURRENT_ERROR_STATUS	B:H	R	no
				Status code byte, 00 == no error, other values in os_trace_data.txt (OS_RESPONSES)			
b(2)	MON			FTD_SB_OS_CURRENT_ERROR_FUNCTION_ID	B:H	R	no
				OS function id where error/warn/remark occurred, values in os_trace_data.txt (MONITOR_HOOK_IDS)			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(6)	MON			FTD_SB_OS_CURRENT_ERROR_TASK	S	R	no
				Task name Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
d(8)	MON			FTD_SB_OS_CURRENT_ERROR_PARAMETER_1	DW:H	R	no
				Parameter 1, 32-bit hex number. See dct4_osmo_interpretation.txt			
e(8)	MON			FTD_SB_OS_CURRENT_ERROR_PARAMETER_2	DW:H	R	no
				Parameter 2, 32-bit hex number. See dct4_osmo_interpretation.txt			
f(8)	MON			FTD_SB_OS_CURRENT_ERROR_PARAMETER_3	DW:H	R	no
				Parameter 3, 32-bit hex number. See dct4_osmo_interpretation.txt			

21.7 Display 63.07: OS pre-reset warning status

S40 Data display	S40 HELP display
<pre>aa bb cccccc P1 dddddddd P2 eeeeeeee P3 ffffffff</pre>	<pre>OS PRE-RESET WARNING</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_OS_PRE_RESET_WARN_STATUS	B:H	R	no
				Status code byte, 00 == no error, other values in os_trace_data.txt (OS_RESPONSES)			
b(2)	MON			FTD_SB_OS_PRE_RESET_WARN_FUNCTION_ID	B:H	R	no
				OS function id where error/warn/remark occurred, values in os_trace_data.txt (MONITOR_HOOK_IDS)			
c(6)	MON			FTD_SB_OS_PRE_RESET_WARN_TASK	S	R	no
				Task name Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt.			
d(8)	MON			FTD_SB_OS_PRE_RESET_WARN_PARAMETER_1	DW:H	R	no
				Parameter 1, 32-bit hex number. See dct4_osmo_interpretation.txt			
e(8)	MON			FTD_SB_OS_PRE_RESET_WARN_PARAMETER_2	DW:H	R	no
				Parameter 2, 32-bit hex number. See dct4_osmo_interpretation.txt			
f(8)	MON			FTD_SB_OS_PRE_RESET_WARN_PARAMETER_3	DW:H	R	no
				Parameter 3, 32-bit hex number. See dct4_osmo_interpretation.txt			

21.8 Display 63.08: OS current warning status

S40 Data display	S40 HELP display
<pre>aa bb cccccc P1 dddddddd P2 eeeeeeee P3 ffffffff</pre>	<pre>OS CURRENT WARNING</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_OS_CURRENT_WARN_STATUS	B:H	R	no
				Status code byte, 00 == no error, other values in os_trace_data.txt (OS_RESPONSES)			
b(2)	MON			FTD_SB_OS_CURRENT_WARN_FUNCTION_ID	B:H	R	no
				OS function id where error/warn/remark occurred, values in os_trace_data.txt (MONITOR_HOOK_IDS)			
c(6)	MON			FTD_SB_OS_CURRENT_WARN_TASK	S	R	no
				Task name Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
d(8)	MON			FTD_SB_OS_CURRENT_WARN_PARAMETER_1	DW:H	R	no
				Parameter 1, 32-bit hex number. See dct4_osmo_interpretation.txt			
e(8)	MON			FTD_SB_OS_CURRENT_WARN_PARAMETER_2	DW:H	R	no
				Parameter 2, 32-bit hex number. See dct4_osmo_interpretation.txt			
f(8)	MON			FTD_SB_OS_CURRENT_WARN_PARAMETER_3	DW:H	R	no
				Parameter 3, 32-bit hex number. See dct4_osmo_interpretation.txt			

21.9 Display 63.09: OS pre-reset remark status

S40 Data display	S40 HELP display
<pre>aa bb cccccc P1 dddddddd P2 eeeeeeee P3 ffffffff</pre>	<pre>OS PRE-RESET REMARK</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_OS_PRE_RESET_REM_STATUS	B:H	R	no
				Status code byte, 00 == no error, other values in os_trace_data.txt (OS_RESPONSES)			
b(2)	MON			FTD_SB_OS_PRE_RESET_REM_FUNCTION_ID	B:H	R	no
				OS function id where error/warn/remark occurred, values in os_trace_data.txt (MONITOR_HOOK_IDS)			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(6)	MON			FTD_SB_OS_PRE_RESET_REM_TASK	S	R	no
				Task name Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
d(8)	MON			FTD_SB_OS_PRE_RESET_REM_PARAMETER_1	DW:H	R	no
				Parameter 1, 32-bit hex number. See dct4_osmo_interpretation.txt			
e(8)	MON			FTD_SB_OS_PRE_RESET_REM_PARAMETER_2	DW:H	R	no
				Parameter 2, 32-bit hex number. See dct4_osmo_interpretation.txt			
f(8)	MON			FTD_SB_OS_PRE_RESET_REM_PARAMETER_3	DW:H	R	no
				Parameter 3, 32-bit hex number. See dct4_osmo_interpretation.txt			

21.10 Display 63.10: OS current remark status

S40 Data display	S40 HELP display
<pre>aa bb cccccc P1 dddddddd P2 eeeeeeee P3 ffffffff</pre>	<pre>OS CURRENT REMARK</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_OS_CURRENT_REM_STATUS	B:H	R	no
				Status code byte, 00 == no error, other values in os_trace_data.txt (OS_RESPONSES)			
b(2)	MON			FTD_SB_OS_CURRENT_REM_FUNCTION_ID	B:H	R	no
				OS function id where error/warn/remark occurred, values in os_trace_data.txt (MONITOR_HOOK_IDS)			
c(6)	MON			FTD_SB_OS_CURRENT_REM_TASK	S	R	no
				Task name Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
d(8)	MON			FTD_SB_OS_CURRENT_REM_PARAMETER_1	DW:H	R	no
				Parameter 1, 32-bit hex number. See dct4_osmo_interpretation.txt			
e(8)	MON			FTD_SB_OS_CURRENT_REM_PARAMETER_2	DW:H	R	no
				Parameter 2, 32-bit hex number. See dct4_osmo_interpretation.txt			
f(8)	MON			FTD_SB_OS_CURRENT_REM_PARAMETER_3	DW:H	R	no
				Parameter 3, 32-bit hex number. See dct4_osmo_interpretation.txt			

21.11 Display 63.11: Heap system status

S40 Data display	S40 HELP display
<pre>aaaaaaa bbbb ccccccc dddd jjjjjjjj ee ff gg hh ii</pre>	<pre>usedbyt blks freebyt blks largfree zz dd ii cc TT</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(7)	MON			FTD_SB_HEAP_USED_BYTES	DW:D	R	no
	Used bytes						
b(4)	MON			FTD_SB_HEAP_USED_BLOCKS	W:D	R	no
	Used block count						
c(7)	MON			FTD_SB_HEAP_FREE_BYTES	DW:D	R	no
	Free bytes						
d(4)	MON			FTD_SB_HEAP_FREE_BLOCKS	W:D	R	no
	Free block count						
e(2)	MON			FTD_SB_HEAP_ZERO_ALLOCATES	B:D	R	no
	Count of zero allocations						
f(2)	MON			FTD_SB_HEAP_DOUBLE_DEALLOC	B:D	R	no
	Count of double deallocations						
g(2)	MON			FTD_SB_HEAP_INVALID_POINTER	B:D	R	no
	Count of invalid pointers						
h(2)	MON			FTD_SB_HEAP_CORRUPT_BLOCK	B:D	R	no
	Count of corrupt blocks						
i(2)	MON			FTD_SB_HEAP_PNTRCHK_FAIL	DW:D	R	no
	Total count of pointer check failures						
j(8)	MON			FTD_SB_HEAP_LARGEST_FREE	DW:D	R	no
	Size of the largest free heap block in bytes						

21.12 Display 63.12: Heap top users

Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt.

S40 Data display	S40 HELP display
<pre>aaaaaaa bbbb ccccccc dddd eeeeeee ffff ggggggg hhhh</pre>	<pre>TOP blks 2nd blks 3rd blks 4t blks</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(7)	MON			FTD_SB_HEAP_MEM_OWNER_TASK_1	S	R	no
				Task name			
b(4)	MON			FTD_SB_HEAP_MEM_OWNER_BLOCKS_1	W:H	R	no
				Number of blocks used			
c(7)	MON			FTD_SB_HEAP_MEM_OWNER_TASK_2	S	R	no
				Task name			
d(4)	MON			FTD_SB_HEAP_MEM_OWNER_BLOCKS_2	W:H	R	no
				Number of blocks used			
e(7)	MON			FTD_SB_HEAP_MEM_OWNER_TASK_3	S	R	no
				Task name			
f(4)	MON			FTD_SB_HEAP_MEM_OWNER_BLOCKS_3	W:H	R	no
				Number of blocks used			
g(7)	MON			FTD_SB_HEAP_MEM_OWNER_TASK_4	S	R	no
				Task name			
h(4)	MON			FTD_SB_HEAP_MEM_OWNER_BLOCKS_4	W:H	R	no
				Number of blocks used			

21.13 Display 63.13: Failed assertions

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbbbbbbb cccc</pre>	<pre>FILE LINE total count</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_ASSERT_LATEST_FILE	S	R	no
	Filename, where assertion happened						
b(10)	MON			FTD_SB_ASSERT_LATEST_LINE	DW:D	R	no
	Line, where assertion happened						
c(5)	MON			FTD_SB_ASSERT_TOTAL_COUNT	W:D	R	no
	Counter for failed assertions						

21.14 Display 63.30: Information of OS_SYSTEM_STACK

Note! Values are not stored to permanent memory.

S40 Data display	S40 HELP display
<pre> aaaa bbbb c d </pre>	<pre> FIQ IRQ Pre-reset </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_STACK_STATUS_SYSTEM_1	DW:D	R	no
	FIQ stack status (OS_SYSTEM_STACK_1)						
b(4)	MON			FTD_SB_STACK_STATUS_SYSTEM_2	DW:D	R	no
	IRQ stack status (OS_SYSTEM_STACK_2)						
c	MON			FTD_SB_STACK_PRE_RESET_STATUS_SYSTEM_1	B:D	R	no
	Shows the status of FIQ stack just before reset. 0 : status OK, no overflow 1 : status not OK, stack overflow						
d	MON			FTD_SB_STACK_PRE_RESET_STATUS_SYSTEM_2	B:D	R	no
	Shows the status of IRQ stack just before reset: 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.15 Display 63.31: Select task set

This displays toggles task set that is shown in displays 63.32 - 63.99. To toggle the set:

1. Press menu-button.
2. Scroll in the main menu to loop to field test display item.
3. Press Select-button
4. Select this display in executive mode by entering 6331 at the query prompt.
5. Confirm with the Ok button.

6. Task set is toggled and the resulting set is shown in the display

Note 1: If the display is selected using arrow buttons, then the task set selection is not toggled.

Note 2: This display may have been configured off in products that have less than 69 tasks.

S40 Data display	S40 HELP display
<pre>SELECTED TASK SET: a</pre>	<pre>Toggle task set for displays 63.32-63.99</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	MON			FTD_SB_TASK_SET_STATUS	B:D	R	no
	Current task set selection for displays 63.32 - 63.99 1 = tasks 0 - 67 2 = tasks 68 - 135						
EXE	MON			FTD_SB_TASK_SET_TOGGLE	B:D	R	no
	Toggle OS task set.						

21.16 Display 63.32: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_0	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_0	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_ TASK_0	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_ TASK_0	B:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_0	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.17 Display 63.33: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_1	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_1	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_1	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_1	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_1	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.18 Display 63.34: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_2	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_2	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_2	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_2	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_2	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.19 Display 63.35: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_3	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_3	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_3	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_3	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_3	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.20 Display 63.36: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_4	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_4	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_4	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_4	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_4	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.21 Display 63.37: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_5	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_5	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_5	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_5	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_5	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.22 Display 63.38: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_6	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_6	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_6	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_6	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_6	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.23 Display 63.39: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_7	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_7	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_7	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_7	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_7	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.24 Display 63.40: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_8	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_8	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_8	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_8	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_8	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.25 Display 63.41: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_9	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_9	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_ TASK_9	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_ TASK_9	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_ RESET_STATUS_9	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.26 Display 63.42: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_10	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_10	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_10	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_10	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_10	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.27 Display 63.43: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_11	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_11	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_11	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_11	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_11	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.28 Display 63.44: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_12	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_12	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_12	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_12	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_12	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.29 Display 63.45: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_13	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_13	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_13	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_13	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_13	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.30 Display 63.46: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_14	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_14	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_14	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_14	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_14	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.31 Display 63.47: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_15	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_15	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_15	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_15	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_15	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.32 Display 63.48: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_16	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_16	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_16	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_16	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_16	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.33 Display 63.49: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_17	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_17	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_17	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_17	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_17	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.34 Display 63.50: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_18	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_18	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_18	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_18	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_18	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.35 Display 63.51: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_19	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_19	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_19	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_19	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_19	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.36 Display 63.52: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_20	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_20	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_20	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_20	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_20	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.37 Display 63.53: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_21	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_21	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_21	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_21	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_21	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.38 Display 63.54: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_22	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_22	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_22	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_22	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_22	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.39 Display 63.55: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_23	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_23	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_ TASK_23	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_ TASK_23	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_23	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.40 Display 63.56: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_24	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_24	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_24	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_24	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_24	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.41 Display 63.57: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_25	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_25	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_25	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_25	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_25	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.42 Display 63.58: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_26	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_26	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_26	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_26	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_26	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.43 Display 63.59: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_27	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_27	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_27	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_27	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_27	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.44 Display 63.60: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_28	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_28	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_28	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_28	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_28	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.45 Display 63.61: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_29	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_29	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_29	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_29	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_29	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.46 Display 63.62: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_30	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_30	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_30	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_30	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_30	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.47 Display 63.63: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_31	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_31	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
					Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.		
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_31	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_31	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_31	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.48 Display 63.64: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_32	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_TASK_32	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_32	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_32	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_32	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.49 Display 63.65: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e ccccc</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_33	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_33	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_33	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_3	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_33	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.50 Display 63.66: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e ccccc ddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_34	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_34	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_34	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_34	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_34	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.51 Display 63.67: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_35	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_35	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_35	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_35	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_35	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.52 Display 63.68: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_36	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_36	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_36	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_36	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_36	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.53 Display 63.69: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e ccccc ddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_37	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_37	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_ TASK_37	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_ TASK_37	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_ RESET_STATUS_37	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.54 Display 63.70: Information about tasks

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e ccccc ddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_38	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_38	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_38	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_38	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_38	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.55 Display 63.71: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_39	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_TASK_39	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_39	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_39	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_39	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.56 Display 63.72: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_40	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_40	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_ TASK_40	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_ TASK_40	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_40	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.57 Display 63.73: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_41	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_41	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_41	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_41	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_41	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.58 Display 63.74: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_42	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_42	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_42	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_42	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_42	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.59 Display 63.75: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_43	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_43	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_ TASK_43	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_ TASK_43	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_ RESET_STATUS_43	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.60 Display 63.76: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_44	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_44	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_44	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_44	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_44	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.61 Display 63.77: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_45	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_45	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_45	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_45	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_45	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.62 Display 63.78: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_46	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_46	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_46	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_46	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_46	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.63 Display 63.79: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_47	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_47	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_47	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_47	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_47	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.64 Display 63.80: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_48	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_48	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_48	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_48	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_48	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.65 Display 63.81: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_49	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_TASK_49	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_49	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_49	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_49	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.66 Display 63.82: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_50	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_50	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_50	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_50	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_50	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.67 Display 63.83: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_51	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_51	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_51	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_51	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_51	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.68 Display 63.84: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_52	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_52	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_52	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_52	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_52	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.69 Display 63.85: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_53	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_53	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_53	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_53	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_53	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.70 Display 63.86: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_54	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_54	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_ TASK_54	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_ TASK_54	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_54	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.71 Display 63.87: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_55	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_ TASK_55	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_55	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_55	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_55	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.72 Display 63.88: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_56	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_56	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_56	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_56	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_56	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.73 Display 63.89: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc ddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_57	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_57	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_57	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_57	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_57	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.74 Display 63.90: Information about tasks

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc ddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_58	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_58	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_58	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_58	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_58	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.75 Display 63.91: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_59	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_59	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_59	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_59	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_59	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.76 Display 63.92: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_60	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_60	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_60	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_60	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_60	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.77 Display 63.93: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e ccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_61	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_61	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_61	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_61	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_61	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.78 Display 63.94: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e ccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_62	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_62	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
					Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.		
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_62	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_62	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_62	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.79 Display 63.95: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_63	S	R	no
				Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt			
b(5)	MON			FTD_SB_STACK_STATUS_TASK_63	DW:D	R	no
				Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.			
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_63	B:D	R	no
				Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_63	B:D	R	no
				Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.			
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_63	B:D	R	no
				Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow			

21.80 Display 63.96: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_64	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_64	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_64	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_64	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_64	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.81 Display 63.97: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbb/e cccccc dddddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_65	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_65	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_65	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_65	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_65	B:D	R	no
	Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow						

21.82 Display 63.98: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_66	S	R	no
	Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt						
b(5)	MON			FTD_SB_STACK_STATUS_TASK_66	DW:D	R	no
	Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.						
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_66	B:D	R	no
	Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_66	B:D	R	no
	Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_66	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

21.83 Display 63.99: Information about tasks

These displays show information either about tasks 0...67 or tasks 68 - 136 depending on which task set is currently selected, see display 63.31.

where x = 0...67 and corresponds either to task x or task x + 68 depending on selected task set.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbb/e cccc dddd</pre>	<pre>Task Name Stack/o.flow Mailbox Fastmailbox</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_TASKNAME_67	S	R	no
Task Name (ASCII) Note: task names are not available in some products. In that case task number is shown, see os_trace_data.txt							
b(5)	MON			FTD_SB_STACK_STATUS_TASK_67	DW:D	R	no
Number tells how many stack memory locations have been empty in the worst case. So, if number is zero, stack has been full. Values are not stored to permanent memory.							
c(5)	MON			FTD_SB_MSGBUF_STATUS_TASK_67	B:D	R	no
Worst case Mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
d(5)	MON			FTD_SB_FASTBUF_STATUS_TASK_67	B:D	R	no
Fast mailbox status of task x (x is the task id) i.e. how much there is queue "places" used in worst case.							
e	MON			FTD_SB_STACK_PRE_RESET_STATUS_67	B:D	R	no
Tells whether stack overflow occurred before reset was done. (x is the task id) 0 : status OK, no overflow 1 : status not OK, stack overflow							

22 Group 64: Common Audio displays

22.1 Display 64.01: Read DSP Memory

When display is selected, address fields can be edited. Keyboard is in "text"-mode, so hex numbers 0-F can be written. Data display shows the addresses and their contents. After editing of addresses is completed, request for reading specified memory locations is sent. These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>aaaaaa bbbb cccc dddd eeee ffff gggg hhhh</pre>	<pre>Use menu to read from DSP memory</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	DSP_AUDIO			FTD_SB_READ_DSP_ADDR_1	DW:H	R	yes
Address field for reading DSP memory. Hex format, 24 bits.							
b(4)	DSP_AUDIO			FTD_SB_READ_DSP_MEM_1	W:H	R	yes
Current contents of address a(6) in DSP memory							
c(4)	DSP_AUDIO			FTD_SB_READ_DSP_MEM_2	W:H	R	yes
Current contents of address a(6) + 1 in DSP memory							
d(4)	DSP_AUDIO			FTD_SB_READ_DSP_MEM_3	W:H	R	yes
Current contents of address a(6) + 2 in DSP memory							
e(4)	DSP_AUDIO			FTD_SB_READ_DSP_MEM_4	W:H	R	yes
Current contents of address a(6) + 3 in DSP memory							
f(4)	DSP_AUDIO			FTD_SB_READ_DSP_MEM_5	W:H	R	yes
Current contents of address a(6) + 4 in DSP memory							
g(4)	DSP_AUDIO			FTD_SB_READ_DSP_MEM_6	W:H	R	yes
Current contents of address a(6) + 5 in DSP memory							
h(4)	DSP_AUDIO			FTD_SB_READ_DSP_MEM_7	W:H	R	yes
Current contents of address a(6) + 6 in DSP memory							
INPUT(4)	DSP_AUDIO			FTD_SB_READ_DSP_ADDR	DW:H	R	yes
Address field for reading DSP memory. Hex format, 24 Bits.							

22.2 Display 64.02: Signal generators

This display can be used to control test signal generators in the DSP. When display is selected, fields can be edited. When editing is completed, a request to start the generators is sent. Because FTD-application is uncapable to handle more than one input value per FTD, only frequency input is used at the beginning.

S40 Data display	S40 HELP display
<pre>LEV: aaaaadB FREQ: bbbbHz ROUT: cc WAVE: dd</pre>	<pre>Signal Level Frequency Routing Waveform</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	DSP_AUDIO			FTD_SB_BASIC_SIGGEN_LEVEL	S	R	yes
Level of the test signal, dB from maximum. Decimal format.							
b(4)	DSP_AUDIO			FTD_SB_BASIC_SIGGEN_FREQ	W:D	R	yes
Frequency of the test signal. Decimal format.							
c(2)	DSP_AUDIO			FTD_SB_BASIC_SIGGEN_ROUTE	B:D	R	yes
Routing of the test signal.							
d(2)	DSP_AUDIO			FTD_SB_BASIC_SIGGEN_WAVE_FORM	B:D	R	yes
Wave form of the test signal.							
INPUT(8)	DSP_AUDIO			FTD_SB_BASIC_SIGGEN_INPUT	DW:D	R	yes
Test input value (for frequency)							

22.3 Display 64.03: Accesory mode status

Note: The information in this display is provided by ISA Audio Server.

S40 Data display	S40 HELP display
<pre>Mod : aaa AccMod :bbb</pre>	<pre>Mode Ana/Dig AccessoryMod</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	AUDIO			COMM_FTD_DATA_AUD_ANADIGI_MODE	B:D	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Mode: ANA - Analog / DIG - Digital							
b(3)	AUDIO			COMM_FTD_DATA_AUD_ACCESSORY_MODE	B:D	R,I,O	yes
Accessory mode: HP / HF / HDC5 / HDC9 / LPS1 / LPS3 / PPHF / PPHF_EXT / HFU_2 / HFU_2_EXT / ANCO_HP / ANCO_ANC / IHF / SMART							

22.4 Display 64.04: Downlink audio display

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>UEMATT: aabb PEAK: cccc CUTOFF: dddd eeeeffff</pre>	<pre>UEMatt LR Peak value Cutoff count Vlvl Dnlack</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	DSP_AUDIO			FTD_SB_DNLINK_AUD_ATT	B:H	R	yes
Downlink analog attenuator setting (left channel if stereo)							
b(2)	DSP_AUDIO			FTD_SB_DNLINK_AUD_ATT_R	B:H	R	yes
c(4)	DSP_AUDIO			FTD_SB_DNLINK_AUD_SIGNAL_PEAK	W:H	R	yes
Peak value of the downlink signal since last request. Counter is reset after every request.							
d(4)	DSP_AUDIO			FTD_SB_DNLINK_AUD_CUT_OFF	W:H	R	yes
Value of the downlink cut off counter since last request. Counter is reset after every request.							
e(4)	DSP_AUDIO			FTD_SB_DNLINK_VOICE_LEVEL	W:H	R	yes
Downlink voice level moving average in hex							
f(4)	DSP_AUDIO			FTD_SB_DNLINK_DATA_LACK	W:H	R	yes
Counter for lack of downlink data							

22.5 Display 64.05: Uplink audio display

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>UEMGAIN: aa PEAK: bbbb CUTOFF: cccc Vo_1: dddd</pre>	<pre>UEM gain Peak value Cutoff count Voice level</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	DSP_AUDIO			FTD_SB_UPLINK_AUD_GAIN	B:H	R	yes
	Uplink analog gain setting.						
b(4)	DSP_AUDIO			FTD_SB_UPLINK_AUD_SIGNAL_PEAK	W:H	R	yes
	Peak value of the uplink signal since last request. Counter is reset after every request.						
c(4)	DSP_AUDIO			FTD_SB_UPLINK_AUD_CUT_OFF	W:H	R	yes
	Value of the uplink cut off counter since last request. Counter is reset after every request.						
d(4)	DSP_AUDIO			FTD_SB_UPLINK_VOICE_LEVEL	W:H	R	yes
	Uplink voice level instantaneous or moving average in hex						

22.6 Display 64.06: Microphone Active Gain Control (AGC)

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eeee</pre>	<pre>GainA GainD THR_L THR_U Counter_A</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	DSP_AUDIO			FTD_SB_AGC_AGAIN	W:D	R	yes
	Analog microphone gain in dB. Decimal point and sign is not shown. E.g. -10.5dB is shown as "105". $20 \cdot \log_{10}(Q11)$. Gain value always contains one decimal, e.g. "3" means "0.3 dB".						
b(3)	DSP_AUDIO			FTD_SB_AGC_DGAIN	W:D	R	yes
	Digital AGC gain in dB. Decimal point is not shown. $20 \cdot \log_{10}(Q11)$.						
c(3)	DSP_AUDIO			FTD_SB_AGC_LOWER_TRESHOLD	W:D	R	yes
	Lower threshold for Microphone AGC in dB. Decimal point and sign is not shown. E.g. -10.5dB is shown as "105". $20 \cdot \log_{10}(Q11)$.						
d(3)	DSP_AUDIO			FTD_SB_AGC_UPPER_TRESHOLD	W:D	R	yes
	Upper threshold for Microphone AGC in dB. Decimal point and sign is not shown. $20 \cdot \log_{10}(Q11)$.						
e(4)	DSP_AUDIO			FTD_SB_AGC_GAIN_CONTROL_COUNTER	W:H	R	yes
	Counter for analog gain control. Hex format (Q11)						

22.7 Display 64.07: Acoustic Echo Canceller (AEC)

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eee fff ggg h iii jjjj kkkk</pre>	<pre>EAA Ada ERL RxG TcG GLi TxN Sta CNo RXVAD TXVAD</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	DSP_AUDIO			FTD_SB_AEC_ACOUSTIC_ATT	W:D	R	yes
				Electro acoustic attenuation of echo in dB. Decimal point and sign is not shown. E.g. -10.5dB is shown as "105". 20*log10(Q11).			
b(3)	DSP_AUDIO			FTD_SB_AEC_ADAPTIVE_ATT	W:D	R	yes
				Adaptive attenuation of echo in dB. Decimal point is not shown. 20*log10(Q11).			
c(3)	DSP_AUDIO			FTD_SB_AEC_ECHO	W:D	R	yes
				Total echo return loss in dB. Decimal point is not shown. 20*log10(Q11).			
d(3)	DSP_AUDIO			FTD_SB_AEC_RX_ATT	W:D	R	yes
				RX attenuation gain in dB. Decimal point and sign is not shown. 20*log10(Q11).			
e(3)	DSP_AUDIO			FTD_SB_AEC_TX_ATT	W:D	R	yes
				TX attenuation gain in dB. Decimal point and sign is not shown. 20*log10(Q11).			
f(3)	DSP_AUDIO			FTD_SB_AEC_ATT_GAIN_LIMIT	W:D	R	yes
				Gain limit for RX and TX attenuators in dB. Decimal point and sign is not shown. 20*log10(Q11).			
g(3)	DSP_AUDIO			FTD_SB_AEC_TX_NOISE	W:D	R	yes
				TX Noise level in dB. Decimal point and sign is not shown. 20*log10(Q11).			
h	DSP_AUDIO			FTD_SB_AEC_ADAPTIVE_FILTERS	B:D	R	yes
				Adaptive filter status.			
i(3)	DSP_AUDIO			FTD_SB_AEC_COMFORT_NOISE	W:H	R	yes
				Comfort noise generation in different 12 sub bands. Hex format, 12 bits.			
j(4)	DSP_AUDIO			FTD_SB_AEC_RX_VAD	W:H	R	yes
				16 last RX VAD decisions in hex format.			
k(4)	DSP_AUDIO			FTD_SB_AEC_TX_VAD	W:H	R	yes
				16 last TX VAD decisions in hex format.			

22.8 Display 64.08: Dynamic/Multi-Band Range Controller (DRC/MDRC)

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eee fff gg</pre>	<pre>DsL UspL UsL NsL DTb UTb DNTb</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	DSP_AUDIO			FTD_SB_DRC_DL_SIGNAL_LEVEL	W:D	R	yes
Downlink signal level in dB. 10*log10(Q11). Decimal point and sign is not shown. E.g. -10.5dB is shown as "105".							
b(3)	DSP_AUDIO			FTD_SB_DRC_UL_SPEECH_LEVEL	W:D	R	yes
Uplink speech level in dB. 10*log10(Q11). Decimal point and sign is not shown. E.g. -10.5dB is shown as "105".							
c(3)	DSP_AUDIO			FTD_SB_DRC_UL_SIGNAL_LEVEL	W:D	R	yes
Uplink signal level in dB. 10*log10(Q11). Decimal point and sign is not shown. E.g. -10.5dB is shown as "105".							
d(3)	DSP_AUDIO			FTD_SB_DRC_NOISE_LEVEL	W:D	R	yes
Backround noise signal level in dB. 10*log10(Q11). Decimal point and sign is not shown. E.g. -10.5dB is shown as "105".							
e(3)	DSP_AUDIO			FTD_SB_DRC_DL_TBL	W:D	R	yes
Current downlink DRC table(s).							
f(3)	DSP_AUDIO			FTD_SB_DRC_UL_TBL	W:D	R	yes
Current uplink DRC table(s).							
g(2)	DSP_AUDIO			FTD_SB_DRC_DL_NOISE_TBL	B:D	R	yes
Current downlink noise dependent table.							

22.9 Display 64.09: Control DSP audio enhancements switch 1

This can be provided by Audio Server, but currently is not supported

To control DSP audio enhancements, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 6409 (TEST GROUP;TEST DISPLAY) at the query prompt.
5. Test input display will activate, enter the control words in display. Keyboard is in "text" mode, so that hex numbers 0-F can be written.
6. Confirm with the Ok button.
7. If activation succeeded, the control word is then sent to the DSP.
8. Status of the registers is read 5-10 times per second and fields a and b are updated accordingly. This allows the user to see the current values in these registers.

Used together with displays 64.10 and 64.11, this display makes rapid on/off switching of audio DSP algorithms possible. Switching with arrow keys is possible only after this display or display 2 has been selected from the menu. This prevents accidental on/off switching of algorithms when browsing displays by arrow keys. Entered values are not saved to permanent memory.

S40 Data display	S40 HELP display
<pre>Entered: aaa Switch 1: bbb</pre>	<pre>Use menu to control DSP audio enhancements</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_VALUE_OF_SWITCH_1	W:H	R	yes
Value written to switch1.							
b(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_CURR_VALUE_SWITCH_1	W:H	R	yes
Current value of switch1. Updated 5-10 times per second.							
INPUT(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_VALUE_TO_SWITCH_1	DW:H	R	yes
Value to be written to switch1							

22.10 Display 64.10: Control DSP audio enhancements switch 2

This can be provided by Audio Server, but currently is not supported

To control DSP audio enhancements, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 6410 (TEST GROUP;TEST DISPLAY) at the query prompt.
5. Test input display will activate, enter the control words in display. Keyboard is in "text" mode, so that hex numbers 0-F can be written.
6. Confirm with the Ok button.
7. If activation succeeded, the control word is then sent to the DSP.
8. Status of the registers is read 5-10 times per second and fields a and b are updated accordingly. This allows the user to see the current values in these registers.

S40 Data display	S40 HELP display
<pre>Entered: aaa Switch 2: bbb</pre>	<pre>Use menu to control DSP audio enhancements</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_VALUE_OF_SWITCH_2	W:H	R	yes
	Value written to switch2.						
b(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_CURR_VALUE_SWITCH_2	W:H	R	yes
	Current value of switch2. Updated 5-10 times per second.						
INPUT(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_VALUE_TO_SWITCH_2	DW:H	R	yes
	Value to be written to switch2						

22.11 Display 64.11: Control DSP audio enhancements switch 3

This can be provided by Audio Server, but currently is not supported

To control DSP audio enhancements, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 6411 (TEST GROUP;TEST DISPLAY) at the query prompt.
5. Test input display will activate, enter the control words in display. Keyboard is in "text" mode, so that hex numbers 0-F can be written.
6. Confirm with the Ok button.
7. If activation succeeded, the control word is then sent to the DSP.
8. Status of the registers is read 5-10 times per second and fields a and b are updated accordingly. This allows the user to see the current values in these registers.

S40 Data display	S40 HELP display
<pre>Entered: aaaa Switch 3: bbbb</pre>	<pre>Use menu to control DSP audio enhancements</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_VALUE_OF_SWITCH_3	W:H	R	yes
	Value written to switch3.						
b(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_CURR_VALUE_SWITCH_3	W:H	R	yes
	Current value of switch3. Updated 5-10 times per second.						
INPUT(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_1_VALUE_TO_SWITCH_3	DW:H	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Value to be written to switch3						

22.12 Display 64.12: SpCs

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre> RX: aaaa TX: bbbb mode: cc dd SpC: eeeee </pre>	<pre> RX_TYPE TX_TYPE dec enc mode used SpC </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_RX_TYPE	W:H	R,I,O	yes
Downlink flags RX_TYPE information							
b(4)	DSP_AUDIO			FTD_SB_TX_TYPE	W:H	R,I,O	yes
Uplink flags TX_TYPE information							
c(2)	DSP_AUDIO			FTD_SB_AMR_DEC_BITRATE	B:H	R,I,O	yes
AMR SpC Decoder bitrate (00-07)							
d(2)	DSP_AUDIO			FTD_SB_AMR_ENC_BITRATE	B:H	R,I,O	yes
AMR SpC Encoder bitrate (00-07)							
e(5)	DSP_AUDIO			FTD_SB_SPC_TYPE	S	R,I,O	yes
SpC type in string (G_FR, G_HR, G_EFR, G_AMR, WAMR1, or WAMR2)							

22.13 Display 64.13: SpC counters

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre> aaaaa eeee bbbbbb ccccc ddddd </pre>	<pre> C_HO MaxUPT C_MODCHANGES C_FORMCHANGE C_BADFRAMES </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	DSP_AUDIO			FTD_SB_C_HANDOVERS	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number of codec handovers (codec reconfigurations) since last reset						
b(5)	DSP_AUDIO			FTD_SB_C_MODE_CHANGES	W:D	R	yes
	Number of AMR mode changes since last reset (AMR modes from 4.75 to 12.2 kbits/s)						
c(5)	DSP_AUDIO			FTD_SB_C_FORMAT_CHANGES	W:D	R	yes
	Number of AMR format changes changes since last reset (AMR formats 1-3)						
d(5)	DSP_AUDIO			FTD_SB_C_BAD_FRAMES	W:D	R	yes
	Number of bad frames since last reset						
e(4)	DSP_AUDIO			FTD_SB_MAX_UPT	W:D	R	yes
	Maximum uplink processing time (range 0-9999 system clock ticks)						

22.14 Display 64.14: DSP audio interface status

S40 Data display	S40 HELP display
<pre>aa bb cccc dd ee ffff</pre>	<pre>1AM 1ID 1HW 2AM 2ID 2HW</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	DSP_AUDIO			FTD_SB_PRI_ACC_MODE	B:H	R	yes
	Primary accessory mode						
b(2)	DSP_AUDIO			FTD_SB_PRI_ACC_ID	B:H	R	yes
	Primary accessory ID						
c(4)	DSP_AUDIO			FTD_SB_PRI_HW_IF	W:H	R	yes
	Primary audio HW interface						
d(2)	DSP_AUDIO			FTD_SB_SEC_ACC_MODE	B:H	R	yes
	Secondary accessory mode						
e(2)	DSP_AUDIO			FTD_SB_SEC_ACC_ID	B:H	R	yes
	Secondary accessory ID						
f(4)	DSP_AUDIO			FTD_SB_SEC_HW_IF	W:H	R	yes
	Secondary audio HW interface						

22.15 Display 64.15: Tone generator status

S40 Data display	S40 HELP display
<pre>aaa dB bbb cccc d eeee ffff ggggg hhhh</pre>	<pre>Gain State WaveF Slopes Freq1 Freq2 Freq3 Freq4</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	DSP_AUDIO			FTD_SB_TONE_GAIN	S	R	yes
b(3)	DSP_AUDIO			FTD_SB_TONE_STATE	B:D	R	yes
c(5)	DSP_AUDIO			FTD_SB_TONE_WAVEFORM	S	R	yes
d	DSP_AUDIO			FTD_SB_TONE_SLOPES	B:D	R	yes
e(5)	DSP_AUDIO			FTD_SB_TONE_FREQ1	W:D	R	yes
f(5)	DSP_AUDIO			FTD_SB_TONE_FREQ2	W:D	R	yes
g(5)	DSP_AUDIO			FTD_SB_TONE_FREQ3	W:D	R	yes
h(5)	DSP_AUDIO			FTD_SB_TONE_FREQ4	W:D	R	yes

22.16 Display 64.16: Downlink ALWE status

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>aaaabbbbcccc ddddeeeeffff ggg hhhh</pre>	<pre>SpeechFlags LostFrameAtt M_CN C_CN</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_DALWE_SPEECH_FLAG_1	W:H	R	yes
				DALWE speech flag bits from 48 consequent speech frames, part 1			
b(4)	DSP_AUDIO			FTD_SB_DALWE_SPEECH_FLAG_2	W:H	R	yes
				DALWE speech flag bits from 48 consequent speech frames, part 2			
c(4)	DSP_AUDIO			FTD_SB_DALWE_SPEECH_FLAG_3	W:H	R	yes
				DALWE speech flag bits from 48 consequent speech frames, part 3			
d(4)	DSP_AUDIO			FTD_SB_DALWE_FRAME_ATT_1	W:H	R	yes
				DALWE lost frame attenuation flag bits from 48 consequent speech frames, part 1			
e(4)	DSP_AUDIO			FTD_SB_DALWE_FRAME_ATT_2	W:H	R	yes
				DALWE lost frame attenuation flag bits from 48 consequent speech frames, part 2			
f(4)	DSP_AUDIO			FTD_SB_DALWE_FRAME_ATT_3	W:H	R	yes
				DALWE lost frame attenuation flag bits from 48 consequent speech frames, part 3			
g(3)	DSP_AUDIO			FTD_SB_DALWE_CN_LVL_MAX	W:D	R	yes
				Maximum comfort noise level in dB. Decimal point and sign are not shown. E.g. -10.5dB is shown as "105".			
h(5)	DSP_AUDIO			FTD_SB_DALWE_C_CN	W:D	R	yes
				Comfort noise counter			

22.17 Display 64.17: Uplink ALWE status

These values are updated 5-10 times/second.

S40 Data display	S40 HELP display
<pre>aaa bbb ccc ddd eeee fff ggggg</pre>	<pre>AvSp AvN SNR VAD C_FSpMin PVAD C_PfMin</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	DSP_AUDIO			FTD_SB_UALWE_SPEECH_LVL_AVG	W:D	R	yes
				Longtime average speech level in dB. Decimal point is not shown. E.g. 20.5dB is shown as "205".			
b(3)	DSP_AUDIO			FTD_SB_UALWE_NOISE_LVL_AVG	W:D	R	yes
				Longtime average noise level in dB			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(3)	DSP_AUDIO			FTD_SB_UALWE_SNR_EST	W:D	R	yes
		Longtime SNR estimate in dB					
d(4)	DSP_AUDIO			FTD_SB_UALWE_VAD	W:H	R	yes
		Uplink ALWE VAD (last 16 decisions)					
e(5)	DSP_AUDIO			FTD_SB_UALWE_C_FALSE_SPEECH_MIN	W:D	R	yes
		False speech detection counter minimum value					
f(4)	DSP_AUDIO			FTD_SB_UALWE_PAUSE_ATT_VAD	W:H	R	yes
		Pause attenuation VAD (last 16 decisions)					
g(5)	DSP_AUDIO			FTD_SB_UALWE_C_PAUSE_FRAME_MIN	W:D	R	yes
		Pause frame counter minimum value					

22.18 Display 64.18: Mixer gains

S40 Data display	S40 HELP display
<pre> aaaabbbbccccc ddddeeeefffff gggghhhhiiii jjjjj </pre>	<pre> ETo EDL ESP EAP UMi UT0 USP UAP AMi ADL </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_EAR_TONE	S	R	yes
		Ear tone gain in decibels. Decimal point is not shown. E.g. -10.5dB is shown as "-105". Value must have either '+' or '-' sign.					
b(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_EAR_DL	S	R	yes
		Ear CMT DL gain in decibels					
c(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_EAR_APE_SPEECH	S	R	yes
		Ear APE speech play gain in decibels					
d(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_EAR_APE_AUDIO	S	R	yes
		Ear APE audio play gain in decibels					
e(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_UL_MIC	S	R	yes
		CMT UL microphone gain in decibels					
f(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_UL_TONE	S	R	yes
		CMT UL tone gain in decibels					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_UL_APE_SPEECH	S	R	yes
	CMT UL APE speech play gain in decibels						
h(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_UL_APE_AUDIO	S	R	yes
	CMT UL APE audio play gain in decibels						
i(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_APE_REC_MIC	S	R	yes
	APE speech recording microphone gain in decibels						
j(4)	DSP_AUDIO			FTD_SB_MIXER_GAIN_APE_REC_DL	S	R	yes
	APE speech recording CMT DL gain in decibels						

22.19 Display 64.19: UDRC status

These values are updated 5-10 times/second

S40 Data display	S40 HELP display
<pre>aaaabbbbcccc ddd eee fff gggg hh</pre>	<pre>CurrULTables SpL ULL BgnL VAD Bands</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_UDRC_TBL_1	W:D	R	yes
	Current URDC tables for bands 1-4						
b(4)	DSP_AUDIO			FTD_SB_UDRC_TBL_2	W:D	R	yes
	Current URDC tables for bands 5-8						
c(4)	DSP_AUDIO			FTD_SB_UDRC_TBL_3	W:D	R	yes
	Current URDC tables for bands 9-12						
d(3)	DSP_AUDIO			FTD_SB_UDRC_SPEECH_LVL	W:D	R	yes
	Speech level in dB. Decimal point is not shown. E.g. 10.5dB is shown as "105".						
e(3)	DSP_AUDIO			FTD_SB_UDRC_UL_LVL	W:D	R	yes
	Uplink signal level in dB.						
f(3)	DSP_AUDIO			FTD_SB_UDRC_BGN_LVL	W:D	R	yes
	Background noise level in dB.						
g(4)	DSP_AUDIO			FTD_SB_UDRC_VAD	W:H	R	yes
	UDRC VAD (last 16 decisions)						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(2)	DSP_AUDIO			FTD_SB_UDRC_BANDS	B:D	R	yes
	Number of bands						

22.20 Display 64.20: MDRC status

These values are updated 5-10 times/second

S40 Data display	S40 HELP display
<pre> aaaabbbbccccc ddd eee ffff gg </pre>	<pre> CurrDLTables DLL BgnL VAD Bands </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_MDRC_TBL_1	W:D	R	yes
	Current MRDC tables for bands 1-4						
b(4)	DSP_AUDIO			FTD_SB_MDRC_TBL_2	W:D	R	yes
	Current MRDC tables for bands 5-8						
c(4)	DSP_AUDIO			FTD_SB_MDRC_TBL_3	W:D	R	yes
	Current MRDC tables for bands 9-12						
d(3)	DSP_AUDIO			FTD_SB_MDRC_DL_LVL	W:D	R	yes
	Downlink signal level in dB. Decimal point is not shown. E.g. 10.5dB is shown as "105".						
e(3)	DSP_AUDIO			FTD_SB_MDRC_BGN_LVL	W:D	R	yes
	Background noise level in dB.						
f(4)	DSP_AUDIO			FTD_SB_MDRC_VAD	W:D	R	yes
	MDRC VAD (last 16 decisions)						
g(2)	DSP_AUDIO			FTD_SB_MDRC_BANDS	B:D	R	yes
	Number of bands						

22.21 Display 64.21: Control DSP audio enhancements switch 4

This can be provided by Audio Server, but currently is not supported

To control DSP audio enhancements, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 6421 (TEST GROUP;TEST DISPLAY) at the query prompt.

5. Test input display will activate, enter the control words in display. Keyboard is in "text" mode, so that hex numbers 0-F can be written.
6. Confirm with the Ok button.
7. If activation succeeded, the control word is then sent to the DSP.
8. Fields a and b are updated when the status of registers is changed. This allows the user to see the current values in these registers.

S40 Data display	S40 HELP display
<pre>Entered: aaaa Switch 4: bbbb</pre>	<pre>Use menu to control DSP audio enhancements</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_VALUE_OF_SWITCH_4	W:H	R	yes
				Value written to switch4.			
b(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_CURR_VALUE_SWITCH_4	W:H	R	yes
				Current value of switch4. Updated when changed in DSP.			
INPUT(4)	DSP_AUDIO			FTD_SB_BASIC_ALG_VALUE_TO_SWITCH_4	W:H	R	yes
				Value to be written to switch4			

23 Group 65: Common PPC (Product Performance Counters) displays

23.1 Display 65.01: PPC Counters 1

S40 Data display	S40 HELP display
<pre>aaaa bb cc dd ee ff</pre>	<pre>CCTI NB DR SC WR BO</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_PPC_CUMUL_CALL_TIMER	DW:D	R	no
				PPC number 36 : Cumulative Call Timer.			
b(2)	MON			FTD_SB_PPC_DMM_NO_BUF	W:D	R	no
				PPC number 12 : Dynamic Memory Management - No Buffers.			
c(2)	MON			FTD_SB_PPC_DSP_RESET	W:D	R	no
				PPC number 16 : DSP reset counter.			
d(2)	MON			FTD_SB_PPC_SW_CRASH	B:D	R	no
				PPC number 17 : SW crash counter			
e(2)	MON			FTD_SB_PPC_ASIC_WD_RESET	B:D	R	no
				PPC number 18 : ASIC watchdog reset counter.			
f(2)	MON			FTD_SB_PPC_BAD_POWER_OFF	W:D	R	no
				PPC number 49 : Bad Power Off Counter.			

23.2 Display 65.02: PPC Counters 2

S40 Data display	S40 HELP display
<pre>aa bb cc dd eeee ff gg hh ii jjjj kkkk</pre>	<pre>PT PB BT BP BCTF IC IB IT IS PCCC PDCC</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_PPC_PA_OVER_T_PWR_OFF	B:D	R	no
				PPC number 20 : PA Over Temperature Power off counter.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(2)	MON			FTD_SB_PPC_PA_OVER_T_BATT_TEMP	B:D	R	no
				PPC number 21 : PA Over Temperature Power off Battery temperature.			
c(2)	MON			FTD_SB_PPC_BATT_OVER_T_PWR_OFF	B:D	R	no
				PPC number 22 : Battery Over Temperature Power off counter.			
d(2)	MON			FTD_SB_PPC_BATT_OVER_T_PA_TEMP	B:D	R	no
				PPC number 23 : Battery Over Temperature Power off PA temperature			
e(4)	MON			FTD_SB_PPC_BATT_CHARGED_FULL	DW:D	R	no
				PPC number 24 : Battery Charged to Full Counter.			
f(2)	MON			FTD_SB_PPC_INV_CHA_CONN	B:D	R	no
				PPC number 27 : Invalid Charger Connected counter.			
g(2)	MON			FTD_SB_PPC_INV_BATT_CONN	B:D	R	no
				PPC number 29 : Invalid Battery Connection counter.			
h(2)	MON			FTD_SB_PPC_INV_BATT_CONN_BTEMP	W:D	R	no
				PPC number 30 : Invalid Battery Connection BTEMP.			
i(2)	MON			FTD_SB_PPC_INV_BATT_CONN_BSIZE	W:D	R	no
				PPC number 31 : Invalid Battery Connection BSIZE.			
j(4)	MON			FTD_SB_PPC_CHA_CONN	W:D	R	no
				PPC number 32 : Charger connection counter.			
k(4)	MON			FTD_SB_PPC_CHA_DISCONN	W:D	R	no
				PPC number 33 : Charger disconnection counter.			

23.3 Display 65.03: PPC Counters 3

S40 Data display	S40 HELP display
<pre> aaa bbb cccc </pre>	<pre> 4000 4100 4300 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_PPC_DROPPED_CALL	DW:D	R	no
				PPC number 40 : Total number of dropped calls.			
b(3)	MON			FTD_SB_PPC_DROPPED_CALL_RSSI	DW:D	R	no
				PPC number 41 : Dropped call rssi (in dBm).			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(4)	MON			FTD_SB_PPC_DROPPED_CALL_BER	DW:D	R	no
PPC number 43 : Dropped call ber(in %).							

23.4 Display 65.04: Camera PPCs

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbb ccccccc dddd eeee ffff gggg hh iiii </pre>	<pre> Start Cifail Vfcou Difail Land Port Dis Stu Twil </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(7)	MON			FTD_SB_PPC_CAMERA_APP_START	DW:D	R	no
Camera application started							
b(4)	MON			FTD_SB_PPC_CAMERA_CONTROL_FAILED	W:D	R	no
Camera control interface failed							
c(7)	MON			FTD_SB_PPC_CAMERA_VIEW_RUNTIME	DW:D	R	no
Camera viewfinder runtime counter							
d(4)	MON			FTD_SB_PPC_CAMERA_DATA_FAILED	W:D	R	no
Camera data interface failed							
e(4)	MON			FTD_SB_PPC_PICTURE_LANDSCAPE	W:D	R	no
Pictures taken landscape							
f(4)	MON			FTD_SB_PPC_PICTURE_PORTRAIT	W:D	R	no
Pictures taken portrait							
g(4)	MON			FTD_SB_PPC_PICTURE_DISCARDED	W:D	R	no
Discarded images							
h(2)	MON			FTD_SB_PPC_COMPACT_CAMERA_PORT_STUCK	B:D	R	no
CCP stuck counter							
i(4)	MON			FTD_SB_PPC_PICTURE_TWILIGHT	W:D	R	no
Pictures taken twilight							

23.5 Display 65.05: HW UI counters

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc</pre>	<pre>Flip Open El on time Keypad Input</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_PPC_FLIP_OPEN_TIMES	DW:D	R	no
				PPC 1014: Flip open counter			
b(8)	MON			FTD_SB_PPC_EL_ON_TIME	DW:D	R	no
				PPC 1015: EL on time counter (in second)			
c(8)	MON			FTD_SB_PPC_KEYPAD_CHINESE_CHARACTER_INPUT	DW:D	R	no
				PPC 1016: Keypad Chinese Character Input Counter Note: repeated in display 65.05			

24 Group 66: Common Voice dialer displays

24.1 Display 66.03: Display for Name Dialer's DSP part

S40 Data display	S40 HELP display
<pre>a bbb ccc ddd eeeee fffff ggggg hhhhh iiiii</pre>	<pre>Eou Eout Fs Frcnt Maxpwr Score Snr Confth Conf</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	DSP_VOICE			FTD_V_ND_EOU	B:H	R	yes
b(3)	DSP_VOICE			FTD_V_ND_EOU_FRAME	W:H	R	yes
c(3)	DSP_VOICE			FTD_V_ND_FRAME_START	W:H	R	yes
d(3)	DSP_VOICE			FTD_V_ND_FRAME_COUNT	W:H	R	yes
e(6)	DSP_VOICE			FTD_V_ND_MAX_POWER	W:H	R	yes
f(5)	DSP_VOICE			FTD_V_ND_SCORE	W:H	R	yes
g(5)	DSP_VOICE			FTD_V_ND_SNR	W:H	R	yes
h(5)	DSP_VOICE			FTD_V_ND_CONF_THRESH	W:H	R	yes
i(5)	DSP_VOICE			FTD_V_ND_CONFIDENCE	W:H	R	yes

24.2 Display 66.04: Display for Voice Recorder/Player DSP part

S40 Data display	S40 HELP display
<pre>a bbb ccc d e fff ggg h</pre>	<pre>Mix Cod CodM Form Mix Cod CodM Form</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	DSP_VOICE			FTD_V_RECORD_MIX	B:H	R	yes
	Mixing mode in decimals						
b(3)	DSP_VOICE			FTD_V_RECORD_CODEC	W:H	R	yes
	The used codec in string						
c(3)	DSP_VOICE			FTD_V_RECORD_CODEC_M	W:H	R	yes
	Used codec mode (e.g. AMR 12.2)						
d	DSP_VOICE			FTD_V_RECORD_FORMAT	B:H	R	yes
	Used format (bit-order and headers)						
e	DSP_VOICE			FTD_V_PLAYER_MIX	B:H	R	yes
	Mixing mode in decimals						
f(3)	DSP_VOICE			FTD_V_PLAYER_CODEC	W:H	R	yes
	The used codec in string						
g(3)	DSP_VOICE			FTD_V_PLAYER_CODEC_M	W:H	R	yes
	Used codec mode (e.g. AMR 12.2)						
h	DSP_VOICE			FTD_V_PLAYER_FORMAT	B:H	R	yes
	Used format (bit-order and headers)						

25 Group 67: Common WAP displays

25.1 Display 67.01: Reset counters

With this display all wap counters of the field test display can be reset (i.e. all counters in this group).

S40 Data display		S40 HELP display	
<pre>RESET WAP COUNTERS</pre>		<pre>Use menu to reset wap counters</pre>	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	WDP			FTD_SB_RESET_WDP_COUNTERS	B:D	R	yes
Reset WDP counters							
EXE	WTP			FTD_SB_RESET_WTP_COUNTERS	B:D	R	no
Reset WTP counters							

25.2 Display 67.02: WDP server display

S40 Data display		S40 HELP display	
<pre>aaaaa bbbbb ccccc ddeee ffgg hhhh jjjj kkkkk</pre>		<pre>SentD RcvdD SndOk ErInd SErr RErr SMaxD RMaxD</pre>	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WDP			FTD_SB_WDP_SENT_DATAGRAMS	B:D	R	yes
Number of requested datagrams in decimal.							
b(5)	WDP			FTD_SB_WDP_RCVD_DATAGRAMS	B:D	R	yes
Number of received datagrams in decimal.							
c(5)	WDP			FTD_SB_WDP_SENT_OK_DATAGRAMS	B:D	R	yes
Number of successfully sent datagrams in decimal.							
d(2)	WDP			FTD_SB_WDP_LAST_ERROR_IND_TYPE	B:D	R	yes
Last error type in WDP_ERROR_IND. Hexadecimal, 00 if no error indications yet.							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e(2)	WDP			FTD_SB_WDP_LAST_ERROR_IND_CODE	B:D	R	yes
				Last error code in WDP_ERROR_IND. Hexadecimal, 00 if no error indications yet.			
f(2)	WDP			FTD_SB_WDP_SENT_WCMP_ERROR_TYPE	B:D	R	yes
				Sent WCMP error type in hexadecimal, 00 if no errors yet.			
g(2)	WDP			FTD_SB_WDP_SENT_WCMP_ERROR_CODE	B:D	R	yes
				Sent WCMP error code in hexadecimal, 00 if no errors yet.			
h(2)	WDP			FTD_SB_WDP_RCVD_ERROR_TYPE	B:D	R	yes
				Received ICMP/WCMP error type in hexadecimal if the last WDP error code is WDP_ICMP_ERROR or WDP_WCMP_ERROR, else 00.			
i(2)	WDP			FTD_SB_WDP_RCVD_ERROR_CODE	B:D	R	yes
				Received ICMP/WCMP error code in hexadecimal if the last WDP error code is WDP_ICMP_ERROR or WDP_WCMP_ERROR, else 00			
j(4)	WDP			FTD_SB_WDP_BIGGEST_SENT_DATAGRAM	B:D	R	yes
				Size of the biggest sent datagram.			
k(5)	WDP			FTD_SB_WDP_BIGGEST_RCVD_DATAGRAM	B:D	R	yes
				Size of the biggest received datagram.			

25.3 Display 67.03: WTP server display

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd eeff gghh iijj</pre>	<pre>SentT SndOk TmrLa RepRe LAb0 LErr LSAb</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WTP			FTD_SB_WTP_SENT_TRANSACTIONS	B:D	R	yes
				Number of sent transactions in decimal.			
b(5)	WTP			FTD_SB_WTP_SENT_OK_TRANSACTIONS	B:D	R	yes
				Number of successfully sent transactions in decimal.			
c(5)	WTP			FTD_SB_WTP_RETRY_TIMER_LAUNCH	B:D	R	yes
				Number of launch of Base Retry Interval Timer.			
d(5)	WTP			FTD_SB_WTP_REPEATED_RESPONSES	B:D	R	yes
				Number of repeated responses from server.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e(2)	WTP			FTD_SB_WTP_LAST_ABORT_IND_TYPE	B:D	R	yes
				Last abort indication type. Hexadecimal, 00 if no abort indications yet.			
f(2)	WTP			FTD_SB_WTP_LAST_ABORT_IND_CODE	B:D	R	yes
				Last abort indication cause value. Hexadecimal, 00 if no abort indications yet.			
g(2)	WTP			FTD_SB_WTP_LAST_ERROR_IND_TYPE	B:D	R	yes
				Last error indication type. Hexadecimal, 00 if no error indications yet.			
h(2)	WTP			FTD_SB_WTP_LAST_ERROR_IND_CODE	B:D	R	yes
				Last error indication cause value. Hexadecimal, 00 if no error indications yet.			
i(2)	WTP			FTD_SB_WTP_LAST_ABORT_SEND_TYPE	B:D	R	yes
				Last sent abort type. Hexadecimal, 00 if no abort indications yet.			
j(2)	WTP			FTD_SB_WTP_LAST_ABORT_SEND_CODE	B:D	R	yes
				Last sent abort code. Hexadecimal, 00 if no abort indications yet			

26 Group 68: IrDA Information (Media Module) displays

26.1 Display 68.01: BER Test Control

S40 Data display	S40 HELP display
<pre>BER TEST aaa</pre>	<pre>USE MENU TO Start and Stop BER Test</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	MON			FTD_BER_TEST_STATUS	S	R	no
	Toggle BER Test Status off						
EXE	MON			FTD_BER_TEST_TOGGLE	B:D	R	no
	Toggle BER Test status on						

26.2 Display 68.02: BER Test Data Display

If selected, test is started, when selected a second time, the test is stopped and all values in Display 2 reset.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc ddd</pre>	<pre>FS FR FF CRC</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_BER_FRAMES_SENT	W:D	R	no
	Test Frames Sent						
b(4)	MON			FTD_BER_FRAMES_RECEIVED	W:D	R	no
	Test Frames Received						
c(4)	MON			FTD_BER_FRAMES_FAILED	W:D	R	no
	Test Frames Failed						
d(3)	MON			FTD_BER_BAD_CRC	DW:H	R	no
	Bad CRC						

27 Group 69: USB Information (Media Module) display

27.1 Display 69.01: USB MM - Software Versions

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccc dddddddddddd</pre>	<pre>USB MM vers HAL version USB Core V CPU Version</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_USB_MM_SW_VERSION	S	R	no
				A 12 character string showing the current USB Media Module Software Version number. ie. 01.03.030			
b(12)	MON			FTD_USB_MM_HAL_VERSION	S	R	no
				A 12 character string showing the current USB HAL Software Version number.			
c(12)	MON			FTD_USB_MM_CORE_VERSION	S	R	no
				A 12 character string showing the current USB Core Version number.			
d(12)	MON			FTD_USB_MM_TIKU_VERSION	S	R	no
				A 12 character string showing the current CPU (Tiku, UPPE etc..)Version number.			

27.2 Display 69.02: USB MM - Device, Bus states & Power Usage

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccc ddd%</pre>	<pre>MM state Dev state Bus State % Power</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_USB_MM_STATE	S	R	no
				A 12 character string showing the current state of the USB Media Module. ie. Initialising, Inactive, Attached, Activating, Active etc.			
b(12)	MON			FTD_USB_MM_DEVICE_STATE	S	R	no
				A 12 character string showing the current USB device state. Attached, Powered, Default, Addressed, Configured etc.			
c(12)	MON			FTD_USB_MM_BUS_STATE	S	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
A 12 character string showing the current USB bus state. Suspended or Resumed.							
d(3)	MON			FTD_USB_MM_EM_STATE	W:D	R	no
A word (decimal) value indicating the current percentage USB battery being used.							

27.3 Display 69.03: USB MM - Event Counters

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd eeeee ff ggggg hhhhh</pre>	<pre>Att/Detaches Susp/Resumes Rsts Cur Cnf Tx Rx IRPs</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	MON			FTD_USB_MM_ATTACHES	W:D	R	no
A uint16 (decimal) value indicating how many times a USB cable has been attached to the phone.							
b(5)	MON			FTD_USB_MM_DETACHES	W:D	R	no
A uint16 (decimal) value indicating how many times a USB cable has been detached from the phone.							
c(5)	MON			FTD_USB_MM_SUSPENDS	W:D	R	no
A uint16 (decimal) value indicating how many times the USB bus has been suspended.							
d(5)	MON			FTD_USB_MM_RESUMES	W:D	R	no
A uint16 (decimal) value indicating how many times the USB bus has been resumed.							
e(5)	MON			FTD_USB_MM_RESETS	W:D	R	no
A uint16 (decimal) value indicating how many USB resets have been received.							
f(2)	MON			FTD_USB_MM_CURR_CONFIGURATION	B:D	R	no
A uint8 (decimal) 2 digit value indicating the current Configuration setting.							
g(5)	MON			FTD_USB_MM_NO_TX_IRPS	W:D	R	no
A uint16 (decimal) value indicating how many IRPs the MM has transmitted.							
h(5)	MON			FTD_USB_MM_NO_RX_IRPS	W:D	R	no
A uint16 (decimal) value indicating how many IRPs the MM has received.							

27.4 Display 69.04: USB MM - Event Timing

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd eeeee fffff g h iiii</pre>	<pre>Resu Prv Max Susp Prv Max Rset Prv Max Wake S E Att</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	MON			FTD_USB_MM_RESUME_	W:D	R	no
				LAST			
A uint16 (decimal) value indicating the time in ms that the MM was in resume mode last time around.							
b(5)	MON			FTD_USB_MM_RESUME_	W:D	R	no
				LONGEST			
A uint16 (decimal) value indicating the maximum time in ms that the MM was in resume mode.							
c(5)	MON			FTD_USB_MM_SUSPEND_	W:D	R	no
				LAST			
A uint16 (decimal) value indicating the time in ms that the MM was in suspend mode last time around.							
d(5)	MON			FTD_USB_MM_SUSPEND_	W:D	R	no
				LONGEST			
A uint16 (decimal) value indicating the maximum time in ms that the MM was in suspend mode.							
e(5)	MON			FTD_USB_MM_RESET_LAST	W:D	R	no
A uint16 (decimal) value indicating the time in ms between the last USB resets.							
f(5)	MON			FTD_USB_MM_RESET_	W:D	R	no
				LONGEST			
A uint16 (decimal) value indicating the maximum time in ms between USB Resets.							
g	MON			FTD_USB_MM_WAKEUP_	B:D	R	no
				SUPPORTED			
A bool8 (1 or 0) indicating whether remote wakeup is supported by the current configuration..							
h	MON			FTD_USB_MM_WAKEUP_	B:D	R	no
				ENABLED			
A bool8 (1 or 0) indicating whether remote wakeup is enabled or not..							
i(5)	MON			FTD_USB_MM_WAKEUP_	W:D	R	no
				ATTEMPTS			
A uint16 (decimal) value indicating how many times we have tried to wakeup the host.							

27.5 Display 69.06: USB MM - Data Flow & Rate Logging

S40 Data display	S40 HELP display
<pre>Txaaaaaaaaaa bbbbbbccccc Rxdddddddddd eeeeeefffff</pre>	<pre>USB Tx Bytes MovAv WinAv USB Rx Bytes MovAv WinAv</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	MON			FTD_USB_MM_DATA_TX	S	R	no
A 10 character string showing a count of how many bytes have been transmitted USB.(IN Data)							
b(6)	MON			FTD_USB_MM_DATA_TX_	S	R	no
				TPUT_MOV_AV			
A 6 character string indicating a moving average of the transmitted data throughput in bytes per second.							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(6)	MON			FTD_USB_MM_DATA_TX_TPUT_INST_AV	S	R	no
				A 6 character string indicating snapshot of the transmitted data throughput in bytes per second.			
d(10)	MON			FTD_USB_MM_DATA_RX	S	R	no
				A 10 character string showing a count of how many bytes have been received over USB. (OUT data)			
e(6)	MON			FTD_USB_MM_DATA_RX_TPUT_MOV_AV	S	R	no
				A 6 character string indicating a moving average of the received data throughput in bytes per second.			
f(6)	MON			FTD_USB_MM_DATA_RX_TPUT_INST_AV	S	R	no
				A 6 character string indicating a snapshot of the received data throughput in bytes per second.			

27.6 Display 69.07: USB MM - Information for the PhoNet Connection

S40 Data display	S40 HELP display
<pre> aaaaaa FlowCtrl b Txccd e ffff Rxggh i jjjj </pre>	<pre> Service Flow Control EP#L Stat Sz EP#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	MON			FTD_USB_MM_PHONET_ACTIVE	S	R	no
				An 8 character string indicating either PhoNet or nothing if this interface is not in use. (ie. in the current configuration)			
b	MON			FTD_USB_MM_PHONET_FLOW_CTRL	B:D	R	no
				A bool8 (1 or 0) indicating the whether flow control is active on this service.			
c(2)	MON			FTD_USB_MM_INFO_PHONET_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx data (IN data) DR TX Routing Table			
d	MON			FTD_USB_MM_INFO_PHONET_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation. Loopback Route Handle			
e	MON			FTD_USB_MM_INFO_PHONET_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the Tx (IN) endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
f(4)	MON			FTD_USB_MM_INFO_PHONET_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for Tx EP DR Tx Routing Table			
g(2)	MON			FTD_USB_MM_INFO_PHONET_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx data (OUT data) usb_dr_rev_rx_route using route handle			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h	MON			FTD_USB_MM_INFO_PHONET_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation. Loopback Route Handle			
i	MON			FTD_USB_MM_INFO_PHONET_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
j(4)	MON			FTD_USB_MM_INFO_PHONET_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.7 Display 69.08 USB MM - Information for Interface / Connection 1

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSf1 Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_1_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT			
b	MON			FTD_USB_MM_INFO_1_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT			
c	MON			FTD_USB_MM_INFO_1_ALT_INTERFACE	B:H	R	no
				A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl			
d	MON			FTD_USB_MM_INFO_1_PCR_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT			
e(2)	MON			FTD_USB_MM_INFO_1_PIPE_HANDLE	B:D	R	no
				A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT			
f	MON			FTD_USB_MM_INFO_1_PIPE_STATE	B:D	R	no
				A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT			
g	MON			FTD_USB_MM_INFO_1_PIPE_RX_FLOW_STATE	B:D	R	no
				A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(2)	MON			FTD_USB_MM_INFO_1_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table			
i	MON			FTD_USB_MM_INFO_1_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation. Loopback Route Handle			
j	MON			FTD_USB_MM_INFO_1_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the IN endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
k(4)	MON			FTD_USB_MM_INFO_1_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table			
l(2)	MON			FTD_USB_MM_INFO_1_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle			
m	MON			FTD_USB_MM_INFO_1_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_1_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_1_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.8 Display 69.09 USB MM - Information for Interface / Connection 2

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_2_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc. Name from the PIT			
b	MON			FTD_USB_MM_INFO_2_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface. NSI state from the PIT			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c	MON			FTD_USB_MM_INFO_2_ALT_INTERFACE	B:H	R	no
				A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl			
d	MON			FTD_USB_MM_INFO_2_PCR_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT			
e(2)	MON			FTD_USB_MM_INFO_2_PIPE_HANDLE	B:D	R	no
				A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT			
f	MON			FTD_USB_MM_INFO_2_PIPE_STATE	B:D	R	no
				A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT			
g	MON			FTD_USB_MM_INFO_2_PIPE_RX_FLOW_STATE	B:D	R	no
				A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table			
h(2)	MON			FTD_USB_MM_INFO_2_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table			
i	MON			FTD_USB_MM_INFO_2_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle			
j	MON			FTD_USB_MM_INFO_2_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
k(4)	MON			FTD_USB_MM_INFO_2_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table			
l(2)	MON			FTD_USB_MM_INFO_2_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle			
m	MON			FTD_USB_MM_INFO_2_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_2_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_2_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.9 Display 69.10 USB MM - Information for Interface / Connection 3

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_3_	S	R	no
				NAME	An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT		
b	MON			FTD_USB_MM_INFO_3_NSI_	B:D	R	no
				STATE	A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT		
c	MON			FTD_USB_MM_INFO_3_ALT_	B:H	R	no
				INTERFACE	A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl		
d	MON			FTD_USB_MM_INFO_3_PCR_	B:D	R	no
				STATE	A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT		
e(2)	MON			FTD_USB_MM_INFO_3_	B:D	R	no
				PIPE_HANDLE	A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT		
f	MON			FTD_USB_MM_INFO_3_	B:D	R	no
				PIPE_STATE	A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT		
g	MON			FTD_USB_MM_INFO_3_	B:D	R	no
				PIPE_RX_FLOW_STATE	A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table		
h(2)	MON			FTD_USB_MM_INFO_3_IN_	B:D	R	no
				EP_NO	A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table		
i	MON			FTD_USB_MM_INFO_3_	S	R	no
				LOOPBACK_IN	A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle		
j	MON			FTD_USB_MM_INFO_3_IN_	S	R	no
				EP_STATUS	A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table		
k(4)	MON			FTD_USB_MM_INFO_3_IN_	W:D	R	no
				EP_SIZE	A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table		
l(2)	MON			FTD_USB_MM_INFO_3_	B:D	R	no
				OUT_EP_NO	A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle		

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
m	MON			FTD_USB_MM_INFO_3_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_3_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_3_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.10 Display 69.11 USB MM - Information for Interface / Connection 4

A generic specification for all the displays covered by the header line.
 where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_4_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT			
b	MON			FTD_USB_MM_INFO_4_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT			
c	MON			FTD_USB_MM_INFO_4_ALT_INTERFACE	B:H	R	no
				A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl			
d	MON			FTD_USB_MM_INFO_4_PCR_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT			
e(2)	MON			FTD_USB_MM_INFO_4_PIPE_HANDLE	B:D	R	no
				A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT			
f	MON			FTD_USB_MM_INFO_4_PIPE_STATE	B:D	R	no
				A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT			
g	MON			FTD_USB_MM_INFO_4_PIPE_RX_FLOW_STATE	B:D	R	no
				A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(2)	MON			FTD_USB_MM_INFO_4_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table			
i	MON			FTD_USB_MM_INFO_4_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation. Loopback Route Handle			
j	MON			FTD_USB_MM_INFO_4_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the IN endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
k(4)	MON			FTD_USB_MM_INFO_4_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table			
l(2)	MON			FTD_USB_MM_INFO_4_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle			
m	MON			FTD_USB_MM_INFO_4_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_4_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_4_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.11 Display 69.12 USB MM - Information for Interface / Connection 5

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_5_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc. Name from the PIT			
b	MON			FTD_USB_MM_INFO_5_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface. NSI state from the PIT			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c	MON			FTD_USB_MM_INFO_5_ALT_INTERFACE	B:H	R	no
				A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl			
d	MON			FTD_USB_MM_INFO_5_PCR_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT			
e(2)	MON			FTD_USB_MM_INFO_5_PIPE_HANDLE	B:D	R	no
				A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT			
f	MON			FTD_USB_MM_INFO_5_PIPE_STATE	B:D	R	no
				A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT			
g	MON			FTD_USB_MM_INFO_5_PIPE_RX_FLOW_STATE	B:D	R	no
				A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table			
h(2)	MON			FTD_USB_MM_INFO_5_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table			
i	MON			FTD_USB_MM_INFO_5_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle			
j	MON			FTD_USB_MM_INFO_5_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
k(4)	MON			FTD_USB_MM_INFO_5_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table			
l(2)	MON			FTD_USB_MM_INFO_5_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle			
m	MON			FTD_USB_MM_INFO_5_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_5_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_5_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.12 Display 69.13 USB MM - Information for Interface / Connection 6

A generic specification for all the displays covered by the header line.
 where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_6_	S	R	no
				NAME	An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT		
b	MON			FTD_USB_MM_INFO_6_NSI_	B:D	R	no
				STATE	A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT		
c	MON			FTD_USB_MM_INFO_6_ALT_	B:H	R	no
				INTERFACE	A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl		
d	MON			FTD_USB_MM_INFO_6_PCR_	B:D	R	no
				STATE	A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT		
e(2)	MON			FTD_USB_MM_INFO_6_	B:D	R	no
				PIPE_HANDLE	A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT		
f	MON			FTD_USB_MM_INFO_6_	B:D	R	no
				PIPE_STATE	A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT		
g	MON			FTD_USB_MM_INFO_6_	B:D	R	no
				PIPE_RX_FLOW_STATE	A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table		
h(2)	MON			FTD_USB_MM_INFO_6_IN_	B:D	R	no
				EP_NO	A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table		
i	MON			FTD_USB_MM_INFO_6_	S	R	no
				LOOPBACK_IN	A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle		
j	MON			FTD_USB_MM_INFO_6_IN_	S	R	no
				EP_STATUS	A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table		
k(4)	MON			FTD_USB_MM_INFO_6_IN_	W:D	R	no
				EP_SIZE	A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table		
l(2)	MON			FTD_USB_MM_INFO_6_	B:D	R	no
				OUT_EP_NO	A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle		

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
m	MON			FTD_USB_MM_INFO_6_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_6_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_6_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.13 Display 69.14 USB MM - Information for Interface / Connection 7

A generic specification for all the displays covered by the header line.
 where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_7_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT			
b	MON			FTD_USB_MM_INFO_7_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT			
c	MON			FTD_USB_MM_INFO_7_ALT_INTERFACE	B:H	R	no
				A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl			
d	MON			FTD_USB_MM_INFO_7_PCR_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT			
e(2)	MON			FTD_USB_MM_INFO_7_PIPE_HANDLE	B:D	R	no
				A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT			
f	MON			FTD_USB_MM_INFO_7_PIPE_STATE	B:D	R	no
				A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT			
g	MON			FTD_USB_MM_INFO_7_PIPE_RX_FLOW_STATE	B:D	R	no
				A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(2)	MON			FTD_USB_MM_INFO_7_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table			
i	MON			FTD_USB_MM_INFO_7_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation. Loopback Route Handle			
j	MON			FTD_USB_MM_INFO_7_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the IN endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
k(4)	MON			FTD_USB_MM_INFO_7_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table			
l(2)	MON			FTD_USB_MM_INFO_7_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle			
m	MON			FTD_USB_MM_INFO_7_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_7_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_7_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.14 Display 69.15 USB MM - Information for Interface / Connection 8

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_8_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc. Name from the PIT			
b	MON			FTD_USB_MM_INFO_8_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface. NSI state from the PIT			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c	MON			FTD_USB_MM_INFO_8_ALT_INTERFACE	B:H	R	no
				A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl			
d	MON			FTD_USB_MM_INFO_8_PCR_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT			
e(2)	MON			FTD_USB_MM_INFO_8_PIPE_HANDLE	B:D	R	no
				A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT			
f	MON			FTD_USB_MM_INFO_8_PIPE_STATE	B:D	R	no
				A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT			
g	MON			FTD_USB_MM_INFO_8_PIPE_RX_FLOW_STATE	B:D	R	no
				A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table			
h(2)	MON			FTD_USB_MM_INFO_8_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table			
i	MON			FTD_USB_MM_INFO_8_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle			
j	MON			FTD_USB_MM_INFO_8_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
k(4)	MON			FTD_USB_MM_INFO_8_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table			
l(2)	MON			FTD_USB_MM_INFO_8_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle			
m	MON			FTD_USB_MM_INFO_8_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_8_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_8_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.15 Display 69.16 USB MM - Information for Interface / Connection 9

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_9_	S	R	no
				NAME	An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT		
b	MON			FTD_USB_MM_INFO_9_NSI_	B:D	R	no
				STATE	A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT		
c	MON			FTD_USB_MM_INFO_9_ALT_	B:H	R	no
				INTERFACE	A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl		
d	MON			FTD_USB_MM_INFO_9_PCR_	B:D	R	no
				STATE	A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT		
e(2)	MON			FTD_USB_MM_INFO_9_	B:D	R	no
				PIPE_HANDLE	A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT		
f	MON			FTD_USB_MM_INFO_9_	B:D	R	no
				PIPE_STATE	A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT		
g	MON			FTD_USB_MM_INFO_9_	B:D	R	no
				PIPE_RX_FLOW_STATE	A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table		
h(2)	MON			FTD_USB_MM_INFO_9_IN_	B:D	R	no
				EP_NO	A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table		
i	MON			FTD_USB_MM_INFO_9_	S	R	no
				LOOPBACK_IN	A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle		
j	MON			FTD_USB_MM_INFO_9_IN_	S	R	no
				EP_STATUS	A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table		
k(4)	MON			FTD_USB_MM_INFO_9_IN_	W:D	R	no
				EP_SIZE	A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table		
l(2)	MON			FTD_USB_MM_INFO_9_	B:D	R	no
				OUT_EP_NO	A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle		

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
m	MON			FTD_USB_MM_INFO_9_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_9_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_9_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.16 Display 69.17 USB MM - Information for Interface / Connection 10

A generic specification for all the displays covered by the header line.
 where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_10_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT			
b	MON			FTD_USB_MM_INFO_10_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT			
c	MON			FTD_USB_MM_INFO_10_ALT_INTERFACE	B:H	R	no
				A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl			
d	MON			FTD_USB_MM_INFO_10_PCR_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT			
e(2)	MON			FTD_USB_MM_INFO_10_PIPE_HANDLE	B:D	R	no
				A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT			
f	MON			FTD_USB_MM_INFO_10_PIPE_STATE	B:D	R	no
				A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT			
g	MON			FTD_USB_MM_INFO_10_PIPE_RX_FLOW_STATE	B:D	R	no
				A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(2)	MON			FTD_USB_MM_INFO_10_IN_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table			
i	MON			FTD_USB_MM_INFO_10_LOOPBACK_IN	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation. Loopback Route Handle			
j	MON			FTD_USB_MM_INFO_10_IN_EP_STATUS	S	R	no
				A 1 character string indicating the current status of the IN endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
k(4)	MON			FTD_USB_MM_INFO_10_IN_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table			
l(2)	MON			FTD_USB_MM_INFO_10_OUT_EP_NO	B:D	R	no
				A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle			
m	MON			FTD_USB_MM_INFO_10_LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_10_OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint. eg. On(1), Off(0), Halted(h), Flow Controlled(f) From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_10_OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

27.17 Display 69.18 USB MM - Information for Interface / Connection 11

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_11_NAME	S	R	no
				An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc. Name from the PIT			
b	MON			FTD_USB_MM_INFO_11_NSI_STATE	B:D	R	no
				A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface. NSI state from the PIT			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c	MON			FTD_USB_MM_INFO_11_	B:H	R	no
				ALT_INTERFACE			
A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl							
d	MON			FTD_USB_MM_INFO_11_	B:D	R	no
				PCR_STATE			
A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT							
e(2)	MON			FTD_USB_MM_INFO_11_	B:D	R	no
				PIPE_HANDLE			
A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT							
f	MON			FTD_USB_MM_INFO_11_	B:D	R	no
				PIPE_STATE			
A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT							
g	MON			FTD_USB_MM_INFO_11_	B:D	R	no
				PIPE_RX_FLOW_STATE			
A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table							
h(2)	MON			FTD_USB_MM_INFO_11_IN_	B:D	R	no
				EP_NO			
A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table							
i	MON			FTD_USB_MM_INFO_11_	S	R	no
				LOOPBACK_IN			
A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle							
j	MON			FTD_USB_MM_INFO_11_IN_	S	R	no
				EP_STATUS			
A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table							
k(4)	MON			FTD_USB_MM_INFO_11_IN_	W:D	R	no
				EP_SIZE			
A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table							
l(2)	MON			FTD_USB_MM_INFO_11_	B:D	R	no
				OUT_EP_NO			
A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle							
m	MON			FTD_USB_MM_INFO_11_	S	R	no
				LOOPBACK_OUT			
A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.							
n	MON			FTD_USB_MM_INFO_11_	S	R	no
				OUT_STATUS			
A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table							
o(4)	MON			FTD_USB_MM_INFO_11_	W:D	R	no
				OUT_EP_SIZE			
A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.							

27.18 Display 69.19 USB MM - Information for Interface / Connection 12

A generic specification for all the displays covered by the header line.

where X = 1...12 is the number of the connection.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa b c d ee f g Txhhi j kkkk Rxllm n oooo </pre>	<pre> Name NSIStat AiPCR HaPSFl Ep#L Stat Sz Ep#L Stat Sz </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_USB_MM_INFO_12_	S	R	no
				NAME			
An 8 character string indicating the type of service for this page. This will be a meaningful description derived from the PEP_SUB_TYPE stored name in the first PIT entry. ie. Obex, Modem_AT, TLP etc.Name from the PIT							
b	MON			FTD_USB_MM_INFO_12_	B:D	R	no
				NSI_STATE			
A uint8 (decimal 0 - 9) indicating the state of the Name Service Interface.NSI state from the PIT							
c	MON			FTD_USB_MM_INFO_12_	B:H	R	no
				ALT_INTERFACE			
A uint8 (hex) value indicating the selected alternate interface (0 - default)Information from Interface Ctrl							
d	MON			FTD_USB_MM_INFO_12_	B:D	R	no
				PCR_STATE			
A uint8 (decimal 0 - 9) indicating the state of the pipe creation process.PCR state from the PIT							
e(2)	MON			FTD_USB_MM_INFO_12_	B:D	R	no
				PIPE_HANDLE			
A uint8 (decimal) indicating the pipe handle.Pipe handle from the PIT							
f	MON			FTD_USB_MM_INFO_12_	B:D	R	no
				PIPE_STATE			
A bool8 (1 or 0) indicating whether the pipe is enabled or disabled.Pipe Enabled flag from the PIT							
g	MON			FTD_USB_MM_INFO_12_	B:D	R	no
				PIPE_RX_FLOW_STATE			
A bool8 (1or 0) indicating whether the Pipe is flow controlled in the Rx direction.DR RX Routing Table							
h(2)	MON			FTD_USB_MM_INFO_12_IN_	B:D	R	no
				EP_NO			
A uint8 (decimal) indicating the endpoint number for Tx (IN data)DR TX Routing Table							
i	MON			FTD_USB_MM_INFO_12_	S	R	no
				LOOPBACK_IN			
A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.Loopback Route Handle							
j	MON			FTD_USB_MM_INFO_12_IN_	S	R	no
				EP_STATUS			
A 1 character string indicating the current status of the IN endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table							
k(4)	MON			FTD_USB_MM_INFO_12_IN_	W:D	R	no
				EP_SIZE			
A uint16 (decimal) upto 4 digits indicating the endpoint size for EPDR Tx Routing Table							
l(2)	MON			FTD_USB_MM_INFO_12_	B:D	R	no
				OUT_EP_NO			
A uint8 (decimal) indicating the endpoint number for Rx (OUT data)usb_dr_rev_rx_route using route handle							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
m	MON			FTD_USB_MM_INFO_12_ LOOPBACK_OUT	S	R	no
				A 1 character string indicating whether loopback is active on this endpoint. ie. L - loopback n - normal operation.			
n	MON			FTD_USB_MM_INFO_12_ OUT_STATUS	S	R	no
				A 1 character string indicating the current status of the OUT endpoint.eg. On(1), Off(0), Halted(h), Flow Controlled(f)From usb_dr_ep_status table			
o(4)	MON			FTD_USB_MM_INFO_12_ OUT_EP_SIZE	W:D	R	no
				A uint16 (decimal) upto 4 digits indicating the endpoint size for the Rx EP.			

28 Group 71: Common Bluetooth information displays

28.1 Group 71 Information

Reference for this display group is: fender_ftd_event_msg.doc (version 2.0)

Continuous Database: bo_bt, Project fender_common

Object: fender_ftd_event_msg.doc

Type: ms_word, Instance 1

Indicative path: fender_common/design/lower_layers/fender_ll_ftd_event_msg.doc

28.2 Display 71.01: Connection Information

S40 Data display		S40 HELP display	
a b ccc		M S ASR	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	MON			FTD_NUM_MASTER_CON	B:D	R	no
	Number of connections of the BT Master instance [0;7].						
b	MON			FTD_NUM_SLAVE_INSTANCE	B:D	R	no
	Number of BT slave instances [0;1].						
c(3)	MON			FTD_ACTIVE_SLEEP_RATIO	B:D	R	no
	Active/sleep ratio in percent [0;100].						

28.3 Display 71.02: MCM Information 1/2

S40 Data display		S40 HELP display	
aaaaa bbbbbbbbb cccccc dd eeeeeeeeeeee		HW Version SW Version COD CC BD_ADDR	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	MON			FTD_HW_VERSION_NUM	S	R	no
	HW Version number.						
b(8)	MON			FTD_SW_VERSION_NUM	S	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	SW Version number.						
c(6)	MON			FTD_CLASS_OF_DEVICE	S	R	no
	Class of Device [000000;FFFFFF].						
d(2)	MON			FTD_BT_COUNTRY_CODE	B:H	R	no
	Country Code [0x00;0xFF].						
e(12)	MON			FTD_BD_ADDR	S	R	no
	BD_ADDR=Bluetooth Device Address (is equal to serial number) [000000000000;FFFFFFFFFFFF]. The data format is string.						

28.4 Display 71.03: MCM Information 2/2

S40 Data display	S40 HELP display
aaaaaaaaaaaa	LocalName

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_FRIENDLY_NAME	S	R	no
	Friendly Name of local BT device						

28.5 Display 71.04 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
aaaa bbbbbbbbbbbb c d eee	Con BDA CS LS Q

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_1_HANDLE	W:H	R	no
	Connection handle [0x0000;0xFFFF].						
b(12)	MON			FTD_CON_1_BD_ADDR	S	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
BD Address of remote BT device [000000000000;FFFFFFFF]. The data format is string.							
c	MON			FTD_CON_1_CON_STATE	S	R	no
Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existsT = Test modeD = Disconnect							
d	MON			FTD_CON_1_LOC_DEV_STATE	S	R	no
Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S							
e(3)	MON			FTD_CON_1_QUALITY	B:D	R	no
Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]							

28.6 Display 71.05 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
<pre> aaaa bbbbbbbbbbbbbb c d eee </pre>	<pre> Con BDA CS LS Q </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_2_HANDLE	W:H	R	no
Connection handle [0x0000;0xFFFF].							
b(12)	MON			FTD_CON_2_BD_ADDR	S	R	no
BD Address of remote BT device [000000000000;FFFFFFFF]. The data format is string.							
c	MON			FTD_CON_2_CON_STATE	S	R	no
Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existsT = Test modeD = Disconnect							
d	MON			FTD_CON_2_LOC_DEV_STATE	S	R	no
Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S							
e(3)	MON			FTD_CON_2_QUALITY	B:D	R	no
Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]							

28.7 Display 71.06 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
<pre>aaaa bbbbbbbbbbbbbb c d eee</pre>	<pre>Con BDA CS LS Q</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_3_HANDLE	W:H	R	no
	Connection handle [0x0000;0xFFFF].						
b(12)	MON			FTD_CON_3_BD_ADDR	S	R	no
	BD Address of remote BT device [000000000000;FFFFFFFFFFFF]. The data format is string.						
c	MON			FTD_CON_3_CON_STATE	S	R	no
	Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existsT = Test modeD = Disconnect						
d	MON			FTD_CON_3_LOC_DEV_STATE	S	R	no
	Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S						
e(3)	MON			FTD_CON_3_QUALITY	B:D	R	no
	Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]						

28.8 Display 71.07 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
<pre>aaaa bbbbbbbbbbbbbb c d eee</pre>	<pre>Con BDA CS LS Q</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_4_HANDLE	W:H	R	no
	Connection handle [0x0000;0xFFFF].						
b(12)	MON			FTD_CON_4_BD_ADDR	S	R	no
	BD Address of remote BT device [000000000000;FFFFFFFFFFFF]. The data format is string.						
c	MON			FTD_CON_4_CON_STATE	S	R	no
	Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existsT = Test modeD = Disconnect						
d	MON			FTD_CON_4_LOC_DEV_STATE	S	R	no
	Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S						
e(3)	MON			FTD_CON_4_QUALITY	B:D	R	no
	Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]						

28.9 Display 71.08 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
<pre> aaaa bbbbbbbbbbbbbb c d eee </pre>	<pre> Con BDA CS LS Q </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_5_HANDLE	W:H	R	no
	Connection handle [0x0000;0xFFFF].						
b(12)	MON			FTD_CON_5_BD_ADDR	S	R	no
	BD Address of remote BT device [000000000000;FFFFFFFFFFFF]. The data format is string.						
c	MON			FTD_CON_5_CON_STATE	S	R	no
	Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existsT = Test modeD = Disconnect						
d	MON			FTD_CON_5_LOC_DEV_STATE	S	R	no
	Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S						
e(3)	MON			FTD_CON_5_QUALITY	B:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind	
		Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]						

28.10 Display 71.09 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
<pre> aaaa bbbbbbbbbbbbbb c d eee </pre>	<pre> Con BDA CS LS Q </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_6_HANDLE	W:H	R	no
	Connection handle [0x0000;0xFFFF].						
b(12)	MON			FTD_CON_6_BD_ADDR	S	R	no
	BD Address of remote BT device [000000000000;FFFFFFFFFFFF]. The data format is string.						
c	MON			FTD_CON_6_CON_STATE	S	R	no
	Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existT = Test modeD = Disconnect						
d	MON			FTD_CON_6_LOC_DEV_STATE	S	R	no
	Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S						
e(3)	MON			FTD_CON_6_QUALITY	B:D	R	no
	Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]						

28.11 Display 71.10 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
<pre>aaaa bbbbbbbbbbbbbb c d eee</pre>	<pre>Con BDA CS LS Q</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_7_HANDLE	W:H	R	no
	Connection handle [0x0000;0xFFFF].						
b(12)	MON			FTD_CON_7_BD_ADDR	S	R	no
	BD Address of remote BT device [000000000000;FFFFFFFFFFFF]. The data format is string.						
c	MON			FTD_CON_7_CON_STATE	S	R	no
	Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existsT = Test modeD = Disconnect						
d	MON			FTD_CON_7_LOC_DEV_STATE	S	R	no
	Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S						
e(3)	MON			FTD_CON_7_QUALITY	B:D	R	no
	Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]						

28.12 Display 71.11 Information on the connection(s)

One display for each of 8 connection handles.

Where "x" is the number of the connection. Connection related information is available for maximum 8 connections [7 Master + 1 Slave connection] of the local BT device. To get information on a specific connection exchange the x with the appropriate number [1-8].

Example: To get information about the slave connection x must be set to 8.

x = 1 must be used to get information about the first master connection.

S40 Data display	S40 HELP display
<pre>aaaa bbbbbbbbbbbbbb c d eee</pre>	<pre>Con BDA CS LS Q</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_CON_8_HANDLE	W:H	R	no
	Connection handle [0x0000;0xFFFF].						
b(12)	MON			FTD_CON_8_BD_ADDR	S	R	no
	BD Address of remote BT device [000000000000;FFFFFFFFFFFF]. The data format is string.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c	MON			FTD_CON_8_CON_STATE	S	R	no
	Connection Status:A = ActiveS = SniffH = HoldN = Connection does not existT = Test modeD = Disconnect						
d	MON			FTD_CON_8_LOC_DEV_STATE	S	R	no
	Local BT device state for this connection:M = local device is BT MasterS = local device is BT SlaveI = local device is neither M nor S						
e(3)	MON			FTD_CON_8_QUALITY	B:D	R	no
	Quality of connection in percent (ratio between transmission attempts and the number of necessary retransmissions) [0;100]						

28.13 Display 71.12: BT module OS Information

S40 Data display	S40 HELP display
aaaa	OsFreeBlocks

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_OS_FREE_BLOCKS	W:H	R	no
	Total number of BT OS free blocks [0x0000;0xFFFF]						

28.14 Display 71.13: Post Mortem Dump Information 1/2

S40 Data display	S40 HELP display
aa bb	ResetReason ResetMode

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_PMD_RESET_REASON	B:H	R	no
	Reason of last module reset [0x00;0x23].						
b(2)	MON			FTD_PMD_RESET_ARM_MODE	B:H	R	no
	ARM mode last module reset [0x00;0x1F].						

28.15 Display 71.14: Post Mortem Dump Information 2/2

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbb cc dddd</pre>	<pre>Task State Timer State Resrc State Free Blocks</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_PMD_TASK_STATE	S	R	no
State of each OS Task before last reset - stored in Post Mortem Dump. The data format is string.							
b(4)	MON			FTD_PMD_TIMER_STATE	W:H	R	no
State of OS Timers - stored in Post Mortem Dump. The data format is hex.							
c(2)	MON			FTD_PMD_RESOURCE_STATE	B:H	R	no
State of OS Resources - stored in Post Mortem Dump. The data format is hex.							
d(4)	MON			FTD_PMD_FREE_BLOCKS	W:H	R	no
Number of free blocks - stored in Post Mortem Dump. [0x0000;0xFFFF]							

29 Group 72: Bluetooth media module displays

29.1 Display 72.01: BT MM display (1st display MM IF)

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bb cc d e ff ggggggggggggg hh ii j k ll</pre>	<pre>BD_ADDR1 di oi c s si BD_ADDR2 di oi c s si</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_BT_MM_BD_ADDR_1	S	R	no
				BD_ADDR of the first connected device. Hex string format			
b(2)	MON			FTD_SB_BT_MM_PN_DEV_ID_1	B:D	R	no
				phonet device id of the first connected device. Decimal format			
c(2)	MON			FTD_SB_BT_MM_PN_OBJ_ID_1	B:D	R	no
				phonet object id of the first connected device. Decimal format			
d	MON			FTD_SB_BT_MM_CONN_DIR_1	S	R	no
				Connection direction of the first connected device M0 = o MT= t.			
e	MON			FTD_SB_BT_MM_SCO_HANDLE_1	S	R	no
				Sco handle of the first connected device T=true F=false.			
f(2)	MON			FTD_SB_BT_MM_SERVICE_ID_1	B:D	R	no
				Service id of the first connected device. Decimal format			
g(12)	MON			FTD_SB_BT_MM_BD_ADDR_2	S	R	no
				BD_ADDR of the second connected device. Hex string format.			
h(2)	MON			FTD_SB_BT_MM_PN_DEV_ID_2	B:D	R	no
				phonet device id of the second connected device. Decimal format			
i(2)	MON			FTD_SB_BT_MM_PN_OBJ_ID_2	B:D	R	no
				phonet object id of the second connected device. Decimal format			
j	MON			FTD_SB_BT_MM_CONN_DIR_2	S	R	no
				Connection direction of the second connected device. M0 = o MT= t.			
k	MON			FTD_SB_BT_MM_SCO_HANDLE_2	S	R	no
				Sco handle of the second connected device. T=true F=false.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
l(2)	MON			FTD_SB_BT_MM_SERVICE_ID_2	B:D	R	no
Service id of the second connected device. Decimal format							

29.2 Display 72.02: BT MM display (2nd display MM IF)

S40 Data display	S40 HELP display
<pre>aa bb cc ddddddd eeeeeee</pre>	<pre>queue stor em persent int state BT configur</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_BT_QUEUE_MAX_LENGTH	B:D	R	no
Max length of message queue. Decimal format							
b(2)	MON			FTD_SB_BT_STORAGE_MAX_LENGTH	B:D	R	no
Max length of message storage. Decimal format							
c(2)	MON			FTD_SB_BT_EM_LEVEL	B:D	R	no
MCM's energy level to energy management. Decimal format							
d(8)	MON			FTD_SB_BT_INTERNAL_STATE	S	R	no
BT MM IF's internal state.							
e(8)	MON			FTD_SB_BT_CONFIG_USED	S	R	no
BT MM Configuration (Base & Delta)							

29.3 Display 72.03: BT MM display (1st display SDP)

S40 Data display	S40 HELP display
<pre>SDPcli aa bbbb cc dddd ee ffff</pre>	<pre>SDPcli os l2ha st pdus id errc</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_BT_SDP_OPEN_CLIENT_SESSION	B:D	R	no
0 = no open client sessions, 1 = there is an open client session							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(4)	MON			FTD_SB_BT_SDP_CLIENT_L2_HANDLE	W:D	R	no
				L2_handle of the L2CAP channel for the SDP client session.			
c(2)	MON			FTD_SB_BT_SDP_CLIENT_STATE	B:D	R	no
				State of the SDP client.			
d(4)	MON			FTD_SB_BT_SDP_SENT_PDU_COUNT	W:D	R	no
				Number of request PDUs sent by the SDP client.			
e(2)	MON			FTD_SB_BT_SDP_SENT_PDU_ID	B:D	R	no
				Identifier of the last PDU sent by the SDP client.			
f(4)	MON			FTD_SB_BT_SDP_RECEIVED_ERROR_CODE	W:D	R	no
				Error code of last received error response PDU.			

29.4 Display 72.04: BT MM display (2nd display SDP)

S40 Data display	S40 HELP display
<pre>SDPser aa bb cccc dddd ee ffffffff gggg hhhh</pre>	<pre>SDPser db os l2ha pduc id srhandle errc attr</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_BT_SDP_SERVICE_RECORD_COUNT	B:D	R	no
				Number of service records in SDP server database			
b(2)	MON			FTD_SB_BT_SDP_OPEN_SERVER_SESSION	B:D	R	no
				0 = no open server sessions, 1 = there is an open server session			
c(4)	MON			FTD_SB_BT_SDP_SERVER_L2_HANDLE	W:H	R	no
				L2_handle of the L2CAP channel for the SDP server session.			
d(4)	MON			FTD_SB_BT_SDP_RECEIVED_PDU_COUNT	W:D	R	no
				Number of request PDUs received by the SDP server.			
e(2)	MON			FTD_SB_BT_SDP_RECEIVED_PDU_ID	B:H	R	no
				Identifier of the last PDU received by the SDP server			
f(8)	MON			FTD_SB_BT_SDP_EXAMINED_SR_HANDLE	DW:H	R	no
				Handle of the latest examined service record			
g(4)	MON			FTD_SB_BT_SDP_RETURNED_ERROR_CODE	W:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Error code of last sent error response PDU.							
h(4)	MON			FTD_SB_BT_SDP_RETURNED_ATTRIBUTE_ID	W:H	R	no
Last attribute id SDP server has returned.							

29.5 Display 72.05: BT MM display (1st display HCI)

S40 Data display	S40 HELP display
<pre>BT HCI aa bb cc dddd eeee ffff gggg</pre>	<pre>BT HCI Comm Eve Err Send k/s Max Res k/s Max</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_BT_HCI_COMMANDS_SENT	B:D	R	no
Number of sent commands. Decimal format							
b(2)	MON			FTD_SB_BT_HCI_EVENTS_RECEIVED	B:D	R	no
Number of received events. Decimal format							
c(2)	MON			FTD_SB_BT_HCI_ERRORS	B:H	R	no
Number of errors. Firs 4 bit idicates location of error. Last 4b indicates amount of errors. Hex format							
d(4)	MON			FTD_SB_BT_HCI_DATA_RECEIVED	W:D	R	no
Data recieved data k/s. decimal format							
e(4)	MON			FTD_SB_BT_HCI_DATA_RECEIVED_MAX	W:D	R	no
Data recieved data k/s maximum value. Decimal format							
f(4)	MON			FTD_SB_BT_HCI_DATA_SENT	W:D	R	no
Data sent data k/s. decimal format							
g(4)	MON			FTD_SB_BT_HCI_DATA_SENT_MAX	W:D	R	no
Data sent data k/s maximum value. Decimal format							

29.6 Display 72.06: BT MM display (2nd display HCI)

S40 Data display	S40 HELP display
<pre>aaaa bb cc dddd ee ff gggg hh ii jjjj kk ll</pre>	<pre>List of comm evets event status Comm Eve St</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_BT_HCI_COMMAND_LIST1	W:H	R	no
				Last sent command. Hex format			
b(2)	MON			FTD_SB_BT_HCI_EVENT_LIST1	B:H	R	no
				Last reseived event. Hex format			
c(2)	MON			FTD_SB_BT_HCI_EVENT_STATUS1	B:H	R	no
				Event code for last received event . Hex format			
d(4)	MON			FTD_SB_BT_HCI_COMMAND_LIST2	W:H	R	no
				2nd Last sent command. Hex format			
e(2)	MON			FTD_SB_BT_HCI_EVENT_LIST2	B:H	R	no
				2nd Last received event. Hex format			
f(2)	MON			FTD_SB_BT_HCI_EVENT_STATUS2	B:H	R	no
				Event code for 2nd last received event. Hex format			
g(4)	MON			FTD_SB_BT_HCI_COMMAND_LIST3	W:H	R	no
				3rd last sent command. Hex format			
h(2)	MON			FTD_SB_BT_HCI_EVENT_LIST3	B:H	R	no
				3rd last reseived event. Hex format			
i(2)	MON			FTD_SB_BT_HCI_EVENT_STATUS3	B:H	R	no
				Event code for 3rd last received event. Hex format			
j(4)	MON			FTD_SB_BT_HCI_COMMAND_LIST4	W:H	R	no
				4th Last sent command. Hex format			
k(2)	MON			FTD_SB_BT_HCI_EVENT_LIST4	B:H	R	no
				4th Last received event. Hex format			
l(2)	MON			FTD_SB_BT_HCI_EVENT_STATUS4	B:H	R	no
				Event code for 4th last received event. Hex format			

29.7 Display 72.07: BT MM display (1st MCE display)

S40 Data display	S40 HELP display
<pre> BT MCE aaaa bbbb cc dd ee </pre>	<pre> BT MCE Conn. Dison. Err. Buffer Conn. status </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_BT_MCE_CONNECTIONS	W:H	R	no
				Number of sent connections. Decimal format			
b(4)	MON			FTD_SB_BT_MCE_DISCONNECTIONS	W:H	R	no
				Number of disconnections. Decimal format			
c(2)	MON			FTD_SB_BT_MCE_ERRORS	B:H	R	no
				Number of errors. First 4 bits indicate the location of error. Last 4 bits indicate the amount of errors. Type: uint8 Show: Hex format			
d(2)	MON			FTD_SB_BT_MCE_BUFFER_READY	B:D	R	no
				Number of registration into buffer ready handler. Decimal format			
e(2)	MON			FTD_SB_BT_MCE_STATUS_OF_LAST_CONN	B:H	R	no
				Status of connection. Show: Hex format. Req = 0x00 LinkK = 0x01 PIN = 0x02 Auth = 0x03 Enc = 0x04 CC = 0x05 Disc = 0x06 Rej = 0x07			

29.8 Display 72.08: BT MM display (2nd MCE display)

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa MCE Dev DB bbbbbbbbbbbb cccccc</pre>	<pre>Local BDADDR Device DB BD_ADDR Class of Dev</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_BT_MCE_LOCAL_BD_ADDR	S	R	no
				Show own BD_ADDR. Hex string format			
b(12)	MON			FTD_SB_BT_MCE_DEV_DB_BD_ADDR	S	R	no
				Found device BD_ADDR, MCE search DB trough and start again, intervall for one device is 3sec (if FTD refresh rate is 1sec). Hex string format			
c(6)	MON			FTD_SB_BT_MCE_DEV_DB_COD	S	R	no
				Class of remote device, this belongs to device which BD_ADDR is in top of the COD field. Hex format			

29.9 Display 72.09: BT MM display (3rd MCE display)

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbb cccc ddd eeeeee ff</pre>	<pre>ConnDB BDADD ConnHandle Packet LinkT Role EncrM</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_BT_MCE_CONN_DB_BD_ADDR	S	R	no
This page search MCE connection DB information, by chaning every 3 sec into next device. This field show BD_ADDR of connected device. Hex string format							
b(4)	MON			FTD_SB_BT_MCE_CONN_DB_CONN_HANDLE	W:H	R	no
Connection handle of active connection. Show: Hex format							
c(4)	MON			FTD_SB_BT_MCE_CONN_DB_PACKET_TYPE	W:H	R	no
Packet type of connection. Show: Hex format							
d(3)	MON			FTD_SB_BT_MCE_CONN_DB_LINK_TYPE	S	R	no
Type of connection. Show: ASCII ACL = 0x01 SCO = 0x00							
e(6)	MON			FTD_SB_BT_MCE_CONN_DB_ROLE	S	R	no
Role of connection. Show: ASCII Master = 0x00 Slave = 0x01							
f(2)	MON			FTD_SB_BT_MCE_CONN_DB_ENC	B:H	R	no
Show is link encrypted or not. Show: Hex format							

29.10 Display 72.10: BT MM display (4th MCE display)

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbb cccccccc ddd ee ff</pre>	<pre>SecuDB BDADD Protocol ID Channel ID Lev Stat Num</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_BT_MCE_SECU_DB_BD_ADDR	S	R	no
This page search MCE security DB information, by chaning every 3 sec into next device. This field show BD_ADDR of device. Show: Hex string format							
b(8)	MON			FTD_SB_BT_MCE_SECU_DB_P_ID	DW:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Protocol ID. Show: Hex format.						
c(8)	MON			FTD_SB_BT_MCE_SECU_DB_C_ID	DW:H	R	no
	Channel ID. Show: Hex format.						
d(4)	MON			FTD_SB_BT_MCE_SECU_DB_LEVEL	W:H	R	no
	Security level. Show: Hex format						
e(2)	MON			FTD_SB_BT_MCE_SECU_DB_STATUS	W:H	R	no
	Status of security process. Show: Hex format						
f(2)	MON			FTD_SB_BT_MCE_SECU_DB_NUM	B:H	R	no
	Space of connections for specific protocl and channel. Show: Decimal format						

29.11 Display 72.11: BT MM display (1st stack display)

S40 Data display	S40 HELP display
<pre>Bluetooth aaaaaaaaaaaa bbbbbbbbbbbb</pre>	<pre>BT FTD Release ver. Release date</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_BT_STACK_VERSION_STR	S	R	no
	Telecaster release version string Show: ASCII						
b(12)	MON			FTD_SB_BT_STACK_VERSION_DATE	S	R	no
	Telecaster release version date. Show: ASCII						

29.12 Display 72.12: BT MM display (1st PEP display)

S40 Data display	S40 HELP display
<pre>PEP aa bb cc dd ee ff gg hh ii jj kk ll mm nn</pre>	<pre>PEP se co i1 s1 i2 s2 i3 s3 i4 s4 i5 s5 i6 s6</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_BT_PEP_SERVICES	B:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number of PEP services registered. Hex format						
b(2)	MON			FTD_SB_BT_PEP_CONNECTION	B:H	R	no
	Number of active PEP connections. Hex format						
c(2)	MON			FTD_SB_BT_PEP_SERVICE_ID_1	B:H	R	no
	Service id of the registered service. Hex format						
d(2)	MON			FTD_SB_BT_PEP_SERVICE_STATE_1	B:H	R	no
	State of the registered service. Hex format						
e(2)	MON			FTD_SB_BT_PEP_SERVICE_ID_2	B:H	R	no
	Service id of the registered service. Hex format						
f(2)	MON			FTD_SB_BT_PEP_SERVICE_STATE_2	B:H	R	no
	State of the registered service. Hex format						
g(2)	MON			FTD_SB_BT_PEP_SERVICE_ID_3	B:H	R	no
	Service id of the registered service. Hex format						
h(2)	MON			FTD_SB_BT_PEP_SERVICE_STATE_3	B:H	R	no
	State of the registered service. Hex format						
i(2)	MON			FTD_SB_BT_PEP_SERVICE_ID_4	B:H	R	no
	Service id of the registered service. Hex format						
j(2)	MON			FTD_SB_BT_PEP_SERVICE_STATE_4	B:H	R	no
	State of the registered service. Hex format						
k(2)	MON			FTD_SB_BT_PEP_SERVICE_ID_5	B:H	R	no
	Service id of the registered service. Hex format						
l(2)	MON			FTD_SB_BT_PEP_SERVICE_STATE_5	B:H	R	no
	State of the registered service. Hex format						
m(2)	MON			FTD_SB_BT_PEP_SERVICE_ID_6	B:H	R	no
	Service id of the registered service. Hex format						
n(2)	MON			FTD_SB_BT_PEP_SERVICE_STATE_6	B:H	R	no
	State of the registered service. Hex format						

29.13 Display 72.13: BT MM display (2nd PEP display)

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bb cc dd ee ffffffff gg hhhhhhh ii</pre>	<pre>BTDevAddress dl st dn oi TX-data- fc RX-data- fc</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	MON			FTD_SB_BT_PEP_BDADDR	S	R	no
	BD address of the connection. Hex string format						
b(2)	MON			FTD_SB_BT_PEP_DLC	B:H	R	no
	RFCOMM dlc of the connection. Hex format						
c(2)	MON			FTD_SB_BT_PEP_SERVICE_TYPE	B:H	R	no
	Type of the service (service ID). Hex format						
d(2)	MON			FTD_SB_BT_PEP_DEVICE	B:H	R	no
	Device ID of the connected device.						
e(2)	MON			FTD_SB_BT_PEP_OBJECT	B:H	R	no
	Object number of the connected object. Hex format						
f(8)	MON			FTD_SB_BT_PEP_DATA_TX	DW:H	R	no
	Amount of data transmitted with this connection. Hex format						
g(2)	MON			FTD_SB_BT_PEP_FLOW_TX	B:H	R	no
	State of the TX flow control on connection. Hex format						
h(8)	MON			FTD_SB_BT_PEP_DATA_RX	DW:H	R	no
	Amount of data received with this connection. Hex format						
i(2)	MON			FTD_SB_BT_PEP_FLOW_RX	B:H	R	no
	State of the RX flow control on connection. Hex format						

29.14 Display 72.14: BT MM display (1st display L2CAP)

S40 Data display	S40 HELP display
<pre>aaaaaaa bbbbbbb ccccccc dddd</pre>	<pre>cid rem loc mtu rx tx sta int glo hci_handle</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_BT_L2CAP_CIDS	DW:H	R	no
	remote and local cids. Hex format						
b(8)	MON			FTD_SB_BT_L2CAP_MTUS	DW:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
		remote and local mtus. Hex format					
c(8)	MON			FTD_SB_BT_L2CAP_STATES	DW:H	R	no
	l2cap global and internal state. Hex format						
d(4)	MON			FTD_SB_BT_L2CAP_HCI_HANDLE	W:H	R	no
	hci_handle. Hex format						

29.15 Display 72.15: BT MM display (2nd display L2CAP)

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddd </pre>	<pre> cid rem loc data rec data sent hci handle </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_BT_L2CAP_CIDS	DW:H	R	no
	remote and local cids. Hex format						
b(8)	MON			FTD_SB_BT_L2CAP_DATA_REC	DW:H	R	no
	data received in a cid. Type: uint32 Show: Hex format						
c(8)	MON			FTD_SB_BT_L2CAP_DATA_SENT	DW:H	R	no
	data sent in a cid. Type: uint32 Show: Hex format						
d(4)	MON			FTD_SB_BT_L2CAP_HCI_HANDLE	W:H	R	no
	hci_handle. Hex format						

29.16 Display 72.16: BT MM display (3rd display L2CAP)

S40 Data display	S40 HELP display
<pre> aaaa bb cc </pre>	<pre> cids hci handle pk_hc latx </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_BT_L2CAP_ACL_HCI_HANDLE	W:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	hci_handle. Type: uint16 Show: Hex format						
b(2)	MON			FTD_SB_BT_L2CAP_PACK_ AT_HC	B:H	R	no
	packets in the chip. Type: uint8 Show: Hex format						
c(2)	MON			FTD_SB_BT_L2CAP_LAST_ SENT	B:H	R	no
	code of last packet sent. Type: uint8 Show: Hex format						

29.17 Display 72.17: BT MM display (4th display L2CAP)

S40 Data display	S40 HELP display
NON CHANNEL aaaa bbbb cc	NON CHANNEL cid handle code

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_BT_L2CAP_NCH_ CID	W:H	R	no
	cid that requested the echo. Type: uint16 Show: Hex format						
b(4)	MON			FTD_SB_BT_L2CAP_NCH_ HCI_HANDLE	W:H	R	no
	hci_handle. Type: uint16 Show: Hex format						
c(2)	MON			FTD_SB_BT_L2CAP_NCH_ CODE	B:H	R	no
	code for the non channel code. Type: uint8 Show: Hex format						

29.18 Display 72.18: BT MM display (5th display L2CAP)

S40 Data display	S40 HELP display
FLOW INFO aaaa bb	NON CHANNEL handle flow

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_BT_L2CAP_HCI_ HANDLE	W:H	R	no
	hci_handle. Hex format						
b(2)	MON			FTD_SB_BT_L2CAP_FLOW	B:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	informs if flow is on or not. Type: uint8 Show: Hex format						

30 Group 73: Common Accessory displays

30.1 Group 73 Information

Please refer Accessory Server specific documentation for more information about the data items.

30.2 Display 73.01: Accessory mode information 1

S40 Data display	S40 HELP display
<pre>AccMod : aa AccDetOn : bb HeadInt :cccc HookInt :dddd</pre>	<pre>AccessoryMod AccDetInProg HeadIntRdng HookIntRdng</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_ACC_MODE	B:H	R	yes
Accessory mode (byte, hex)							
b(2)	ACCESSORY			ACC_SB_FTD_ACC_DET_ON	B:D	R	yes
Accessory detection in progress flag: 0 / 1 (byte, hex)							
c(4)	ACCESSORY			ACC_SB_FTD_ACC_HEADINT	W:D	R	yes
Last HeadInt channel reading (word, hex)							
d(4)	ACCESSORY			ACC_SB_FTD_ACC_HOOKINT	W:D	R	yes
Last HookInt channel reading (word, hex)							

30.3 Display 73.02: Accessory mode information 2

S40 Data display	S40 HELP display
<pre>AccCntr : aa AccPPHWi : bb AccPPHDwn :cc AccChrgDc :dd</pre>	<pre>DetLoopCntr PPHWrongInst PPHPowerDown ChrgDisconn</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_ACC_COUNTER	B:D	R	yes
Accessory detection loop counter value (byte, hex)							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(2)	ACCESSORY			ACC_SB_FTD_ACC_PPHF_WI	B:D	R	yes
				Plug and play handsfree wrong installation flag: 0 / 1 (byte, hex)			
c(2)	ACCESSORY			ACC_SB_FTD_ACC_PPHF_DOWN	B:D	R	yes
				Plug and play handsfree power down flag: 0 / 1 (byte, hex)			
d(2)	ACCESSORY			ACC_SB_FTD_ACC_CHRG_DC	B:D	R	yes
				Charger disconnection detected flag: 0 / 1 (byte, hex)			

30.4 Display 73.03: Accessory mode information 3

S40 Data display	S40 HELP display
<pre>AccHDBtnD:aa AccSttInd:bb AccSUpInd:cc</pre>	<pre>HDBtnDownDet HFU2StateInd HFU2StartInd</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_ACC_HD_BTN_DOWN	B:D	R	yes
				Headset detected in button down state flag: 0 / 1 (byte, hex)			
b(2)	ACCESSORY			ACC_SB_FTD_ACC_HFU2_INFO	B:D	R	yes
				HFU-2x car kit state indication data (byte, hex)			
c(2)	ACCESSORY			ACC_SB_FTD_ACC_HFU2_SU_INFO	B:D	R	yes
				HFU-2x car kit start up indication data (byte, hex)			

30.5 Display 73.04: Vibra information

S40 Data display	S40 HELP display
<pre>AccVbrStt:aa AccVbrInt:bb</pre>	<pre>VibraState VibraIntnsty</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_ACC_VBR_STATE	B:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Vibra state (off/on) flag: 0 / 1 (byte, hex)						
b(2)	ACCESSORY			ACC_SB_FTD_ACC_VBR_INT	B:D	R	yes
	Vibra intensity (relative clock frequency) data: 0x00 - 0x64 (byte, hex)						

30.6 Display 73.05: Proximity sensor information

S40 Data display	S40 HELP display
AccPxmStt :aa PxmReg : bbbb	ProxmtyState PrxDetCtlReg

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_ACC_PXM_STATE	B:H	R	yes
	Proximity detection state information (byte, hex)						
b(4)	ACCESSORY			ACC_SB_FTD_ACC_PXM_REG	W:H	R	yes
	Proximity detector register value (word, hex)						

30.7 Display 73.06: Ambient light sensor information 1

S40 Data display	S40 HELP display
AccAliLlv :aa CalVal : bbbb TmpVal : cccc RawVal : dddd	AmbntLghtLvl AliCalibrVal AliTmpCmpVal AliRawADVal

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_ACC_ALI_LUM	B:D	R	yes
	Ambient light luminance level (byte, hex)						
b(4)	ACCESSORY			ACC_SB_FTD_ACC_ALI_CAL_VAL	W:D	R	yes
	Ambient light calibrated value (word, hex)						
c(4)	ACCESSORY			ACC_SB_FTD_ACC_ALI_TEMP_VAL	W:D	R	yes
	Ambient light temperature compensated value (word, hex)						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(4)	ACCESSORY			ACC_SB_FTD_ACC_ALI_RAW_VAL	W:D	R	yes
Ambient light raw AD value (word, hex)							

30.8 Display 73.07: Ambient light sensor information 2

S40 Data display	S40 HELP display
CalConv:aaaa VCXOTmp:bbbb	AmbntCalConv VCXOTemperat

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	ACCESSORY			ACC_SB_FTD_ACC_ALI_CALCONV	W:D	R	yes
Ambient light CalConv -calibration value (word, hex)							
b(4)	ACCESSORY			ACC_SB_FTD_ACC_ALI_VCXOTEMP	B:D	R	yes
VCXO Temperature (byte, decimal)							

30.9 Display 73.08: Active cover information

S40 Data display	S40 HELP display
AccAcAd:aaaa AccAcTp:bbbb AccAcSt:cc	CoverEad CoverType CoverState

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	ACCESSORY			ACC_SB_FTD_ACC_AC_EAD	W:D	R	yes
Active cover AD-value (word, hex)							
b(4)	ACCESSORY			ACC_SB_FTD_ACC_AC_TYPE	W:D	R	yes
Active cover type: (word, hex)							
c(2)	ACCESSORY			ACC_SB_FTD_ACC_AC_STATE	B:D	R	yes
Active cover state: (byte, hex)							

30.10 Display 73.09: Pop Port accessory mode

S40 Data display	S40 HELP display
<pre>MastType:aaa SubType:bbb AccId:ccc</pre>	<pre>MasterType SubType AccessoryID</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	ACCESSORY			ACC_SB_FTD_ACC_MASTYPE	B:D	R	no
		Master Type: (byte, dec)					
b(3)	ACCESSORY			ACC_SB_FTD_ACC_SUBTYPE	B:D	R	no
		Sub Type: (byte, dec)					
c(3)	ACCESSORY			ACC_SB_FTD_ACC_ACCID	B:D	R	no
		Accessory ID: (byte, dec)					

30.11 Display 73.10: ACI register states

S40 Data display	S40 HELP display
<pre>PortDataR:aa DDR_Reg: bb IntOptReg:cc</pre>	<pre>Port Data DataDirectio InterruptOpt</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_ACC_PORTDATA	B:H	R	no
		ACI ASIC port data reg (byte, hex)					
b(2)	ACCESSORY			ACC_SB_FTD_ACC_DDR	B:H	R	no
		ACI ASIC ddr reg (byte, hex)					
c(2)	ACCESSORY			ACC_SB_FTD_ACC_INOPT	B:H	R	no
		ACI ASIC IntOpt reg: (byte, hex)					

30.12 Display 73.11: Tomahawk bits

S40 Data display	S40 HELP display
<pre>Vout:a HC:b PUp:c Busy:d ACISpdReg:ee ACIDelay:ff</pre>	<pre>VOUT HiCurr. PullUp Busy ACISpdR ACITempDelay</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	ACCESSORY			ACC_SB_FTD_ACC_VOUT	B:D	R	no
	PopPort VOUT (byte, dec)						
b	ACCESSORY			ACC_SB_FTD_ACC_HIGHCURR	B:D	R	no
	VOUT high current (byte, dec)						
c	ACCESSORY			ACC_SB_FTD_ACC_PULLUP	B:D	R	no
	Strong pull-up (byte, dec)						
d	ACCESSORY			ACC_SB_FTD_ACC_BUSY	B:D	R	no
	ACC ACI Busy (byte, dec)						
e(2)	ACCESSORY			ACC_SB_FTD_ACC_ACISPDR	B:H	R	no
	ACI Speed register: (byte, hex)						
f(2)	ACCESSORY			ACC_SB_FTD_ACC_ACIDELAY	B:D	R	no
	ACI Temperature Delay (byte, dec)						

30.13 Display 73.12: Accessory AudioBlock

S40 Data display	S40 HELP display
<pre>AudBlock:a AudBVer:bb</pre>	<pre>AudBlockIncl AudBlockVers</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	ACCESSORY			ACC_SB_FTD_ACC_AUDBLOCK	B:D	R	no
	AudioBlock 1=yes 0=no (byte, dec)						
b(2)	ACCESSORY			ACC_SB_FTD_ACC_AB_VER	B:D	R	no
	AudioBlock version (byte, dec)						

30.14 Display 73.13: Accessory ACI memory data 1

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>ACI ASIC Memory content page 1/2</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA1	DW:H	R	no
		ACI Data1 (dword, hex)					
b(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA2	DW:H	R	no
		ACI Data2 (dword, hex)					
c(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA3	DW:H	R	no
		ACI Data3 (dword, hex)					
d(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA4	DW:H	R	no
		ACI Data4 (dword, hex)					

30.15 Display 73.14: Accessory ACI memory data 2

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>ACI ASIC Memory content page 2/2</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA5	DW:H	R	no
		ACI Data5 (dword, hex)					
b(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA6	DW:H	R	no
		ACI Data6 (dword, hex)					
c(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA7	DW:H	R	no
		ACI Data7 (dword, hex)					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(8)	ACCESSORY			ACC_SB_FTD_ACC_ACI_DATA8	DW:H	R	no
ACI Data8 (dword, hex)							

30.16 Display 73.15: Accessory AV HW1

S40 Data display	S40 HELP display
<pre>PlugDet: a Mic/Data: b Mic/Vid: c</pre>	<pre>AVGenIOState DataSwitch VideoSwitch</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	ACCESSORY			ACC_SB_FTD_NOK_AV_GENIO_STATE	B:D	R	no
PlugDet 1=yes 0=no (byte, dec)							
b	ACCESSORY			ACC_SB_FTD_NOK_AV_MICDATA	B:D	R	no
Mic/Data, 1=MIC, 0=Data (byte, dec)							
c	ACCESSORY			ACC_SB_FTD_NOK_AV_MICVIDEO	B:D	R	no
Mic/Vid, 1=Mic, 0=Video (byte, Dec)							

30.17 Display 73.16: Accessory AV ECI Info

S40 Data display	S40 HELP display
<pre>ECI_HW: aa ECI_SW: bb ECI_Mic: cc</pre>	<pre>ECI_HW_Ver. ECI_SW_Ver. ECI_MicCtrl</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_NOK_AV_ECI_HW_VERSION	B:D	R	no
ECI Chip HW Version(byte, hex)							
b(2)	ACCESSORY			ACC_SB_FTD_NOK_AV_ECI_SW_VERSION	B:D	R	no
ECI Chip SW Version (byte, hex)							
c(2)	ACCESSORY			ACC_SB_FTD_NOK_AV_MIC_CTRL	B:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	ECI Mic control (byte, hex)						

30.18 Display 73.17: Accessory AV ECI Info2

S40 Data display	S40 HELP display
<pre>PORT Data: aaaaaaa DDR: bbbbbbbb</pre>	<pre>ECI Port data ECI DDR Reg data</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_ECI_PORT_DATA	DW:H	R	no
ECI Port data (byte, hex)							
b(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_ECI_DDR_REG_DATA	DW:H	R	no
ECI DDR Register data (byte, hex)							

30.19 Display 73.18: Accessory AV ECI Interrupt configuration

S40 Data display	S40 HELP display
<pre>Int .Regs: aaaaaaa bbbbbbbb</pre>	<pre>ECI Interrupt Config. Registers</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_ECI_INT_REG_CFG1	DW:H	R	no
ECI Interrupt configuration data1 (dword, hex)							
b(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_ECI_INT_REG_CFG2	DW:H	R	no
ECI Interrupt configuration data2 (dword, hex)							

30.20 Display 73.19: Accessory AV Accessory Info

S40 Data display	S40 HELP display
<pre>Enh.ID: aaaa Enh.Mod:bbbb CC:cc NF:ddd Active: eeee</pre>	<pre>Enhanc. ID Enhanc. MOD Conf. NumFea Active State</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	ACCESSORY			ACC_SB_FTD_NOK_AV_ENH_ID	W:H	R	no
		Enhancement ID (word, hex)					
b(4)	ACCESSORY			ACC_SB_FTD_NOK_AV_ENH_MOD	W:H	R	no
		Enhancement Modification (word, hex)					
c(2)	ACCESSORY			ACC_SB_FTD_NOK_AV_CONN_CONF	B:H	R	no
		Connector configuration (byte, hex)					
d(3)	ACCESSORY			ACC_SB_FTD_NOK_AV_NUM_OF_FEATURES	B:D	R	no
		Number of features (byte, decimal)					
e(4)	ACCESSORY			ACC_SB_FTD_NOK_AV_ACTIVE_STATE	W:H	R	no
		Active state (word, hex)					

30.21 Display 73.20: Accessory AV Feature Map 1

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>Feature Map 1 / 4</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP1	DW:H	R	no
		Features 1and 2 (dword, hex)					
b(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP2	DW:H	R	no
		Features 3 and 4(dword, hex)					
c(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP3	DW:H	R	no
		Features 5 and 6(dword, hex)					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP4	DW:H	R	no
Features 7 and 8(dword, hex)							

30.22 Display 73.21: Accessory AV Feature Map 2

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>Feature Map 2 / 4</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP5	DW:H	R	no
Features 9 and 10 (dword, hex)							
b(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP6	DW:H	R	no
Features 11 and 12(dword, hex)							
c(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP7	DW:H	R	no
Features 13 and 14(dword, hex)							
d(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP8	DW:H	R	no
Features 15 and 16(dword, hex)							

30.23 Display 73.22: Accessory AV Feature Map 3

S40 Data display	S40 HELP display
<pre>aaaaaaaa bbbbbbbb cccccccc dddddddd</pre>	<pre>Feature Map 3 / 4</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP9	DW:H	R	no
Features 17 and 18 (dword, hex)							
b(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP10	DW:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Features 19 and 20(dword, hex)							
c(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP11	DW:H	R	no
	Features 21 and 22(dword, hex)						
d(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP12	DW:H	R	no
	Features 23 and 24(dword, hex)						

30.24 Display 73.23: Accessory AV Feature Map 4

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> Feature Map 4 / 4 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP13	DW:H	R	no
	Features 25 and 26 (dword, hex)						
b(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP14	DW:H	R	no
	Features 27 and 28(dword, hex)						
c(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP15	DW:H	R	no
	Features 29 and 30(dword, hex)						
d(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_FEA_MAP16	DW:H	R	no
	Features 31 and 32(dword, hex)						

30.25 Display 73.24: Accessory AV audio features

S40 Data display	S40 HELP display
<pre> AudioP: aa AudType: bb P: cccccccc Enh.Act: d </pre>	<pre> AudioProfile AudioType DeviceProf. Enh.Active </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	ACCESSORY			ACC_SB_FTD_NOK_AV_AUDIO_PROFILE	B:H	R	no
	AudioProfile (byte, hex)						
b(2)	ACCESSORY			ACC_SB_FTD_NOK_AV_AUDIO_TYPE	B:H	R	no
	AudioType (byte, hex)						
c(8)	ACCESSORY			ACC_SB_FTD_NOK_AV_DEV_PROFILE	DW:H	R	no
	Device Profile (dword, hex)						
d	ACCESSORY			ACC_SB_FTD_NOK_AV_ENH_ACTIVE	B:D	R	no
	Enhancement Active (byte, dec)						

31 Group 74: Common Memory Management displays

31.1 Display 74.01: Information of MeM component versions

S40 Data display	S40 HELP display
<pre>Ver : aaaaaaaaaaaa bbbbbbbbbbbb cccccccccccc</pre>	<pre>PMM version PERM version NVD version</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(11)	PERMANENT_DATA			PERM_SB_FTD_PMM_VERSION	S	R	yes
		PMM release ID					
b(11)	PERMANENT_DATA			PERM_SB_FTD_PERM_VERSION	S	R	yes
		PERM release ID					
c(11)	PERMANENT_DATA			PERM_SB_FTD_NVD_VERSION	S	R	yes
		NVD release ID					

32 Group 75: Location Displays

32.1 Group 75 Information

Location displays are grouped in the following way:

Displays 75.0X: Common location FTDs

Displays 75.2X: GSM specific General FTDs

Displays 75.3X: GPS specific General FTDs

32.2 Display 75.01: WGS-84 Coordinates

This display shows latitude / longitude for the last requested location

NOTE!

All numerical values are shown in decimal.

In case no location request has been requested all fields shall show "x".

In case the latest received location request did not result in any latitude / longitude, these fields shall display "-", but method and status fields shall display actual values.

S40 Data display	S40 HELP display
a bb.cccccc d eee.ffffff ggggggggggg hhhhhhhhhhh	LATITUDE LONGITUDE STATUS METHOD

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	LOCATIO N			LS_SB_FTD_LATITUDE_DIR	S	R,I,O	yes
b(2)	LOCATIO N			LS_SB_FTD_LATITUDE_DEG	S	R,I,O	yes
c(6)	LOCATIO N			LS_SB_FTD_LATITUDE	S	R,I,O	yes
d	LOCATIO N			LS_SB_FTD_LONGITUDE_ DIR	S	R,I,O	yes
e(3)	LOCATIO N			LS_SB_FTD_LONGITUDE_ DEG	S	R,I,O	yes
f(6)	LOCATIO N			LS_SB_FTD_LONGITUDE	S	R,I,O	yes
g(11)	LOCATIO N			LS_SB_FTD_LOCATE_RESP_ STATUS	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Status: OK : Successful location response DONE : Successful location response - last of multiple FAIL : Fatal error occurred, no location estimate TIME-OUT : Desired Response Time exceeded. PRIV-NOT-OK : Privacy not ok							
h(11)	LOCATIO N			LS_SB_FTD_LOCATE_RESP_ METHOD	S	R,I,O	yes
Method: NW SELECT : The method is selected by the NW. AGPS, MS BAS : MS based AGPS method used AGPS, MS ASS : MS assisted AGPS method used AFLT, MS BAS : MS based AFLT method used SECTOR : Brew sector information HYBRID : More than 1							

32.3 Display 75.02: Altitude and Velocity vector

This display shows altitude and velocity for the last requested location.

NOTE!

All numerical values are shown in decimal.

In case no location request has been requested all fields shall display "x".

In case the latest location estimate did not include altitude/velocity these fields shall display "-".

S40 Data display	S40 HELP display
<pre>aaaaaa bbbbbb cccccccc dddddddddddddd</pre>	<pre>Speed(m/s) Heading(deg) Altitude(m) Fix Type</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	LOCATIO N			LS_SB_FTD_SPEED	S	R,I,O	yes
Speed in m/s. Format aaa.aa.							
b(5)	LOCATIO N			LS_SB_FTD_DIRECTION	S	R,I,O	yes
Heading in degrees relative to north (clockwise). Format bbb.b							
c(8)	LOCATIO N			LS_SB_FTD_ALTITUDE	S	R,I,O	yes
Altitude above WGS-84 ellipsoid in meters. Can be negative or positive (+/-). Format cccccc.c							
d(12)	LOCATIO N			LS_SB_FTD_FIX_TYPE	S	R,I,O	yes
Fix Type: 2D 2 dimensional fix 3D 3 dimensional fix							

32.4 Display 75.03: Error Estimate Ellipsoid

This display shows error estimation for the last requested location.

All numerical values are shown in decimal.

In case no location request has been requested all fields shall display "x".

In case the latest location estimate did not include uncertainty information these fields shall display "-".

S40 Data display	S40 HELP display
<pre>ORIENTAT:aaa PERP.: bbbbb ALONG: ccccc VERT.: ddddd</pre>	<pre>Orientation Semiminor(m) Semimajor(m) Vertical (m)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_ERR_ORIENTAT	S	R,I,O	yes
Error estimate ellipsoid orientation clockwise from north in degrees (0..89 degrees)							
b(5)	LOCATIO N			LS_SB_FTD_ERR_EAST	S	R,I,O	yes
Error estimate East in meters, 1 sigma value							
c(5)	LOCATIO N			LS_SB_FTD_ERR_NORTH	S	R,I,O	yes
Error estimate North in meters, 1 sigma value							
d(5)	LOCATIO N			LS_SB_FTD_ERR_VERT	S	R,I,O	yes
Error estimate Vertical in meters, 1 sigma value							

32.5 Display 75.04: MS Time of the Location Estimate

This display shows the time stamp for the last location estimate .

The time stamp is always based on local time, i.e. the time of the clock in MS.

NOTE!

All numerical values are shown in decimal.

If MS time in ISA Time Server is not set one might experience invalid time stamps.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa bbbbbbbbb ccccccccccc</pre>	<pre>MS Date MS Time STATUS</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	LOCATIO N			LS_SB_FTD_MS_DATE	S	R,I,O	yes
MS date: (format: dd:mm:yyyy; dd day, mm month, yy year)							
b(8)	LOCATIO N			LS_SB_FTD_MS_TIME	S	R,I,O	yes
MS Time: (format: hh:mm:ss; hh hours, mm minutes, ss seconds)							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(11)	LOCATIO N			LS_SB_FTD_LOCATE_RESP_ STATUS	S	R,I,O	yes
Status: OK : Successful location response DONE : Successful location response - last of multiple FAIL : Fatal error occurred, no location estimate TIME-OUT : Desired Response Time exceeded. PRIV-NOT-OK : Privacy not ok							

32.6 Display 75.10: Test Display #1

To start a location request, perform following steps:

1. Press the Menu button
2. Scroll in the main menu loop to field test display item
3. Press the Select button
4. Select this display in input mode by entering 75.10
5. "INPUT" prompt will be shown on the display, enter the location request parameters in display following this: XYANNN

Value of X	Location method
0	Stand-Alone GPS
1	MS-Based AGPS
2	MS-Assisted Hybrid (CDMA)
3	MS-Assisted AFLT (CDMA)

Value of Y	Start type
0	Cold start (all GPS data cleared)
1	Warm start (GPS Ephemeris data cleared)
2	Hot start (no GPS data cleared)

Please note that field Y has only effect when X=0 or X=1 (Stand-Alone GPS or MS-Based AGPS).

Value of A	Multiple request type
0	Multiple requests for single-fix. Request treated as NNN * single fix (e.g each can start as cold start)
1	Single request for multiple fixes. Request treated as 1 * multiple fixes (with NNN number of fixes, e.g. only first one can start as cold start). The interval between the fixes will be 1 second.

Please note that for MS-Assisted Hybrid/AFLT field A is always treated as A=0.

Value of NNN	Number of fixes
000	Stop ongoing location request
XXX	Number of fixes to be made (ranging in [001, FFE])
FFF	Infinite number of fixes - continuous until stopped (NNN=000)

6. Confirm with the Ok button

If change succeeded the status will show appropriate value.

TTF (Time To Fix) will show the measured time to get the first fix only.

S40 Data display		S40 HELP display	
aaaaaaaaaaa bbbbbb		Status TTF (s)	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(11)	LOCATIO N			LS_SB_FTD_LOCATE_RESP_ STATUS	S	R,I,O	yes
		Status: OK : Successful location response DONE : Successful location response - last of multiple FAIL : Fatal error occurred, no location estimate TIME-OUT : Desired Response Time exceeded. PRIV-NOT-OK : Privacy not ok					
b(5)	LOCATIO N			LS_SB_FTD_FIX_TIME	S	R,I,O	yes
		Measured Time to fix (bbb.b) seconds					
INPUT(7)	LOCATIO N			LS_SB_FTD_LOCATION_REQ	DW:H	R,I,O	yes
		Trigger location request xyannn					

32.7 Display 75.11: Test Display #2

This display is associated to 75.10.

When a location request is started from display 75.10, all fields in 75.11 will be cleared (set to zero, 000). If NNN * single fixes was requested, Location Server will measure the actual time to each fix, and increment the appropriate counter by one.

S40 Data display		S40 HELP display	
aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk lll		<05 <10 <15 <20 <25 <30 <35 <40 <45 <50 <55 >55	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_5	W:UD	R,I,O	yes
		counter for fixes, TTF < 5s					
b(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_10	W:UD	R,I,O	yes
		counter for fixes, 5s=<TTF<10s					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_15	W:UD	R,I,O	yes
		counter for fixes, 10s=<TTF<15s					
d(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_20	W:UD	R,I,O	yes
		counter for fixes, 15s=<TTF<20s					
e(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_25	W:UD	R,I,O	yes
		counter for fixes 20s=<TTF<25s					
f(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_30	W:UD	R,I,O	yes
		counter for fixes 25s=<TTF<30s					
g(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_35	W:UD	R,I,O	yes
		counter for fixes 30s=<TTF<35s					
h(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_40	W:UD	R,I,O	yes
		counter for fixes 35s=<TTF<40s					
i(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_45	W:UD	R,I,O	yes
		counter for fixes 40s=<TTF<45s					
j(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_50	W:UD	R,I,O	yes
		counter for fixes 45s=<TTF<50s					
k(3)	LOCATIO N			LS_SB_FTD_TTF_LESS_55	W:UD	R,I,O	yes
		counter for fixes 50s=<TTF<55s					
l(3)	LOCATIO N			LS_SB_FTD_TTF_GREATER_55	W:UD	R,I,O	yes
		counter for fixes 55s=<TTF					

32.8 Display 75.19: Information of Location Server version

S40 Data display	S40 HELP display
<pre> aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccc dddddddddddd </pre>	<pre> LS Rel. ID LS Rel. Date </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	LOCATIO N			LS_SB_FTD_LS_VERSION	S	R	yes
		Location Server release ID					
b(12)	LOCATIO N			LS_SB_FTD_LS_DATE	S	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Location Server release date							
c(12)	LOCATIO N			LS_SB_FTD_LS_TEXT_1	S	R	yes
	Reserved for spare text						
d(12)	LOCATIO N			LS_SB_FTD_LS_TEXT_2	S	R	yes
	Reserved for spare text						

32.9 Display 75.21: GSM Measure Position Request Counters, GPS

Sub-Group: GSM, General Location FTDs

NOTE!

Examples for how the counters should behave for display 75.20, 75.21 and 75.22 can be found together with description for display 75.22.

S40 Data display	S40 HELP display
<pre>GPS REQ aaaaa OK bbbbb FAIL ccccc</pre>	<pre>GPS REQUESTS RESP OK RESP FAIL</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	LOCATIO N			LS_SB_FTD_GPS_REQS	W:UD	R,I,O	yes
	Received GSM Measure Position Request						
b(5)	LOCATIO N			LS_SB_FTD_GPS_OK	W:UD	R,I,O	yes
	GPS locations or measurements sent successfully to CS SW as a response to GSM Measure Position Request with requested method "GPS" since power-up.						
c(5)	LOCATIO N			LS_SB_FTD_GPS_FAIL	W:UD	R,I,O	yes
	Responses to GSM Position Request requesting the method "GPS" that have contained GSM Location Information error element since power-up.						

32.10 Display 75.23: GSM Positioning Instructions

This display will be based on last received LS_GSM_LOCATE_REQ and its LS_SB_GSM_POSITIONING_INSTR sub block

NOTE!

All numerical values are shown in decimal.

If no GSM_LS_LOCATE_REQ with LS_SB_GSM_POSITIONING_INSTR has not been received the display shall show "x" in all data fields.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb Resp:ccc ddd Acc: eeeeeee</pre>	<pre>Method Type Method RespT Sets Req. Accur.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	LOCATIO N			LS_SB_FTD_GSM_METHOD_ TYP	S	R,I,O	yes
				Method Type: ASSISTED : MS-assisted method requested BASED : MS-based method requested ASS.PREFERED : MS assisted method preferred, but MS based allowed BAS.PREFERED : MS based method preferred, but MS assisted allowed			
b(12)	LOCATIO N			LS_SB_FTD_GSM_POSIT_ METHOD	S	R,I,O	yes
				Positioning Method: E-OTD : E-OTD method should be used. GPS : GPS method should be used. E-OTD or GPS : E-OTD or GPS method should be used.			
c(3)	LOCATIO N			LS_SB_FTD_GSM_RESP_ TIME	S	R,I,O	yes
				This field indicates the desired response time in seconds, 0 to 128. The value for this field shall be calculated according to GSM 04.31 based on the response time field.			
d(3)	LOCATIO N			LS_SB_FTD_GSM_ MULTIPLE_SET	S	R,I,O	yes
				Multiple Sets: MS : Multiple E-OTD/GPS measurement information sets can be sent from MS. nMS : Sending of Multiple E-OTD/GPS measurement information sets is not allowed.			
e(7)	LOCATIO N			LS_SB_FTD_GSM_POSIT_ ACC	S	R,I,O	yes
				This field indicates the required accuracy in meters, 0 m to 1800000m. The value for this field shall be calculated according to GSM 03.32 based on the position accuracy field.			

32.11 Display 75.24: GSM Measurement Error Info

This display will be based on last sent LS_GSM_LOCATE_RESP and its LS_SB_GSM_MEAS_ERROR_INFO subblock
The strings form displays like this:

Data Display:

<pre> Error 0 Error 1 Error 2 +++++++ + Undefined + + Not enough + + Not enough + + Error + + BTSs for + + GPS SVs + + + + MS Based + + for GPS + + + + E-OTD + + location + +++++++ </pre>	<pre> Error 3 Error 4 Error 5 +++++++ + E-OTD loc. + + E-OTD + + GPS Locat. + + calculation+ + assistance + + calculation+ + assistance + + missing + + assistance + + missing + + + + missing + +++++++ </pre>	<pre> Error 6 Error 7 Error 8 +++++++ + GPS + + Requested + + Location + + assistance + + method + + request not+ + missing + + not + + processed + + + + supported + + + +++++++ </pre>
<pre> Error 9 Error 10 Error 11 +++++++ + Reference + + Reference + + Measurement+ + BTS for GPS+ + BTS for + + terminated + + is not the + + E-OTD not + + by another + + serv. BTS + + serv. BTS + + RRPR + +++++++ </pre>	<pre> Error 12 Error!= 1..12 No Error +++++++ + Measurement+ + Unknown + + No Error + + terminated + + Error + + + + by another + + Code + + + + request + + + + + +++++++ </pre>	

NOTE!

This display contains the measurement error info in the Measure Position Response component in RRLP that is sent from MS to the network.

If no LS_GSM_LOCATE_RESP has been sent, the display shall show "x" in all data fields.

If LS_GSM_LOCATE_RESP has been sent but no LS_SB_GSM_MEAS_ERROR_INFO was included, the display shall show display "No error".

If LS_GSM_LOCATE_RESP has been sent with LS_SB_GSM_MEAS_ERROR_INFO, the display shall show the appropriate error.

S40 Data display	S40 HELP display
<pre> aaaaaaaaaaaa bbbbbbbbbbbb cccccccccccc dddddddddddd </pre>	<pre> Location Information ErrorElement in RRLP </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	LOCATIO N			LS_SB_FTD_EOTD_ERR_1	S	R,I,O	yes
	Error code: text 0: Undefined 1: Not enough 2: Not enough 3: E-OTD loc. 4: E-OTD 5: GPS Locat. 6: GPS 7: Requested 8: Location 9: Reference 10: Reference 11: Measurement 12: Measurement other: Unknown						
b(12)	LOCATIO N			LS_SB_FTD_EOTD_ERR_2	S	R,I,O	yes
	Error code: text 0: Error 1: BTSs for 2: GPS SVs 3: calculation 4: assistance 5: calculation 6: assistance 7: method 8: request not 9: BTS for GPS 10: BTS for 11: terminated 12: terminated other: Error						
c(12)	LOCATIO N			LS_SB_FTD_EOTD_ERR_3	S	R,I,O	yes
	Error code: text 1: MS Based 2: for GPS 3: assistance 4: missing 5: assistance 6: missing 7: not 8: processed 9: is not the 10: EOT-D not 11: by another 12: by another other: Code						
d(12)	LOCATIO N			LS_SB_FTD_EOTD_ERR_4	S	R,I,O	yes
	Error code: text1: E-OTD2: location3: missing5: missing7: supported9: serv. BTS10: serv. BTS11: RRRP12: request						

32.12 Display 75.30: Information of GPS version

This display will be based on information provided by each LTM during their registration with LS_METHOD_REGISTRATION_REQ.

If no LTM with GPS capability has registered (or if subblock CLMI_SB_LTM_VERSION is missing from the registration) all fields shall show "x".

S40 Data display	S40 HELP display
<pre> aaaaaaaaaaaa bbbbbbbbbbbb cccccccccccc dddddddddddd </pre>	<pre> GPS LTM Ver. LTM SW Date GPS DSP Ver. DSP SW Date </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	LOCATIO N			LS_SB_FTD_GPS_MCU_ VERSION	S	R	yes
	GPS LTM SW version						
b(12)	LOCATIO N			LS_SB_FTD_GPS_MCU_DATE	S	R	yes
	GPS LTM SW version release date						
c(12)	LOCATIO N			LS_SB_FTD_GPS_DSP_ VERSION	S	R	yes
	GPS DSP SW version						
d(12)	LOCATIO N			LS_SB_FTD_GPS_DSP_DATE	S	R	yes
	GPS DSP SW version release date						

32.13 Display 75.31 GPS Pseudorange measurements, channels 1

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
aaa bbbb cccccccc dddddddd	SV (PRN) C/No (db . Hz) Pseudorange Doppler (Hz)

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_1	S	R,I,O	yes
	Satellite PRN code.						
b(4)	LOCATIO N			LS_SB_FTD_CNO_1	S	R,I,O	yes
	Satellite C/N0 in dB-Hz.Format bb.b						
c(8)	LOCATIO N			LS_SB_FTD_PSEUDORANGE_1	S	R,I,O	yes
	Measured satellite code phase in C/A chips.Format cccc.ccc						
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_1	S	R,I,O	yes
	Measured satellite doppler in Hz. Signed value (+/-).Format ddddddd.dd						

32.14 Display 75.32 GPS Pseudorange measurements, channels 2

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc ddddddddd </pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz) </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_2	S	R,I,O	yes
	Satellite PRN code.						
b(4)	LOCATIO N			LS_SB_FTD_CNO_2	S	R,I,O	yes
	Satellite C/N0 in dB-Hz.Format bb.b						
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_2	S	R,I,O	yes
	Measured satellite code phase in C/A chips.Format cccc.ccc						
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_2	S	R,I,O	yes
	Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd						

32.15 Display 75.33 GPS Pseudorange measurements, channels 3

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc ddddddddd </pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz) </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_3	S	R,I,O	yes
	Satellite PRN code.						
b(4)	LOCATIO N			LS_SB_FTD_CNO_3	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Satellite C/N0 in dB-Hz.Format bb.b						
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_3	S	R,I,O	yes
	Measured satellite code phase in C/A chips.Format cccc.ccc						
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_3	S	R,I,O	yes
	Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd						

32.16 Display 75.34 GPS Pseudorange measurements, channels 4

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db . Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_4	S	R,I,O	yes
	Satellite PRN code.						
b(4)	LOCATIO N			LS_SB_FTD_CNO_4	S	R,I,O	yes
	Satellite C/N0 in dB-Hz.Format bb.b						
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_4	S	R,I,O	yes
	Measured satellite code phase in C/A chips.Format cccc.ccc						
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_4	S	R,I,O	yes
	Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd						

32.17 Display 75.35 GPS Pseudorange measurements, channels 5

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_5	S	R,I,O	yes
Satellite PRN code.							
b(4)	LOCATIO N			LS_SB_FTD_CNO_5	S	R,I,O	yes
Satellite C/N0 in dB-Hz.Format bb.b							
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_5	S	R,I,O	yes
Measured satellite code phase in C/A chips.Format cccc.ccc							
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_5	S	R,I,O	yes
Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd							

32.18 Display 75.36 GPS Pseudorange measurements, channels 6

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_6	S	R,I,O	yes
Satellite PRN code.							
b(4)	LOCATIO N			LS_SB_FTD_CNO_6	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Satellite C/N0 in dB-Hz.Format bb.b							
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_6	S	R,I,O	yes
Measured satellite code phase in C/A chips.Format cccc.ccc							
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_6	S	R,I,O	yes
Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd							

32.19 Display 75.37 GPS Pseudorange measurements, channels 7

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db . Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_7	S	R,I,O	yes
Satellite PRN code.							
b(4)	LOCATIO N			LS_SB_FTD_CNO_7	S	R,I,O	yes
Satellite C/N0 in dB-Hz.Format bb.b							
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_7	S	R,I,O	yes
Measured satellite code phase in C/A chips.Format cccc.ccc							
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_7	S	R,I,O	yes
Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd							

32.20 Display 75.38 GPS Pseudorange measurements, channels 8

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_8	S	R,I,O	yes
Satellite PRN code.							
b(4)	LOCATIO N			LS_SB_FTD_CNO_8	S	R,I,O	yes
Satellite C/N0 in dB-Hz.Format bb.b							
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_8	S	R,I,O	yes
Measured satellite code phase in C/A chips.Format cccc.ccc							
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_8	S	R,I,O	yes
Measured satellite doppler in Hz. Signed value (+/-).Format ddddd.dd							

32.21 Display 75.39 GPS Pseudorange measurements, channels 9

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_9	S	R,I,O	yes
Satellite PRN code.							
b(4)	LOCATIO N			LS_SB_FTD_CNO_9	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Satellite C/N0 in dB-Hz.Format bb.b						
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_9	S	R,I,O	yes
	Measured satellite code phase in C/A chips.Format cccc.ccc						
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_9	S	R,I,O	yes
	Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd						

32.22 Display 75.40 GPS Pseudorange measurements, channels 10

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db . Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_10	S	R,I,O	yes
	Satellite PRN code.						
b(4)	LOCATIO N			LS_SB_FTD_CNO_10	S	R,I,O	yes
	Satellite C/N0 in dB-Hz.Format bb.b						
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_10	S	R,I,O	yes
	Measured satellite code phase in C/A chips.Format cccc.ccc						
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_10	S	R,I,O	yes
	Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd						

32.23 Display 75.41 GPS Pseudorange measurements, channels 11

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_11	S	R,I,O	yes
	Satellite PRN code.						
b(4)	LOCATIO N			LS_SB_FTD_CNO_11	S	R,I,O	yes
	Satellite C/N0 in dB-Hz.Format bb.b						
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_11	S	R,I,O	yes
	Measured satellite code phase in C/A chips.Format cccc.ccc						
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_11	S	R,I,O	yes
	Measured satellite doppler in Hz. Signed value (+/-).Format ddddd.dd						

32.24 Display 75.42 GPS Pseudorange measurements, channels 12

12 identical screens, one for each channel.

Used during MS Assisted A-GPS measurements.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.31 has the highest C/N0 and display 75.42 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaa bbbb cccccccc dddddddd</pre>	<pre> SV (PRN) C/No (db.Hz) Pseudorange Doppler (Hz)</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	LOCATIO N			LS_SB_FTD_SV_12	S	R,I,O	yes
	Satellite PRN code.						
b(4)	LOCATIO N			LS_SB_FTD_CNO_12	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Satellite C/N0 in dB-Hz.Format bb.b							
c(8)	LOCATIO N			LS_SB_FTD_ PSEUDORANGE_12	S	R,I,O	yes
Measured satellite code phase in C/A chips.Format cccc.ccc							
d(9)	LOCATIO N			LS_SB_FTD_DOPPLER_12	S	R,I,O	yes
Measured satellite doppler in Hz. Signed value (+/-).Format dddddd.dd							

32.25 Display 75.50: GPS Position fix Information

Data displayed are valid for the last requested location. In case no location has been requested all fields shall show "x". In case the latest location estimate did not include proper information, these fields shall display "-".

S40 Data display	S40 HELP display
<pre> aaaaaaaaaa bb cccccccc ddddd </pre>	<pre> UTC time Num.of SVs Alt.AMSL Geoidal Sep. </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	LOCATIO N			LS_SB_FTD_UTC	S	R,I,O	yes
UTC time: hhmmss.nnn hh = hour mm = minutes ss = seconds nnn = milliseconds							
b(2)	LOCATIO N			LS_SB_FTD_NUMBER_OF_SV	S	R,I,O	yes
Number of SVs used for calculated position fix							
c(8)	LOCATIO N			LS_SB_FTD_ALT_AMSL	S	R,I,O	yes
Altitude above mean sea level							
d(5)	LOCATIO N			LS_SB_FTD_GEOID_SEP	S	R,I,O	yes
Difference between the WGS-84 earth ellipsoid surface and the mean sea level surface. Altitude difference in meters.							

32.26 Display 75.51 GPS Satellite Information, channels 1

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_1	S	R,I,O	yes
				Used: Satellite used for calculated position Not used: Satellite not used for calculated position			
b(3)	LOCATIO N			LS_SB_FTD_SV_1	S	R,I,O	yes
				Satellite PRN code.			
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_1	S	R,I,O	yes
				OK: All NAV data are ok If not ok a 6 bit binary value is displayed (MSB at the left), please refer to ICD-GPS-200 for details			
d(4)	LOCATIO N			LS_SB_FTD_CNO_1	S	R,I,O	yes
				Satellite C/N0 in dB-Hz. Format bb.b			
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_1	S	R,I,O	yes
				Satellite elevation. Format ccc.cc (range -90.00 to +90.00 degrees)			
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_1	S	R,I,O	yes
				Satellite azimuth. Format ddd.dd (range 0 to 359.99 degrees)			

32.27 Display 75.52 GPS Satellite Information, channels 2

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_2	S	R,I,O	yes
b(3)	LOCATIO N			LS_SB_FTD_SV_2	S	R,I,O	yes
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_2	S	R,I,O	yes
d(4)	LOCATIO N			LS_SB_FTD_CNO_2	S	R,I,O	yes
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_2	S	R,I,O	yes
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_2	S	R,I,O	yes

32.28 Display 75.53 GPS Satellite Information, channels 3

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV (PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_3	S	R,I,O	yes
b(3)	LOCATIO N			LS_SB_FTD_SV_3	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_3	S	R,I,O	yes
		OK: All NAV data are okIf not ok a 6 bit binary value is displayed (MSB at the left), please refer to ICD-GPS-200 for details					
d(4)	LOCATIO N			LS_SB_FTD_CNO_3	S	R,I,O	yes
		Satellite C/N0 in dB-Hz.Format bb.b					
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_3	S	R,I,O	yes
		Satellite elevation.Format ccc.cc (range -90.00 to +90.00 degrees)					
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_3	S	R,I,O	yes
		Satellite azimuth.Format ddd.dd (range 0 to 359.99 degrees)					

32.29 Display 75.54 GPS Satellite Information, channels 4

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_4	S	R,I,O	yes
		Used: Satellite used for calculated positionNot used: Satellite not used for calculated position					
b(3)	LOCATIO N			LS_SB_FTD_SV_4	S	R,I,O	yes
		Satellite PRN code.					
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_4	S	R,I,O	yes
		OK: All NAV data are okIf not ok a 6 bit binary value is displayed (MSB at the left), please refer to ICD-GPS-200 for details					
d(4)	LOCATIO N			LS_SB_FTD_CNO_4	S	R,I,O	yes
		Satellite C/N0 in dB-Hz.Format bb.b					
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_4	S	R,I,O	yes
		Satellite elevation.Format ccc.cc (range -90.00 to +90.00 degrees)					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_4	S	R,I,O	yes
Satellite azimuth.Format ddd.dd (range 0 to 359.99 degrees)							

32.30 Display 75.55 GPS Satellite Information, channels 5

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_5	S	R,I,O	yes
Used: Satellite used for calculated positionNot used: Satellite not used for calculated position							
b(3)	LOCATIO N			LS_SB_FTD_SV_5	S	R,I,O	yes
Satellite PRN code.							
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_5	S	R,I,O	yes
OK: All NAV data are okIf not ok a 6 bit binary value is displayed (MSB at the left), please refer to ICD-GPS-200 for details							
d(4)	LOCATIO N			LS_SB_FTD_CNO_5	S	R,I,O	yes
Satellite C/N0 in dB-Hz.Format bb.b							
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_5	S	R,I,O	yes
Satellite elevation.Format ccc.cc (range -90.00 to +90.00 degrees)							
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_5	S	R,I,O	yes
Satellite azimuth.Format ddd.dd (range 0 to 359.99 degrees)							

32.31 Display 75.56 GPS Satellite Information, channels 6

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_6	S	R,I,0	yes
b(3)	LOCATIO N			LS_SB_FTD_SV_6	S	R,I,0	yes
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_6	S	R,I,0	yes
d(4)	LOCATIO N			LS_SB_FTD_CNO_6	S	R,I,0	yes
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_6	S	R,I,0	yes
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_6	S	R,I,0	yes

32.32 Display 75.57 GPS Satellite Information, channels 7

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre>aaaaaaaaa bbb cccccc dddd eeeee ffffff</pre>	<pre>Used SV(PRN) Health C/No Elevation Azimuth</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_7	S	R,I,O	yes
				Used: Satellite used for calculated position Not used: Satellite not used for calculated position			
b(3)	LOCATIO N			LS_SB_FTD_SV_7	S	R,I,O	yes
				Satellite PRN code.			
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_7	S	R,I,O	yes
				OK: All NAV data are ok If not ok a 6 bit binary value is displayed (MSB at the left), please refer to ICD-GPS-200 for details			
d(4)	LOCATIO N			LS_SB_FTD_CNO_7	S	R,I,O	yes
				Satellite C/N0 in dB-Hz. Format bb.b			
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_7	S	R,I,O	yes
				Satellite elevation. Format ccc.cc (range -90.00 to +90.00 degrees)			
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_7	S	R,I,O	yes
				Satellite azimuth. Format ddd.dd (range 0 to 359.99 degrees)			

32.33 Display 75.58 GPS Satellite Information, channels 8

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre>aaaaaaaaa bbb cccccc dddd eeeee ffffff</pre>	<pre>Used SV(PRN) Health C/No Elevation Azimuth</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_8	S	R,I,O	yes
b(3)	LOCATIO N			LS_SB_FTD_SV_8	S	R,I,O	yes
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_8	S	R,I,O	yes
d(4)	LOCATIO N			LS_SB_FTD_CNO_8	S	R,I,O	yes
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_8	S	R,I,O	yes
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_8	S	R,I,O	yes

32.34 Display 75.59 GPS Satellite Information, channels 9

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_9	S	R,I,O	yes
b(3)	LOCATIO N			LS_SB_FTD_SV_9	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_9	S	R,I,O	yes
d(4)	LOCATIO N			LS_SB_FTD_CNO_9	S	R,I,O	yes
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_9	S	R,I,O	yes
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_9	S	R,I,O	yes

32.35 Display 75.60 GPS Satellite Information, channels 10

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_10	S	R,I,O	yes
b(3)	LOCATIO N			LS_SB_FTD_SV_10	S	R,I,O	yes
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_10	S	R,I,O	yes
d(4)	LOCATIO N			LS_SB_FTD_CNO_10	S	R,I,O	yes
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_10	S	R,I,O	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_10	S	R,I,O	yes
Satellite azimuth.Format ddd.dd (range 0 to 359.99 degrees)							

32.36 Display 75.61 GPS Satellite Information, channels 11

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0.If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV(PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_11	S	R,I,O	yes
Used: Satellite used for calculated positionNot used: Satellite not used for calculated position							
b(3)	LOCATIO N			LS_SB_FTD_SV_11	S	R,I,O	yes
Satellite PRN code.							
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_11	S	R,I,O	yes
OK: All NAV data are okIf not ok a 6 bit binary value is displayed (MSB at the left), please refer to ICD-GPS-200 for details							
d(4)	LOCATIO N			LS_SB_FTD_CNO_11	S	R,I,O	yes
Satellite C/N0 in dB-Hz.Format bb.b							
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_11	S	R,I,O	yes
Satellite elevation.Format ccc.cc (range -90.00 to +90.00 degrees)							
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_11	S	R,I,O	yes
Satellite azimuth.Format ddd.dd (range 0 to 359.99 degrees)							

32.37 Display 75.62 GPS Satellite Information, channels 12

12 identical screens, one for each channel.

Used during MS Based A-GPS and Stand alone GPS positioning.

where x is the channel number 1 - 12.

The channels are reported in the order of C/N0 level. Display 75.51 has the highest C/N0 and display 75.62 has the lowest C/N0. If more than 12 measurements are available, only the 12 strongest measurements will be shown.

S40 Data display	S40 HELP display
<pre> aaaaaaaaa bbb cccccc dddd eeeee ffffff </pre>	<pre> Used SV (PRN) Health C/No Elevation Azimuth </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	LOCATIO N			LS_SB_FTD_SV_USED_12	S	R,I,O	yes
b(3)	LOCATIO N			LS_SB_FTD_SV_12	S	R,I,O	yes
c(6)	LOCATIO N			LS_SB_FTD_SV_HEALTH_12	S	R,I,O	yes
d(4)	LOCATIO N			LS_SB_FTD_CNO_12	S	R,I,O	yes
e(6)	LOCATIO N			LS_SB_FTD_ELEVATION_12	S	R,I,O	yes
f(6)	LOCATIO N			LS_SB_FTD_AZIMUTH_12	S	R,I,O	yes

32.38 Display 75.68: GPS Assistance data from network

This display shows which GPS assistance data has been received from the network.

When Location Server starts a new Location procedure, all fields in this display will be cleared. When assistance data are received from network the appropriate fields will be updated. "xx" = unavailable, "11" = available. Furthermore actual values for reference time accuracy (microsec) and Reference location accuracy (m) are displayed.

S40 Data display	S40 HELP display
<pre> aa bb cc dd ee ff gg hh iiiiiiiiii jj kkkkkkkkkk </pre>	<pre> IO UT AL AA RT DG EP TA r.tim.acc LA r.loc.acc </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	LOCATIO N			LS_SB_FTD_ASS_IONO	S	R,I,O	yes
	Ionospheric						
b(2)	LOCATIO N			LS_SB_FTD_ASS_UTC	S	R,I,O	yes
	UTC						
c(2)	LOCATIO N			LS_SB_FTD_ASS_ALMANAC	S	R,I,O	yes
	Almanac						
d(2)	LOCATIO N			LS_SB_FTD_ASS_AA	S	R,I,O	yes
	Acquisition assistance						
e(2)	LOCATIO N			LS_SB_FTD_ASS_RTI	S	R,I,O	yes
	RTI						
f(2)	LOCATIO N			LS_SB_FTD_ASS_DGPS	S	R,I,O	yes
	DGPS corrections						
g(2)	LOCATIO N			LS_SB_FTD_ASS_ EPHEMERIS	S	R,I,O	yes
	Ephemeris						
h(2)	LOCATIO N			LS_SB_FTD_ASS_REF_TIME_ AVAIL	S	R,I,O	yes
	Ref time availability						
i(9)	LOCATIO N			LS_SB_FTD_ASS_REF_TIME_ ACC	S	R,I,O	yes
	Ref.time accuracy in microseconds						
j(2)	LOCATIO N			LS_SB_FTD_ASS_REF_LOC_ AVAIL	S	R,I,O	yes
	Ref.loc availability						
k(9)	LOCATIO N			LS_SB_FTD_ASS_REF_LOC_ ACC	S	R,I,O	yes
	Ref.loc. accuracy in meters.						

32.39 Display 75.69: GPS User DOP Information

DOPs displayed are valid for the last requested location.

If the DOPs were not requested from the latest location request, the specific fields shall display "x". If the DOPs were requested but not available the fields shall show "-".

S40 Data display	S40 HELP display
<pre>aaaaaa bbbbbb cccccc</pre>	<pre>HDOP PDOP VDOP</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	LOCATIO N			LS_SB_FTD_HDOP	S	R,I,O	yes
		Horizontal DOP (Dilution Of Precision) (aaa.aa)					
b(6)	LOCATIO N			LS_SB_FTD_PDOP	S	R,I,O	yes
		Position DOP (bbb.bb)					
c(6)	LOCATIO N			LS_SB_FTD_VDOP	S	R,I,O	yes
		Vertical DOP (ccc.cc)					

33 Group 76: Touchpad displays

33.1 Display 76.01: Information of the touchpad server

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccc dddddddddddd</pre>	<pre>TPServerVer TPServerDate TPDriverVer TPDriverDate</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	TOUCHPAD			FTD_SB_TP_SERVER_VERSION	S	R	yes
		Touchpad server version (string) Eg. 01.03.02					
b(12)	TOUCHPAD			FTD_SB_TP_SERVER_DATE	S	R	yes
		Touchpad server release date (string) Eg. Sept 23, 02					
c(12)	TOUCHPAD			FTD_SB_TP_DRIVER_VERSION	S	R	yes
		Touchpad driver version (string) Eg. 01.03.02					
d(12)	TOUCHPAD			FTD_SB_TP_DRIVER_DATE	S	R	yes
		Touchpad driver release date (string) Eg. Oct 11, 02					

33.2 Display 76.02: Information of pen events

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbb ccccc ddddd</pre>	<pre>PenStatus Coordinate X Coordinate Y Pressure Z</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	TOUCHPAD			FTD_SB_TP_PEN_STATUS	S	R	yes
		Whether pen is pressed or not (string) Eg. Pressed Released					
b(5)	TOUCHPAD			FTD_SB_TP_PEN_X	W:D	R	yes
		X coordinate (0 to 65535 decimal)					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(5)	TOUCHPAD			FTD_SB_TP_PEN_Y	W:D	R	yes
		Y coordinate (0 to 65535 decimal)					
d(5)	TOUCHPAD			FTD_SB_TP_PEN_Z	W:D	R	yes
		Pressure (0 to 65535 decimal)					

33.3 Display 76.03: Logical Area Hit Counters (1-4)

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> HitCounter 1 HitCounter 2 HitCounter 3 HitCounter 4 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_1	DW:D	R	no
		PPC 1017: Logical area hit counter. Area 1.					
b(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_2	DW:D	R	no
		PPC 1018: Logical area hit counter. Area 2					
c(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_3	DW:D	R	no
		PPC 1019: Logical area hit counter. Area 3					
d(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_4	DW:D	R	no
		PPC 1020: Logical area hit counter. Area 4					

33.4 Display 76.04: Logical Area Hit Counters (5-8)

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> HitCounter 5 HitCounter 6 HitCounter 7 HitCounter 8 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_5	DW:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
PPC 1021: Logical area hit counter. Area 5.							
b(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_6	DW:D	R	no
PPC 1022: Logical area hit counter. Area 6.							
c(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_7	DW:D	R	no
PPC 1023: Logical area hit counter. Area 7.							
d(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_8	DW:D	R	no
PPC 1024: Logical area hit counter. Area 8.							

33.5 Display 76.05: Logical Area Hit Counters (9-9)

S40 Data display	S40 HELP display
aaaaaaaa	HitCounter 9

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_PPC_LOGICAL_AREA_HIT_9	DW:D	R	no
PPC 1025: Logical area hit counter. Area 9.							

33.6 Display 76.06: Characters Recognition Counters

S40 Data display	S40 HELP display
aaaaaaaa bbbbbbbb cccccccc dddddddd	First Hit Hit No Hit Keypad Input

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_PPC_HWRE_FIRST_HIT	DW:D	R	no
PPC 1010: handwriting recognition engine first hit counter							
b(8)	MON			FTD_SB_PPC_HWRE_IN_THE_LIST	DW:D	R	no
PPC 1011: handwriting recognition engine in the list (except first) hit counter.							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(8)	MON			FTD_SB_PPC_HWRE_NOT_IN_THE_LIST	DW:D	R	no
				PPC 1012: handwriting recognition engine not in the list counter			
d(8)	MON			FTD_SB_PPC_KEYPAD_CHINESE_CHARACTER_INPUT	DW:D	R	no
				PPC 1016: Keypad Chinese Character Input Counter Note: repeated in display 65.05			

34 Group 77: Sensor displays

34.1 Display 77.01: Common sensor server display

This display shows Sensor Server version. The display also has three varying lines.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccccc dddddddddddddd</pre>	<pre>Sens srv Ver misc. misc. misc.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	SENSOR			SENSOR_SB_FTD_STRING11	S	R	yes
	Sensor server version						
b(12)	SENSOR			SENSOR_SB_FTD_STRING12	S	R	yes
	Miscellaneous						
c(12)	SENSOR			SENSOR_SB_FTD_STRING13	S	R	yes
	Miscellaneous						
d(12)	SENSOR			SENSOR_SB_FTD_STRING14	S	R	yes
	Miscellaneous						

34.2 Display 77.02: Compass XY display

This display shows compass information.

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb cccccccccccccc dddddddddddddd P:e Head:fff</pre>	<pre>X-axisY-axis Calibration values PwrMode Head</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	SENSOR			SENSOR_COMPASS_XY_SB_FTD_X_AXIS	W:D	R	yes
	X-axis						
b(5)	SENSOR			SENSOR_COMPASS_XY_SB_FTD_Y_AXIS	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Y-axis						
c(12)	SENSOR			SENSOR_COMPASS_XY_SB_FTD_S21	S	R	yes
	Calibration values						
d(12)	SENSOR			SENSOR_COMPASS_XY_SB_FTD_S22	S	R	yes
	Calibration values						
e	SENSOR			SENSOR_COMPASS_XY_SB_FTD_PM	B:D	R	yes
	Powermode						
f(3)	SENSOR			SENSOR_COMPASS_XY_SB_FTD_HEADING	W:D	R	yes
	Heading						

34.3 Display 77.03: Ambient light sensor display

This display shows ambient light sensor information for the configured sensor

S40 Data display	S40 HELP display
<pre>aaaaa bb ccc ddddd eeeee ffffff ggggg hhhhh iiiii</pre>	<pre>Lux Gain inT Chan0 Chan1 Calcc CalRC ThrLO ThrHI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	SENSOR			SENSOR_ALS_FTD_LUX_LEVEL	DW:D	R	yes
	Illuminance value						
b(2)	SENSOR			SENSOR_ALS_FTD_GAIN	B:D	R	yes
	Gain value						
c(3)	SENSOR			SENSOR_ALS_FTD_INT_TIME	W:D	R	yes
	Integration time						
d(5)	SENSOR			SENSOR_ALS_FTD_RAW_CHAN0	W:D	R	yes
	Raw channel 0 value						
e(5)	SENSOR			SENSOR_ALS_FTD_RAW_CHAN1	W:D	R	yes
	Raw channel 1 value						
f(5)	SENSOR			SENSOR_ALS_FTD_CAL_CC	W:D	R	yes
	Calibration coefficient						
g(5)	SENSOR			SENSOR_ALS_FTD_CAL_RC	W:D	R	yes
	Resistor coefficient						
h(5)	SENSOR			SENSOR_ALS_FTD_THRESHLOW	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Lower Interrupt threshold register						
i(5)	SENSOR			SENSOR_ALS_FTD_THRESHHIGH	W:D	R	yes
	Higher Interrupt threshold register						

34.4 Display 77.04: Accelerometer display

This display shows accelerometer information for the configured sensor

S40 Data display	S40 HELP display
<pre>aa bbbbbc dd eeeeff gg hhhhSiTj Skkkk Dl1111</pre>	<pre>XRaw Xg Pth. YRaw Yg Roll ZRaw Zg S Tp Speed Dist.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	SENSOR			SENSOR_ACCEL_FTD_RAW_X_AXIS	B:H	R	yes
	Raw x axis value in 2's complement						
b(5)	SENSOR			SENSOR_ACCEL_FTD_UNIT_X_AXIS	W:D	R	yes
	Unit x axis value in g.(-8000 to 8000 signed)						
c(4)	SENSOR			SENSOR_ACCEL_FTD_PITCH	W:D	R	yes
	Pitch value in degrees. (-180 to 180 signed)						
d(2)	SENSOR			SENSOR_ACCEL_FTD_RAW_Y_AXIS	B:H	R	yes
	Raw y axis value in 2's complement.						
e(5)	SENSOR			SENSOR_ACCEL_FTD_UNIT_Y_AXIS	W:D	R	yes
	Unit y axis value in g.(-8000 to 8000 signed)						
f(4)	SENSOR			SENSOR_ACCEL_FTD_ROLL	W:D	R	yes
	Roll value in degrees.(-180 to 180 signed)						
g(2)	SENSOR			SENSOR_ACCEL_FTD_RAW_Z_AXIS	B:H	R	yes
	Raw Zaxis value in 2's complement.						
h(5)	SENSOR			SENSOR_ACCEL_FTD_UNIT_Z_AXIS	W:D	R	yes
	Unit z axis value in g.(-8000 to 8000 signed)						
i	SENSOR			SENSOR_ACCEL_FTD_VALUE_STATUS	B:H	R	yes
	Value status						
j	SENSOR			SENSOR_ACCEL_FTD_VALUE_TYPE	B:H	R	yes
	Value type						
k(4)	SENSOR			SENSOR_ACCEL_FTD_SPEED	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Speed in cm/s.						
l(5)	SENSOR			SENSOR_ACCEL_FTD_DISTANCE	DW:D	R	yes
	Distance in m.						

34.5 Display 77.05: Compass 3D display

This display shows compass 3D information for the configured sensor

S40 Data display	S40 HELP display
<pre> aaaa bbbb cc dddd eeee ff gggg hhhh ii CjMkSlHdmmmm </pre>	<pre> XRaw Xo Pth. YRaw Yo Roll ZRaw Zo Freq ClMchStHead. </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	SENSOR			SENSOR_COMPASS_3D_FTD_RAW_X_AXIS	W:H	R	yes
	Raw x axis value in 2's complement.						
b(4)	SENSOR			SENSOR_COMPASS_3D_FTD_OFFSET_X_AXIS	W:H	R	yes
	Offset x axis value in 2's complement						
c(2)	SENSOR			SENSOR_COMPASS_3D_FTD_PITCH	B:H	R	yes
	Pitch value in degrees in 2's complement. (-128 to 127)						
d(4)	SENSOR			SENSOR_COMPASS_3D_FTD_RAW_Y_AXIS	W:H	R	yes
	Raw y axis value in 2's complement.						
e(4)	SENSOR			SENSOR_COMPASS_3D_FTD_OFFSET_Y_AXIS	W:H	R	yes
	Offset y axis value in 2's complement						
f(2)	SENSOR			SENSOR_COMPASS_3D_FTD_ROLL	B:H	R	yes
	Roll value in degrees in 2's complement. (-128 to 127)						
g(4)	SENSOR			SENSOR_COMPASS_3D_FTD_RAW_Z_AXIS	W:H	R	yes
	Raw z axis value in 2's complement.						
h(4)	SENSOR			SENSOR_COMPASS_3D_FTD_OFFSET_Z_AXIS	W:H	R	yes
	Offset z axis value in 2's complement						
i(2)	SENSOR			SENSOR_COMPASS_3D_FTD_FREQ	B:H	R	yes
	Measuring frequency (x*10)						
j	SENSOR			SENSOR_COMPASS_3D_FTD_CAL_STATUS	B:H	R	yes
	Calibration status						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
k	SENSOR			SENSOR_COMPASS_3D_FTD_MECH_STATUS	B:H	R	yes
	Mechanical state						
l	SENSOR			SENSOR_COMPASS_3D_FTD_STATUS	B:H	R	yes
	Sensor status						
m(4)	SENSOR			SENSOR_COMPASS_3D_FTD_HEADING	W:D	R	yes
	Heading in degrees (x*0.1)						

34.6 Display 77.99: Varying sensor display

This display is used for new sensors that don't have a dedicated display yet.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbbbbbbbb cccccccccccc dddddddddddd</pre>	<pre>Varying Sensor disp. Can chg.from rel. to rel.</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	SENSOR			SENSOR_SB_FTD_STRING991	S	R	yes
	Varying field test display 1						
b(12)	SENSOR			SENSOR_SB_FTD_STRING992	S	R	yes
	Varying field test display 2						
c(12)	SENSOR			SENSOR_SB_FTD_STRING993	S	R	yes
	Varying field test display 3						
d(12)	SENSOR			SENSOR_SB_FTD_STRING994	S	R	yes
	Varying field test display 4						

35 Group 78: Email displays

35.1 Group 78 Information

This group is for Email displays. Initially it consists of only BlackBerry displays. Blackberry is a proprietary wireless email protocol. Common email displays may be added later.

35.2 Display 78.01: BlackBerry - Registration APN information

NOTE!

This group is for Email displays. Initially it consists of only BlackBerry displays. Blackberry is a proprietary wireless email protocol. Common email displays may be added later.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb ccccccccccccc ddddddddddddd</pre>	<pre>BB regist. APN used</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	BLACKBERRY_EMAIL			FTD_SB_BB_REGISTRATION_ROUTING_PART1	S	R,0	yes
First 12 characters of the APN used for the registration server.							
b(12)	BLACKBERRY_EMAIL			FTD_SB_BB_REGISTRATION_ROUTING_PART2	S	R,0	yes
Second set of 12 characters of the APN used for the registration server.							
c(12)	BLACKBERRY_EMAIL			FTD_SB_BB_REGISTRATION_ROUTING_PART3	S	R,0	yes
Third set of 12 characters of the APN used for the registration server.							
d(12)	BLACKBERRY_EMAIL			FTD_SB_BB_REGISTRATION_ROUTING_PART4	S	R,0	yes
Fourth set of 12 characters of the APN used for the registration server.							

35.3 Display 78.02: BlackBerry - Registration and Routing information

S40 Data display	S40 HELP display
<pre>BB Regis: IP:aaaaaaaa remote:bbbbbb local:cccc</pre>	<pre>BB Regis: IP address Remote prt local prt</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	BLACKBERRY_EMAIL			FTD_SB_BB_REGISTRATION_ROUTING_HOST	S	R,0	yes
IP address of the registration host, 4 bytes expressed as 8 ASCII hex characters.							
b(5)	BLACKBERRY_EMAIL			FTD_SB_BB_REGISTRATION_REMOTE_ROUTING_PORTS	S	R,0	yes
Remote registration port, 2 bytes expressed as 4 ASCII hex characters.							
c(5)	BLACKBERRY_EMAIL			FTD_SB_BB_REGISTRATION_LOCAL_ROUTING_PORTS	S	R,0	yes
Local registration port, 2 bytes expressed as 4 ASCII hex characters.							

35.4 Display 78.03: BlackBerry - Service APN information

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbbbbbbbb cccccccccccc dddddddddddd</pre>	<pre>BBservice APN used</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	BLACKBERRY_EMAIL			FTD_SB_BB_SERVICE_ROUTING_PART1	S	R,0	yes
First 12 characters of the APN used for the service server.							
b(12)	BLACKBERRY_EMAIL			FTD_SB_BB_SERVICE_ROUTING_PART2	S	R,0	yes
Second set of 12 characters of the APN used for the service server.							
c(12)	BLACKBERRY_EMAIL			FTD_SB_BB_SERVICE_ROUTING_PART3	S	R,0	yes
Third set of 12 characters of the APN used for the service server.							
d(12)	BLACKBERRY_EMAIL			FTD_SB_BB_SERVICE_ROUTING_PART4	S	R,0	yes
Fourth set of 12 characters of the APN used for the service server.							

35.5 Display 78.04: BlackBerry - Service information

S40 Data display	S40 HELP display
<pre>BB Service: IP:aaaaaaaa remote:bbbbbb local:cccccc</pre>	<pre>BB Service: IP address Remote prt local prt</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	BLACKBERRY_EMAIL			FTD_SB_BB_SERVICE_ROUTING_HOST	S	R,0	yes
IP address of the service host, 4 bytes expressed as 8 ASCII hex characters.							
b(5)	BLACKBERRY_EMAIL			FTD_SB_BB_SERVICE_REMOTE_ROUTING_PORTS	S	R,0	yes
Remote service port, 2 bytes expressed as 4 ASCII hex characters.							
c(5)	BLACKBERRY_EMAIL			FTD_SB_BB_SERVICE_LOCAL_ROUTING_PORTS	S	R,0	yes
Local service port, 2 bytes expressed as 4 ASCII hex characters.							

35.6 Display 78.05: BlackBerry - Last 4 events log

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb ccccccccccccc dddddddddddddd</pre>	<pre>Last 4 events log <code><time></pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	BLACKBERRY_EMAIL			FTD_SB_BB_EVENTLOG_1	S	R,0	yes
Event code and time of last event							
b(12)	BLACKBERRY_EMAIL			FTD_SB_BB_EVENTLOG_2	S	R,0	yes
Event code and time of last but one event							
c(12)	BLACKBERRY_EMAIL			FTD_SB_BB_EVENTLOG_3	S	R,0	yes
Event code and time of last but two events							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(12)	BLACKBERRY_EMAIL			FTD_SB_BB_EVENTLOG_4	S	R,0	yes
Event code and time of last but three events							

35.7 Display 78.06: BlackBerry - UDP traffic

S40 Data display	S40 HELP display
<pre>snd:aaaaaaaa bbbbbbbbbbbb rcv:cccccccc dddddddddddd</pre>	<pre>UDP traffic send and receive info</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	BLACKBERRY_EMAIL			FTD_SB_BB_UDP_TRAFFIC_LASTSEND	S	R,0	yes
Time of last sent packet. Blank if data has not been sent.							
b(12)	BLACKBERRY_EMAIL			FTD_SB_BB_UDP_TRAFFIC_SENT	S	R,0	yes
Number of datagrams sent and total length. The 2 fields separated by a comma.							
c(8)	BLACKBERRY_EMAIL			FTD_SB_BB_UDP_TRAFFIC_LASTRECEIVE	S	R,0	yes
Time of last received packet. Blank if data has not been received.							
d(12)	BLACKBERRY_EMAIL			FTD_SB_BB_UDP_TRAFFIC_RECEIVED	S	R,0	yes
Number of datagrams received and total length. The 2 fields separated by a comma.							

35.8 Display 78.07: BlackBerry - Mail traffic

S40 Data display	S40 HELP display
<pre>snd:aaaaaaaa bbbbbbbbbbbb rcv:cccccccc dddddddddddd</pre>	<pre>Mail traffic send and receive info</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	BLACKBERRY_EMAIL			FTD_SB_BB_MAIL_TRAFFIC_LASTSEND	S	R,0	yes
Time of last sent mail.							
b(12)	BLACKBERRY_EMAIL			FTD_SB_BB_MAIL_TRAFFIC_SENT	S	R,0	yes
Number of mail sent and total length. The 2 fields separated by a comma.							
c(8)	BLACKBERRY_EMAIL			FTD_SB_BB_MAIL_TRAFFIC_LASTRECEIVE	S	R,0	yes
Time of last received mail.							
d(12)	BLACKBERRY_EMAIL			FTD_SB_BB_MAIL_TRAFFIC_RECEIVED	S	R,0	yes
Number of mail received and total length. The 2 fields separated by a comma.							

35.9 Display 78.08: BlackBerry - NOC selection

When display is selected via the menu (not using the arrow buttons), the NOC selection field can be edited. Keyboard is in "text" mode, so hex numbers 0-F can be written. After editing is completed, the new selected NOC is activated.

S40 Data display	S40 HELP display
<p>NOC SELECTION: a</p>	<p>Use menu to select NOC</p>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	BLACKBERRY_EMAIL			FTD_SB_BB_NOC_SELECTION	B:H	R,0	yes
Show NOC selection							
INPUT	BLACKBERRY_EMAIL			FTD_SB_BB_NOC_SET	DW:H	R,0	yes
Allow the tester to select a NOC. The value 0 is reserved to the production NOC							

35.10 Display 78.09: BlackBerry - Reset UDP traffic counters

S40 Data display	S40 HELP display
<pre>RESET UDP TRAFFIC COUNTERS</pre>	<pre>Use menu to reset UDP traffic counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	BLACKBERRY_EMAIL			FTD_SB_BB_UDP_ACTION_RESET	B:D	R,0	yes
Reset UDP counters.							

35.11 Display 78.10: BlackBerry - Reset mail traffic counters

S40 Data display	S40 HELP display
<pre>RESET MAIL TRAFFIC COUNTERS</pre>	<pre>Use menu to reset Mail traffic counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	BLACKBERRY_EMAIL			FTD_SB_BB_MAIL_ACTION_RESET	B:D	R,0	yes
Reset mail counters.							

36 Group 79: FM radio

36.1 Display 79.01: FM Data

Notes:

1. FTD_FM_RF displays the received RF frequency based on the PLL values and the status of the HILO bit.

When HLSI bit = 0

$$\text{Frequency(MHz)} = (\text{PLL}/2) * 0.032768 + 0.225$$

When HLSI bit = 1

$$\text{Frequency(MHz)} = (\text{PLL}/2) * 0.032768 - 0.225$$

S40 Data display	S40 HELP display
<pre>aaa b ccccccddddd ee ffgg hhhh iiiiiiiiiiii</pre>	<pre>RSSI M IFCount Freq In M SL Area State</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	FM_RADIO			FTD_SB_FM_RSSI	B:D	R,I,O	no
		RSSI shown as 0-15 (as read from ADC)					
b	FM_RADIO			FTD_SB_FM_Mono	S	R,I,O	no
		Mono =M Stereo =S					
c(6)	FM_RADIO			FTD_SB_FM_IF_COUNT	W:D	R,I,O	no
		IF Count (KHz) (Note: uses 4096 multiplier)					
d(6)	FM_RADIO			FTD_SB_FM_RF	S	R,I,O	no
		RF Frequency (MHz) shown as 6 chars: e.g. 102.85					
e(2)	FM_RADIO			FTD_SB_FM_INT_ID	S	R,I,O	no
		Last FM Radio interrupt shown as Hex value string, shown as ## when disabled (use in conjunction with interrupt mask)					
f(2)	FM_RADIO			FTD_SB_FM_MUTE	S	R,I,O	no
		Mute L,R,S or B shown as one letter L = left R= right S = soft B = both shown as 2 chars e.g LS (left, soft)					
g(2)	FM_RADIO			FTD_SB_FM_SSL	S	R,I,O	no
		SSL shown as decimal, 3, 5, 7 or 10. 00 = 3 01 = 5 10 = 7 & 11 = 10					
h(4)	FM_RADIO			FTD_SB_FM_AREA	S	R,I,O	no
		Area Euro/ USA/ Jap					
i(12)	FM_RADIO			FTD_SB_FM_SERVER_STATE	S	R,I,O	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	SW Server State string						

36.2 Display 79.02: FM version

Notes:

1. This screen would not show the HAL data until the HAL interface has been developed.
2. The ASIC state is derived from the software

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbcccccc</pre>	<pre>ASIC ID State State</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	FM_RADIO			FTD_SB_FM_ASIC_ID	S	R	no
ASIC ID in Hex version string							
b(6)	FM_RADIO			FTD_SB_FM_HAL_STATE	S	R	no
SW HAL state string indicating the HAL state							
c(6)	FM_RADIO			FTD_SB_FM_ASIC_STATE	S	R	no
ASIC state string indicating the HW driver / ASIC state							

36.3 Display 79.03: FM RDS

S40 Data display	S40 HELP display
<pre>aaaaaaaaabbbb cccccccccccc ddddddd e fffffff g</pre>	<pre>Name RDBS RDS State RDS Data L GTC Data R</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	FM_RADIO			FTD_SB_FM_RDS_NAME	S	R	no
String in ASCII characters which is the RDS station name (PS)							
b(4)	FM_RADIO			FTD_SB_FM_RDS	S	R	no
01 = RDS 10 = RBDS 00 = off shown as xxx RBDS lock shown only as US when locked							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(12)	FM_RADIO			FTD_SB_FM_SERVER_RDS_STATE	S	R	no
		SW Server RDS State string (TBD)					
d(8)	FM_RADIO			FTD_SB_FM_RDS_DATA	DW:H	R	no
		Last RDS Data shown in Hex					
e	FM_RADIO			FTD_SB_FM_RDS_LOCK	B:D	R	no
		RDS sync lock 0 = no lock 1 = locked shown only as L when locked					
f(8)	FM_RADIO			FTD_SB_FM_RDS_GTC	S	R	no
		Last GTC string setting					
g	FM_RADIO			FTD_SB_FM_RDS_FLYWHEEL_LOCK	B:D	R	no
		RDS flywheel lock 0 = no-lock 1 = locked shown only as L when locked					

36.4 Display 79.04: FM RDS Codes

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbb c </pre>	<pre> Name PI E </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	FM_RADIO			FTD_SB_FM_RDS_NAME	S	R	no
		String in ASCII characters which is the RDS station name (PS)					
b(4)	FM_RADIO			FTD_SB_FM_RDS_PI	W:H	R	no
		RDS PI data in Hex.					
c	FM_RADIO			FTD_SB_FM_RDS_Error	B:D	R	no
		RDS Error 0 = no E 1 = E shown only as E when set.					

36.5 Display 79.05: FM RDS Counters

Notes:

1. Definitions:

- FTD_FM_RDS_BLOCK_INVALID is defined as follows;

NBI = number of blocks received with BLID[2:0] bits set to 111B

NBT = total number of blocks received

DisplayValue=100NBI/NBT

- FTD_FM_RDS_BLOC_QUALITY_UN is defined as follows:

NBP = number of perfect blocks received with ELB[2:0] bits set to 00B

DisplayValue=100NBP/NBT

- FTD_FM_RDS_BLOC_QUALITY_CO is defined as follows:

NBE = number of Un-correctable blocks received with ELB[2:0] bits set to 11B

DisplayValue=100(NBT-NBE)/NBT

NBT in both cases is the total number of blocks received. This could be a count of the number of interrupts received if only the DAVMSK is set and provided the SW always reads the data.

2. The RDS Block counters FTD_FM_RDS_BLOCK_INVALID, FTD_FM_RDS_BLOCK_QUALITY_UN and FTD_FM_RDS_BLOCKQUALITY_COR are under SW reset control, which can be activated from screen 13.

3. The data can be taken from BLID or BPID fields depending on whether the data is from the last block register or the previous block register.

4. The data can be taken from ELB or EPB fields depending on whether the data is from the last block register or the previous block register.

5. FTD_FM_RDS_E2BIT and FTD_FM_RDS_E5BIT are under software reset control, which can be activated from screen 13.

6. ASIC counters are not under SW reset control.

S40 Data display	S40 HELP display
<pre>aa bbb ccc ddddeeee fff gg hhh ii jjjjjjkkkkkkk</pre>	<pre>ELB Err Good E2 E5 Cor D1 D2 AF Good Bad</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	FM_RADIO			FTD_SB_FM_RDS_ELB	S	R	no
Last ASIC Block error status (ELB). 00 = no error, 01 = max 2 bit, 10 = max 5 bit, 11 = uncorrectable							
b(3)	FM_RADIO			FTD_SB_FM_RDS_BLOCK_INVALID	B:D	R	no
RDS invalid block count shown as % eg 23%							
c(3)	FM_RADIO			FTD_SB_FM_RDS_BLOCK_PERFECT	B:D	R	no
Count of RDS blocks with no errors shown as % eg 23%							
d(4)	FM_RADIO			FTD_SB_FM_RDS_E2BIT	W:D	R	no
Count of the RDS blocks with max 2 bit errors							
e(4)	FM_RADIO			FTD_SB_FM_RDS_E5BIT	W:D	R	no
Count of the RDS blocks with max 5 bit errors							
f(3)	FM_RADIO			FTD_SB_FM_RDS_BLOCK_UNCORRECTABLE	B:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Count of RDS blocks with uncorrectable errors shown as % eg 23%							
g(2)	FM_RADIO			FTD_SB_FM_RDS_D1	S	R	no
String in ASCII characters which is the current setting of the delay one							
h(3)	FM_RADIO			FTD_SB_FM_RDS_D2	S	R	no
String in ASCII characters which is the current setting of the delay two							
i(2)	FM_RADIO			FTD_SB_FM_RDS_AF_N	B:D	R	no
The current number of AFs in the AF list							
j(6)	FM_RADIO			FTD_SB_FM_RDS_GOOD	W:D	R	no
The current number of good blocks (ASIC counter)							
k(6)	FM_RADIO			FTD_SB_FM_RDS_BAD	W:D	R	no
The current number of Bad blocks (ASIC counter)							

36.6 Display 79.06: FM RDS AF

Notes:

1. This screen would be used to show the next of the 25 AF"s in the list
2. If the RSSI is shown then it has been scanned
3. If the RSSI is zero - then it is not been scanned yet
4. Displaying the RSSI values will show if the list has been reordered correctly

S40 Data display	S40 HELP display
<pre> aaaa bcd ee ffffff ggg hhhhh iii jjjjj kkk </pre>	<pre> RDBS LLA AF Freq RSSI AF Freq RSSI AF Freq RSSI </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	FM_RADIO			FTD_SB_FM_RDS	S	R	no
01 = RDS 10 = RBDS 00 = off shown as xxx RBDS lock shown only as US when locked							
b	FM_RADIO			FTD_SB_FM_RDS_LOCK	B:D	R	no
RDS sync lock 0 = no lock 1 = locked shown only as L when locked							
c	FM_RADIO			FTD_SB_FM_RDS_FLYWHEEL_LOCK	B:D	R	no
RDS flywheel lock 0 = no-lock 1 = locked shown only as L when locked							
d	FM_RADIO			FTD_SB_FM_RDS_AF_TYPE	S	R	no
RDS AF Type A or B shown when data is available							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e(2)	FM_RADIO			FTD_SB_FM_RDS_AF_N	B:D	R	no
		The current number of AFs in the AF list					
f(6)	FM_RADIO			FTD_SB_FM_RF	S	R,I,O	no
		RF Frequency (MHz) shown as 6 chars: e.g. 102.85					
g(3)	FM_RADIO			FTD_SB_FM_RSSI	B:D	R,I,O	no
		RSSI shown as 0-15 (as read from ADC)					
h(6)	FM_RADIO			FTD_SB_FM_RDS_AF_1	S	R	no
		AF list (MHz) shown as 102.85					
i(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_1	B:D	R	no
		RSSI shown as 0-15 (as read from ADC) and x if no data					
j(6)	FM_RADIO			FTD_SB_FM_RDS_AF_2	S	R	no
		AF list (MHz) shown as 102.85					
k(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_2	B:D	R	no
		RSSI shown as 0-15 (as read from ADC) and x if no data					

36.7 Display 79.07 FM RDS AF List

Six similar displays, each showing four AF values as explained below the data table. First two AF values are included in display 79.06.

Notes:-

1. Sub block id generic postfixes #1, #2, #3 and #4 are to be replaced with real postfixes as shown in the following table:

Display	#1	#2	#3	#4
79.07	3	4	5	6
79.08	7	8	9	10
79.09	11	12	13	14
79.10	15	16	17	18
79.11	19	20	21	22
79.12	23	24	25	none

2. If the RSSI is shown then it has been scanned

3. If the RSSI is zero - then it is not been scanned yet

4. Displaying the RSSI values will show if the list has been reordered correctly

S40 Data display	S40 HELP display
<pre>aaaaaa bbb ccccc ddd eeeeee fff gggggg hhh</pre>	<pre>AF Freq RSSI AF Freq RSSI AF Freq RSSI AF Freq RSSI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	FM_RADIO			FTD_SB_FM_RDS_AF_3	S	R	no
				AF list (MHz) shown as "102.85"			
b(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_3	B:D	R	no
				RSSI shown as 0-15 (as read from ADC) and x if no data			
c(6)	FM_RADIO			FTD_SB_FM_RDS_AF_4	S	R	no
				AF list (MHz) shown as "102.85"			
d(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_4	B:D	R	no
				RSSI shown as 0-15 (as read from ADC) and x if no data			
e(6)	FM_RADIO			FTD_SB_FM_RDS_AF_5	S	R	no
				AF list (MHz) shown as "102.85"			
f(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_5	B:D	R	no
				RSSI shown as 0-15 (as read from ADC) and x if no data			
g(6)	FM_RADIO			FTD_SB_FM_RDS_AF_6	S	R	no
				AF list (MHz) shown as "102.85"			
h(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_6	B:D	R	no
				RSSI shown as 0-15 (as read from ADC) and x if no data			

36.8 Display 79.08 FM RDS AF List

Six similar displays, each showing four AF values as explained below the data table. First two AF values are included in display 79.06.

Notes:-

1. Sub block id generic postfixes #1, #2, #3 and #4 are to be replaced with real postfixes as shown in the following table:

Display	#1	#2	#3	#4
79.07	3	4	5	6
79.08	7	8	9	10
79.09	11	12	13	14
79.10	15	16	17	18

79.11	19	20	21	22
79.12	23	24	25	none

2. If the RSSI is shown then it has been scanned
3. If the RSSI is zero - then it is not been scanned yet
4. Displaying the RSSI values will show if the list has been reordered correctly

S40 Data display	S40 HELP display
<pre>aaaaaa bbb cccccc ddd eeeeee fff gggggg hhh</pre>	<pre>AF Freq RSSI AF Freq RSSI AF Freq RSSI AF Freq RSSI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	FM_RADIO			FTD_SB_FM_RDS_AF_7	S	R	no
	AF list (MHz) shown as "102.85"						
b(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_7	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
c(6)	FM_RADIO			FTD_SB_FM_RDS_AF_8	S	R	no
	AF list (MHz) shown as "102.85"						
d(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_8	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
e(6)	FM_RADIO			FTD_SB_FM_RDS_AF_9	S	R	no
	AF list (MHz) shown as "102.85"						
f(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_9	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
g(6)	FM_RADIO			FTD_SB_FM_RDS_AF_10	S	R	no
	AF list (MHz) shown as "102.85"						
h(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_10	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						

36.9 Display 79.09 FM RDS AF List

Six similar displays, each showing four AF values as explained below the data table. First two AF values are included in display 79.06.

Notes:-

1. Sub block id generic postfixes #1, #2, #3 and #4 are to be replaced with real postfixes as shown in the following table:

Display	#1	#2	#3	#4
79.07	3	4	5	6
79.08	7	8	9	10
79.09	11	12	13	14
79.10	15	16	17	18
79.11	19	20	21	22
79.12	23	24	25	none

2. If the RSSI is shown then it has been scanned
3. If the RSSI is zero - then it is not been scanned yet
4. Displaying the RSSI values will show if the list has been reordered correctly

S40 Data display	S40 HELP display
aaaaaa bbb cccccc ddd eeeeeee fff gggggg hhh	AF Freq RSSI AF Freq RSSI AF Freq RSSI AF Freq RSSI

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	FM_RADIO			FTD_SB_FM_RDS_AF_11	S	R	no
	AF list (MHz) shown as "102.85"						
b(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_11	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
c(6)	FM_RADIO			FTD_SB_FM_RDS_AF_12	S	R	no
	AF list (MHz) shown as "102.85"						
d(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_12	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
e(6)	FM_RADIO			FTD_SB_FM_RDS_AF_13	S	R	no
	AF list (MHz) shown as "102.85"						
f(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_13	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
g(6)	FM_RADIO			FTD_SB_FM_RDS_AF_14	S	R	no
	AF list (MHz) shown as "102.85"						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_14	B:D	R	no
RSSI shown as 0-15 (as read from ADC) and x if no data							

36.10 Display 79.10 FM RDS AF List

Six similar displays, each showing four AF values as explained below the data table. First two AF values are included in display 79.06.

Notes:-

1. Sub block id generic postfixes #1, #2, #3 and #4 are to be replaced with real postfixes as shown in the following table:

Display	#1	#2	#3	#4
79.07	3	4	5	6
79.08	7	8	9	10
79.09	11	12	13	14
79.10	15	16	17	18
79.11	19	20	21	22
79.12	23	24	25	none

2. If the RSSI is shown then it has been scanned
3. If the RSSI is zero - then it is not been scanned yet
4. Displaying the RSSI values will show if the list has been reordered correctly

S40 Data display	S40 HELP display
<pre> aaaaaa bbb cccccc ddd eeeeee fff gggggg hhh </pre>	<pre> AF Freq RSSI AF Freq RSSI AF Freq RSSI AF Freq RSSI </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	FM_RADIO			FTD_SB_FM_RDS_AF_15	S	R	no
AF list (MHz) shown as "102.85"							
b(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_15	B:D	R	no
RSSI shown as 0-15 (as read from ADC) and x if no data							
c(6)	FM_RADIO			FTD_SB_FM_RDS_AF_16	S	R	no
AF list (MHz) shown as "102.85"							
d(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_16	B:D	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
RSSI shown as 0-15 (as read from ADC) and x if no data							
e(6)	FM_RADIO			FTD_SB_FM_RDS_AF_17	S	R	no
AF list (MHz) shown as "102.85"							
f(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_17	B:D	R	no
RSSI shown as 0-15 (as read from ADC) and x if no data							
g(6)	FM_RADIO			FTD_SB_FM_RDS_AF_18	S	R	no
AF list (MHz) shown as "102.85"							
h(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_18	B:D	R	no
RSSI shown as 0-15 (as read from ADC) and x if no data							

36.11 Display 79.11 FM RDS AF List

Six similar displays, each showing four AF values as explained below the data table. First two AF values are included in display 79.06.

Notes:-

1. Sub block id generic postfixes #1, #2, #3 and #4 are to be replaced with real postfixes as shown in the following table:

Display	#1	#2	#3	#4
79.07	3	4	5	6
79.08	7	8	9	10
79.09	11	12	13	14
79.10	15	16	17	18
79.11	19	20	21	22
79.12	23	24	25	none

2. If the RSSI is shown then it has been scanned

3. If the RSSI is zero - then it is not been scanned yet

4. Displaying the RSSI values will show if the list has been reordered correctly

S40 Data display	S40 HELP display
aaaaaa bbb cccccc ddd eeeeee fff gggggg hhh	AF Freq RSSI AF Freq RSSI AF Freq RSSI AF Freq RSSI

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	FM_RADIO			FTD_SB_FM_RDS_AF_19	S	R	no
	AF list (MHz) shown as "102.85"						
b(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_19	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
c(6)	FM_RADIO			FTD_SB_FM_RDS_AF_20	S	R	no
	AF list (MHz) shown as "102.85"						
d(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_20	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
e(6)	FM_RADIO			FTD_SB_FM_RDS_AF_21	S	R	no
	AF list (MHz) shown as "102.85"						
f(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_21	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
g(6)	FM_RADIO			FTD_SB_FM_RDS_AF_22	S	R	no
	AF list (MHz) shown as "102.85"						
h(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_22	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						

36.12 Display 79.12 FM RDS AF List

Six similar displays, each showing four AF values as explained below the data table. First two AF values are included in display 79.06.

Notes:-

1. Sub block id generic postfixes #1, #2, #3 and #4 are to be replaced with real postfixes as shown in the following table:

Display	#1	#2	#3	#4
79.07	3	4	5	6
79.08	7	8	9	10
79.09	11	12	13	14
79.10	15	16	17	18
79.11	19	20	21	22
79.12	23	24	25	none

2. If the RSSI is shown then it has been scanned

3. If the RSSI is zero - then it is not been scanned yet

4. Displaying the RSSI values will show if the list has been reordered correctly

S40 Data display	S40 HELP display
<pre>aaaaaa bbb ccccc ddd eeeeee fff</pre>	<pre>AF Freq RSSI AF Freq RSSI AF Freq RSSI AF Freq RSSI</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	FM_RADIO			FTD_SB_FM_RDS_AF_23	S	R	no
	AF list (MHz) shown as "102.85"						
b(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_23	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
c(6)	FM_RADIO			FTD_SB_FM_RDS_AF_24	S	R	no
	AF list (MHz) shown as "102.85"						
d(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_24	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						
e(6)	FM_RADIO			FTD_SB_FM_RDS_AF_25	S	R	no
	AF list (MHz) shown as "102.85"						
f(3)	FM_RADIO			FTD_SB_FM_RDS_AF_RSSI_25	B:D	R	no
	RSSI shown as 0-15 (as read from ADC) and x if no data						

36.13 Display 79.13: FM RDS Force State

To force mode or reset counters follow the following steps:-

1. Press Menu button and select net monitor
2. Press the selection button
3. Select this display to executive mode by entering 7913 (The group and display number of this display) to the query prompt
4. Test input prompt will be active, enter the mode (see data table below) in display
5. Confirm with OK.
6. If a valid key is pressed the key number will be shown in line two, invalid = x.

Status Code	Status
0	Counter reset
1	D1 reset
2	D2 reset
3	SSL up
4	SSL down

5	AF Re-Scan
6	RDS on/off toggle
7	Ostrich trace on/off toggle
8 & 9	TBD

S40 Data display	S40 HELP display
<div style="border: 1px solid gray; padding: 10px; background-color: #e0e0e0;"> Force Mode a </div>	<div style="border: 1px solid gray; padding: 10px; background-color: #e0e0e0;"> Use menu to force mode or reset counters </div>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	FM_RADIO			FTD_SB_FM_STATE	B:D	R	no
Status code, see the table below.							
INPUT	FM_RADIO			FTD_SB_SB_FM_FORCE_STATE	DW:D	R	no
Force state or reser counters by entering 0 ... 7. Use the status codes in the table below.							

37 Group 80: Socket displays

37.1 Display 80.01: Overview of links

S40 Data display	S40 HELP display
<pre>123456789A aaaaaaaaaa bbbbbbbbbb cccccccccc</pre>	<pre>NumberOfLink StatusOfLink FlowControl IPVersion</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SOCKET			FTD_SB_SCKT_STATUS_OF_LINK	S	R	yes
Status of links. Each letter in the string corresponds to one link. U : Link is UP D : Link is DOWN O : Link is OPENING							
b(10)	SOCKET			FTD_SB_SCKT_FLOW_STATUS	S	R	yes
Pipe flow control status of links. Each letter in the string corresponds to one link. 0 : OFF 1 : On x : N/A							
c(10)	SOCKET			FTD_SB_SCKT_LINK_IP_VERSION	S	R	yes
IP version of links. Each letter in the string corresponds to one link. 4 : IPv4 6 : IPv6 D : Dual-stack IPv4 / IPv6 x : N/A							

37.2 Display 80.06: Link type and IPv4 details of link

This display shows detailed IPv4 information about one link and the type of link in verbal format.. Check link IP version on display 80.01. IPv4 addresses are shown in decimal format without dots (standard format is bbb.ccc.ddd.eee).Perform the following steps to select the link to be shown:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display by entering 8006 (Socket displays;IPv4 details of link) to the query prompt.
5. Test input prompt will be shown on the display, enter the link number in display.
6. Confirm with the Ok button.
7. If the change succeeded, the new link information is displayed on this display

S40 Data display	S40 HELP display
<pre>a nnnnnn bbbccdddee fffgghhhi i i jjjkkkl l l mmm</pre>	<pre>Nmb Type LinkIPAdres PriDNSAdres SecDNSAdres</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	SOCKET			FTD_SB_SCKT_LINK_NUMBER	B:H	R	yes
	Current link number in hexadecimal						
b(3)	SOCKET			FTD_SB_SCKT_LINK_IP_A	B:D	R	yes
	Part A of the link IPv4 address						
c(3)	SOCKET			FTD_SB_SCKT_LINK_IP_B	B:D	R	yes
	Part B of the link IPv4 address						
d(3)	SOCKET			FTD_SB_SCKT_LINK_IP_C	B:D	R	yes
	Part C of the link IPv4 address						
e(3)	SOCKET			FTD_SB_SCKT_LINK_IP_D	B:D	R	yes
	Part D of the link IPv4 address						
f(3)	SOCKET			FTD_SB_SCKT_LINK_PRI_DNS_A	B:D	R	yes
	Part A of the Primary DNS address						
g(3)	SOCKET			FTD_SB_SCKT_LINK_PRI_DNS_B	B:D	R	yes
	Part B of the Primary DNS address						
h(3)	SOCKET			FTD_SB_SCKT_LINK_PRI_DNS_C	B:D	R	yes
	Part C of the Primary DNS address						
i(3)	SOCKET			FTD_SB_SCKT_LINK_PRI_DNS_D	B:D	R	yes
	Part D of the Primary DNS address						
j(3)	SOCKET			FTD_SB_SCKT_LINK_SEC_DNS_A	B:D	R	yes
	Part A of the Secondary DNS address						
k(3)	SOCKET			FTD_SB_SCKT_LINK_SEC_DNS_B	B:D	R	yes
	Part B of the Secondary DNS address						
l(3)	SOCKET			FTD_SB_SCKT_LINK_SEC_DNS_C	B:D	R	yes
	Part C of the Secondary DNS address						
m(3)	SOCKET			FTD_SB_SCKT_LINK_SEC_DNS_D	B:D	R	yes
	Part D of the Secondary DNS address						
n(6)	SOCKET			FTD_SB_SCKT_LINK_TYPE	S	R	no
	Verbal presentation of link type (e.g. GPRS), or NOLINK if link is not available.						
INPUT(4)	SOCKET			FTD_SB_SCKT_LINK_SELECT	DW:H	R	yes
	Give link number in hexadecimal						

37.3 Display 80.08: IPv6 address of link

This display shows the IPv6 address of the link in hexadecimal format without semicolons (standard format is BBBB:CCCC:DDDD:EEEE:FFFF:GGGG:HHHH:IIII). Check link IP version on display 80.01. Note that the address is link local(not globally routable), if the first part (FTD_SB_SCKT_LINK_IPV6_A) of the address is FE80. Perform the following steps to select the link to be shown:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display by entering 8008 (Socket displays;IPv6 address of link) to the query prompt.
5. Test input prompt will be shown on the display, enter the link number in display.
6. Confirm with the Ok button.
7. If the change succeeded, the new link information is displayed on this display

S40 Data display	S40 HELP display
<pre>a bbbb cccc dddd eeee ffff gggg hhhh iiii</pre>	<pre>Nmb LinkIPv6 LinkIPv6 LinkIPv6 LinkIPv6</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	SOCKET			FTD_SB_SCKT_IPV6_LINK_NUMBER	B:H	R	yes
	Current link number in hexadecimal						
b(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_A	W:H	R	yes
	Part A of the link IPv6 address						
c(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_B	W:H	R	yes
	Part B of the link IPv6 address						
d(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_C	W:H	R	yes
	Part C of the link IPv6 address						
e(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_D	W:H	R	yes
	Part D of the link IPv6 address						
f(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_E	W:H	R	yes
	Part E of the link IPv6 address						
g(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_F	W:H	R	yes
	Part F of the link IPv6 address						
h(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_G	W:H	R	yes
	Part G of the link IPv6 address						
i(4)	SOCKET			FTD_SB_SCKT_LINK_IPV6_H	W:H	R	yes
	Part H of the link IPv6 address						
INPUT(4)	SOCKET			FTD_SB_SCKT_IPV6_LINK_SELECT	DW:H	R	yes
	Give link number in hexadecimal						

37.4 Display 80.09: DHCP information of link

This display shows DHCP information of selected link. Select link number from information available at display 8001. If DHCP information is not available, all fields are zero. This may be the case if DHCP is not used at all for selected link, or DHCP has not managed to get the information.

Perform the following steps to select the link to be shown:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display by entering 8009 (Socket displays;DHCP information of link) to the query prompt.
5. Test input prompt will be shown on the display, enter the link number in display.
6. Confirm with the Ok button.
7. If the change succeeded, the new link information is displayed on this display

S40 Data display	S40 HELP display
<pre>aaabbbccddd eeefffggghh iiiijjkkklll mmmmm nnnnn</pre>	<pre>DefaultGWadd SubnetMask DHCPsrvaddr Lease T1</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_SCKT_DEFAULTGW_IP_A	B:D	R	no
	Part A of the default gateway IPv4 address						
b(3)	SOCKET			FTD_SB_SCKT_DEFAULTGW_IP_B	B:D	R	no
	Part B of the default gateway IPv4 address						
c(3)	SOCKET			FTD_SB_SCKT_DEFAULTGW_IP_C	B:D	R	no
	Part C of the default gateway IPv4 address						
d(3)	SOCKET			FTD_SB_SCKT_DEFAULTGW_IP_D	B:D	R	no
	Part D of the default gateway IPv4 address						
e(3)	SOCKET			FTD_SB_SCKT_SUBNETMASK_IP_A	B:D	R	no
	Part A of the subnet mask IPv4 address						
f(3)	SOCKET			FTD_SB_SCKT_SUBNETMASK_IP_B	B:D	R	no
	Part B of the subnet mask IPv4 address						
g(3)	SOCKET			FTD_SB_SCKT_SUBNETMASK_IP_C	B:D	R	no
	Part C of the subnet mask IPv4 address						
h(3)	SOCKET			FTD_SB_SCKT_SUBNETMASK_IP_D	B:D	R	no
	Part D of the subnet mask IPv4 address						
i(3)	SOCKET			FTD_SB_SCKT_DHCP_SRV_IP_A	B:D	R	no
	Part A of the DHCP server IPv4 address						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
j(3)	SOCKET			FTD_SB_SCKT_DHCP_SRV_IP_B	B:D	R	no
	Part B of the DHCP server IPv4 address						
k(3)	SOCKET			FTD_SB_SCKT_DHCP_SRV_IP_C	B:D	R	no
	Part C of the DHCP server IPv4 address						
l(3)	SOCKET			FTD_SB_SCKT_DHCP_SRV_IP_D	B:D	R	no
	Part D of the DHCP server IPv4 address						
m(5)	SOCKET			FTD_SB_SCKT_DHCP_LEASE_LEFT	DW:D	R	no
	Remaining lease time in minutes						
n(5)	SOCKET			FTD_SB_SCKT_DHCP_T1_LEFT	DW:D	R	no
	Remaining time until T1 expires in minutes						
INPUT(8)	SOCKET			FTD_SB_SCKT_DHCP_LINK_SELECT	DW:H	R	no
	Give link number in hexadecimal						

37.5 Display 80.11: Statistics about UDP transmissions

S40 Data display	S40 HELP display
<pre> aaa bbbbb cccc dddd eeeeeeeeee fffffffffff </pre>	<pre> OSckt MxSDgm DDgm1 DDgm2 SentBytes ReceivdBytes </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_SCKT_UDP_OPEN_SCKTS	B:D	R	yes
	Number of currently open UDP sockets						
b(5)	SOCKET			FTD_SB_SCKT_UDP_MX_SENT_DGRAM	W:D	R	yes
	Maximum sent datagram size						
c(5)	SOCKET			FTD_SB_SCKT_UDP_DSCRD_DGRAMS1	W:D	R	yes
	Number of discarded datagrams (nobody listening the destination port)						
d(5)	SOCKET			FTD_SB_SCKT_UDP_DSCRD_DGRAMS2	W:D	R	yes
	Number of discarded datagrams (error in header, checksum failure or other reason)						
e(10)	SOCKET			FTD_SB_SCKT_UDP_SENT_BYTES	DW:D	R	yes
	Number of sent bytes						
f(10)	SOCKET			FTD_SB_SCKT_UDP_RCVD_BYTES	DW:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Number of received bytes						

37.6 Display 80.21: Statistics about TCP connections

S40 Data display	S40 HELP display
<pre>aaa bbbbb cccc ddddd eeeeeeeeee fffff ggggg</pre>	<pre>CSckt CCSckt PConF AConF DataInSndQue MxReTO MReTO</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_SCKT_TCP_CONN_SCKTS	B:D	R	yes
Number of currently connected TCP sockets							
b(5)	SOCKET			FTD_SB_SCKT_TCP_CUM_CONN_SCKTS	W:D	R	yes
Cumulative number of connected TCP sockets							
c(5)	SOCKET			FTD_SB_SCKT_TCP_PAS_CONN_FAIL	W:D	R	yes
Number of passive connect failures							
d(5)	SOCKET			FTD_SB_SCKT_TCP_ACT_CONN_FAIL	W:D	R	yes
Number of active connect failures							
e(10)	SOCKET			FTD_SB_SCKT_TCP_DATA_IN_SND_QUES	DW:D	R	yes
Current amount of data in all send queues							
f(5)	SOCKET			FTD_SB_SCKT_TCP_MAX_RETRANS_TO	W:D	R	yes
Maximum retransmission timeout experienced							
g(5)	SOCKET			FTD_SB_SCKT_TCP_MIN_RETRANS_TO	W:D	R	yes
Minimum retransmission timeout experienced							

37.7 Display 80.22: Statistics about TCP transmissions

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa bbbbbbbbbbb cccccccccc dddd eeeee</pre>	<pre>ReceivdBytes SentBytes RcvdDupBytes DRdSmt Retrn</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SOCKET			FTD_SB_SCKT_TCP_RCVD_BYTES	DW:D	R	yes
				Number of received bytes (duplicates included)			
b(10)	SOCKET			FTD_SB_SCKT_TCP_SENT_BYTES	DW:D	R	yes
				Number of sent bytes (retransmissions included)			
c(10)	SOCKET			FTD_SB_SCKT_TCP_DUP_BYTES	DW:D	R	yes
				Number of received duplicate bytes			
d(5)	SOCKET			FTD_SB_SCKT_TCP_DSCRD_RCVD_SGMNTS	W:D	R	yes
				Number of discarded received TCP segments (error in header, checksum failure or other reason)			
e(5)	SOCKET			FTD_SB_SCKT_TCP_RETRANSMITS	W:D	R	yes
				Number of retransmits			

37.8 Display 80.31: Statistics about DNS queries 1

S40 Data display	S40 HELP display
<pre>aaabbbccddd eee ffffffff ggggggggggggg hhhhhhhhhhhhh</pre>	<pre>LastAnswerIP Addrs Last Query Name</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_SCKT_DNS_ANS_IP_A	B:D	R	yes
				Part A of last answer IP address			
b(3)	SOCKET			FTD_SB_SCKT_DNS_ANS_IP_B	B:D	R	yes
				Part B of last answer IP address			
c(3)	SOCKET			FTD_SB_SCKT_DNS_ANS_IP_C	B:D	R	yes
				Part C of last answer IP address			
d(3)	SOCKET			FTD_SB_SCKT_DNS_ANS_IP_D	B:D	R	yes
				Part D of last answer IP address			
e(3)	SOCKET			FTD_SB_SCKT_DNS_ANS_NMB	B:D	R	yes
				Total number of IP addresses in last answer (IPv4 and IPv6)			
f(8)	SOCKET			FTD_SB_SCKT_DNS_QUERY_NAME_1	S	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	First 8 characters of last query name						
g(12)	SOCKET			FTD_SB_SCKT_DNS_QUERY_NAME_2	S	R	yes
	Next 12 characters of last query name						
h(12)	SOCKET			FTD_SB_SCKT_DNS_QUERY_NAME_3	S	R	yes
	Next 12 characters of last query name						

37.9 Display 80.32: Statistics about DNS queries 2

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd eeeee fffff ggggg</pre>	<pre>Quers A_Answ WOAns MsdAns PriAn SecAns GHBAaddress</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	SOCKET			FTD_SB_SCKT_DNS_QUERIES_SENT	W:D	R	yes
	Number of Ipv4 queries sent						
b(5)	SOCKET			FTD_SB_SCKT_DNS_A_ANSWERS	W:D	R	yes
	Number of A answers						
c(5)	SOCKET			FTD_SB_SCKT_DNS_REPLIES_WO_ANSWER	W:D	R	yes
	Number of replies from network without acceptable answers						
d(5)	SOCKET			FTD_SB_SCKT_DNS_MSD_ANSWERS	W:D	R	yes
	Number of missed answers leading to retransmission						
e(5)	SOCKET			FTD_SB_SCKT_DNS_PRI_DNS_ANSWERS	W:D	R	yes
	Total number of answers from primary DNS						
f(5)	SOCKET			FTD_SB_SCKT_DNS_SEC_DNS_ANSWERS	W:D	R	yes
	Total number of answers from secondary DNS						
g(5)	SOCKET			FTD_SB_SCKT_DNS_GHBA_QUERIES	W:D	R	yes
	Number of IPv4 address-to-name queries sent.						

37.10 Display 80.33: Statistics about DNS queries 3

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd eeeee fffff</pre>	<pre>Quers AAAA WellK Autoc UserDefAnswr GHBAAddress</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	SOCKET			FTD_SB_SCKT_DNS_IPV6_	W:D	R	yes
				QUERIES_SENT			
Number of IPv6 queries sent							
b(5)	SOCKET			FTD_SB_SCKT_DNS_AAAA_	W:D	R	yes
				ANSWERS			
Number of AAAA answers							
c(5)	SOCKET			FTD_SB_SCKT_DNS_	W:D	R	yes
				WELLKNOWN_ANS			
Number of answers from well-known IPv6 DNS servers							
d(5)	SOCKET			FTD_SB_SCKT_DNS_	W:D	R	yes
				AUTOCONF_ANS			
Number of answers from automatically configured DNS servers							
e(5)	SOCKET			FTD_SB_SCKT_DNS_	W:D	R	yes
				USERDEF_ANS			
Number of answers from user defined DNS servers							
f(5)	SOCKET			FTD_SB_SCKT_DNS_IPV6_	W:D	R	yes
				GHBA_QUERIES			
Number of IPv6 address-to-name queries sent.							

37.11 Display 80.34: Last DNS answer IPv6 address

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeee ffff gggg hhhh</pre>	<pre>LastAnsIPv6 LastAnsIPv6 LastAnsIPv6 LastAnsIPv6</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_	W:H	R	yes
				IPV6_A			
Part A of last answer IPv6 address							
b(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_	W:H	R	yes
				IPV6_B			
Part B of last answer IPv6 address							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_IPV6_C	W:H	R	yes
	Part C of last answer IPv6 address						
d(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_IPV6_D	W:H	R	yes
	Part D of last answer IPv6 address						
e(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_IPV6_E	W:H	R	yes
	Part E of last answer IPv6 address						
f(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_IPV6_F	W:H	R	yes
	Part F of last answer IPv6 address						
g(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_IPV6_G	W:H	R	yes
	Part G of last answer IPv6 address						
h(4)	SOCKET			FTD_SB_SCKT_DNS_ANS_IPV6_H	W:H	R	yes
	Part H of last answer IPv6 address						

37.12 Display 80.35: DNS server address of last DNS query

S40 Data display	S40 HELP display
<pre>a bbbb cccc dddd eeee ffff gggg hhhh iiii</pre>	<pre>v DNSServAdr DNSServAdr DNSServAdr DNSServAdr</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	SOCKET			FTD_SB_SCKT_DNS_DEST_IPVER	B:D	R	yes
	IP version of DNS server address shown. 0: N/A 4: IPv4 6: IPv6						
b(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_A	W:H	R	yes
	Server address of last DNS query, part A of IPv6 address						
c(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_B	W:H	R	yes
	Server address of last DNS query, part B of IPv6 address						
d(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_C	W:H	R	yes
	Server address of last DNS query, part C of IPv6 address						
e(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_D	W:H	R	yes
	Server address of last DNS query, part D of IPv6 address						
f(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_E	W:H	R	yes
	Server address of last DNS query, part E of IPv6 address						
g(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_F	W:H	R	yes
	Server address of last DNS query, part F of IPv6 address						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_G	W:H	R	yes
	Server address of last DNS query. Part G of IPv6 address or first half of IPv4 address in hexadecimal form.						
i(4)	SOCKET			FTD_SB_SCKT_DNS_DEST_H	W:H	R	yes
	Server address of last DNS query. Part H of IPv6 address or second half of IPv4 address in hexadecimal form.						

37.13 Display 80.40: Ping link selection

This display is used to select link that will be used with ping application (see display 8041). Available links can be seen on display 8001.

Selected link number is 1 by default. When link number is changed that selection remains until changed again or mobile goes through power cycle. Link type shows verbal presentation of link type if link exists (e.g. GPRS), otherwise it shows NOLINK.

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display by entering 8040 (Socket displays;PING link selection) to the query prompt.
5. Test input prompt will be shown on the display, enter the link number in display.
6. Confirm with the Ok button.
7. If the change succeeded, the new link information is displayed on this display

S40 Data display	S40 HELP display
<pre>Ping link: a bbbbbb</pre>	<pre>Ping link: Link number Link type</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	SOCKET			FTD_SB_SCKT_PING_LINK_NUMBER	B:H	R	no
	Current link number in hexadecimal						
b(6)	SOCKET			FTD_SB_SCKT_PING_LINK_TYPE	S	R	no
	Verbal presentation of link type (e.g. GPRS), or NOLINK if link is not available.						
INPUT(8)	SOCKET			FTD_SB_SCKT_PING_LINK_SELECT	DW:H	R	no
	Give link number in hexadecimal						

37.14 Display 80.41: Ping application

This display is used to ping, i.e. to send ICMP echo requests to specific IPv4 address. Ping uses link specified via display 8040. After started, ping always tries to send 10 ICMP echo requests at one-second interval with 32 bytes of data. When pinging is started, it is not possible to start another ping before previous pinging has stopped.

Because of limitations in FTD application, the destination IP address has to be given in hexadecimal format in input query. For example, when pinging to 192.168.0.1 test input would be:"C0A80001" (192 = C0, 168 = A8, 0 = 00, 1 = 01).

By default status is S (stopped). When pinging starts the status field is changed to R (running). After pinging process has completed the status changes again to S, and at that time final results can be read from the screen. Status F (fatal) means that pinging could not start at all. Status X (syntax error) means that ping application was unable to parse user input. ICMP type and code fields may contain additional information why ping may have failed, e.g.destination unreachable, as defined in RFC792.If pinging is successfully started, it will last approximately 10-15 seconds. IPv6 is not supported.

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display by entering 8041 (Socket displays:Ping application) to the query prompt.
5. Test input prompt will be shown on the display, enter the IP number to be pinged in hexadecimal
6. Confirm with the Ok button.
7. If everything goes right, screen is updated; the pinging starts, and results will be available shortly. Pinging process is successfully completed when status changes from R (running) to S (stopped). F and X statuses indicate of some problem (e.g. link is not selected, IP address is invalid etc.)

S40 Data display	S40 HELP display
<pre>aaabbbccddd ee ff gghh i jjjjj kkkkk lllll mmmmmm</pre>	<pre>Ping DestIP Snt Rcv IC S Min Max Ave Type</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_SCKT_PING_DEST_IP_A	B:D	R	no
		Part A of the IPv4 address being pinged					
b(3)	SOCKET			FTD_SB_SCKT_PING_DEST_IP_B	B:D	R	no
		Part B of the IPv4 address being pinged					
c(3)	SOCKET			FTD_SB_SCKT_PING_DEST_IP_C	B:D	R	no
		Part C of the IPv4 address being pinged					
d(3)	SOCKET			FTD_SB_SCKT_PING_DEST_IP_D	B:D	R	no
		Part D of the IPv4 address being pinged					
e(2)	SOCKET			FTD_SB_SCKT_PING_SENT_CNT	B:D	R	no
		Number of ICMP echo requests sent					
f(2)	SOCKET			FTD_SB_SCKT_PING_REPLY_CNT	B:D	R	no
		Number of ICMP echo replies received					

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
g(2)	SOCKET			FTD_SB_SCKT_PING_ICMP_	B:D	R	no
				TYPE			
Possibly received ICMP type value (RFC792)							
h(2)	SOCKET			FTD_SB_SCKT_PING_ICMP_	B:D	R	no
				CODE			
Possibly received ICMP code value (RFC792)							
i	SOCKET			FTD_SB_SCKT_PING_	S	R	no
				STATUS			
State of pinging process (R = running, S = stopped and results are on screen, F = fatal error and pinging could not start at all, X = syntax error in input)							
j(5)	SOCKET			FTD_SB_SCKT_PING_MIN_	W:D	R	no
				TIME			
Minimum round trip time in milli-seconds							
k(5)	SOCKET			FTD_SB_SCKT_PING_MAX_	W:D	R	no
				TIME			
Maximum round trip time in milli-seconds							
l(5)	SOCKET			FTD_SB_SCKT_PING_AVE_	W:D	R	no
				TIME			
Average round trip time in milli-seconds							
m(6)	SOCKET			FTD_SB_SCKT_PING_LINK_	S	R	no
				TYPE			
Verbal presentation of link type (e.g. GPRS), or NOLINK if link is not available.							
INPUT(8)	SOCKET			FTD_SB_SCKT_PING_DEST_	DW:H	R	no
				IP			
Give IP number as hexadecimal value (e.g. C0A80001)							

37.15 Display 80.51: Reset statistics counters

With this display, all statistics counters on displays 80.11, 80.21, 80.22, 80.31, 80.32, 80.33, 80.34, 80.35, 80.40 and 80.41 can be reset.

S40 Data display	S40 HELP display
STATISTICS COUNTERS RESET	USE MENU TO RESET STATISTICS COUNTERS

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	SOCKET			FTD_SB_SCKT_RESET_	S	R	yes
				STATS			
Reset statistics counters on displays 80.11, 80.21, 80.22, 80.31, 80.32, 80.33, 80.34 and 80.35							

37.16 Display 80.61: IKE SGW and Suite Information for Negotiation #1

S40 Data display	S40 HELP display
<pre>aaa.bbb.ccc. ddd eeee ffff</pre>	<pre>SGW IP Addr IKE suite IPsec suite</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_IKE_SGW_IP_A_1	B:D	R	no
	Part A of SGW IP address						
b(3)	SOCKET			FTD_SB_IKE_SGW_IP_B_1	B:D	R	no
	Part B of SGW IP address						
c(3)	SOCKET			FTD_SB_IKE_SGW_IP_C_1	B:D	R	no
	Part C of SGW IP address						
d(3)	SOCKET			FTD_SB_IKE_SGW_IP_D_1	B:D	R	no
	Part D of SGW IP address						
e(5)	SOCKET			FTD_SB_IKE_IKE_SUITE_1	W:D	R	no
	Negotiated IKE suite						
f(5)	SOCKET			FTD_SB_IKE_IPSEC_SUITE_1	W:D	R	no
	Negotiated IPsec suite						

37.17 Display 80.62: IKE State Information for Negotiation #1

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa b cccccccccc dd:ee:ff gggggggggggg</pre>	<pre>CurStat NATT PrevState PrvStaChange Last error</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SOCKET			FTD_SB_IKE_CUR_STATE_1	S	R	no
	Current state of negotiation						
b	SOCKET			FTD_SB_IKE_NAT_T_1	B:D	R	no
	NAT-T (0=OFF, 1=ON)						
c(10)	SOCKET			FTD_SB_IKE_PREV_STATE_1	S	R	no
	Previous state of negotiation						
d(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_H_1	B:D	R	no
	Time of previous state change, hours						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
e(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_M_1	B:D	R	no
				Time of previous state change, minutes			
f(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_S_1	B:D	R	no
				Time of previous state change, seconds			
g(12)	SOCKET			FTD_SB_IKE_LAST_NEG_ERROR_1	S	R	no
				Last negotiation error			

37.18 Display 80.63: IKE SGW and Suite Information for Negotiation #2

S40 Data display	S40 HELP display
<pre>aaa.bbb.ccc. ddd eeee ffff</pre>	<pre>SGW IP Addr IKE suite IPsec suite</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_IKE_SGW_IP_A_2	B:D	R	no
				Part A of SGW IP address			
b(3)	SOCKET			FTD_SB_IKE_SGW_IP_B_2	B:D	R	no
				Part B of SGW IP address			
c(3)	SOCKET			FTD_SB_IKE_SGW_IP_C_2	B:D	R	no
				Part C of SGW IP address			
d(3)	SOCKET			FTD_SB_IKE_SGW_IP_D_2	B:D	R	no
				Part D of SGW IP address			
e(5)	SOCKET			FTD_SB_IKE_IKE_SUITE_2	W:D	R	no
				Negotiated IKE suite			
f(5)	SOCKET			FTD_SB_IKE_IPSEC_SUITE_2	W:D	R	no
				Negotiated IPsec suite			

37.19 Display 80.64: IKE State Information for Negotiation #2

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa b cccccccccc dd:ee:ff gggggggggggg</pre>	<pre>CurStat NATT PrevState PrvStaChange Last error</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SOCKET			FTD_SB_IKE_CUR_STATE_2	S	R	no
	Current state of negotiation						
b	SOCKET			FTD_SB_IKE_NAT_T_2	B:D	R	no
	NAT-T (0=OFF, 1=ON)						
c(10)	SOCKET			FTD_SB_IKE_PREV_STATE_2	S	R	no
	Previous state of negotiation						
d(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_H_2	B:D	R	no
	Time of previous state change, hours						
e(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_M_2	B:D	R	no
	Time of previous state change, minutes						
f(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_S_2	B:D	R	no
	Time of previous state change, seconds						
g(12)	SOCKET			FTD_SB_IKE_LAST_NEG_ERROR_2	S	R	no
	Last negotiation error						

37.20 Display 80.65: IKE SGW and Suite Information for Negotiation #3

S40 Data display	S40 HELP display
<pre>aaa.bbb.ccc. ddd eeee ffff</pre>	<pre>SGW IP Addr IKE suite IPsec suite</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_IKE_SGW_IP_A_3	B:D	R	no
	Part A of SGW IP address						
b(3)	SOCKET			FTD_SB_IKE_SGW_IP_B_3	B:D	R	no
	Part B of SGW IP address						
c(3)	SOCKET			FTD_SB_IKE_SGW_IP_C_3	B:D	R	no
	Part C of SGW IP address						
d(3)	SOCKET			FTD_SB_IKE_SGW_IP_D_3	B:D	R	no
	Part D of SGW IP address						
e(5)	SOCKET			FTD_SB_IKE_IKE_SUITE_3	W:D	R	no
	Negotiated IKE suite						
f(5)	SOCKET			FTD_SB_IKE_IPSEC_SUITE_3	W:D	R	no
	Negotiated IPsec suite						

37.21 Display 80.66: IKE State Information for Negotiation #3

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa b cccccccccc dd:ee:ff ggggggggggggg</pre>	<pre>CurStat NATT PrevState PrvStaChange Last error</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SOCKET			FTD_SB_IKE_CUR_STATE_3	S	R	no
Current state of negotiation							
b	SOCKET			FTD_SB_IKE_NAT_T_3	B:D	R	no
NAT-T (0=OFF, 1=ON)							
c(10)	SOCKET			FTD_SB_IKE_PREV_STATE_3	S	R	no
Previous state of negotiation							
d(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_H_3	B:D	R	no
Time of previous state change, hours							
e(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_M_3	B:D	R	no
Time of previous state change, minutes							
f(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_S_3	B:D	R	no
Time of previous state change, seconds							
g(12)	SOCKET			FTD_SB_IKE_LAST_NEG_ERROR_3	S	R	no
Last negotiation error							

37.22 Display 80.67: IKE SGW and Suite Information for Negotiation #4

S40 Data display	S40 HELP display
<pre>aaa.bbb.ccc. ddd eeee ffff</pre>	<pre>SGW IP Addr IKE suite IPsec suite</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_IKE_SGW_IP_A_4	B:D	R	no
Part A of SGW IP address							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(3)	SOCKET			FTD_SB_IKE_SGW_IP_B_4	B:D	R	no
	Part B of SGW IP address						
c(3)	SOCKET			FTD_SB_IKE_SGW_IP_C_4	B:D	R	no
	Part C of SGW IP address						
d(3)	SOCKET			FTD_SB_IKE_SGW_IP_D_4	B:D	R	no
	Part D of SGW IP address						
e(5)	SOCKET			FTD_SB_IKE_IKE_SUITE_4	W:D	R	no
	Negotiated IKE suite						
f(5)	SOCKET			FTD_SB_IKE_IPSEC_SUITE_4	W:D	R	no
	Negotiated IPsec suite						

37.23 Display 80.68: IKE State Information for Negotiation #4

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa b cccccccccc dd:ee:ff ggggggggggggg</pre>	<pre>CurStat NATT PrevState PrvStaChange Last error</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SOCKET			FTD_SB_IKE_CUR_STATE_4	S	R	no
	Current state of negotiation						
b	SOCKET			FTD_SB_IKE_NAT_T_4	B:D	R	no
	NAT-T (0=OFF, 1=ON)						
c(10)	SOCKET			FTD_SB_IKE_PREV_STATE_4	S	R	no
	Previous state of negotiation						
d(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_H_4	B:D	R	no
	Time of previous state change, hours						
e(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_M_4	B:D	R	no
	Time of previous state change, minutes						
f(2)	SOCKET			FTD_SB_IKE_PREV_STATE_CHG_S_4	B:D	R	no
	Time of previous state change, seconds						
g(12)	SOCKET			FTD_SB_IKE_LAST_NEG_ERROR_4	S	R	no
	Last negotiation error						

37.24 Display 80.71: IPsec Statistics

S40 Data display	S40 HELP display
<pre>aaa bbb cccccccccc dddddddddd</pre>	<pre>IPsec Sas IPsec Rules EncrOutbound EncrInbound</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	SOCKET			FTD_SB_IPSEC_SA_COUNT	B:D	R	no
	Number of IPsec SAs						
b(3)	SOCKET			FTD_SB_IPSEC_RULE_COUNT	B:D	R	no
	Number of IPsec rules						
c(10)	SOCKET			FTD_SB_IPSEC_ENCR_OUTBOUND	DW:D	R	no
	Number of sent IPsec encrypted packets						
d(10)	SOCKET			FTD_SB_IPSEC_ENCR_INBOUND	DW:D	R	no
	Number of received IPsec encrypted packets						

37.25 Display 80.72: IPsec Dropped Packets

S40 Data display	S40 HELP display
<pre>aaaaaaaaaa bbbbbbbbbb cccccccccc dddddddddd</pre>	<pre>DropBrkOutb DropBrkInb DropPolOutb DropPolInb</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(10)	SOCKET			FTD_SB_IPSEC_DROP_BROKEN_OUTBOUND	DW:D	R	no
	Number of outbound packets dropped because they are broken (e.g. ICV check failed)						
b(10)	SOCKET			FTD_SB_IPSEC_DROP_BROKEN_INBOUND	DW:D	R	no
	Number of inbound packets dropped because they are broken (e.g. ICV check failed)						
c(10)	SOCKET			FTD_SB_IPSEC_DROP_POLICY_OUTBOUND	DW:D	R	no
	Number of outbound packets dropped by IPsec policy check						
d(10)	SOCKET			FTD_SB_IPSEC_DROP_POLICY_INBOUND	DW:D	R	no
	Number of inbound packets dropped by IPsec policy check						

38 Group 81: Multimode protocol displays

38.1 Display 81.01: Force protocol between GSM and WCDMA

To change Force Protocol status, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 8101 (Multimode protocol displays; Force protocol) to the query prompt.
5. Test input prompt will activate, enter the Force Protocol status code (see the table below) in display.
6. Confirm with the Ok button.

S40 Data display	S40 HELP display
<pre> Forced Mode : a </pre>	<pre> Use menu to disable or enable force protocol </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_SELECTED_RAT_READ	B:D	R,I,O	no
Forced protocol: 0 = dual mode 1 = GSM 2 = WCDMA 255 = unknown							
INPUT	GSS			FTD_SB_SELECTED_RAT_SET	DW:D	R,I,O	yes
Force protocol 0 = dual mode 1 = GSM 2 = WCDMA							

38.2 Display 81.02: Toggle Integrity Protection Mode

To change integrity protection mode, perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in executive mode by entering 8102 (Multimode protocol displays;toggle integrity protection mode) to the query prompt.
5. Confirm with the Ok button.

S40 Data display	S40 HELP display
<pre>Integrity Protection: aaa</pre>	<pre>Use menu to toggle int. protection mode on/off</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_INT_PRO_MODE	S	R,I,O	yes
	Current integrity protection mode: ON : Enabled OFF : Disabled						
EXE	GSS			FTD_SB_INT_PRO_MODE_TOGGLE	S	R,I,O	yes
	Toggle integrity protection mode.						

39 Group 82: DSP Core

39.1 Display 82.01: CDSP load status

This display gives information about the CDSP processor load.

S40 Data display	S40 HELP display
<pre>aaaaa eeeee bbbbbb ffffff ccccc gggggg dddddd hhhhhh</pre>	<pre>Act% ActCyc VLS% VlsCyc LS% LsCycl DS% DsCycl</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_ACT_PORTION	W:D	R	yes
				Amount of time spent in active mode during display update period. Value is relative portion, range 0 ... 10000.			
b(5)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_VLS_PORTION	W:D	R	yes
				Amount of time spent in very light sleep mode during display update period. Value is relative portion, range 0 ... 10000.			
c(5)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_LS_PORTION	W:D	R	yes
				Amount of time spent in light sleep mode during display update period. Value is relative portion, range 0 ... 10000.			
d(5)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_DS_PORTION	W:D	R	yes
				Amount of time spent in deep sleep mode during display update period. Value is relative portion, range 0 ... 10000.			
e(6)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_ACT_CYCLES	DW:H	R	yes
				Amount of time spent in active mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			
f(6)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_VLS_CYCLES	DW:H	R	yes
				Amount of time spent in very light sleep mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			
g(6)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_LS_CYCLES	DW:H	R	yes
				Amount of time spent in light sleep mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			
h(6)	DSP_CORE			DSP_CORE_SB_FTD_LOAD_DS_CYCLES	DW:H	R	yes
				Amount of time spent in deep sleep mode during display update period. Value is sleep clock cycles (one cycle duration is approximately 30.5 ms).			

39.2 Display 82.02: User scratchpad area

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeee ffff gggg hhhh</pre>	<pre>DSP data display Use menu to enter data</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA0	W:H	R	yes
	DSP specific data in hex format						
b(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA1	W:H	R	yes
	DSP specific data in hex format						
c(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA2	W:H	R	yes
	DSP specific data in hex format						
d(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA3	W:H	R	yes
	DSP specific data in hex format						
e(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA4	W:H	R	yes
	DSP specific data in hex format						
f(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA5	W:H	R	yes
	DSP specific data in hex format						
g(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA6	W:H	R	yes
	DSP specific data in hex format						
h(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA7	W:H	R	yes
	DSP specific data in hex format						
INPUT(4)	DSP_CORE			DSP_CORE_SB_FTD_USER_DATA	W:H	R	yes
	DSP specific data in hex format						

39.3 Display 82.03: Non-fatal errors

This display holds four last non-fatal error (=warnings). The display works in a FIFO principle. When a new error occurs all the errors are moved forward and if there are errors more than four, the oldest error code is removed. There are separate queues for fatal and non-fatal error codes. Also the ID of the last executed process is displayed after the error code. Codes are in hexadecimal numbers and process IDs are decimal numbers.

S40 Data display	S40 HELP display
<pre>aaaaaaaaa bbb cccccccc ddd eeeeeeee fff gggggggg hhh</pre>	<pre>Last 4 warns warning task warning task warning task</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_ID0	DW:H	R	yes
	Last non-fatal error code						
b(3)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_TASK_ID0	B:D	R	yes
	OS task						
c(8)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_ID1	DW:H	R	yes
	Last - 1 non-fatal error code.						
d(3)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_TASK_ID1	B:D	R	yes
	OS task						
e(8)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_ID2	DW:H	R	yes
	Last - 2 non-fatal error code.						
f(3)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_TASK_ID2	B:D	R	yes
	OS task						
g(8)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_ID3	DW:H	R	yes
	Last - 3 non-fatal error code.						
h(3)	DSP_CORE			DSP_CORE_SB_FTD_WARNING_TASK_ID3	B:D	R	yes
	OS task						

39.4 Display 82.04: DSP reset counters

Counters are stored to permanent memory.

S40 Data display	S40 HELP display
<pre>aa bb cc dd ee ff gg hh</pre>	<pre>ST NR DSP GG WW CC TT AA</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(2)	MON			FTD_SB_DSP_STARTUP_FAILED	W:H	R	yes
	DSP Startup failures						
b(2)	MON			FTD_SB_DSP_DEAD_RESET	W:H	R	yes
	No DSP response						
c(2)	MON			FTD_SB_DSP_ERROR	W:H	R	yes
	DSP resets						
d(2)	MON			FTD_SB_GSM DSP_ERROR	W:H	R	yes
	GSM resets						
e(2)	MON			FTD_SB_WCDMADSP_ERROR	W:H	R	yes
	WCDMA resets						
f(2)	g(2)	MON			FTD_SB_TDMADSP_ERROR	W:H	R
TDMA resets							
h(2)	MON			FTD_SB_ADSP_ERROR	W:H	R	yes
	Application resets						

y
e
s

39.5 Display 82.07: DSP fatal error codes 1

DSP fatal error codes are stored into FIFO buffers. When a new error occurs all the errors are moved forward in buffers and if there are errors more than eight, the oldest error code is removed from the buffers. There are separate buffers for main error codes and extra error codes. This display holds last two error codes (last and last-1).

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> MainErrCod 0 XtraErrCod 0 MainErrCod 1 XtraErrCod 1 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_0	DW:H	R	no
	Last main error code.						
b(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_0	DW:H	R	no
	Last extra error code.						
c(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_1	DW:H	R	no
	Last-1 main error code.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_1	DW:H	R	no
Last-1 extra error code.							

39.6 Display 82.08: DSP fatal error codes 2

DSP fatal error codes are stored into FIFO buffers in Monitor server. When a new error occurs all the errors are moved forward in buffers and if there are errors more than eight, the oldest error code is removed from the buffers. There are own buffers for main error codes and extraerror codes. This display holds last-2 and last-3 error codes

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> MainErrCod 2 XtreErrCod 2 MainErrCod 3 XtraErrCod 3 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_2	DW:H	R	no
Last-2 main error code.							
b(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_2	DW:H	R	no
Last-2 extra error code.							
c(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_3	DW:H	R	no
Last-3 main error code.							
d(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_3	DW:H	R	no
Last-3 extra error code.							

39.7 Display 82.09: DSP fatal error codes 3

DSP fatal error codes are stored into FIFO buffers in Monitor server. When a new error occurs all the errors are moved forward in buffers and if there are errors more than eight, the oldest error code is removed from the buffers. There are own buffers for main error codes and extraerror codes. This display holds last-4 and last-5 error codes

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> MainErrCod 4 XtreErrCod 4 MainErrCod 5 XtraErrCod 5 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_4	DW:H	R	no
				Last-4 main error code.			
b(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_4	DW:H	R	no
				Last-4 extra error code.			
c(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_5	DW:H	R	no
				Last-5 main error code.			
d(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_5	DW:H	R	no
				Last-5 extra error code.			

39.8 Display 82.10: DSP fatal error codes 4

DSP fatal error codes are stored into FIFO buffers. When a new error occurs all the errors are moved forward in buffers and if there are errors more than eight, the oldest error code is removed from the buffers. There are own buffers for main error codes and extra error codes. This display holds last-6 and last-7 error codes

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> MainErrCod 6 XtreErrCod 6 MainErrCod 7 XtraErrCod 7 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_6	DW:H	R	no
				Last-6 main error code.			
b(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_6	DW:H	R	no
				Last-6 extra error code.			
c(8)	MON			FTD_SB_MON_DSP_MAIN_ERR_CODE_7	DW:H	R	no
				Last-7 main error code.			
d(8)	MON			FTD_SB_MON_DSP_EXTRA_ERR_CODE_7	DW:H	R	no
				Last-7 extra error code.			

39.9 Display 82.11: DSP fatal error code timestamps 1

This display holds timestamps for DSP fatal error codes in displays 82.07 and 82.08

S40 Data display	S40 HELP display
<pre>aaaaaabbbbbb ccccccddddd eeeeeeffffff ggggggghhhhhh</pre>	<pre>date_0time_0 date_1time_1 date_2time_2 date_3time_3</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_0	S	R	no
				Date of the last fatal error. Format: ddmmyy			
b(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_0	S	R	no
				Clock time of the last fatal error. Format:hmmss			
c(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_1	S	R	no
				Date of the las-1 fatal error. Format: ddmmyy			
d(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_1	S	R	no
				Clock time of the last-1 fatal error. Format:hmmss			
e(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_2	S	R	no
				Date of the last-2 fatal error. Format: ddmmyy			
f(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_2	S	R	no
				Clock time of the last-2 fatal error. Format:hmmss			
g(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_3	S	R	no
				Date of the last-3 fatal error. Format: ddmmyy			
h(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_3	S	R	no
				Clock time of the last-3 fatal error. Format:hmmss			

39.10 Display 82.12: DSP fatal error code timestamps 2

This display holds timestamps for DSP fatal error codes in displays 82.09 and 82.10

S40 Data display	S40 HELP display
<pre>aaaaaabbbbbb ccccccddddd eeeeeeffffff ggggggghhhhhh</pre>	<pre>date_4time_4 date_5time_5 date_6time_6 date_7time_7</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_4	S	R	no
				Date of the last-4 fatal error. Format: ddmmyy			
b(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_4	S	R	no
				Clock time of the last-4 fatal error. Format:hmmss			
c(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_5	S	R	no
				Date of the las-5 fatal error. Format: ddmmyy			
d(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_5	S	R	no
				Clock time of the last-5 fatal error. Format:hmmss			
e(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_6	S	R	no
				Date of the last-6 fatal error. Format: ddmmyy			
f(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_6	S	R	no
				Clock time of the last-6 fatal error. Format:hmmss			
g(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_DATE_7	S	R	no
				Date of the last-7 fatal error. Format: ddmmyy			
h(6)	MON			FTD_SB_MON_DSP_FATAL_ERR_CODE_TIME_7	S	R	no
				Clock time of the last-7 fatal error. Format:hmmss			

39.11 Display 82.13: DSP latest entry indexes before error

This display holds the latest entry indices of next FIFO buffers: Process ID list, RX signal list, TX signal list and warning list.

S40 Data display	S40 HELP display
<pre> aaaa bbbb cccc dddd </pre>	<pre> Process ID rx_msg tx_msg Warning </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_PID_LIST_LATEST_ENTRY_INDEX	W:H	R	no
				Latest entry index of DSP process ID list			
b(4)	MON			FTD_SB_MON_DSP_RX_MSG_LIST_LATEST_ENTRY_INDEX	W:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
Latest entry index of DSP RX signal list							
c(4)	MON			FTD_SB_MON_DSP_TX_MSG_LIST_LATEST_ENTRY_INDEX	W:H	R	no
Latest entry index of DSP TX signal list							
d(4)	MON			FTD_SB_MON_DSP_WARNING_LIST_LATEST_ENTRY_INDEX	W:H	R	no
Latest entry index DSP warning list							

39.12 Display 82.14: DSP PID list before error 1

The IDs of last 32 DSP processes preceding DSP error are stored into table. This display holds first eight items (from 0 to 7) of table.

S40 Data display	S40 HELP display
<pre> aaaa eeee bbbb ffff cccc gggg dddd hhhh </pre>	<pre> PID0 PID4 PID1 PID5 PID2 PID6 PID3 PID7 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_PID_0	W:H	R	no
DSP process ID 0							
b(4)	MON			FTD_SB_MON_DSP_PID_1	W:H	R	no
DSP process ID 1							
c(4)	MON			FTD_SB_MON_DSP_PID_2	W:H	R	no
DSP process ID 2							
d(4)	MON			FTD_SB_MON_DSP_PID_3	W:H	R	no
DSP process ID 3							
e(4)	MON			FTD_SB_MON_DSP_PID_4	W:H	R	no
DSP process ID 4							
f(4)	MON			FTD_SB_MON_DSP_PID_5	W:H	R	no
DSP process ID 5							
g(4)	MON			FTD_SB_MON_DSP_PID_6	W:H	R	no
DSP process ID 6							
h(4)	MON			FTD_SB_MON_DSP_PID_7	W:H	R	no
DSP process ID 7							

39.13 Display 82.15: DSP PID list before error 2

The IDs of last 32 DSP processes preceding DSP error are stored into table. This display holds items of table from 8 to 15.

S40 Data display	S40 HELP display
<pre>aaaa eeee bbbb ffff cccc gggg dddd hhhh</pre>	<pre>PID8 PID12 PID9 PID13 PID10 PID14 PID11 PID15</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_PID_8	W:H	R	no
	DSP process ID 8						
b(4)	MON			FTD_SB_MON_DSP_PID_9	W:H	R	no
	DSP process ID 9						
c(4)	MON			FTD_SB_MON_DSP_PID_10	W:H	R	no
	DSP process ID 10						
d(4)	MON			FTD_SB_MON_DSP_PID_11	W:H	R	no
	DSP process ID 11						
e(4)	MON			FTD_SB_MON_DSP_PID_12	W:H	R	no
	DSP process ID 12						
f(4)	MON			FTD_SB_MON_DSP_PID_13	W:H	R	no
	DSP process ID 13						
g(4)	MON			FTD_SB_MON_DSP_PID_14	W:H	R	no
	DSP process ID 14						
h(4)	MON			FTD_SB_MON_DSP_PID_15	W:H	R	no
	DSP process ID 15						

39.14 Display 82.16: DSP PID list before error 3

The IDs of last 32 DSP processes preceding DSP error are stored into table. This display holds items of table from 16 to 23.

S40 Data display	S40 HELP display
<pre>aaaa eeee bbbb ffff cccc gggg dddd hhhh</pre>	<pre>PID16 PID20 PID17 PID21 PID18 PID22 PID19 PID23</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_PID_16	W:H	R	no
	DSP process ID 16						
b(4)	MON			FTD_SB_MON_DSP_PID_17	W:H	R	no
	DSP process ID 17						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(4)	MON			FTD_SB_MON_DSP_PID_18	W:H	R	no
	DSP process ID 18						
d(4)	MON			FTD_SB_MON_DSP_PID_19	W:H	R	no
	DSP process ID 19						
e(4)	MON			FTD_SB_MON_DSP_PID_20	W:H	R	no
	DSP process ID 20						
f(4)	MON			FTD_SB_MON_DSP_PID_21	W:H	R	no
	DSP process ID 21						
g(4)	MON			FTD_SB_MON_DSP_PID_22	W:H	R	no
	DSP process ID 22						
h(4)	MON			FTD_SB_MON_DSP_PID_23	W:H	R	no
	DSP process ID 23						

39.15 Display 82.17: DSP PID list before error 4

The IDs of last 32 DSP processes preceding DSP error are stored into table. This display holds last eight items of table (from 24 to 31).

S40 Data display	S40 HELP display
<pre> aaaa eeee bbbb ffff cccc gggg dddd hhhh </pre>	<pre> PID24 PID28 PID25 PID29 PID26 PID30 PID27 PID31 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_PID_24	W:H	R	no
	DSP process ID 24						
b(4)	MON			FTD_SB_MON_DSP_PID_25	W:H	R	no
	DSP process ID 25						
c(4)	MON			FTD_SB_MON_DSP_PID_26	W:H	R	no
	DSP process ID 26						
d(4)	MON			FTD_SB_MON_DSP_PID_27	W:H	R	no
	DSP process ID 27						
e(4)	MON			FTD_SB_MON_DSP_PID_28	W:H	R	no
	DSP process ID 28						
f(4)	MON			FTD_SB_MON_DSP_PID_29	W:H	R	no
	DSP process ID 29						
g(4)	MON			FTD_SB_MON_DSP_PID_30	W:H	R	no
	DSP process ID 30						
h(4)	MON			FTD_SB_MON_DSP_PID_31	W:H	R	no
	DSP process ID 31						

39.16 Display 82.18: DSP Rx signal list before error 1

The last sixteen DSP Rx signals preceding error are stored into table. This display holds first eight items (from 0 to 7) of table.

S40 Data display		S40 HELP display	
aaaa	eeee	Rx0	Rx4
bbbb	ffff	Rx1	Rx5
cccc	gggg	Rx2	Rx6
dddd	hhhh	Rx3	Rx7

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_RX_SIGID_0	W:H	R	no
	DSP Rx signal 0						
b(4)	MON			FTD_SB_MON_DSP_RX_SIGID_1	W:H	R	no
	DSP Rx signal 1						
c(4)	MON			FTD_SB_MON_DSP_RX_SIGID_2	W:H	R	no
	DSP Rx signal 2						
d(4)	MON			FTD_SB_MON_DSP_RX_SIGID_3	W:H	R	no
	DSP Rx signal 3						
e(4)	MON			FTD_SB_MON_DSP_RX_SIGID_4	W:H	R	no
	DSP Rx signal 4						
f(4)	MON			FTD_SB_MON_DSP_RX_SIGID_5	W:H	R	no
	DSP Rx signal 5						
g(4)	MON			FTD_SB_MON_DSP_RX_SIGID_6	W:H	R	no
	DSP Rx signal 6						
h(4)	MON			FTD_SB_MON_DSP_RX_SIGID_7	W:H	R	no
	DSP Rx signal 7						

39.17 Display 82.19: DSP Rx signal list before error 2

The last sixteen DSP Rx signals preceding error are stored into table. This display holds last eight items (from 8 to 15) of table.

S40 Data display	S40 HELP display
<pre> eeee bbbb ffff cccc gggg dddd hhhh </pre>	<pre> Rx8 Rx12 Rx9 Rx13 Rx10 Rx14 Rx11 Rx15 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_RX_SIGID_8	W:H	R	no
	DSP Rx signal 8						
b(4)	MON			FTD_SB_MON_DSP_RX_SIGID_9	W:H	R	no
	DSP Rx signal 9						
c(4)	MON			FTD_SB_MON_DSP_RX_SIGID_10	W:H	R	no
	DSP Rx signal 10						
d(4)	MON			FTD_SB_MON_DSP_RX_SIGID_11	W:H	R	no
	DSP Rx signal 11						
e(4)	MON			FTD_SB_MON_DSP_RX_SIGID_12	W:H	R	no
	DSP Rx signal 12						
f(4)	MON			FTD_SB_MON_DSP_RX_SIGID_13	W:H	R	no
	DSP Rx signal 13						
g(4)	MON			FTD_SB_MON_DSP_RX_SIGID_14	W:H	R	no
	DSP Rx signal 14						
h(4)	MON			FTD_SB_MON_DSP_RX_SIGID_15	W:H	R	no
	DSP Rx signal 15						

39.18 Display 82.20: DSP Tx signal list before error 1

The last sixteen DSP Tx signals preceding error are stored into table. This display holds first eight items (from 0 to 7) of table.

S40 Data display	S40 HELP display
<pre> aaaa eeee bbbb ffff cccc gggg dddd hhhh </pre>	<pre> Tx0 Tx4 Tx1 Tx5 Tx2 Tx6 Tx3 Tx7 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_TX_SIGID_0	W:H	R	no
	DSP Tx signal 0						
b(4)	MON			FTD_SB_MON_DSP_TX_SIGID_1	W:H	R	no
	DSP Tx signal 1						
c(4)	MON			FTD_SB_MON_DSP_TX_SIGID_2	W:H	R	no
	DSP Tx signal 2						
d(4)	MON			FTD_SB_MON_DSP_TX_SIGID_3	W:H	R	no
	DSP Tx signal 3						
e(4)	MON			FTD_SB_MON_DSP_TX_SIGID_4	W:H	R	no
	DSP Tx signal 4						
f(4)	MON			FTD_SB_MON_DSP_TX_SIGID_5	W:H	R	no
	DSP Tx signal 5						
g(4)	MON			FTD_SB_MON_DSP_TX_SIGID_6	W:H	R	no
	DSP Tx signal 6						
h(4)	MON			FTD_SB_MON_DSP_TX_SIGID_7	W:H	R	no
	DSP Tx signal 7						

39.19 Display 82.21: DSP Tx signal list before error 2

The last sixteen DSP Tx signals preceding error are stored into table. This display holds last eight items (from 8 to 15) of table.

S40 Data display		S40 HELP display	
aaaa	eeee	Tx8	Tx12
bbbb	ffff	Tx9	Tx13
cccc	gggg	Tx10	Tx14
dddd	hhhh	Tx11	Tx15

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_MON_DSP_TX_SIGID_8	W:H	R	no
	DSP Tx signal 8						
b(4)	MON			FTD_SB_MON_DSP_TX_SIGID_9	W:H	R	no
	DSP Tx signal 9						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(4)	MON			FTD_SB_MON_DSP_TX_SIGID_10	W:H	R	no
				DSP Tx signal 10			
d(4)	MON			FTD_SB_MON_DSP_TX_SIGID_11	W:H	R	no
				DSP Tx signal 11			
e(4)	MON			FTD_SB_MON_DSP_TX_SIGID_12	W:H	R	no
				DSP Tx signal 12			
f(4)	MON			FTD_SB_MON_DSP_TX_SIGID_13	W:H	R	no
				DSP Tx signal 13			
g(4)	MON			FTD_SB_MON_DSP_TX_SIGID_14	W:H	R	no
				DSP Tx signal 14			
h(4)	MON			FTD_SB_MON_DSP_TX_SIGID_15	W:H	R	no
				DSP Tx signal 15			

39.20 Display 82.22: DSP warning list before error 1

The last eight DSP warnings before error are stored into table. This display holds first two warning and extra warning codes of table.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> WrnCode 0 XtraWrnCod 0 WrnCode 1 XtraWrnCod 1 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_0	DW:H	R	no
				Warning code 0.			
b(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_0	DW:H	R	no
				Extra warning code 0.			
c(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_1	DW:H	R	no
				Warning code 1.			
d(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_1	DW:H	R	no
				Extra warning code 1.			

39.21 Display 82.23: DSP warning list before error 2

The last eight warning codes and extra warning codes before error are stored into table. This display holds items 2 and 3 of table.

S40 Data display		S40 HELP display	
aaaaaaa bbbbbbb ccccccc ddddddd		WrnCode 2 XtraWrnCod 2 WrnCode 3 XtraWrnCod 3	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_2	DW:H	R	no
				Warning code 2.			
b(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_2	DW:H	R	no
				Extra warning code 2.			
c(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_3	DW:H	R	no
				Warning code 3.			
d(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_3	DW:H	R	no
				Extra warning code 3.			

39.22 Display 82.24: DSP warning list before error 3

The last eight warning codes and extra warning codes before error are stored into table. This display holds items 4 and 5 of table.

S40 Data display		S40 HELP display	
aaaaaaa bbbbbbb ccccccc ddddddd		WrnCode 4 XtraWrnCod 4 WrnCode 5 XtraWrnCod 5	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_4	DW:H	R	no
				Warning code 4.			
b(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_4	DW:H	R	no

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Extra warning code 4.						
c(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_5	DW:H	R	no
	Warning code 5.						
d(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_5	DW:H	R	no
	Extra warning code 5.						

39.23 Display 82.25: DSP warning list before error 4

The last eight warning codes and extra warning codes before error are stored into table. This display holds items 4 and 5 of table.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbbbbbbb cccccccc dddddddd </pre>	<pre> WrnCode 6 XtraWrnCod 6 WrnCode 7 XtraWrnCod 7 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_6	DW:H	R	no
	Warning code 6.						
b(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_6	DW:H	R	no
	Extra warning code 6.						
c(8)	MON			FTD_SB_MON_DSP_WARNING_CODE_7	DW:H	R	no
	Warning code 7.						
d(8)	MON			FTD_SB_MON_DSP_EXTRA_WARNING_CODE_7	DW:H	R	no
	Extra warning code 7.						

40 Group 83: ADSP SW Platform Display

40.1 Display 83.01: ADSP version and date

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaaa bbbbbbbbbbbbb cccccccccccccc dddddd</pre>	<pre>ADSP version Version date</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	DSP_CORE			FTD_SB_ADSP_VERSION_1	S	R	yes
		ADSP version string					
b(12)	DSP_CORE			FTD_SB_ADSP_VERSION_2	S	R	yes
		ADSP version string					
c(12)	DSP_CORE			FTD_SB_ADSP_VERSION_3	S	R	yes
		ADSP version string					
d(6)	DSP_CORE			FTD_SB_ADSP_VERSION_DATE	S	R	yes
		ADSP version date. Format: ddmmyy					

40.2 Display 83.02: Reset display

With this display all counters and error codes in this group can be reset.

S40 Data display	S40 HELP display
<pre>RESET COUNTERS</pre>	<pre>Use menu to reset error codes and counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	MON			FTD_SB_ADSP_CLEAR_CNT	B:H	R	no
Clears all counters and error codes in this group. Note! This is not resetting any PPC counters.							

40.3 Display 83.03: ADSP error and reset counters and MCU reset time

This display has counters for MCU originated ADSP resets, ADSP originated ADSP resets (fatal ADSP errors) and non-fatal ADSP errors. The display also holds the time of the last MCU originated ADSP reset.

Note! These are not PPC counters.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc ddddddddddd</pre>	<pre>MCU rst cnt Fatal cnt Nonfatal cnt MCU rst date</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	MON			FTD_SB_PPC_MCU_GEN_ADSP_RESET	W:D	R	yes
				Number of MCU originated ADSP resets.			
b(4)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_TOTAL	W:D	R	yes
				Number of ADSP originated ADSP resets (fatal ADSP errors).			
c(4)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERRORS_TOTAL	W:D	R	yes
				Number of non-fatal ADSP errors.			
d(11)	MON			FTD_SB_ADSP_MCU_RESET_DATE	S	R	yes
				Date and time of the last MCU originated ADSP reset. Format: ddmmyy hhmm			

40.4 Display 83.04: Counters for specific ADSP non-fatal errors

This display holds information about specific non-fatal errors in the ADSP.

Note! These are not PPC counters.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeee ffff gggg hhhh</pre>	<pre>Specific ADSP error counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_1	W:D	R	yes
				Counter for unrecognised messages received by the ADSP.			
b(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_2	W:D	R	yes
				Counter for errors when a signal is meant for its receiving process, but in different state of the process.			
c(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_3	W:D	R	yes

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	Reserved.						
d(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_4	W:D	R	yes
	Reserved.						
e(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_5	W:D	R	yes
	Reserved.						
f(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_6	W:D	R	yes
	Reserved.						
g(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_7	W:D	R	yes
	Reserved.						
h(4)	DSP_CORE			FTD_SB_ADSP_SPECIFIC_ERR_CNT_8	W:D	R	yes
	Reserved.						

40.5 Display 83.05: ADSP fatal error codes

This display holds four last fatal error codes. The display works in a FIFO principle. When a new error occurs all the errors are moved forward and if there are errors more than four, the oldest error code is removed. There are separate queues for fatal and non-fatal error codes. Also the ID of the last executed process is displayed after the error code. Codes and process IDs are in hexadecimal numbers.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbb cccccccc ddd eeeeeeee fff gggggggg hhh </pre>	<pre> Last 4 fatal ADSP errors error task error task </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_CODES_1	DW:H	R	yes
	Last fatal error code.						
b(3)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_TASK_ID_1	W:H	R	yes
	Last process running when the error occurred.						
c(8)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_CODES_2	DW:H	R	yes
	Last - 1 fatal error code.						
d(3)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_TASK_ID_2	W:H	R	yes
	Last process running when the error occurred.						
e(8)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_CODES_3	DW:H	R	yes
	Last - 2 fatal error code.						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
f(3)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_TASK_ID_3	W:H	R	yes
				Last process running when the error occurred.			
g(8)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_CODES_4	DW:H	R	yes
				Last - 3 fatal error code.			
h(3)	MON			FTD_SB_PPC_ADSP_ORI_RESETS_ERROR_TASK_ID_4	W:H	R	yes
				Last process running when the error occurred.			

40.6 Display 83.06: ADSP non-fatal error codes

This display holds four last non-fatal error codes. The display works in a FIFO principle. When a new error occurs all the errors are moved forward and if there are errors more than four, the oldest error code is removed. There are separate queues for fatal and non-fatal error codes. Also the ID of the last executed process is displayed after the error code. Codes and process IDs are in hexadecimal numbers.

S40 Data display	S40 HELP display
<pre> aaaaaaaa bbb cccccccc ddd eeeeeeee fff gggggggg hhh </pre>	<pre> Last 4 non- fatal ADSP errors error task </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(8)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERRORS_CODE_1	DW:H	R	yes
				Last non-fatal error code.			
b(3)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERROR_TASK_ID_1	W:H	R	yes
				Last process running when the error occurred.			
c(8)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERRORS_CODE_2	DW:H	R	yes
				Last - 1 non-fatal error code.			
d(3)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERROR_TASK_ID_2	W:H	R	yes
				Last process running when the error occurred.			
e(8)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERRORS_CODE_3	DW:H	R	yes
				Last - 2 non-fatal error code.			
f(3)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERROR_TASK_ID_3	W:H	R	yes
				Last process running when the error occurred.			
g(8)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERRORS_CODE_4	DW:H	R	yes
				Last - 3 non-fatal error code.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
h(3)	MON			FTD_SB_PPC_ADSP_NON_FATAL_ERROR_TASK_ID_4	W:H	R	yes
Last process running when the error occurred.							

40.7 Display 83.07: ADSP fatal error code timestamps

This display holds timestamps for fatal error codes in display 83.05.

S40 Data display	S40 HELP display
<pre>aaaaaa bbbb cccccc dddd eeeeee ffff gggggg hhhh</pre>	<pre>Fatal error timestamps date time date time</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_DATE_1	S	R	yes
Date of the last fatal error. Format: ddmmyy							
b(4)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_TIME_1	S	R	yes
Clock time of the last fatal error. Format: hhmm							
c(6)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_DATE_2	S	R	yes
Date of the last - 1 fatal error. Format: ddmmyy							
d(4)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_TIME_2	S	R	yes
Clock time of the last - 1 fatal error. Format: hhmm							
e(6)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_DATE_3	S	R	yes
Date of the last - 2 fatal error. Format: ddmmyy							
f(4)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_TIME_3	S	R	yes
Clock time of the last - 2 fatal error. Format: hhmm							
g(6)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_DATE_4	S	R	yes
Date of the last - 3 fatal error. Format: ddmmyy							
h(4)	MON			FTD_SB_ADSP_LAST_FATAL_ERR_CODE_TIME_4	S	R	yes
Clock time of the last - 3 fatal error. Format: hhmm							

40.8 Display 83.08: ADSP non-fatal error code timestamps

This display holds timestamps for non-fatal error codes in display 83.06.

S40 Data display	S40 HELP display
<pre>aaaaaa bbbb cccccc dddd eeeeee ffff gggggg hhhh</pre>	<pre>Non-fatal error timestamps date time</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(6)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_DATE_1	S	R	yes
				Date of the last non-fatal error. Format: ddmmyy			
b(4)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_TIME_1	S	R	yes
				Clock time of the last non-fatal error. Format: hhmm			
c(6)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_DATE_2	S	R	yes
				Date of the last - 1 non-fatal error. Format: ddmmyy			
d(4)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_TIME_2	S	R	yes
				Clock time of the last - 1 non-fatal error. Format: hhmm			
e(6)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_DATE_3	S	R	yes
				Date of the last - 2 non-fatal error. Format: ddmmyy			
f(4)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_TIME_3	S	R	yes
				Clock time of the last - 2 non-fatal error. Format: hhmm			
g(6)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_DATE_4	S	R	yes
				Date of the last - 3 non-fatal error. Format: ddmmyy			
h(4)	MON			FTD_SB_ADSP_LAST_NON_FATAL_ERR_CODE_TIME_4	S	R	yes
				Clock time of the last - 3 non-fatal error. Format: hhmm			

40.9 Display 83.09: Counters for failed application starts

This display holds counters for failed application starts.

S40 Data display	S40 HELP display
<pre>aaaa bbbb cccc dddd eeee ffff gggg hhhh</pre>	<pre>Application start fail counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_1	W:D	R	yes
				Counter for failed audio application start requests.			
b(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_2	W:D	R	yes
				Counter for failed voice application start requests.			
c(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_3	W:D	R	yes
				Counter for failed midi application start requests.			
d(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_4	W:D	R	yes
				Counter for failed video application start requests.			
e(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_5	W:D	R	yes
				Reserved.			
f(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_6	W:D	R	yes
				Reserved.			
g(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_7	W:D	R	yes
				Reserved.			
h(4)	DSP_CORE			FTD_SB_ADSP_APP_START_FAIL_CNT_8	W:D	R	yes
				Reserved.			

40.10 Display 83.10: Common ADSP test data display

This display prompts for a number, which is then sent to the ADSP. The ADSP responds with four 12 character string, which are displayed by the FTD.

S40 Data display	S40 HELP display
<pre>aaaaaaaaaaaa bbbbbbbbbbbb cccccccccccc dddddddddddd</pre>	<pre>Use menu to display ADSP data</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	DSP_CORE			FTD_SB_ADSP_TEST_DATA_1	S	R	yes
				ADSP test data.			
b(12)	DSP_CORE			FTD_SB_ADSP_TEST_DATA_2	S	R	yes
				ADSP test data.			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(12)	DSP_CORE			FTD_SB_ADSP_TEST_DATA_3	S	R	yes
	ADSP test data.						
d(12)	DSP_CORE			FTD_SB_ADSP_TEST_DATA_4	S	R	yes
	ADSP test data.						
INPUT	DSP_CORE			FTD_SB_ADSP_TEST_INDEX	DW:D	R	yes
	Select data to be shown by giving the index of the data.						

41 Group 85: UMA (Unlicensed Mobile Access) Displays

41.1 Display 85.01: (UMA) URR and URLC parameters

S40 Data display	S40 HELP display
<pre>a b cc d ee fff ggg hhh iii jjjj kk llll</pre>	<pre>S F Ca C Ca Rin Rout HotoG HotoU ARFC BS LACB</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GPDS			FTD_SB_URR_STATE	B:UD	R,I,O	yes
				1=URR Degistered, 2=URR Registered, 3=URR Idle, 4=URR Dedicated			
b	GPDS			FTD_SB_URR_SCAN_FREQUENCY	S	R,I,O	yes
				WLAN scan frequence. H=High, M=Medium, L=Low. 0=Off			
c(2)	GPDS			FTD_SB_URR_CAUSE	B:UD	R,I,O	yes
				Last URR Discovery / Registration reject cause. See values from UMA Stage 3 specification, Chapters 11.2.12 and 11.2.21. Range 0-11. xx if not valid			
d	GPDS			FTD_SB_URR_REGISTER_REATT	B:UD	R,I,O	yes
				UMA registration reattempt counter. Range 0-3.			
e(2)	GPDS			FTD_SB_URLC_CAUSE	B:UD	R,I,O	yes
				Last URLC cause. See values from UMA Stage 3 specification, Chapter 11.2.39. Range 0-13. xx if not valid			
f(3)	GPDS			FTD_SB_URR_ROVE_IN_CTR	B:UD	R,I,O	yes
				Counter for rove-in procedures. Range 0-255			
g(3)	GPDS			FTD_SB_URR_ROVE_OUT_CTR	B:UD	R,I,O	yes
				Counter for rove-out procedures. Range 0-255			
h(3)	GPDS			FTD_SB_URR_HO_TO_UMAN_CTR	B:UD	R,I,O	yes
				Counter for handover to UMAN procedures. Range 0-255			
i(3)	GPDS			FTD_SB_URR_HO_TO_GERAN_CTR	B:UD	R,I,O	yes
				Counter for handover to GERAN procedures. Range 0-255			
j(4)	GPDS			FTD_SB_URR_ARFCN	W:H	R,I,O	yes
				ARFCN value for UMAN cell. Range 0-FFFF			
k(2)	GPDS			FTD_SB_URR_BSIC	B:H	R,I,O	yes
				BSIC value for UMAN cell. Range 0-FF			
l(4)	GPDS			FTD_SB_URR_LAC_BLACKLIST	W:H	R,I,O	yes
				LAC (Location Area Code) which is blacklisted. Range 0-FFFF			

41.2 Display 85.02: (UMA) UNC and SGW IP addresses

S40 Data display	S40 HELP display
<pre>a bbb.ccc. ddd.eee fff.ggg.hhh. iii</pre>	<pre>T UNC-IPaddr IPaddr cont SGW-IPaddr IPaddr cont</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GPDS			FTD_SB_URR_ADDR_TYPE	B:UD	R,I,O	yes
	4=IPv4, 6=IPv6						
b(3)	GPDS			FTD_SB_URR_UNC_ADDRESS_1	B:UD	R,I,O	yes
	The UNC IP address, part 1. Currently only IPv4 is supported.						
c(3)	GPDS			FTD_SB_URR_UNC_ADDRESS_2	B:UD	R,I,O	yes
	The UNC IP address, part 2. Currently only IPv4 is supported.						
d(3)	GPDS			FTD_SB_URR_UNC_ADDRESS_3	B:UD	R,I,O	yes
	The UNC IP address, part 3. Currently only IPv4 is supported.						
e(3)	GPDS			FTD_SB_URR_UNC_ADDRESS_4	B:UD	R,I,O	yes
	The UNC IP address, part 4. Currently only IPv4 is supported.						
f(3)	GPDS			FTD_SB_URR_SGW_ADDRESS_1	B:UD	R,I,O	yes
	The SGW IP address, part 1. Currently only IPv4 is supported.						
g(3)	GPDS			FTD_SB_URR_SGW_ADDRESS_2	B:UD	R,I,O	yes
	The SGW IP address, part 2. Currently only IPv4 is supported.						
h(3)	GPDS			FTD_SB_URR_SGW_ADDRESS_3	B:UD	R,I,O	yes
	The SGW IP address, part 3. Currently only IPv4 is supported.						
i(3)	GPDS			FTD_SB_URR_SGW_ADDRESS_4	B:UD	R,I,O	yes
	The SGW IP address, part 4. Currently only IPv4 is supported.						

41.3 Display 85.03: (UMA) RTP Server display

1/ 3GPP TS 26.101

/2/ 3GPP TS 26.201

S40 Data display	S40 HELP display
<pre>aaa bbb dd g ccc ee ff h i j k l m nnnnn ooooo</pre>	<pre>PJE WJB FR S PJL NR LFR R C M U D DT STRCH SHRNK</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	RTP			FTD_SB_RTP_UMA_PRESENT_JITTER_EST	W:D	R	yes
				Present jitter estimate (max dynamics): Range 0-999 [ms]			
b(3)	RTP			FTD_SB_RTP_UMA_WAIT_TIME	W:D	R	yes
				Wait time in jitter buffer before sent to decoder: Range 0-999 [ms]			
c(3)	RTP			FTD_SB_RTP_UMA_PRESENT_JITTER_LEN	W:D	R	yes
				Present length of Jitter buffer: Range 0-999 [ms]			
d(2)	RTP			FTD_SB_RTP_UMA_FER_WITH_FEC	B:D	R	yes
				FER with redundancy: Range 0-99 [%]			
e(2)	RTP			FTD_SB_RTP_UMA_FEA_WITHOUT_FEC	B:D	R	yes
				FER without redundancy: Range 0-99 [%]			
f(2)	RTP			FTD_SB_RTP_UMA_LATE_FRAME_RATE	B:D	R	yes
				Late Frame Rate: Range 0-99 [%]			
g	RTP			FTD_SB_RTP_UMA_SAMPLE_SIZE	B:D	R	yes
				Sample size: Range 1-4			
h	RTP			FTD_SB_RTP_UMA_FEC_LEVEL	B:D	R	yes
				Redundancy level: Range 0-2			
i	RTP			FTD_SB_RTP_UMA_CODEC_TYPE	B:D	R	yes
				Codec type: 1 = AMR 2 = AMR-WB			
j	RTP			FTD_SB_RTP_UMA_CODEC_MODE	B:H	R	yes
				Codec mode: Range 0-8 and F in AMR /1/ Range 0-9 and F in AMR-WB /2/			
k	RTP			FTD_SB_RTP_UMA_CMR_UL	B:D	R	yes
				CMR uplink: Range 0-7 in AMR /1/ Range 0-8 in AMR-WB /2/			
l	RTP			FTD_SB_RTP_UMA_CMR_DL	B:D	R	yes
				CMR downlink: Range 0-7 in AMR /1/ Range 0-8 in AMR-WB /2/			
m	RTP			FTD_SB_RTP_UMA_DTX	B:D	R	yes
				DTX: 0 = OFF 1 = ON			
n(5)	RTP			FTD_SB_RTP_UMA_PLAYBACK_INCREASED	W:D	R	yes
				Amount of playback increase: Range 0 - 65535			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
o(5)	RTP			FTD_SB_RTP_UMA_PLAYBACK_DECREASED	W:D	R	yes
Amount of playback decrease: Range 0 - 65535							

41.4 Display 85.04: UMA preferred mode

If data isn't available xxx is shown on the display.

To change UMA preferred mode perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 8504 (UMA preferred mode) to the query prompt.
5. Test input prompt will activate, enter the UMA preferred mode code (see the table below) in display.
6. Confirm with the Ok button.

S40 Data display	S40 HELP display
<pre>UMA pret mode: a bbbbbbbbbb</pre>	<pre>UMA pref mode: 0=GO, 1=GP 2=UO, 3=UP</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a	GSS			FTD_SB_UMA_PREF_MODE_NR_READ	B:D	R	no
UMA pref mode:0 = GERAN ONLY1 = GERAN PREFERRED2 = UMAN ONLY3 = UMAN PREFERRED							
b(10)	GSS			FTD_SB_UMA_PREF_MODE_TXT_READ	S	R	no
UMA pref mode:GERAN ONLYGERAN PREFUMAN ONLYUMAN PREF							
INPUT	GSS			FTD_SB_UMA_PREF_MODE_SET	B:D	R	no
UMA pref mode0 = GERAN ONLY1 = GERAN PREFERRED2 = UMAN ONLY3 = UMAN PREFERRED							

41.5 Display 85.05: UMA PLMNs

If data isn't available xxx is shown on the display.

S40 Data display	S40 HELP display
<pre>CCaaa NCbbb ccccccff ffff ddddddgggggg eeeeeehhhhh</pre>	<pre>UMA MCC&MNC PLMN1 PLMN4 PLMN2 PLMN5 PLMN3 PLMN6</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	GSS			FTD_SB_UMA_MCC	S	R,I,O	no
				UMA MCC value in decimal (MCC=Mobile Country Code)			
b(3)	GSS			FTD_SB_UMA_MNC	S	R,I,O	no
				UMA MNC value in decimal (MNC=Mobile Network Code). Three digits are shown only in DCS1900. In other systems only two digits are shown.			
c(6)	GSS			FTD_SB_UMA_1_AVAIL_PLMN	DW:H	R,I,O	no
				1. available network(MCC+MNC)			
d(6)	GSS			FTD_SB_UMA_2_AVAIL_PLMN	DW:H	R,I,O	no
				2. available network			
e(6)	GSS			FTD_SB_UMA_3_AVAIL_PLMN	DW:H	R,I,O	no
				3. available network			
f(6)	GSS			FTD_SB_UMA_4_AVAIL_PLMN	DW:H	R,I,O	no
				4. available network			
g(6)	GSS			FTD_SB_UMA_5_AVAIL_PLMN	DW:H	R,I,O	no
				5. available network			
h(6)	GSS			FTD_SB_UMA_6_AVAIL_PLMN	DW:H	R,I,O	no
				6. available network			

41.6 Display 85.06: Current system

If data isn't available xxx is shown on the display.

S40 Data display	S40 HELP display
<pre> aaaa bbb DTM:ccc GPRS:ddd eeee ECMPfff </pre>	<pre> RAT UMA DTM support GPRS avail. NMO ECMP </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	GSS			FTD_SB_UMA_RAT_INFO	S	R,I,O	no
				RAT information (GSM/UMTS).			
b(3)	GSS			FTD_SB_UMA_INFO	S	R,I,O	yes
				UMA if UMA is active, xxx otherwise.			
c(3)	GSS			FTD_SB_UMA_DTM_SUPPORT	S	R,I,O	no
				Is DTM supported by the UMA cell (ON/OFF).			

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
d(3)	GSS			FTD_SB_UMA_GPRS_AVAIL	S	R,I,O	no
	GPRS availability (ON/OFF).						
e(4)	GSS			FTD_SB_UMA_NMO	S	R,I,O	no
	NMO = Network Mode of Operation. (NMO1/NMO2/NMO3)						
f(3)	GSS			FTD_SB_UMA_ECMP	S	R,I,O	no
	ECMP = Emergency Call Mode Preference (GSM/UMA)						

42 Group 86: WLAN displays

42.1 Display 86.01: WLAN Device Info

This display contains static WLAN information.

S40 Data display		S40 HELP display	
aaaaaaaaaaaa		Mac address	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	WLAN			FTD_SB_WLAN_OWN_MAC_ADDR	S	R,I,O	no
Phone's WLAN MAC address							

42.2 Display 86.02: WLAN Connection Info 1

This display contains information about the current connection. xx shown on all fields when there is not connection.

S40 Data display		S40 HELP display	
aaaaaaaaaaaaa bbbbbbbbbbbb c d ee f		SSID MAC address SecMod RegD ch ConStat	

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	WLAN			FTD_SB_WLAN_SSID	S	R,I,O	no
	SSID (=access point's name)						
b(12)	WLAN			FTD_SB_WLAN_AP_MAC_ADDR	S	R,I,O	no
	AP's WLAN MAC address						
c	WLAN			FTD_SB_WLAN_SEC_MODE	B:D	R,I,O	no
	Security mode: 0: Open, 1: WEP Open, 2: WEP Shared, 3: WPA-PSK, 4: WPA,						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
	5: WPA2-PSK, 6: WPA2						
d	WLAN			FTD_SB_WLAN_REG_DOMAIN	S	R,I,O	no
	Regulatory Domain: -: none, F: FCC (USA), E: ETSI (Europe),						
e(2)	WLAN			FTD_SB_WLAN_CHANNEL	B:D	R,I,O	no
	Channel number (e.g. 802.11b/g 1-13)						
f	WLAN			FTD_SB_WLAN_CONNECTION_STATE	S	R,I,O	no
	Connection state: x: disconnected, c: connecting, C: connected, R: roaming,						

42.3 Display 86.03: WLAN Connection Info 2

This display contains information about the current connection. xx shown on all fields when there is not connection.

S40 Data display	S40 HELP display
<pre> aaaa bbbbbbbbbb cccccccc ddddddd</pre>	<pre> rates 11b rates 11g capabilitLSB capabilitMSB</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(4)	WLAN			FTD_SB_WLAN_RATES_11B	S	R,I,O	no
	Access point's supported 802.11b rates (1-11 Mbit/s). Each character corresponds to a rate as follows: 1 2 5.5 11 Mbps - = not supported rate B = basic rate (=mandatory for all stations) S = supported rate E.g., BBS- means that 1 and 2 are the basic rates for the access point, 5.5 is an optional rate, and 11 is a not supported rate.						
b(10)	WLAN			FTD_SB_WLAN_RATES_11G	S	R,I,O	no
	Access point's supported 802.11g rates (6-54 Mbit/s). Each character corresponds to a rate as follows: 6 9 12 18 22 24 33 36 48 54 Mbps - = not supported rate B = basic rate (=mandatory for all stations) S = supported rate						

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
c(8)	WLAN			FTD_SB_WLAN_CAPABILITY_LSB	S	R,I,O	no
Access point capabilities bit-map (LSB). 1 means that the AP supports the feature, and 0 means that the AP does not support the feature. The meaning of the bits are as follows (bit 1 is the leftmost bit, and bit 8 is the rightmost bit): Bit 1 ESS Bit 2 IBSS Bit 3 CF Pollable Bit 4 CF Poll Request Bit 5 Privacy Bit 6 Short Preamble Bit 7 PBCC Bit 8 Channel Agility							
d(8)	WLAN			FTD_SB_WLAN_CAPABILITY_MSB	S	R,I,O	no
Access point capabilities bit-map (MSB). 1 means that the AP supports the feature, and 0 means that the AP does not support the feature. The meaning of the bits are as follows (bit 1 is the leftmost bit, and bit 8 is the rightmost bit): Bit 1 Spectrum management Bit 2 QoS Bit 3 Short Slot Time Bit 4 APSD Bit 5 - Bit 6 DSSS-OFDM Bit 7 Delayed Block Ack Bit 8 Immediate Block Ack							

42.4 Display 86.04: WLAN Statistics

Statistics for the current WLAN connection. xx shown on all fields when there is not connection.

The counters are reset when a new WLAN connection is made. They can also be reset using display 86.09

S40 Data display	S40 HELP display
<pre> aaaaa bbbbb cccccccccccc dddddddddddd </pre>	<pre> ULTP DLTP ULByte DLByte </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WLAN			FTD_SB_WLAN_UL_THROUGHPUT	W:D	R,I,O	no
Average uplink (user data) throughput							

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
b(5)	WLAN			FTD_SB_WLAN_DL_THROUGHPUT	W:D	R,I,O	no
				Average downlink (user data) throughput			
c(12)	WLAN			FTD_SB_WLAN_UL_BYTES	DW:D	R,I,O	no
				Amount of transmitted user data (in kilobytes)			
d(12)	WLAN			FTD_SB_WLAN_DL_BYTES	DW:D	R,I,O	no
				Amount of received user data (in kilobytes)			

42.5 Display 86.05: Blacklisted APs 1

List of blacklisted access points. Reset when power is switched off. If there are more than four black listed APs, only the first four are shown. If there are less than four blacklisted APs, xx is shown for the empty places.

S40 Data display	S40 HELP display
<pre> aaaaaaaaaaaa bbbbbbbbbbbb cccccccccccc dddddddddddd </pre>	<pre> Mac addr AP1 Mac addr AP2 Mac addr AP3 Mac addr AP4 </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(12)	WLAN			FTD_SB_WLAN_BLACKLIST_ADDR_1	S	R,I,O	no
				MAC address of a blacklisted AP 1			
b(12)	WLAN			FTD_SB_WLAN_BLACKLIST_ADDR_2	S	R,I,O	no
				MAC address of a blacklisted AP 2			
c(12)	WLAN			FTD_SB_WLAN_BLACKLIST_ADDR_3	S	R,I,O	no
				MAC address of a blacklisted AP 3			
d(12)	WLAN			FTD_SB_WLAN_BLACKLIST_ADDR_4	S	R,I,O	no
				MAC address of a blacklisted AP 4			

42.6 Display 86.06: WLAN Connection Info 3

S40 Data display	S40 HELP display
<pre> -aaa bb c </pre>	<pre> RSSI TxPow PSave </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(3)	WLAN			FTD_SB_WLAN_RSSI	B:D	R,I,O	no
	Signal strength (in dB)						
b(2)	WLAN			FTD_SB_WLAN_TX_POWER	B:D	R,I,O	no
	Current Tx power level (in dBm)						
c	WLAN			FTD_SB_WLAN_POWER_SAVE	B:D	R,I,O	no
	Power save state: 0 : power save not on 1 : light power save 2 : deep power save						

42.7 Display 86.07: WLAN Statistics #2

WLAN data frame transmission and reception counters.

The counters are reset when a new WLAN connection is made. They can also be reset using display 86.09.

S40 Data display	S40 HELP display
<pre> aaaaa bbbbb ccccc ddddd eeeee fffff </pre>	<pre> TxFra RxUFra RxMFRA TxErr TxRet RxCRC </pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WLAN			FTD_SB_WLAN_TX_FRAMES	W:D	R,I,O	no
	Transmitted frames counter.						
b(5)	WLAN			FTD_SB_WLAN_RX_UC_FRAMES	W:D	R,I,O	no
	Received unicast frames counter.						
c(5)	WLAN			FTD_SB_WLAN_RX_MC_FRAMES	W:D	R,I,O	no
	Received multicast and broadcast frames counter.						
d(5)	WLAN			FTD_SB_WLAN_TX_ERRORS	W:D	R,I,O	no
	Transmission error counter (=frames dropped because no ack from the AP)						
e(5)	WLAN			FTD_SB_WLAN_TX_RETRANS	W:D	R,I,O	no
	Retransmission counter.						
f(5)	WLAN			FTD_SB_WLAN_RX_CRC_ERRORS	W:D	R,I,O	no
	Received frames CRC error counter.						

42.8 Display 86.08: WLAN Statistics #3

WLAN connection and roaming related counters.

The counters are reset when a new WLAN connection is made. They can also be reset using display 86.09.

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb ccccc ddddd</pre>	<pre>ConAttConFai Roam CovLos</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WLAN			FTD_SB_WLAN_CONNECTIONS	W:D	R,I,O	no
	Connection attempt total counter.						
b(5)	WLAN			FTD_SB_WLAN_CONNECTION_FAILS	W:D	R,I,O	no
	Unsuccesfull connection attempt counter.						
c(5)	WLAN			FTD_SB_WLAN_ROAMINGS	W:D	R,I,O	no
	Roaming counter.						
d(5)	WLAN			FTD_SB_WLAN_COVERAGE_LOSSES	W:D	R,I,O	no
	Coverage loss counter.						

42.9 Display 86.09: WLAN Counters Reset

This display resets the counters of the WLAN statistic displays.

S40 Data display	S40 HELP display
<pre>RESET WLAN COUNTERS</pre>	<pre>Use menu to reset WLAN counters</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
EXE	WLAN			FTD_SB_WLAN_RESET_COUNTERS	B:D	R,I,O	no
	Reset WDP counters.						

42.10 Display 86.10: WLAN Control

This input display can be used to change various WLAN parameters to non-default values during testing and force some special cases to happen.

S40 Data display	S40 HELP display
<pre>WLAN Control aaaaa</pre>	<pre>Use menu to control WLAN operation</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WLAN			FTD_SB_WLAN_RD_CONTROL_GET	W:D	R,I,O	no
	Last entered control word.						
INPUT(5)	WLAN			FTD_SB_WLAN_RD_CONTROL_SET	W:D	R,I,O	no
	Input for controlling WLAN operation.						

42.11 Display 86.11: WLAN Roaming

WLAN roaming related information.

S40 Data display	S40 HELP display
<pre>aaaaa bbbbb c</pre>	<pre>RoamT RoamDP RoamCause</pre>

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
a(5)	WLAN			FTD_SB_WLAN_ROAM_TIME_TOTAL	W:D	R,I,O	no
	The total duration of the last roaming (=data path broken time+scanning time)						
b(5)	WLAN			FTD_SB_WLAN_ROAM_TIME_DATA_PATH	W:D	R,I,O	no
	The duration how long the data path was broken during the last roaming.						
c	WLAN			FTD_SB_WLAN_ROAM_CAUSE	B:D	R,I,O	no
	The cause for the last roaming: 0 : low RSSI 1 : AP lost						

43 Group 89: Video Sharing

43.1 Display 89.01: Video Sharing RA tune value input 1

To change the RTP VS RA standard definition values perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 8901 (Common general displays; RTP VS RA tune value input 1) to the query prompt.
5. Test input prompt will activate, enter the RTP VS RA tune value code (see the table below) in display.
6. Confirm with the Ok button.

S40 Data display	S40 HELP display
RTP VS RA tune value input 1	Change the VS RA tune values for RTP

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
INPUT(8)	RTP			FTD_SB_RTP_VS_RA_TUNE_ VALUE_ONE	DW:H	R	no

43.2 Display 89.02: Video Sharing RA tune value input 2

To change the RTP VS RA standard definition values perform following steps:

1. Press the Menu button.
2. Scroll in the main menu loop to field test display item.
3. Press the Select button.
4. Select this display in input mode by entering 8902 (Common general displays; RTP VS RA tune value input 2) to the query prompt.
5. Test input prompt will activate, enter the RTP VS RA tune value code (see the table below) in display.
6. Confirm with the Ok button.

S40 Data display	S40 HELP display
RTP VS RA tune value input 2	Change the VS RA tune values for RTP

Fields

Abbr	Server	Type id	Subtype id	Sub-block id	Format	Mode	Ind
INPUT(8)	RTP			FTD_SB_RTP_VS_RA_TUNE_ VALUE_TWO	DW:H	R	no