FullMAX BS1000, FS4000, MS40000 User Manual

Version 1.3

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Overview

a) FullMAX is a point-to-multipoint (PtMP) broadband wireless system based on the WiMAX-e (IEEE 802.16e-2005) protocol with modifications which enable it to operate in the two (1) MHz channels which make up the 700 MHz A Guardband.

   The system includes a BS1000 Base Station, FS4000 Fixed Station and the MS4000 Mobile Station. The BS1000 is typically situated at an operator's tower site with either an omni or sector base station antenna mounted on the tower and a coax cable running to the antenna port of the BS1000 base station. The Base Station data port (Ethernet) is then connected to a router which in turn is connected to a communications backhaul transport (fiber, microwave, leased line) which allows the data traffic to be carried to and from the operator's network operation center (NOC). The Base Station can also operate independently of the backhaul transport. Fixed Stations are typically mounted at specific customer location with an external directional yagi antenna. Mobile Stations are moutned in vehicles with an external omni rooftop mounted "whip" antenna. The FullMAX system also includes a Network Management System (NMS) which allows the operator to monitor and configure the FullMAX network remotely.

b) The main modifications to FullMAX relative to the IEEE802.16e-2005 air interface protocol are:
   1) The RF front end can operate in the 700 MHz A Guardband which includes two frequency ranges:

      a. 757-758 MHz
      b. 787-788 MHz

   2) The BS1000, FS4000 & MS4000 operate in 700 kHz wide channels inside the A Guardbands.

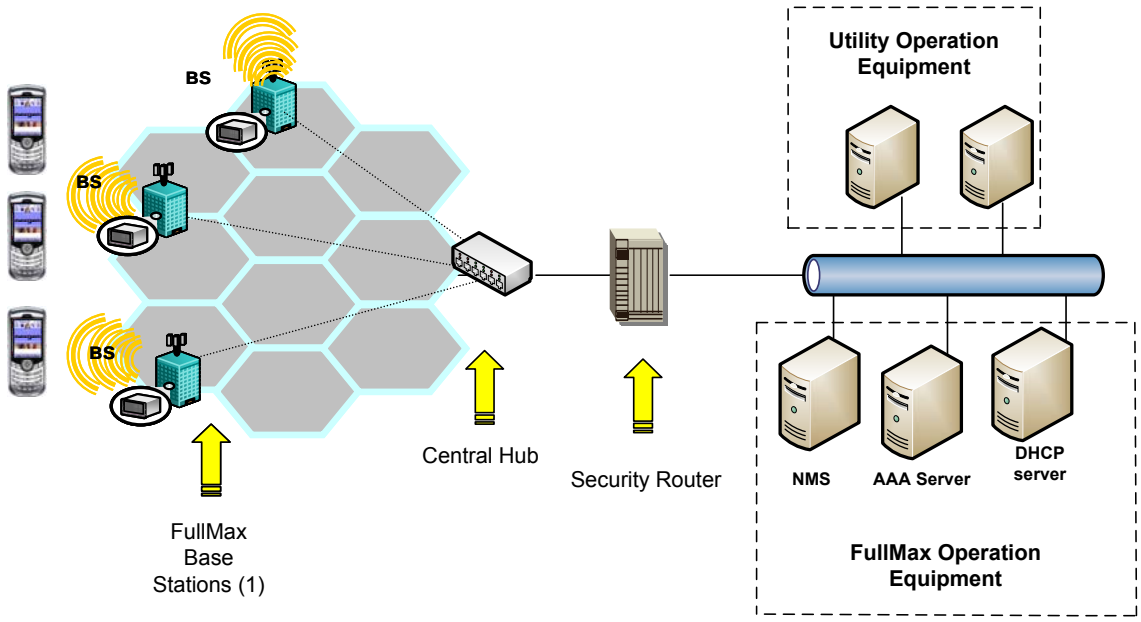
   3) The BS1000, FS4000 and MS4000 have analog and digital filters which are designed to meet spectral mask for FCC Part 27 in the transmit direction and the channel selectivity in the receive direction.

c) Outline of the document:
   1) Paragraph 2: FullMAX system description
   2) Paragraph 3: FullMAX system operation
   3) Paragraph 4: BS1000, FS4000 and MS4000 installation and commissioning.

1 FullMAX Description

1.1 System Description

a) The FullMAX system architecture is described in figure 2-1 below. The system is used to establish private, multi-cell, Point to Multipoint broadband wireless service for electrical utilities and other mission critical industries. It supports both fixed and mobile applications. FullMAX Base Stations are typically installed at the operator's existing Private Land Mobile Radio (PLMR) towers serving their respective cells. Wireless backhaul facilities are used to connect the Base Stations to the central site of the system. FullMAX fixed and mobile stations are deployed throughout the tower's serving area.



(1) FullMax base station consists of 3 independent base station sectors and a base station hub

Fig. 2-1: FullMAX system architecture

b) FullMAX operates in unpaired spectrum using Time Division Duplex (TDD). FullMAX also operates in paired spectrum employing each portion of the paired spectrum as an independent unpaired spectrum.

c) The FullMAX BS1000 is designed to support a single sector and as such, it supports the construction of a Base Station with multiple sectors (1, 2, 3 or more).

An external bridge/router is used to forward/route the traffic to the appropriate sector. Note that the most common deployment is a 3 sector configuration. The sector configuration dictates the type of antenna that should be used.

d) FullMAX supports various frequency reuse schemes as outlined in Annex A to this document.

e) The FullMAX BS antenna is typically installed at an existing utility tower. The antenna should be installed as high on the tower as possible. The BS also employs a GPS antenna for TDD framing synchronization.

f) The FullMAX FS4000 is used at a fixed location installed in a shelter at the remote site. The FullMAX MS4000 is typically installed inside the cabin of a vehicle. Both the FS4000 and the MS4000 supports Ethernet 100 Base T connectivity as well as serial RS232 connectivity. The serial connectivity is needed to support various legacy applications like Supervisory Control and Data Acquisition (SCADA) applications.

1.2 BS1000, FS4000 and MS4000 Hardware Architecture

a) The FullMAX BS1000, FS4000 & MS4000 radio architecture is described in figure 2-1 and 2-2 below. It consists of a Baseband Processor Board (BBP), an Analog Front End (AFE) section and a Low Voltage Power Supply (LVPS) board.

b) The BBP block diagram is described in figure 2-3. It is the heart of the FullMAX radio. It is designed to perform MAC, PHY, networking, network management and other functions that are required in a broadband wireless system. The BBP has the following main characteristics:
    1) Processing resources:
        a. A TI DSP and a Xilinx Spartan 3A FPGA to execute the PHY layer
        b. A Freescale PQ3 processor to execute the MAC layer and complementary embedded software
    2) A GPS time reference module is available for synchronization[1] and for location based services.
    3) User interfaces: 100 Base T, RS232
    4) Interface to the AFE is done through a digital I/Q interface.

c) The AFE section block diagram is described in figure 2-4. The AFE section performs signal processing functions that are needed to deliver the signal to the antenna and to receive the signal from the antenna. The AFE consists of:
    1) A RF Small Signal (RFSS) board which contains a baseband section, an IF section and an RF section.

[1] e.g. for TDD frame synchronization.

a. The baseband section consists of an A/D, D/A, a programmable receive baseband filter, a Digital Pre Distortion (DPD) Equalizer a programmable sampling clock synthesizer and a FPGA.
b. The IF section consists of an IF LO, an I/Q modulator/demodulator, an IF receive channel bank and an IF transmit filter.
c. The RF section consists of a RF LO, an RF up/down convertor, an RF receive channel bank and a RF transmit filter.

2) A RF Front End (RFFE) board which contains a RF PA, LNA, AGC and T/R switch.

3) The AFE employs three 8051 microcontrollers for monitoring and control of all aspects of the AFE operation. A serial interface protocol is available to support control of the master housekeeping microcontroller on the RFSS board by the main PQ3 processor on the BBP board.

Note: The AFE employs a non-agile external RF bandpass filter which is shown as a yellow block in the AFE block diagram in figure 4.

d) The Low Voltage Power Supply (LVPS) block diagram is described in figure 2-5. The LVPS generates all the voltages that are needed at the BBP and the AFE. It is designed for an input voltage range of 9 to 36 VDC to support power feed for a vehicle battery. An optional external power brick is available if needed to support AC or -48 VDC power feed.

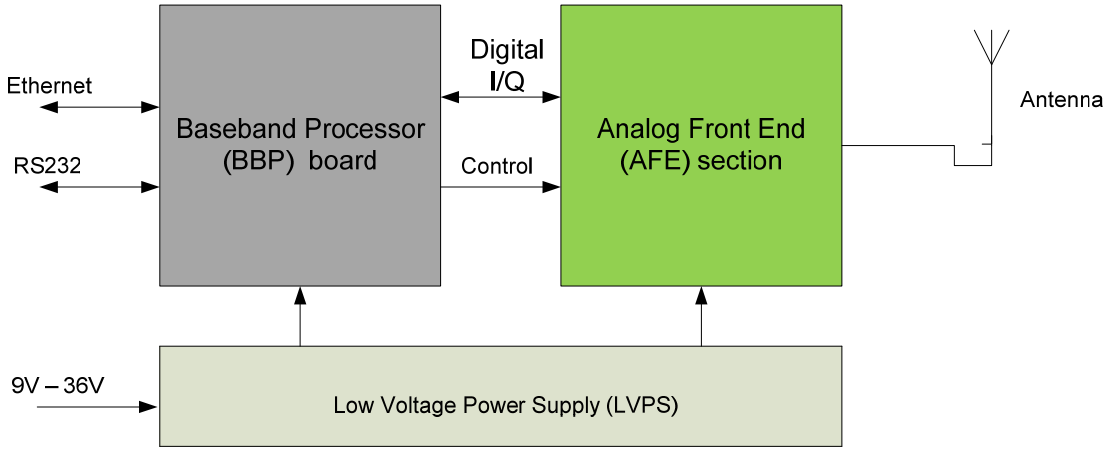


Figure 2-1: FullMAX BS1000, FS4000 & MS4000 High Level Architecture

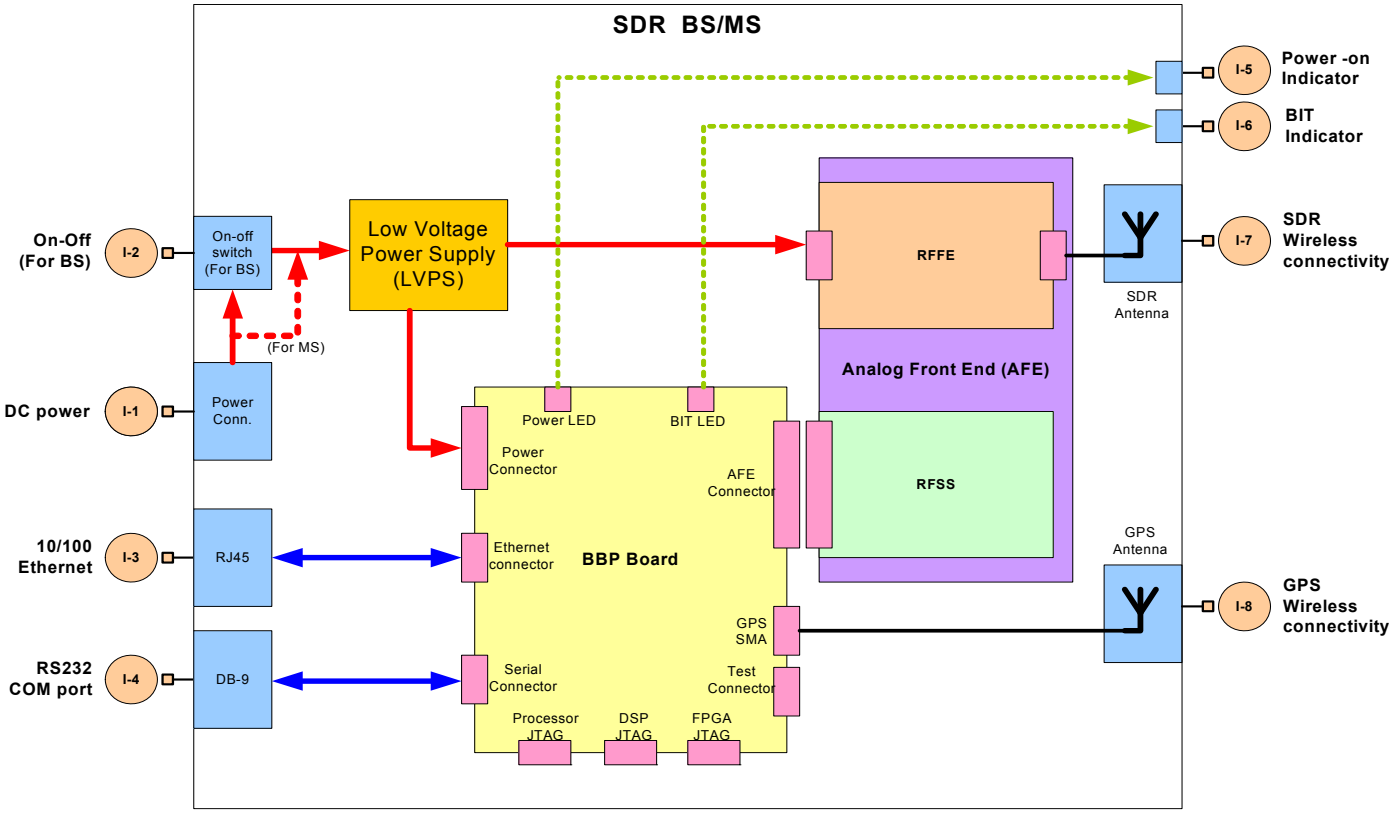


Figure 2-2: FullMAX BS1000, FS4000 & MS4000 Block Diagram

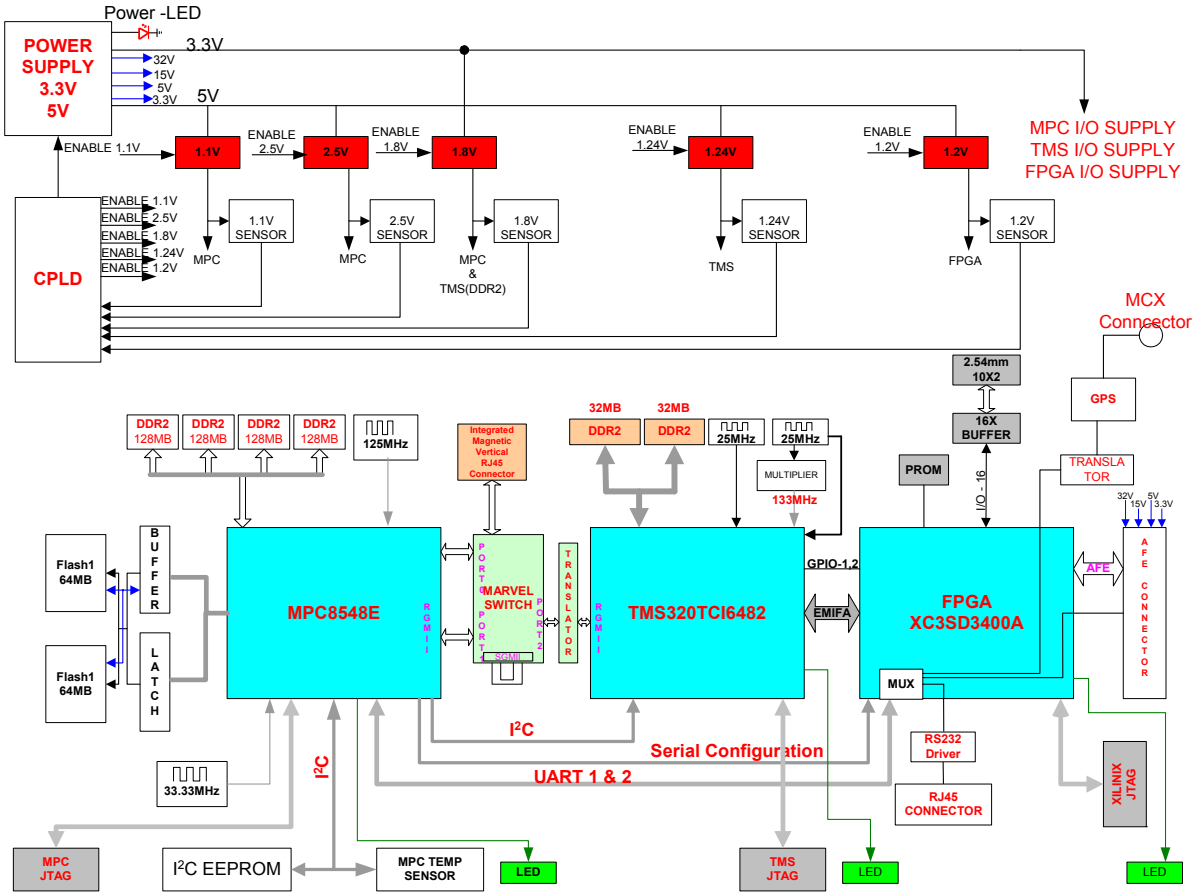


Figure 2-3: Baseband Processor (BBP) Board Block Diagram

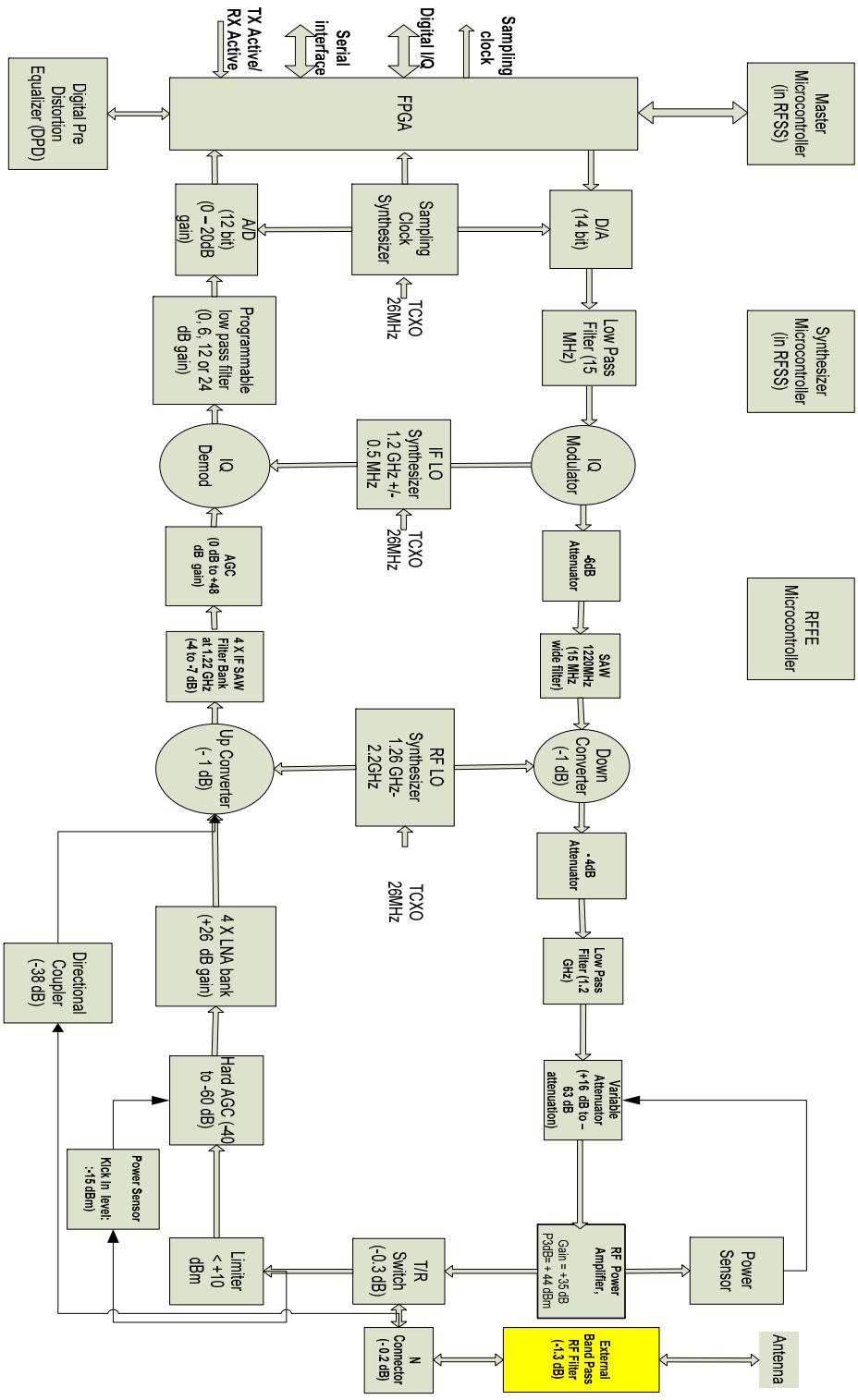


Figure 2- 4: Analog Front End (AFE) Block Diagram

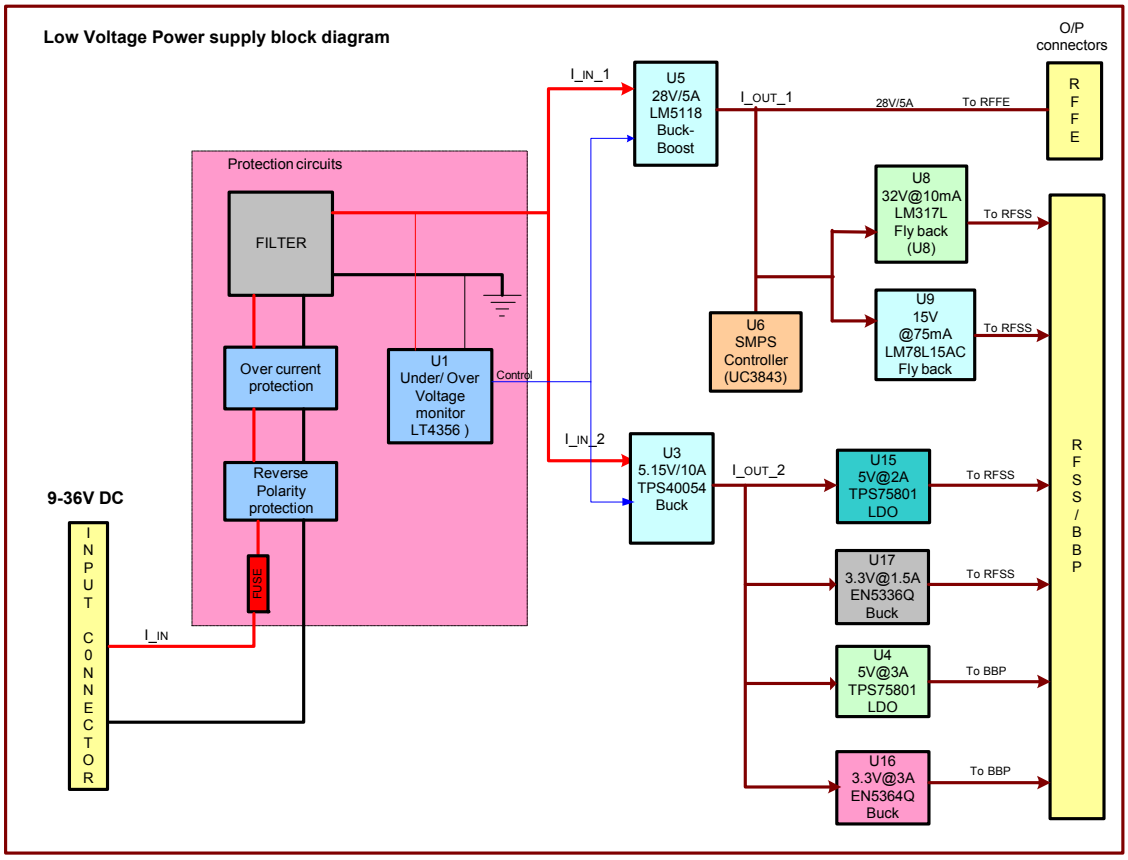


Figure 2-5: Low Voltage Power Supply (LVPS) Block Diagram

1.3 FullMAX BS1000, FS4000 and MS4000 Software Architecture

a) The FullMAX BS1000, FS4000 and MS4000 software architecture is described in figure 2-6 below. It consists of PHY layer, MAC layer and general purpose embedded software components.

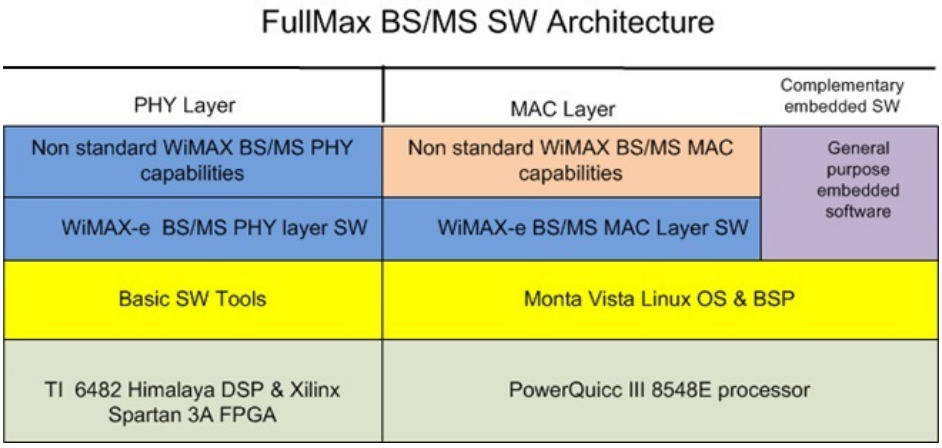


Figure 2-6: FullMAX BS1000, FS4000 & MS4000 software architecture

2 FullMAX BS1000, FS4000 and MS4000 Embedded Software Functionality

a) The FullMAX BS1000, FS4000 and MS4000 support the MAC and PHY layer requirements as defined in the "WiMAX Forum Mobile System Profile Release 1.0 Approved Specifications". This section describes the complementary embedded software that is not considered part of the MAC and the PHY layer software.

b) Networking:

- Supports communication over a 100 Base T Ethernet interface
- Supports IP host functionality: the BS1000, FS4000 & MS4000 have an IP address and they support the following IP protocols: DHCP, ARP, ICMP, TFTP, FTP, SNMP, ToD (RFC-868). Also, the BS1000, FS4000 and MS4000 have a read only MAC address which is programmable during manufacturing.
- Learning bridge and layer 2 forwarding: the BS1000, FS4000 and MS4000 support learning bridge functionality, maintain a Table of Connected Entities (TCE) and use it to forward packets to the correct destination (Ethernet interface, wireless interface or IP host)

c) QOS:

- Most of the QoS functionality is considered part of the MAC layer. The general purpose embedded software provides complimentary QoS functionality such as traffic prioritization.

d) Security:

- The general embedded software supports encryption and authentication functionality and processes which are complimentary to the MAC layer security functionality.

e) Provisioning:

- IP address provisioning (the BS1000, FS4000 and MS4000 acquire an IP address from an external standard DHCP server).
- Time provisioning (the BS1000, FS4000 and MS4000 acquire date and time from an RFC-868 Time server).
- EAP Provisioning (The BS1000, FS4000 and MS4000 acquire the MSK Key from the AAA server).
- Configuration provisioning (the BS1000, FS4000 and MS4000 configuration provisioning is done through CLI and through SNMP commands).

- QoS Provisioning (the BS1000, FS4000 and MS4000 QOS provisioning is done through SNMP commands).

f) Channel Acquisition

- The FS4000 and the MS4000 support a pre-configured channel acquisition plan, i.e., a preconfigured list of channel alternatives, characterized by their center frequency and the bandwidth. The radios go through the list and performs successive channel acquisition attempts until an attempt is successful.

- Criteria for channel acquisition success:
  - Successful registration if the FS4000 and MS4000 were not registered prior to channel acquisition.
  - Successful ranging if the FS4000 and MS4000 were registered prior to channel acquisition (i.e., in the case of moving to a new BS1000).

- Once a channel is successfully acquired, the parameters of the acquired channel are saved to the radio's flash memory and are used as the first acquisition option when powering on.

g) Network Management Support

- The BS1000, FS4000 and MS4000 have a SNMPv2c agent and can be remotely managed by the FullMAX Network Management System outlined in Paragraph 4 below.

- The BS1000, FS4000 and MS4000 also support a Telnet based Command Line Interface (CLI) protocol which can be used to configure all radio BS1000, FS4000 and MS4000 parameters.

h) Miscellaneous BS1000, FS4000 and MS4000 hardware platform Management

- Remote and secure software download
- Initialization and configuration Persistence: The BS1000, FS4000 and MS4000 support a CLI command that initiates the saving of the configuration in the flash. Saved configuration is used after power off.

3 FullMAX System Installation and Commissioning

3.1 Enclosure of BS1000, FS4000 and MS4000

The BS1000, FS4000 and MS4000 devices share the same enclosures

Figure 1: Top View

Figure 2: Bottom View (with FCC label)

Figure 3: Front View

Figure 4: Rear View

Figure 5: Right Side View

Figure 6: Left Side View

3.2 Connecting the BS1000, FS4000 and MS4000

1. Place the enclosure in a stable location. Make sure that air can run freely to the fans on the rear of the enclosure and the holes on the enclosures sides.
2. Connect the cable from the Antenna to the device RF connector on the enclosure left side.

3. Use an Ethernet cable to connect the device with end equipment
4. Connect the power cable to the power connector on the enclosure left side.
5. Connect the power label to the power source.

3.3 FullMAX BS1000, FS4000 & MS4000 Tune Up and Alignment Procedures

1. Frequency and transmit power configuration of the FullMAX BS1000, FS4000 and MS4000 is done by means of either a Command Line Interface (CLI) tool or a Web based Network Management (NMS) tool.

2. The NMS/CLI tools is used to configure the following parameters:

    a. BS1000, FS4000, MS4000 parameters:
        i. Center RF frequency
        ii. Channel bandwidth
        iii. Transmit power

    b. FS4000 and MS4000 parameters:
        i. Maximum uplink transmit power
        ii. An automatic channel acquisition table with up to 10 entries. Each entry includes the center frequency and the channel bandwidth.

3. The center frequency, channel bandwidth and transmit power at the BS1000, FS4000 and MS4000 are configured statically by the NMS/CLI tool. This means that the values will be maintained unless they are changed by the CLI/NMS tool.

4. The FS4000 and MS4000 on the other hand, perform automatic channel acquisition by selecting dynamically, the best channel (highest RSSI) from a list of up to 10 pre-configured entries (see paragraph 2bi above). The transmit power of the FS and MS are controlled by an automatic closed loop power control algorithm running at the BS1000. The transmit power of the FS and MS are increased by the BS1000 as the distance to the FS and MS are increased (i.e., as the path loss increases and the RSSI as measured by the BS1000 becomes lower). Note however that the FS and MS will not transmit above the maximum uplink transmit power (see paragraph 2bii) even if ordered by the BS1000.

5. The BS, FS and MS employ an external RF bandpass filter as described in Annex A to this document. This is an additional safeguard which

guarantees that the BS1000, FS4000 and the MS4000 will not transmit outside the band.

6. The remainder of the document describes the CLI commands that are used to configure the BS1000, FS4000 and MS4000 parameters described above.

3.4 CLI Commands for BS1000, FS4000, MS4000

After logging in through telnet

[FULLMAX]$ Prompt for user is displayed.

Type help or ? to look at different groups.

Lock to dl-config group using dl-config command

[FULLMAX]$

[FULLMAX]$ dl-config

You are locked to dl-config group.
Only dl-config operations are allowed.
Use help or ? for help.

[FULLMAX(dl-config)]$

For Frequency:

[FULLMAX(dl-config)]$ show center-freq
center-freq 940500 khz

[FULLMAX(dl-config)]$ set center-freq
updated center-freq 930800 khz

For Tx Power :

[FULLMAX(dl-config)]$ show tx_power
tx_power 9 dbm

[FULLMAX(dl-config)]$ set tx_power 16
updated tx_power 16 dbm

For Channel Bandwidth:

[FULLMAX(dl-config)]$ show bandwidth

bandwidth 500 khz

For FFT-Size:

[FULLMAX(dl-config)]$ show fft_size
fft_size 128fft

3.5 Monitoring the BS / FS/ MS with the FullMAX NMS

For monitoring the BS availability and performance it should be added to the NMS.

Login to the NMS as an 'Admin'.

If the BS1000 is located in a new tower:

On NMS menu select: Admin →New BS Tower

Type in tower name

Click 'Save'

On NMS menu select: Admin →New BS Sector

Type in a 'sector name'

Select the tower on which the sector is installed

Add the BS1000 IP address

Click 'Save'

The BS1000 availability and performance will now be monitored by the NMS.

4 FullMAX system operation

4.1 Operation Restrictions / Information to User

a) Changes or modifications not expressly approved by Full Spectrum Inc. could void the user's authority to operate the equipment.

b) This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

b.1.1.1 Reorient or relocate the receiving antenna.
b.1.1.2 Increase the separation between the equipment and receiver.
b.1.1.3 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
b.1.1.4 Consult the dealer or an experienced radio/TV technician for help

4.2 BS1000 Operation

The FullMAX BS CLI supports the following commands. The access to this commands are based on the user privileges. The Admin has the privilege to control and monitor all the information supported by the FullMAX BS CLI commands, whereas the operator has limited privileges. After the successful authentication, the user is permitted access to the command line interface. Based on the user privileges, the help menu will be displayed to the user.

4.2.1 Main Group

When the user logs in to the CLI it will lock to the default group which is the main group. Whenever the user enters the Main group, the CLI will display the main prompt. The Help command in main group will show the commands supported in main group along with the group lock commands. Only commands related to main group can be executed in main group.

```
FullMAX#
```

ip-address

System IP address.

Command	Purpose	Privileges
`FullMAX# set` ip-address <ip-address>	Updates the system IP address.	A/O
`FullMAX# show` ip-address	Displays the system IP address.	A/O

```
Example:
FullMAX#set ip-address 10.60.4.42

Updated IP address: 10.60.4.42

FullMAX# show ip-address

IP address: 10.60.4.56
```

dhcp-config-server-ip

DHCP server IP address.

Command	Purpose	Privileges
`FullMAX#set` dhcp-config-server-ip <ip-address>	Allows the user to update the BS with the DHCP server IP address.	A/O
`FullMAX# show` dhcp-config-server-ip	Allows the user to display the remote DHCP server IP address	A/O

```
Example:
FullMAX# set dhcp-config-server-ip 10.60.1.11

Updated DHCP server IP 10.60.1.11

FullMAX# show dhcp-config-server-ip

DHCP server IP 0.0.0.0
```

dhcp-config-remote-id

DHCP remote ID.

Command	Purpose	Privileges
`FullMAX# set` dhcp-config-remote-id <mac-address>	Allows the user to update the DHCP remote ID	A/O
`FullMAX# show` dhcp-config-remote-id	Allows the user to displays the DHCP remote ID	A/O

```
Example:
FullMAX# set dhcp-config-remote-id 0019D1:50CC62
```

```
Updated dhcp-config-remote-id 0019D1:50CC62

FullMAX# show dhcp-config-remote-id

dhcp-config-remote-id 0019D1:50CC62
```

dhcp-config-circuit-id

DHCP circuit ID

Command	Purpose	Privileges
`FullMAX# set` dhcp-config-circuit-id	Allows the user to updates the DHCP circuit ID	A/O
`FullMAX# show` dhcp-config-circuit-id	Allows the user to display the DHCP circuit ID	A/O

Example:

```
FullMAX# set dhcp-config-circuit-id 3

Updated dhcp-config-circuit-id 3

FullMAX# show dhcp-config-circuit-id

dhcp-config-circuit-id 0
```

4.2.2 mac-config

mac-config group defines the commands that monitors or updates the MAC configuration information. The user upon entering the mac-config command , locks into this particular group to execute commands only related to the BS configuration.

```
     FullMAX#
FullMAX# mac-config
FullMAX(mac-config)#
```

Command	Purpose	Privileges
`FullMAX# mac-config`	The command allows the user to lock into the group mac-config and execute all the commands related to the group.	A/O

The commands supported by the mac-config group are

dcd-interval

The command describes the time between transmissions of DCD messages in milliseconds.

Command	Purpose	Privileges
`FullMAX(mac-config)# set dcd-interval <val>`	The command allows the user to update the transmission time between to DCD messages.	A
`FullMAX(mac-config)#show dcd-interval`	The command allows the user to find the time interval for transmission of consecutive DCD messages.	A/O

```
Example:
 FullMAX(mac-config)# set dcd-interval 30
     Updated dcd-interval 30 milliseconds


 FullMAX(mac-config)# show dcd-interval
     dcd-interval 30 milliseconds
```

ucd-interval

The command describes the time between transmissions of UCD messages in milliseconds.

Command	Purpose	Privileges
`FullMAX(mac-config)# set ucd-interval <val>`	The command allows the user to update the transmission time between to UCD messages.	A
`FullMAX(mac-config)# show ucd-interval`	The command allows the user to find the time interval for transmission of consecutive UCD messages.	A/O

```
Example:
 FullMAX(mac-config)# set ucd-interval 30
     Updated ucd-interval 30 milliseconds


 FullMAX(mac-config)# show ucd-interval
     ucd-interval 30 milliseconds
```

dcd-transition

The number of frames from the end of the frame carrying the DCD message the BS shall wait after transmitting a DCD message with an incremented Configuration Change count before issuing a DL-MAP message referring to Downlink Burst profiles defined in that DCD message.

Command	Purpose	Privileges
`FullMAX(mac-config)# set dcd-transition <val>`	This command allows the user to change the configuration count, the BS shall wait to transmit DL-MAP after transmitting the DCD message.	A

`FullMAX(mac-config)#show dcd-transition`	The command allows the user to find the configuration count, the BS shall wait (no. of frames) to transmit DL-MAP after transmitting the DCD message.	A/O

```
Example:
 FullMAX(mac-config)# set dcd-transition 30
          Updated dcd-transition 30 (MAC Frames)

 FullMAX(mac-config)# show dcd-transition
          dcd-transition 30 (MAC Frames)
```

ucd-transition

The number of frames from the end of the frame carrying the UCD message the BS shall wait after transmitting a UCD message with an incremented Configuration Change count before issuing a UL-MAP message referring to Uplink Burst profiles defined in that UCD message.

Command	Purpose	Privileges
`FullMAX(mac-config)# set ucd-transition <val>`	This command allows the user to change the configuration count, the BS shall wait to transmit UL-MAP after transmitting the UCD message.	A
`FullMAX(mac-config)#show ucd-transition`	The command allows the user to find the configuration count, the BS shall wait (no. of frames) to transmit UL-MAP after transmitting the UCD message.	A/O

```
Example:
 FullMAX(mac-config)# set ucd-transition 30
          Updated ucd-transition 30 (MAC Frames)

 FullMAX(mac-config)# show ucd-transition
          ucd-transition 30 (MAC Frames)
```

Dsx-rsp-retries

Number of Timeout Retries on DSA/DSC/DSD Responses.

Command	Purpose	Privileges
`FullMAX(mac-config)# set dsx-rsp-retries <val>`	The command updates the value of the DSA/DSC/DSD responses retries timeout.	A
`FullMAX(mac-config)# show dsx-rsp-retries`	The command displays the DSA/DSC/DSD responses retries timeout.	A/O

```
Example:
```

```
FullMAX(mac-config)#set dsx-rsp-retries 6
     Updated dsx-rsp-retries 6.

FullMAX(mac-config)#show dsx-rsp-retries
     dsx-rsp-retries 3
```

Dsx-req-retries

Number of Timeout Retries on DSA/DSC/DSD Requests.

Command	Purpose	Privileges
`FullMAX(mac-config)# set dsx-req-retries <val>`	The command updates the value of the DSA/DSC/DSD requests retries timeout.	A
`FullMAX(mac-config)#show dsx-req-retries`	The command displays the DSA/DSC/DSD requests retries timeout.	A/O

Example:

```
FullMAX(mac-config)#set dsx-req-retries 6000
     Updated dsx-req-retries 6000 milliseconds.


FullMAX(mac-config)#show dsx-req-retries
    dsx-req-retries 3.
```

T7-timeout

Wait for DSA/DSC/DSD Response Timeout in ms.

Command	Purpose	Privileges
`FullMAX (mac-config) # set t7-timeout <val>`	The command updates the value of T7 timer, with in which the BS/SS should wait for a DSx response.	A
`FullMAX (mac-config) # show t7-timeout`	The command displays the T7 timer, configured to which the BS/SS should wait for a DSx response.	A/O

Example:

```
FullMAX(mac-config)#set t7-timeout 300
    Updated t7-timeout 300 milliseconds.

FullMAX(mac-config)# show t7-timeout
    t7-timeout 300 milliseconds.
```

T8-timeout

Wait for DSA/DSC/DSD Acknowledge Timeout in ms.

Command	Purpose	Privileges

`FullMAX(mac-config)# set t8-timeout <val>`	The command updates the value of T8 timer, with in which the BS/SS should wait for a DSx acknowledge.	A
`FullMAX(mac-config)# show t8-timeout`	The command displays the T8 timer, configured to which the BS/SS should wait for a DSx acknowledge.	A/O

```
Example:
 FullMAX(mac-config)# set t8-timeout 100
     Updated t8-timeout 100 milliseconds.

 FullMAX(mac-config)# show t8-timeout
     t8-timeout 100 milliseconds.
```

T9-timeout

The time allowed between the BS sending a RNG-RSP to an SS, and receiving an SBC-REQ from that same SS.

Command	Purpose	Privileges
`FullMAX(mac-config)# set t9-timeout <val>`	The command updates the T9 timer value that waits for an SBC-REQ from an MS to which it has sent a RNG-RSP.	A
`FullMAX(mac-config)#show t9-timeout`	The command displays the T9 Timer value configured in BS to wait for SBC-REQ from an MS to which the BS has sent the RNG-RSP.	A/O

```
Example:
FullMAX(mac-config)#set t9-timeout 3200
     Updated t9-timeout 3200 milliseconds

 FullMAX(mac-config)#show t9-timeout
     t9-timeout 3200 milliseconds
```

T10-timeout

The maximum time allowed to wait for a dynamic service transaction to end.

Command	Purpose	Privileges
`FullMAX(mac-config)#set t10-timeout <val>`	The command updates the T10 timer value that waits for a dynamic service transaction end.	A
`FullMAX(mac-config)#show t10-timeout`	The command displays the T10 timer value that waits for a dynamic service	A/O

	transaction end.	

```
Example:
 FullMAX(mac-config)# set t10-timeout 1000
     Updated t10-timeout 1000milliseconds

 FullMAX(mac-config)# show t10-timeout
     T10-timeout 1000milliseconds
```

T13-timeout

Time allowed for an SS, following the receipt of a REG-RSP message to send a TFTP-CPLT message to the BS.

Command	Purpose	Privileges
`FullMAX(mac-config)#set t13-timeout <val>`	The command updates the T13 timer for which the BS waits to receive TFTP-CPLT message after sending the REG-RSP.	A
`FullMAX(mac-config)#show t13-timeout`	The command displays the T13 timer configured at BS to wait for TFTP-CPLT message after sending the REG-RSP	A/O

```
Example:
FullMAX(mac-config)# set t13-timeout 13000
     Updated t13-timeout 13000 milliseconds

FullMAX(mac-config)# show t13-timeout
     t13-timeout 13000 milliseconds
```

T17-timeout

Time allowed for SS to complete authorization and key exchange.

Command	Purpose	Privileges
`FullMAX(mac-config)#set t17-timeout <val>`	The command updates the value of T17 timer, with in which the SS should complete the authorization and key exchange.	A
`FullMAX(mac-config)#show t17-timeout`	The command displays the T17 timer, configured to which the SS should complete the authorization and key exchange.	A/O

```
Example:
 FullMAX(mac-config)#set t17-timeout 6000
     Updated t17-timeout 6000 milliseconds.

 FullMAX(mac-config)#show t17-timeout
     t17-timeout 6000 milliseconds.
```

T22-timeout

Time to wait for an ARQ-reset.

Command	Purpose	Privileges
`FullMAX(mac-config)# set t22-timeout <val>`	The command updates the T22 timer for which the BS waits for ARQ reset.	A
`FullMAX(mac-config)# show t22-timeout`	The command displays the T22 timer configured at BS to wait for ARQ reset.	A/O

```
Example:
 FullMAX(mac-config)# set t22-timeout 200
     Updated t22-timeout 200 milliseconds

 FullMAX(mac-config)# show t22-timeout
     t22-timeout 200 milliseconds
```

auto-sfid-enabled

The command defines weather BS is allowed to autonomously allocate SFIDs. If the BS is enabled with this feature, the BS can autonomously allocate SFIDs in configured SFID range. An SF is autonomously when it is not provisioned and may be initiated either by either BS or SS.

Command	Purpose	Privileges
`FullMAX(mac-config)# set auto-sfid-enabled {enable | disable }`	This command allows the user to configure BS by allowing the BS to autonomously allocate SFIDs.	A
`FullMAX(mac-config)# show auto-sfid-enabled {enable | disable }`	This command displays the user, weather the BS is enabled/disabled to allocate SFIDs.	A/ O

```
Example:
FullMAX(mac-config)# set auto-sfid-enabled ENABLE
     Updated auto-sfid-enabled ENABLED

FullMAX(mac-config)# show auto-sfid-enabled
     auto-sfid-enabled ENABLED
```

min-auto-sfid-range

The command defines the minimum value of the SFID for the range allocated to support the creation of service flows autonomously.

Command	Purpose	Privileges
`FullMAX(mac-config)# set min-auto-sfid-range <val>`	This command allows the user to define the minimum value of SFID to define the range in which the BS can autonomously	A

	create Service flows.	
`FullMAX(mac-config)#show min-auto-sfid-range`	The command displays the user, the minimum value of sfid from which the BS can create service flows autonomously.	A/O

```
Example:
 FullMAX(mac-config)# set min-auto-sfid-range 6200
     Updated min-auto-sfid-range 6200

FullMAX(mac-config)# show min-auto-sfid-range
     Updated min-auto-sfid-range 6200
```

max-auto-sfid-range

The command defines the maximum value of the SFID for the range allocated to support the creation of service flows autonomously.

Command	Purpose	Privileges
`FullMAX(mac-config)# set max-auto-sfid-range <val>`	This command allows the user to define the maximum value of SFID range in which the BS can autonomously create Service flows.	A
`FullMAX(mac-config)# show max-auto-sfid-range`	The command displays the user, the maximum value of sfid upto which the BS can create service flows autonomously.	A/O

```
Example:
 FullMAX(mac-config)# set max-auto-sfid-range 6300
     Updated max-auto-sfid-range 6300

 FullMAX(mac-config)# show max-auto-sfid-range
     max-auto-sfid-range 6300
```

all

This command displays all the parametrs values for the mac-config group in CLI.

Command	Purpose	Privileges
`FullMAX(mac-config)#show all`	The command displays the user, the value of all the mib parameters of tables in the group.	A/O

```
Example:
FullMAX(mac-config)# show all

     dcd-interval 5000 milliseconds
     ucd-interval 5000 milliseconds
     ucd-transition 0 (MAC Frames)
```

```
dcd-transition 0 (MAC Frames)
t9-timeout 8000 milliseconds
t13-timeout 0 milliseconds
t15-timer 0 milliseconds
t17-timeout 0 milliseconds
auto-sfid-enabled  DISABLE
min-auto-sfid-range 0
max-auto-sfid-range 0
dsx-req-retries 3
dsx-rsp-retries 3
T7-timer 1000 milliseconds
t8-timer 300 milliseconds
t10-timer  3000 milliseconds
t22-timer  200 milliseconds
```

4.2.3 ul-config

The group defines the commands that monitors or updates the UCD channel attributes that define the characteristics of uplink channels. The user upon entering the ul-config command locks into the CLI to execute commands only related to BS uplink channel characteristics.

```
FullMAX#
FullMAX# ul-config
FullMAX(ul-config)#
```

Command	Purpose
`FullMAX# ul-config`	The command allows the user to lock into the group `ul-config` and execute all the commands related to the group.

ct-based-reserve-timeout

The number of UL-MAPs to receive before contention-based reservation is attempted again for the same connection.

Command	Purpose	Privileges
`FullMAX(ul-config)# set ct-based-reserve-timeout <val>`	The command allows the user to update number of UL-MAPs to receive before contention-based reservation is attempted again for the same connection.	A
`FullMAX(ul-config)#show ct-based-reserve-timeout`	The command allows the user to display number of UL-MAPs to receive before contention-based reservation is attempted again for the same connection.	A/O

Example:

```
FullMAX(ul-config)# set ct-based-reserve-timeout 30
    Updated ct-based-reserve-timeout 30
     FullMAX(ul-config)# show ct-based-reserve-timeout
    ct-based-reserve-timeout 30
```

uplink-center-frequency

Uplink center frequency (in KHz).

Command	Purpose	Privileges
`FullMAX(ul-config)#set uplink-center-frequecy <val>`	The command allows the user to update the uplink center frequency.	A
`FullMAX(ul-config)#show uplink-center-frequecy`	The command allows the user to display the uplink center frequency.	A/O

```
Example:
 FullMAX (ul-config) # set uplink-center-frequency 30
     updated uplink-center-frequecy 30 KHz

 FullMAX (ul-config) # show uplink-center-frequency
     uplink-center-frequecy 30 KHz
```

init-rng-codes

Number of initial ranging CDMA codes.

Command	Purpose	Privileges
`FullMAX(ul-config)# set init-rng-codes <val>`	The command allows the user to update the Number of initial ranging CDMA codes.	A
`FullMAX(ul-config)#show init-rng-codes`	The command allows the user to display the number of initial ranging CDMA codes.	A/O

```
Example:
      FullMAX(ul-config)# set init-rng-codes 10
      Updated init-rng-codes 10

 FullMAX(ul-config)# show init-rng-codes
      init-rng-codes 10
```

periodic-rng-codes

Number of periodic ranging CDMA codes.

Command	Purpose	Privileges
`FullMAX(ul-config)# set periodic-rng-codes <val>`	The command allows the user to update the Number of periodic ranging CDMA	A

	codes.	
FullMAX(ul-config)#show periodic-rng-codes	The command allows the user to display the number of periodic ranging CDMA codes.	A/O

```
Example:
 FullMAX(ul-config)# set periodic-rng-codes 20
     Updated periodic-rng-codes 20

 FullMAX(ul-config)# show periodic-rng-codes
     periodic-rng-codes 20
```

bandwidth-request-codes

Number of bandwidth request codes.

Command	Purpose	Privileges
FullMAX(ul-config)#set bandwidth-request-codes <val>	The command allows the user to update the number of bandwidth request codes.	A
FullMAX(ul-config)#show bandwidth-request-codes	The command allows the user to display the number of bandwidth request codes.	A/O

```
Example:
 FullMAX(ul-config)#set bandwidth-request-codes 20
     Updated bandwidth-request-codes 20

 FullMAX(ul-config)#show bandwidth-request-codes
     bandwidth-request-codes 20
```

per-rng-backoff-start

Initial backoff window size for periodic ranging contention expressed as a power of 2

Command	Purpose	Privileges
FullMAX(ul-config)#set per-rng-backoff-start <val>	The command allows the user to update the initial backoff window size for periodic ranging contention.	A
FullMAX(ul-config)#show per-rng-backoff-start	The command allows the user to display the initial backoff window size for periodic ranging contention.	A/O

```
Example:
 FullMAX (ul-config) # set per-rng-backoff-start 4
      Updated per-rng-backoff-start 4
```

```
FullMAX (ul-config) # show per-rng-backoff-start
          per-rng-backoff-start 4
```

per-rng-backoff-end

Final backoff window size for periodic ranging contention, expressed as a power of 2

Command	Purpose	Privileges
`FullMAX(ul-config)# set per-rng-backoff-end <val>`	The command allows the user to update the final backoff window size for periodic ranging contention.	A
`FullMAX(ul-config)# show per-rng-backoff-end`	The command allows the user to display the final backoff window size for periodic ranging contention.	A/O

```
Example:
 FullMAX(ul-config)# set per-rng-backoff-end 8
      Updated per-rng-backoff-end 8

 FullMAX(ul-config)# show per-rng-backoff-end
      per-rng-backoff-end 8
```

start-off-rng-codes

Indicates the starting number, of the group of codes used for uplink

Command	Purpose	Privileges
`FullMAX(ul-config)#set start-off-rng-codes <val>`	The command allows the user to update the starting number of the codes used for uplink	A
`FullMAX(ul-config)#show start-off-rng-codes`	The command allows the user to display the starting number of the codes used for uplink.	A/O

```
Example:
 FullMAX(ul-config)# set start-off-rng-codes 64
      Updated start-off-rng-codes 64

 FullMAX(ul-config)# show start-off-rng-codes
      start-off-rng-codes 64
```

permutation-base

Determines the UL_PermBase parameter for the sub carrier permutation to be used on this uplink channel.

Command	Purpose	Privileges
`FullMAX(ul-config)# set permutation-base <val>`	The command allows the user to updates the UL_PermBase parameter for the sub carrier permutation to be used on this uplink channel.	A
`FullMAX(ul-config)# show permuation-base`	The command allows the user to display the UL_PermBase parameter for the sub carrier permutation to be used on this uplink channel.	A/O

```
Example:
 FullMAX(ul-config)# set permutation-base 127
      Updated permutation-base 127

 FullMAX(ul-config)#show permutation-base
     permutation-base 8
```

ul-alloc-sub-channel-bitmap

This is a bitmap describing the physical sub-channels allocated to the segment in the UL, when using the uplink PUSC permutation. The LSB of the first byte shall correspond to subchannel 0.

Command	Purpose	Privileges
`FullMAX(ul-config)# set ul-alloc-sub-channel-bitmap <val>`	The command allows the used to update the ofdma subchannel allocation.	A
`FullMAX(ul-config)#show ul-alloc-sub-channel-bitmap`	The command allows the user to display the ofdma subchannel allocation.	A/O

```
Example:
 FullMAX(ul-config)#set ul-alloc-sub-channel-bitmap
00110001
      Updated ul-alloc-sub-channel-bitmap ff

 FullMAX(ul-config)# show ul-alloc-sub-channel-bitmap
     ul-alloc-sub-channel-bitmap 00110001
```

band-amc-alloc-threshold

Threshold of the maximum of the standard deviations of the individual bands CINR measurements over time to trigger mode transition from normal sub channel to Band AMC.

Command	Purpose	Privileges

`FullMAX(ul-config)# set band-amc-alloc-threshold <val>`	The command allows the user to update the parameter for AMC band allocation Threshold.	A
`FullMAX(ul-config)#show band-amc-alloc-threshold`	The command allows the user to display the parameter for AMC band allocation threshold.	A/O

```
Example:
 FullMAX(ul-config)# set band-amc-alloc-threshold 64
     Updated band-amc-alloc-threshold 64 dB

 FullMAX(ul-config)# show band-amc-alloc-threshold
     band-amc-alloc-threshold 64 dB
```

band-amc-release-threshold

Threshold of the maximum of the standard deviations of the individual bands CINR measurements over time to trigger mode transition from Band AMC to normal subchannel.

Command	Purpose	Privileges
`FullMAX(ul-config)# set band-amc-release-threshold <val>`	The command allows the user to update the parameter that defines the maximum threshold for AMC band.	A
`FullMAX(ul-config)#show band-amc-release-threshold`	The command allows the user to display the parameter that defines the maximum threshold for AMC band.	A/O

```
Example:
 FullMAX(ul-config)# set band-amc-release-threshold 56
     Updated band-amc-release-threshold 56 dB

 FullMAX(ul-config)# show band-amc-release-threshold
          band-amc-release-threshold 56 dB
```

band-amc-alloc-timer

Minimum required number of frames to measure the average and standard deviation for the event of Band AMC triggering.

Command	Purpose	Privileges
`FullMAX(ul-config)# set band-amc-alloc-timer <val>`	The command allows the user to update the parameter that defines the minimum	A

	required number of frames to measure the average and standard deviation for the event of Band AMC triggering.	
`FullMAX(ul-config)#show band-amc-alloc-timer`	The command allows the user to display parameter that defines the minimum required number of frames to measure the average and standard deviation for the event of Band AMC triggering.	A/O

```
Example:
 FullMAX(ul-config)# set band-amc-alloc-timer 22
     Updated band-amc-alloc-timer 22 Frames

 FullMAX(ul-config)# show band-amc-alloc-timer
          band-amc-alloc-timer 22 Frames
```

band-amc-release-timer

Minimum required number of frames to measure the average and standard deviation for the event of Band AMC triggering.

Command	Purpose	Privileges
`FullMAX(ul-config)# set band-amc-release-timer <val>`	The command allows the user to update the parameter that defines the minimum required number of frames to measure the average and standard deviation for the event of Band AMC triggering.	A
`FullMAX(ul-config)#show band-amc-release-timer`	The command allows the user to display parameter that defines the minimum required number of frames to measure the average and standard deviation for the event of Band AMC triggering.	A/O

```
Example:
      FullMAX(ul-config)#set band-amc-release-timer 22
     Updated band-amc-release-timer 22 Frames

 FullMAX(ul-config)#show band-amc-release-timer
     band-amc-release-timer 22 Frames
```

band-amc-retry-timer

Backoff timer between consecutive mode transitions from normal subchannel to Band AMC when the previous request is failed.

Command	Purpose	Privileges
`FullMAX(ul-config)#set band-amc-retry-timer <val>`	The command allows the user to update the parameter band AMC retry	A

	timer	
FullMAX(ul-config)#show band-amc-retry-timer	The command allows the user to display parameter band AMC retry timer.	A/O

```
Example:
 FullMAX(ul-config)# set band-amc-retry-timer 5
     Updated band-amc-retry-timer 5
 FullMAX(ul-config)# show band-amc-retry-timer
     band-amc-retry-timer 5
```

band-stat-rep-max-period

Maximum period between refreshing the Band CINR measurement by the unsolicited REP-RSP.

Command	Purpose	Privileges
FullMAX(ul-config)# set band-stat-rep-max-period <val>	The command allows the user to update the maximum period between refreshing the Band CINR measurement by the unsolicited REP-RSP.	A
FullMAX(ul-config)# show band-stat-rep-max-period	The command allows the user to display the maximum period between refreshing the Band CINR measurement by the unsolicited REP-RSP.	A/O

```
Example:
 FullMAX(ul-config)# set band-stat-rep-max-period 12
     Updated band-stat-rep-max-period 12

 FullMAX(ul-config)# show band-stat-rep-max-period
     band-stat-rep-max-period 12
```

up-power-adj-step

MS specific up power offset adjustment step.

Command	Purpose	Privileges
FullMAX(ul-config)#set band-stat-rep-max-period <val>	The command allows the user to update the maximum period between refreshing the Band CINR measurement by the unsolicited REP-RSP.	A
FullMAX(ul-config)#show band-stat-rep-max-period	The command allows the user to display the maximum period between refreshing the Band CINR measurement by the unsolicited REP-RSP.	A/O

```
Example:
```

```
FullMAX(ul-config)# set up-power-adj-step 12
    Updated up-power-adj-step 12 (in 0.01 dB).

FullMAX(ul-config)# show up-power-adj-step
    up-power-adj-step 12 (in 0.01 dB).
```

down-power-offset-adj-step

MS specific down power offset adjumstment step.

Command	Purpose	Privileges
`FullMAX(ul-config)# set down-power-offset-adj-step <val>`	The command allows the user to update the MS specific down power offset adjustment step.	A
`FullMAX ul-config)# show down-power-offset-adj-step`	The command allows the user to display the MS specific down power offset adjustment step.	A/O

```
Example:
FullMAX(ul-config)# set down-power-offset-adj-step 6
    Updated down-power-offset-adj-step 6 (in 0.01 dB).

FullMAX(ul-config)# show up-power-offset-adj-step
    up-power-offset-adj-step 6 (in 0.01 dB).
```

min-power-offset-adj

Minimum level of power offset adjustment.

Command	Purpose	Privileges
`FullMAX(ul-config)# set min-power-offset-adj <val>`	The command allows the user to update the value of Minimum level of power offset adjustment.	A
`FullMAX(ul-config)#show min-power-offset-adj`	The command allows the user to display the value of Minimum level of power offset adjustment.	A/O

```
Example:
FullMAX(ul-config)# set min-power-offset-adj  2
    Updated min-power-offset-adj 2 (in 0.01 dB).
FullMAX(ul-config)# show min-power-offset-adj
    min-power-offset-adj 2 (in 0.01 dB).
```

max-power-offset-adj

Maximum level of power offset adjustment.

Command	Purpose	Privileges

`FullMAX(ul-config)#set max-power-offset-adj <val>`	The command allows the user to update the value of maximum level of power offset adjustment.	A
`FullMAX(ul-config)#show max-power-offset-adj`	The command allows the user to display the value of maximum level of power offset adjustment.	A/O

```
Example:
 FullMAX (ul-config) # set max-power-offset-adj  16
     Updated max-power-offset-adj 16 (in 0.01 dB).

 FullMAX (ul-config) # show max-power-offset-adj
     max-power-offset-adj 16 (in 0.01 dB).
```

initial-rng-backoff-start

Initial backoff window size for initial ranging connection, expressed as a power of 2.

Command	Purpose	Privileges
`FullMAX(ul-config)# set intial-rng-backoff-start <val>`	The command allows the user to update the value of initial backoff window size for initial ranging connection.	A
`FullMAX(ul-config)#show intial-rng-backoff-start`	The command allows the user to display the value of initial backoff window size for initial ranging connection.	A/O

```
Example:
 FullMAX(ul-config)# set intial-rng-backoff-start 2
      Updated intial-rng-backoff-start 2

 FullMAX(ul-config)# show intial-rng-backoff-start
      intial-rng-backoff-start 2
```

initial-rng-backoff-end

Final backoff window size for initial ranging connection, expressed as a power of 2.

Command	Purpose	Privileges
`FullMAX(ul-config)# set intial-rng-backoff-end <val>`	The command allows the user to update the value of final backoff window size for initial ranging connection.	A
`FullMAX(ul-config)# show intial-rng-backoff-end`	The command allows the user to display the value of final backoff window size for initial ranging connection.	A/O

```
Example:
```

```
FullMAX(ul-config)# set intial-rng-backoff-end 8
     Updated intial-rng-backoff-end 8

FullMAX(ul-config)# show intial-rng-backoff-end
     intial-rng-backoff-end 8
```

bw-req-backoff-start

Initial backoff window size for contention bandwidth requests, expressed as a power of 2.

Command	Purpose	Privileges
`FullMAX(ul-config)# set bw-req-backoff-start <val>`	The command allows the user to update the value of initial backoff window size for contention bandwidth requests.	A
`FullMAX(ul-config)#show bw-req-backoff-start`	The command allows the user to display the value of initial backoff window size for contention bandwidth requests.	A/O

```
Example:
FullMAX(ul-config)#set bw-req-backoff-start 4
     Updated bw-req-backoff-start 4

FullMAX(ul-config)#show bw-req-backoff-start
     bw-req-backoff-start 4
```

bw-req-backoff-end

Final backoff window size for contention bandwidth requests, expressed as a power of 2.

Command	Purpose	Privileges
`FullMAX(ul-config)# set bw-req-backoff-end <val>`	The command allows the user to update the value of final backoff window size for contention bandwidth requests.	A
`FullMAX(ul-config)# show bw-req-backoff-end`	The command allows the user to display the value of final backoff window size for contention bandwidth requests.	A/O

```
Example:
 FullMAX(ul-config)# set bw-req-backoff-end 8
     Updated bw-req-backoff-end 4
 FullMAX(ul-config)# show bw-req-backoff-end
          bw-req-backoff-end 4
```

all

This command displays all the parameter values of tables supported in this group.

Command	Purpose	Privileges
`FullMAX(ul-config)# show all`	The command allows the user to display the value of all the MIB parameters of tables supported in this group.	A/O

```
Example:
FullMAX(ul-config)# show all
     ct-based-reserve-timeout 200
     uplink-center-frequency 200
     init-rng-codes 0
     periodic-rng-codes  50
     bandwidth-request-codes 0
     per-rng-backoff-start 20
     permutation-base  0
     ul-alloc-sub-channel-bitmap 3
     band-amc-alloc-threshold 60 db
     band-amc-release-threshold 0 db
     band-amc-alloc-timer 255 Frames
     band-amc-release-timer 0 Frames
```

4.2.4 dl-config

The group defines the commands that monitors or updates the DCD channel attributes that define the characteristics of downlink channel. The user upon entering the dl-config command locks into the CLI to execute commands only related to BS downlink channel characteristics.

```
FullMAX#
FullMAX# dl-config
FullMAX(dl-config)#
```

Command	Purpose	Privileges
`FullMAX# dl-config`	The command allows the user to lock into the group `dl-config` and execute all the commands related to the group.	A/O

dl-channel-table

This command Displays the values of all the commands affiliated to dl-channel-table in the dl-config group.

Command	Purpose	Privileges
`FullMAX(dl-config)#show` dl-channel-table	The command allows the user to display the DL Channel table MIB parameter values.	A/O

```
Example:
 FullMAX(dl-config)# show dl-channel-table
      bs-eirp 244 dBm
           downlink-center-frequency 244 khz
      bsid 00f401:0000f4
      hysterisis-margin 45 dB
      time-to-trigger 2 milliseconds
```

frame-duration-code

The duration of the frame

Command	Purpose	Privileges
`FullMAX(dl-config)#set frame-duration-code`	The command allows the user to update the OFDMA frame duration code.	A
`FullMAX(dl-config)#show frame-duration-code`	The command allows the user to display the OFDMA frame duration code.	A/O

```
Example:
 FullMAX(dl-config)# set frame-duration-code 12
      updated frame-duration-code 12

      FullMAX(dl-config)# show frame-duration-code
      frame-duration-code 12
```

bs-eirp

The EIRP is the equivalent isotropic radiated power of the base station, which computed for a simple single-antenna transmitter.

Command	Purpose	Privileges
`FullMAX(dl-config)#set bs-eirp <val>`	The command allows the user to update the BS EIRP parameter	A
`FullMAX(dl-config)#show bs-eirp`	The command allows the user to display the BS EIRP parameter	A/O

```
Example:
 FullMAX(dl-config)# set bs-eirp 3770
      Updated bs-eirp 3770 dBm

 FullMAX(dl-config)# show bs-eirp
      bs-eirp 3770 dBm
```

downlink-center-frequency

Downlink center frequency (Khz).

Command	Purpose	Privileges
`FullMAX(dl-config)# set downlink-center-frequency <val>`	The command allows the user to update the downlink center frequency.	A
`FullMAX(dl-config)#show downlink-center-frequency`	The command allows the user to display the downlink center frequency.	A/O

```
Example:
      FullMAX (dl-config)# set downlink-center-frequency
     11000
     Updated downlink-center-frequency 11000 kHz

 FullMAX(dl-config)# show downlink-center-frequency
      downlink-center-frequency 11000 kHz.
```

bsid

Defines the encoding of BSID. The BSID is a 6 byte number and follows the encoding rules of MacAddress textual convention, e.e as if it were transmitted least-significant bit first. The value should be displayed with 2 parts clearly separated by a colon e.g : 001DFF:00003A. The most significant part is representing the operator ID.

Command	Purpose	Privileges
`FullMAX(dl-config)# set bsid <val>`	The command allows the user to update the BS ID	A
`FullMAX(dl-config)#show bsid`	The command allows the user to display the BS ID	A/O

```
Example:
 FullMAX(dl-config)# set bsid 0A30A1:10FE11
      Updated bsid 0A30A1:10FE11

 FullMAX(dl-config)# show bsid
      bsid 0A30A1:10FE11
```

bandwidth

Channel Bandwidth in Khz

Command	Purpose	Privileges
`FullMAX(dl-config)# set bandwidth <val>`	The command allows the user to updates the channel bandwidth.	A
`FullMAX(dl-config)#show`	The command allows the user to display the	A/O

bandwidth	channel bandwidh.	

```
Example:
 FullMAX(dl-config)# set bandwidth 400
           Updated bandwidth 400 KHz

 FullMAX(dl-config)# show bandwidth
      bandwidth 400 KHz
```

Sampling-clock

Sampling clock for the channel

Command	Purpose	Privileges
FullMAX(dl-config)#set sampling-clock <val>	The command allows the user to updates the sampling clock.	A
FullMAX(dl-config)#show sampling-clock	The command allows the user to display the sampling clock.	A/O

```
Example:
 FullMAX(dl-config)# set sampling-clock 12800
      Updated sampling-clock 12800 KHz

 FullMAX(dl-config)# show sampling-clock
      sampling-clock 12800 KHz
```

filter-id

The ID of the PHY filter to use for this channel

Command	Purpose	Privileges
FullMAX(dl-config)# set filter-id <val>	The command allows the user to updates the filter id.	A
FullMAX(dl-config)#show filter-id	The command allows the user to display the filter id.	A./O

```
Example:
 FullMAX(dl-config)# set filter-id 1
      Updated filter-id 1

 FullMAX(dl-config)# show filter-id
           filter-id 1
```

fft_size

FFT size for OFDMA PHY

Command	Purpose	Privileges

`FullMAX(dl-config)# set fft_size <val>`	The command allows the user to updates the fft_size.	A
`FullMAX(dl-config)#show fft_size`	The command allows the user to display the fft_size	A/O

```
Example:
 FullMAX (dl-config)# set fft_size 512
     Updated fft_size 512
 FullMAX (dl-config) # show fft_size
     fft_size 512
```

dl _frame-duration

This field indicates the number of OFDMA symbols allocated for downlink transmission in the OFDMA frame

Command	Purpose	Privileges
`FullMAX(dl-config)# set dl_frame-duration <val>`	The command allows the user to updates the downlink frame duration	A
`FullMAX(dl-config)# show dl_frame-duration`	The command allows the user to display the downlink frame duration	A/O

```
Example:
 FullMAX (dl-config)# set dl_frame-duration 20
      Updated dl_frame-duration 20 ofdma symbols

 FullMAX (dl-config) # show dl_frame-duration
      dl_frame-duration 20 ofdma symbols
```

ul _frame-duration

This field indicates the number of OFDMA symbols allocated for uplink transmission in the OFDMA frame.

Command	Purpose	Privileges
`FullMAX(dl-config)# set ul_frame-duration <val>`	The command allows the user to updates the uplink frame duration.	A
`FullMAX(dl-config)#show ul_frame-duration`	The command allows the user to display the uplink frame duration.	A/O

```
Example:
 FullMAX (dl-config)# set ul_frame-duration 10
      Updated ul_frame-duration 10 ofdma symbols

 FullMAX (dl-config) # show ul_frame-duration
      ul_frame-duration 10 ofdma symbols
```

dl_zones_num

Number of downlink zones for the BS

Command	Purpose	Privileges
`FullMAX(dl-config)#set dl_zones_num <val>`	The command allows the user to update the number of downlink zones.	A
`FullMAX(dl-config)#show dl_zones_num`	The command allows the user to display the number of downlink zones.	A/O

```
Example:
 FullMAX (dl-config)# set dl_zones_num 2
      Updated dl_zones_num 2 zones

 FullMAX (dl-config) # show dl_zones_num
           dl_zones_num 2 zones
```

ul_zones_num

Number of uplink zones for the BS

Command	Purpose	Privileges
`FullMAX(dl-config)# set ul_zones_num <val>`	The command allows the user to updates the `number of uplink zones`	A
`FullMAX(dl-config)#show ul_zones_num`	The command allows the user to display the number of uplink zones.	A/O

```
Example:
 FullMAX(dl-config)# set ul_zones_num 2
      Updated ul_zones_num 2 zones

 FullMAX (dl-config)# show ul_zones_num
           ul_zones_num 2 zones
```

4.2.5 zone-config

The group defines the commands that monitors or updates the downlink and uplink zones attributes. The user upon entering the zone-config command locks into the CLI to execute commands only related to BS downlink and uplink zones characteristics.

```
 FullMAX#
 FullMAX# zone-config
      FullMAX(zone-config)#
```

Command	Purpose	Privileges
`FullMAX# zone-config`	The command allows the user to lock into the group `zone-config` and execute all the commands related to the group.	A/O

dl-zone-id

The downlink zone identifier ,the index of the first zone will always be 0

Command	Purpose	Privileges
`FullMAX(zone-config)#show dl-zone-id`	The command allows the user to display the avaliable DL zone ids.	A/O

```
Example:
FullMAX(zone-config)#show dl-zone-id
     dl-zone-id 0
          dl-zone-id 1
     dl-zone-id 2
```

dl-zone-table

This table contains zone attributes that characterize a downlink zone

Command	Purpose	Privileges
`FullMAX(zone-config)# show dl_zone-table`	The command allows the user to display the list of downlink zones.	A/O

```
FullMAX(zone-config)# show dl-zone-table  2
    dl-zone-stc  0
    dl-perm-type pusc
         dl-perm-base 17
    dl-start-symbol 11
    dl-all-sc YES
    dl-cinr-threshold 2 dB
```

dl-perm-type

Permutation type of this zone

Command	Purpose	Privileges
`FullMAX(zone-config)# set dl-perm-type <id> <val>`	The command allows the user to update the downlink permutation type of zone <id>	A
`FullMAX(zone-config)# show dl-perm-type <id>`	The command allows the user to display the permutation type of zone <id>	A/O

```
Example:
 FullMAX(zone-config)# set dl-perm-type 0  1
     Updated dl-perm-type of zone 0 to pusc (1)

 FullMAX(zone-config)# show dl-perm-type 0
     dl-perm-type of zone 0 is pusc (2)
```

dl-zone-stc

Downlink zone

Command	Purpose	Privileges
`FullMAX(zone-config)# set dl-perm-zone <zone-id> <val>`	The command allows the user to update the downlink permutation zone of zone <zone-id>	A
`FullMAX(zone-config)#show dl-perm-zone <zone-id>`	The command allows the user to display the permutation zone of zone <zone-id>	A/O

```
Example:
 FullMAX(zone-config)# set dl-zone-stc 0 2
     Updated dl-zone-stc of zone 0 to nonstc (2)

      FullMAX(zone-config)# show dl-zone-stc 0
     dl-zone-stc of zone 0 is nonstc (2)
```

dl-perm-base

Permutation base for this zone

Command	Purpose	Privileges
`FullMAX(zone-config)# set dl-perm-base <id> <val>`	The command allows the user to update the downlink permutation base of zone <id>	A
`FullMAX(zone-config)# show dl-perm-base <id>`	The command allows the user to display the permutation base of zone <id>	A/O

```
Example:
 FullMAX(zone-config)# set dl-perm-base 0 17
      Updated dl-perm-base of zone 0 to 17

 FullMAX(zone-config)# show dl-perm-base
      dl-perm-base of zone 0 is 17
```

dl-start-symbol

Index of the starting symbol for this zone.

Command	Purpose	Privileges
`FullMAX(zone-config)# set dl-start-symbol <zone-id> <val>`	The command allows the user to update the start-symbol downlink of <zone-id>	A
`FullMAX(zone-config)#show dl-start-symbol <zone-id>`	The command allows the user to display the start-symbol of <zone-id>	A/O

```
Example:
 FullMAX (zone-config)# set dl-start-symbol 0 5
      Updated dl-perm-type of zone 0 to 5

 FullMAX(zone-config)# show dl-start-symbol
      dl-start-symbol of zone 0 is 5
```

dl-all-sc

Use all subchannels.

1 (true): use_all_SC=1

2 (false): use_all_SC=0

Downlink zone parameters –

Command	Purpose	Privileges
`FullMAX (zone-config)#set dl-all-sc <zone-id> <val>`	The command allows the user to update the downlink zone–all-subchannels parameter	A
`FullMAX(zone-config)#show dl-all-sc <zone-id>`	The command allows the user to display the all subchannels parameter of <zone-id>	A/O

```
Example:
 FullMAX(zone-config)# set dl-all-sc 0 YES
      Updated dl-all-sc of zone 0 to YES

      FullMAX (zone-config) # show dl-all-sc 0
      dl-all-sc of zone 0 is YES
```

dl-cinr-threshold

Threshold of the maximum of the standard deviations of the individual bands CINR measurements over time to trigger mode transition from zone 0 to this zone.

Command	Purpose	Privileges
`FullMAX(zone-config)# set dl-cinr-threshold <zone-id> <val>`	The command allows the user to update the CINR threshold for <zone-id>	A

`FullMAX(zone-config)#show dl-cinr-threshold <zone-id>`	The command allows the user to display the CINR threshold for <zone-id>	A/O

```
Example:
 FullMAX(zone-config)# set dl- cinr-threshold 0 2
      Updated dl-cinr-threshold of zone 0 to 2 dB
 FullMAX(zone-config)# show dl-cinr-threshold 0
      dl-cinr-threshold of zone 0 is 2 dB
```

ul-Zone-id

The uplink zone identifier , The index of the first uplink zone will always be 0

Command	Purpose	Privileges
`FullMAX(zone-config)# show ul-zone-id`	The command allows the user to display the ul zone indixes avaliable	A/O

```
Example:
 FullMAX(zone-config)#show ul-zone-id
     ul-zone-id 0
     ul-zone-id 1
     ul-zone-id 2
```

ul-zone-table

Displays the Uplink zones table

Command	Purpose	Privileges
`FullMAX(zone-config)#show ul_zone-table`	The command allows the user to display the list of uplink zones.	A/O

```
Example:
FullMAX(zone-config)# show ul-zone-table 0
     ul-perm-type for zone-id (0) : nonstc(2)
     ul-perm-base for zone-id (0) : 17
     ul-start-symbol for zone-id (0) : 11
     ul-alloc-bitmap for zone-id (0) : 3
     ul-cinr-threshold for zone-id (0) : 2 dB
```

ul-perm-type

A zone permutation type

Command	Purpose	Privileges
`FullMAX(zone-config)#set ul-perm-type <id> <val>`	The command allows the user to update the uplink permutation type of	A

	<zone-id>	
FullMAX(zone-config)#show ul-perm-type <id>	The command allows the user to display the permutation type of zone <zone-id>	A/O

```
Example:
 FullMAX(zone-config)# set ul-perm-type 0 2
     Updated ul-perm-type for zone-id(0): to non-stc (2)
 FullMAX(zone-config)# show ul-perm-type 0
     ul-perm-type for zone-id (0) : non-stc (2)
```

ul-perm-base

Determines the Permutation Base parameter for the zone, permutation to be used on this uplink zone

Command	Purpose	Privileges
FullMAX(zone-config)# set ul-perm-base <id> <val>	The command allows the user to update the uplink permutation base of <zone-id>	A
FullMAX(zone-config)#show ul-perm-base <id>	The command allows the user to display the permutation base of <zone-id>	A/O

```
Example:
      FullMAX(zone-config)# set ul-perm-base 0 17
      Updated ul-perm-base for zone-id (0) to 17
 FullMAX (zone-config) # show ul-perm-base
       ul-perm-base for zone-id (0) : 17
```

ul-start-symbol

Index of the starting symbol for this zonehat segment

Command	Purpose	Privileges
FullMAX(zone-config)# set ul-start-symbol <zone-id> <val>	The command allows the user to update the start-symbol uplink of <zone-id>	A
FullMAX(zone-config)# show ul-start-symbol <zone-id>	The command allows the user to display the start-symbol of <zone-id>	A/O

```
Example:

 FullMAX (zone-config)# set ul-start-symbol 0 5
     Updated ul-start-symbol for zone-id (0) to 5
 FullMAX (zone-config) # show ul-start-symbol
```

```
ul-start-symbol for-id zone-id(0) :5
```

ul-alloc-bitmap

This is a bitmap describing the physical sub-channels allocated to the segment in the UL, when using the uplink PUSC permutation. The LSB of the first byte shall corrspond to subchannel 0. For any bit that is not set, the corresponding subchannel shall not be used by the SS on that segment

Command	Purpose	Privileges
`FullMAX(zone-config)# set ul-alloc-bitmap <zone-id> <val>`	The command allows the user to update the uplink zone – allocation bitmap parameter	A
`FullMAX(zone-config)#show ul-alloc-bitmap <zone-id>`	The command allows the user to display the allocation bitmap parameter of zone <id>	A/O

```
Example:
 FullMAX(zone-config)# set ul-alloc-bitmap 0 010101
     Updated ul-alloc-bitmap for zone-id (0) : to 010101


 FullMAX(zone-config) # show ul-alloc-bitmap 0
      ul-alloc-bitmap of zone-id (0) : 01010101
```

ul-cinr-threshold

This object is used to ensure that the write operation to multiple columns is guaranteed to be treated as atomic operation by agent.

Command	Purpose	Privileges
`FullMAX(zone-config)# set ul-cinr-threshold <zone-id> <val>`	The command allows the user to update the CINR threshold for zone <id>	A
`FullMAX(zone-config)# show ul-cinr-threshold <zone-id>`	The command allows the user to display the CINR threshold for zone <id>	A/O

```
Example:
 FullMAX(zone-config)# set ul-cinr-threshold 0 2
      Updated ul-cinr-threshold for zone-id (0) to 2 dB

      FullMAX(zone-config)# show ul-cinr-threshold 0
     ul-cinr-threshold for zone-id (0): 2 dB
```

4.2.6 bs-cap-config

The group defines the commands to configure the basic capabilities of BS. The user upon entering the bs-capability-config command locks into the CLI to execute commands only related to basic capabilities of BS.

```
FullMAX#
     FullMAX# bs-cap-config
FullMAX(bs-cap-config)#
```

Command	Purpose	Privileges
`FullMAX# bs-cap-config`	The command allows the user to lock into the group bs-cap-config and execute all the commands related to the group.	A/O

all

Description

Command	Purpose	Privileges
`FullMAX(bs-cap-onfig)#show all`	The command allows the user to display values of all the attributes of `bs-cap-config group`	A/O

```
Example:
FullMAX(bs-cap-config)# show all
     capability-ttg-transition-gap 34 microseconds
     capability-rtg-transition-gap  34 microseconds
     capability-pn-window-size 1000
     capability-number-of-ul-harq-channel 0
     capability-number-of-dl-harq-channel 0
```

Capability-ttg-transition-gap

This parameter indicates the configured transition speed SSTTG for TDD and H-FDD SSs. The usage is defined by ss-transistion-gap

Command	Purpose	Privileges
`FullMAX(bs-cap-config)# set capability-ttg-transitio-gap <val>`	The command allows the user to update the TTG transition gap parameter	A
`FullMAX(bs-cap-config)# show capability-ttg-transitio-gap`	The command allows the user to display the TTG transition gap parameter	A/O

```
Example:
 FullMAX(bs-cap-config)# set capability-ttg-transitio-gap
<val>
     Updated capability-ttg-transitio-gap

 FullMAX(bs-cap-config)# show capability-ttg-transitio-gap
     capability-ttg-transitio-gap
```

Capability-rtg-transition-gap

This parameter indicates the configured transition speed SSTTG for TDD and H-FDD SSs. The usage is defined by ss-transition-gap.

Command	Purpose	Privileges
`FullMAX(bs-cap-config)# set capability-rtg-transition-gap <val>`	The command allows the user to update the RTG transition gap.	A
`FullMAX(bs-cap-config)#show capability-rtg-transition-gap`	The command allows the user to display the RTG transition gap.	A/O

```
Example:
 FullMAX(bs-cap-config)# set capability-rtg-transition-gap
30
     Updated capability-rtg-transition-gap

 FullMAX (bs-cap-config)# show capability-rtg-transition-
gap
          capability-rtg-transition-gap  30
```

4.2.7 bs-burst-profile

The group defines the commands to burst profile commands of BS. The user upon entering the bs-burst-profile command locks into the CLI to execute commands only related to BS burst profile of BS.

```
FullMAX#
      FullMAX# bs-burst-profile
 FullMAX(bs-burst-profile)#
```

Command	Purpose	Privileges
`FullMAX#bs-burst-profile`	The command allows the user to lock into the group bs-burst-profile and execute all the commands related to the group.	A/O

uiuc-index

The uplink interval usage code inidicates the uplink burst profile in the ucd message and is used along the index to identify the ucd-fec-code. Max uiuc -index range for OFDMA PHY <0- 10 >

Command	Purpose	Privileges
`FullMAX(bs-burst-Profile)# show uiuc-index`	The command allows the user to display the Uplink intetrval usage codes indexes avaliable in the MAC	A/O

```
Example:
 FullMAX(bs-burst-profile)# show uiuc-index
               uiuc-index 0
               uiuc-index 1
                    uiuc-index 2
               uiuc-index 3
```

ucd-fec-code-type

Uplink FEC code type and modulation type

Command	Purpose	Privileges
`FullMAX (bs-burst-rofile)# show dcd-fec-code-type <uiuc-index>`	The command allows the user to display the different FEC and coding options for uplink burst profile.	A/O

```
Example:
FullMAX(bs-burst-profile)# show ucd-fec-code-type 1
   ucd-fec-code-type for uiuc-index (1) :
     qpskCc1Over2(0), qpskCc3Over4(1),
     sixteenQamCc1Over2(2), sixteenQamCc3Over4(3),
     sixtyFourQamCc1Over2(4), sixtyFourQamCc2Over3(5),
     sixtyFourQamCc3Over4(6), qpskBtc1Over2(7),
     qpskBtc3Over4Or2Over3(8), sixteenQamBtc3Over5(9),
     sixteenQamBtc4Over5(10),
     sixtyFourQamBtc2Over3Or5Over8(11),
     sixtyFourQamBtc5Over6Or4Over5(12), qpskCtc1Over2(13),
     reserved14(14), qpskCtc3Over4(15),
     sixteenQamCtc1Over2(16), sixteenQamCtc3Over4(17),
     sixtyFourQamCtc1Over2(18), sixtyFourQamCtc2Over3(19),
     sixtyFourQamCtc3Over4(20), sixtyFourQamCtc5Over6(21),
     qpskZtCc1Over2(22), qpskZtCc3Over4(23),
     sixteenQamZtCc1Over2(24), sixteenQamZtCc3Over4(25),
     sixtyFourQamZtCc1Over2(26),
     sixtyFourQamZtCc2Over3(27),
```

```
sixtyFourQamZtCc3Over4(28), qpskLdpc1over2(29),
qpskLdpc2over3A(30), qpskLdpc3over4A(31),
sixteenQamLdpc1over2(32), sixteenQamLdpc2over3A(33),
sixteenQamLdpc3over4A(34), sixtyFourQamLdpc1over2(35),
sixtyFourQamLdpc2over3A(36),
sixtyFourQamLdpc3over4A(37), qpskLdpc2over3B(38),
qpskLdpc3over4B(39), sixteenQamLdpc2over3B(40),
sixteenQamLdpc3over4B(41),
sixtyFourQamLdpc2over3B(42),
sixtyFourQamLdpc3over4B(43), qpskCcOptIntv1over2(44),
qpskCcOptIntv3over4(45),
sixteenQamCcOptIntv1over2(46),
sixteenQamCcOptIntv3over4(47),
sixtyFourQamCcOptIntv2over3(48),
sixtyFourQamCcOptIntv3over4(49), qpskLdpc5over6(50),
sixteenQamLdpc5over6(51), sixtyFourQamLdpc5over6(52)
```

diuc-index

The Downlink interval usage code inidicates the uplink burst profile in the ucd message and is used along the index to identify the Dcd-fec-code. Max diuc -index range for OFDMA PHY <0- 12 >

Command	Purpose	Privileges
`FullMAX(bs-burst-Profile)# show diuc-index`	The command allows the user to display the Downlink interval usage codes indexes avaliable in the MAC	A/O

```
Example:
FullMAX(bs-burst-profile)# show diuc index
               diuc-index 0
               diuc-index 1
               diuc-index 2
               diuc-index 3
```

dcd-fec-code-type

Displays FEC and coding options for downlink burst profiles

Command	Purpose	Privileges
`FullMAX (bs-burst-profile)# show dcd-fec-code-type <diuc-index>`	The command allows the user to display the different FEC and coding options for downlink burst profile.	A/O

```
Example:
```

```
FullMAX (bs-burst-profile) # show dcd-fec-code-type 2
     dcd-fec-code-type for dicu-index (2) is
     qpskCc1Over2(0), qpskCc3Over4(1),
     sixteenQamCc1Over2(2), sixteenQamCc3Over4(3),
     sixtyFourQamCc1Over2(4), sixtyFourQamCc2Over3(5),
     sixtyFourQamCc3Over4(6), qpskBtc1Over2(7),
     qpskBtc3Over4Or2Over3(8), sixteenQamBtc3Over5(9),
     sixteenQamBtc4Over5(10),
     sixtyFourQamBtc2Over3Or5Over8(11),
     sixtyFourQamBtc5Over6Or4Over5(12), qpskCtc1Over2(13),
     reserved14(14), qpskCtc3Over4(15),
     sixteenQamCtc1Over2(16), sixteenQamCtc3Over4(17),
     sixtyFourQamCtc1Over2(18), sixtyFourQamCtc2Over3(19),
     sixtyFourQamCtc3Over4(20), sixtyFourQamCtc5Over6(21),
     qpskZtCc1Over2(22), qpskZtCc3Over4(23),
     sixteenQamZtCc1Over2(24), sixteenQamZtCc3Over4(25),
     sixtyFourQamZtCc1Over2(26),
     sixtyFourQamZtCc2Over3(27),
     sixtyFourQamZtCc3Over4(28), qpskLdpc1over2(29),
     qpskLdpc2over3A(30), qpskLdpc3over4A(31),
     sixteenQamLdpc1over2(32), sixteenQamLdpc2over3A(33),
     sixteenQamLdpc3over4A(34), sixtyFourQamLdpc1over2(35),
     sixtyFourQamLdpc2over3A(36),
     sixtyFourQamLdpc3over4A(37), qpskLdpc2over3B(38),
     qpskLdpc3over4B(39), sixteenQamLdpc2over3B(40),
     sixteenQamLdpc3over4B(41),
     sixtyFourQamLdpc2over3B(42),
     sixtyFourQamLdpc3over4B(43), qpskCcOptIntv1over2(44),
     qpskCcOptIntv3over4(45),
     sixteenQamCcOptIntv1over2(46),
     sixteenQamCcOptIntv3over4(47),
     sixtyFourQamCcOptIntv2over3(48),
     sixtyFourQamCcOptIntv3over4(49), qpskLdpc5over6(50),
     sixteenQamLdpc5over6(51), sixtyFourQamLdpc5over6(52)
```

4.2.8 bs-ss-action

The bs-ss-action group define the commands that monitors or updates the actions specified for SS. The user upon entering the bs-ss-action command locks into the CLI to execute commands only related to BS private mib.

```
FullMAX#
FullMAX#bs-ss-action
FullMAX(bs-ss-action)#
```

Command	Purpose	Privileges
`FullMAX#bs-ss-action`	The command allows the user to lock into	A/O

	the group bs-ss-action and execute all the commands related to the group.	

reset-ss

Reset action performed on SS.

Command	Purpose	Privileges
`FullMAX(bs-ss-action)#set reset-ss <mac-address>`	The command allows the user to perform reset action on SS	A

```
Example:
FullMAX(bs-ss-action)# set reset-ss  1 0A1234:5678AB
     Reset-ss message sent to 0A1234:5678AB
```

abort-ss

Abort action performed on SS.

Command	Purpose	Privileges
`FullMAX(bs-ss-action)#set abort-ss <abort-op> <mac-address> [-d:dl-freq] [-u:up-id]`	The command allows the user to perform the abort action on SS	A/O

```
FullMAX(bs-ss-action)# set abort-ss 1 <mac-address>
     abort-ss message sent to <mac-address>
FullMAX(bs-ss-action)# set abort-ss 2 0A1234:5678AB
-d:210000
     abort-ss message with downlink frequency override
210000 KHz sent to 0A1234:5678AB
```

de-reg-ss

De-registration action on SS

Command	Purpose	Privileges
`FullMAX(bs-ss-action)# set abort-ss <abort-op> <mac-address> [-d:dl-freq] [-u:up-id]`	The command allows the user to perform the abort action on SS	A/O

```
FullMAX(bs-ss-action)# set de-reg-ss 0A1234:5678AB 2   De-
reg-ss message sent to 0A1234:5678AB with limited
transmission code (2)
FullMAX(bs-ss-action)# set de-reg-ss 0A1234:5678AB 1
```

```
     De-reg-ss message sent to 0A1234:5678AB with no
transmission code (1)
```

4.2.9 ss-registered

The ss-registered group defines the commands that monitors or updates the standard mib related information. The user upon entering the ss-registered command locks into the CLI to execute commands only related to SS registered table mib.

```
FullMAX#
     FullMAX# ss-registered
FullMAX ss-registered)#
```

Command	Purpose	Privileges
`FullMAX# ss-registered`	The command allows the user to lock into the group ss-registered and execute all the commands related to the group.	A/O

ss-mac-addresss

The MAC address of SS is received in the RNG-REQ message when SS registers ,this MAC address is entered in to the Bs Registered Ss Table.

Command	Purpose	Privileges
`FullMAX(ss-registered)# show registered-ss-mac-address`	The command allows the user display all the SS MAC addresses.	A/O

```
Example:
 FullMAX(ss-registered)# show registered-ss-mac-address
     Registered SS MAC Addresses are:
          registered-ss-mac-address 1 001BFE:01020A
          registered-ss-mac-address 2 001BAA:01030F
          registered-ss-mac-address 3 001BEF:01F01A
```

max-tx-power-qpsk

SS's Maximum available power for QPSK in dBm. This parameter is only applicable to systems supporting the SCa, OFDM or OFDMA PHY.

Command	Purpose	Privileges
`FullMAX(ss-registered)# show max-tx-power-qpsk <Key>`	The command allows the user display SS's Maximum available power for QPSK in dBm. Here key is SS's MAC address.	A/O

```
Example:
 FullMAX(ss-registered)# show max-tx-power-qpsk
001BFE:01020A
        max-tx-power-qpsk 27 dBm
```

max-tx-power-16qam

SS's Maximum available power for 16-QAM constellations in dBm. This parameter is only applicable to systems supporting the SCa, OFDM or OFDMA PHY.

Command	Purpose	Privileges
`FullMAX(ss-registered)# show max-tx-power-16qam <key>`	The command allows the user display SS's Maximum available power for 16QAM in dBm. Here key is SS's MAC address.	A/O

```
Example:
FullMAX(ss-registered)# show max-tx-power-16qam
001BAA:01030F
   max-tx-power-16qam 20 dBm
```

max-tx-power-64qam

SS's Maximum available power for 64-QAM constellations in dBm. This parameter is only applicable to systems supporting the SCa, OFDM or OFDMA PHY.

Command	Purpose	Privileges
`FullMAX(ss-registered)# show max-tx-power-64qam <key>`	The command allows the user display SS's Maximum available power for 64QAM in dBm. Here key is SS's MAC address.	A/O

```
Example:
FullMAX(ss-registered)# show max-tx-power-64qam
001BEF:01F01A
     max-tx-power-64qam  25 dBm
```

4.2.10 ss-ip

The bs-ss-ip group define the commands that monitors or updates the BsSsIp related information. The user upon entering the ss-ip command locks into the CLI to execute commands only related to BsSsIpTable defined in the private mib.

```
FullMAX#
     FullMAX# ss-ip
FullMAX(ss-ip)#
```

Command	Purpose	Privileges
`FullMAX# ss-ip`	The command allows the user to lock into the group ss-ip and execute all the commands related to the group.	A/O

ss-ip-table

This table contains the IP configuration information of Subcriber station's as set by DHCP Relay function in the Base Station.

Command	Purpose	Privileges
`FullMAX(ss-ip)#show ss-ip-table`	The command allows the user display the MS IP table.	A/O

```
Example:
 FullMAX (bs-private) # show ss-ip-table 001BFE:01020A
          ss-mac-address 001BFE:01020A
          ss-ip-address 192.168.0.1
          ss-subnet-mask 192.168.0.0
```

ss-mac-address

The MAC address of SS is received from the RNG-REQ message. When SS registers, this MAC address is entered into the table, and used as the identifier to the SS.

Command	Purpose	Privileges
`FullMAX (ss-ip) # show ss-mac-address`	The command allows the user display the MS MAC address of all MS.	A/O

```
Example:
FullMAX (ss-ip) # show ss-mac-address
     ss-mac-addres  00A1B3:01AB03
     ss-mac-addres  00A1B3:010203
     ss-mac-addres  00A1B3:010405
```

ss-ip-address

The subnet mask address of SS as received from BS DHCP Relay. When SS Registers, this IP address is entered into the table, and used as the identifier to the SS.

Command	Purpose	Privileges
`FullMAX (ss-ip) # show ss-ip-address`	The command allows the user display the IP address.	A/O

```
Example:
 FullMAX(ss-ip)# show ss-ip-address 00A1B3:01AB03
```

```
     ss-ip-addres  192.168.0.1
```

ss-subnet-mask

The IP address of SS is received from the DHCP-Relay in the BS when SS register, this IP address is entered into the table, and used as the identifier to the SS.

Command	Purpose	Privileges
`FullMAX(ss-ip)#show ss-ip-address`	The command allows the user display the subnet mask of all the MS.	A/O

```
Example:
 FullMAX(ss-ip)# show ss-subnet-mask 00A1B3:01AB03
     ss-subnet-mask  192.168.0.0
```

4.2.11 device

```
The device group define the commands that monitors or
updates the device related information in the private MIB.
The user upon entering the device command locks into the
CLI to execute commands only related to device.
FullMAX#
     FullMAX# device
FullMAX(device)#
```

Command	Purpose	Privileges
`FullMAX# device`	The command allows the user to lock into the group device and execute all the commands related to the group.	A/O

type

Type of device (BS/MS/SS).

Command	Purpose	Privileges
`FullMAX(device) # show type`	The command allows the user display the device type (BS/MS/SS)	A/O

```
Example:
 FullMAX(device)# show type
     type BS
```

gpos

The geographical position of the device ,
i.e. the real number describing the longitude and latitusde encoded as a printable string.

Longitude - the precision is within the range -90..90 degrees.Positive numbers indicate locations north of the equator.
Latitude - The precision is within the range -180..180 degrees.Positive numbers indicate locations east of the prime meridian

Command	Purpose	Privileges
`FullMAX(device)# set gpos <val>`	The command allows the user to update the geographical position of the device	A
`FullMAX(device)# show gpos`	The command allows the user display geographical position of the device.	A/O

```
Example:

 FullMAX(device)# set gpos 64.000 88.3400
     updated gpos  64.000 88.3400

 FullMAX(device) # show gpos
          gpos  64.000 88.3400
```

boot-time

The absolute time of last device boot up.

Command	Purpose	Privileges
`FullMAX(device)# show boot-time`	The command allows the user display the device boot up time.	A/O

```
Example:
FullMAX(device)# show boot-time
     boot-time 230404:18052008
```

commit-save

Setting this object to TRUE causes the device to write all configuration changes in FLASH memory. On next boot the changes will be relevant. If this operation does not occur, configuration changes will not be maintained through reset Reading this object always returns FALSE

Command	Purpose	Privileges
`FullMAX(device)# set commit-save <val>`	The command allows the user update the commit-save to TRUE .	A
`FullMAX(device)# show commit-save`	The command allows the user display the commit-save	A/O

```
Example:
```

```
FullMAX(device)# set commit-save TRUE
    Updated commit-save TRUE
FullMAX(device)# show commit-save
    commit-save  FALSE
```

gps-card

GPS card availability in the device.

Command	Purpose	Privileges
`FullMAX(device)#show gps-card`	The command allows the user display the availability of GPS card in the device.	A/O

```
Example:
FullMAX(device)# show gps-card
    gps-card YES
```

bpc-hw-version

Hardware version of baseband processor card.

Command	Purpose	Privileges
`FullMAX(device)#show bpc-hw-version`	The command allows the user display the hardware version of baseband processor card.	A/O

```
Example:
FullMAX(device)# show bpc-hw-version
         bpc-hw-version 1.10
```

afe-hw-ver

Hardware version of the Analog Front End (AFE)

Command	Purpose	Privileges
`FullMAX(device)#show afe-hw-ver`	The command allows the user display the hardware version of AFE.	A/O

```
Example:
FullMAX(device)# show afe-hw-ver
    device-afe-hw-version 1.3
```

afe-sw-ver

Software version of the Analog Front End (AFE)

Command	Purpose	Privileges

`FullMAX(device)#show afe-sw-ver`	The command allows the user display the software version of AFE.	A/O

```
Example:
      FullMAX(device)# show afe-sw-ver
     device-afe-sw-version 1.3
```

build-sw-ver

Software version of the device general embedded software

Command	Purpose	Privileges
`FullMAX(device)#show build-sw-ver`	The command allows the user display the software version of the software build	A/O

```
Example:
FullMAX(device)# show build-sw-ver
      build-sw-version
```

4.2.12 Measurements

The Measurement group defines the commands that monitors or updates the measurement related information in the private MIB. The user upon entering the device command locks into the CLI to execute commands only related to Measurement.

```
FullMAX#
FullMAX#  measurement
FullMAX(measurement)#
```

Temperature

Temperature degree in Celsius

Command	Purpose	Privileges
`FullMAX(measurement)#show temperature`	The command allows the user display temperature of the device.	A/O
`FullMAX(measurement)#track [-rN] [-tN] temperature`	The command allows the user to display real time temperature sample of the device.	A/O

```
Example:
 FullMAX(measurement)# show temperature
     Temperature 45 degrees-Celsius
 FullMAX(measurement)# track –r3 –i2 temperature
     Temperature 45 degrees-Celsius
     Temperature 46 degrees-Celsius
     Temperature 45 degrees-Celsius
```

Voltage

Voltage measurement

Command	Purpose	Privileges
`FullMAX(measurement)# show voltage`	The command allows the user display voltage of the device.	A/O
`FullMAX(measurement)# track [-rN] [-tN] voltage`	The command allows the user to display multiple voltage samples of the device.	A/O

```
Example:
 FullMAX (measurement) # show voltage
     Voltage 3 volts
 FullMAX (measurement) # track –r3 –i10 voltage
     Voltage 3 volts
     Voltage 3 volts
     Voltage 3 volts
```

Current

Current measurements

Command	Purpose	Privileges
`FullMAX(measurement)# show current`	The command allows the user display the current in the device.	A/O
`FullMAX(measurement)# track [-rN] [-tN] current`	The command allows the user to display multiple current measurements in the device.	A/O

```
Example:
 FullMAX (measurement) # show current
     Current 2 amp
 FullMAX (measurement) # track –r4 current
     Current 2 amp
     Current 2 amp
     Current 2 amp
```

Tx-power

Transmit power

Command	Purpose	Privileges
`FullMAX(measurement )# show tx-power`	The command allows the user display the transmit power.	A/O
`FullMAX(measurement)#`	The command allows the user to display	A/O

`track [-rN] [-tN] tx-power`	multple transmit power measurements.	

```
Example:
 FullMAX (measurement) # show tx-power
     Tx-power 45 dBm
 FullMAX (measurement) # track –r2 tx-power
     Tx-power 45 dBm
     Tx-power 43 dBm
```

Rx-power

Receive power

Command	Purpose	Privileges
`FullMAX(measurement)# show rx-power`	The command allows the user display the receive power.	A/O
`FullMAX(measurement)# track [-rN] [-tN] rx-power`	The command allows the user to display multiple receive power measurements.	A/O

```
Example:
 FullMAX(measurement)# show rx-power
     rx-power 45 dBm
 FullMAX(measurement)# track –r2  -i2 rx-power
     rx-power 45 dBm
          rx-power 45 dBm
```

afe-temperature

Read the temperature from the Analog Front End.

Command	Purpose	Privileges
`FullMAX(measurement)# show afe-temperature`	The command allows the user display temperatue from Analog Front End.	A/O
`FullMAX(measurement)# track [-rN] [-tN] afe-temperature`	The command allows the user to track the temperatue from Analog Front End.	A/O

```
Example:
      FullMAX(measurement)# show afe-temperatue
     afe-temperature 27 celcius
 FullMAX(measurement)# track -r4 -i30 afe-temperatue
     afe-temperature 27 celcius
     afe-temperature 27 celcius
     afe-temperature 27 celcius
```

```
     afe-temperature 27 celcius
```

afe-rssi

Read the Receive Signal Strength Indicator (RSSI) from the Analog Front End.

Command	Purpose	Privileges
`FullMAX(measurement)#show afe-rssi`	The command allows the user display RSSI from Analog Front End.	A/O
`FullMAX(measurement)#track [-rN] [-tN] afe-rssi`	The command allows the user to track RSSI from Analog Front End.	A/O

```
Example:
FullMAX(measurement)# show afe-rssi
     afe-rssi 80 dBm
FullMAX(measurement)# track -r3 -i30 afe-rssi
     afe-rssi 80 dBm
     afe-rssi 80 dBm
     afe-rssi 80 dBm
```

4.2.13 pkm–config

pkm–config

The Pkm-Config group defines the commands that moniters or updates the Private Key Management Version 2 Realated information in the Standard MIB .The user upon entering the pkm-config command locks into this group to execute commands only related to this group.

```
FullMAX#
     FullMAX# pkm–config
FullMAX(pkm–config)
```

Command	Purpose	Privileges
`FullMAX#` pkm –config	The command allows the user to lock to pkm-config group and display the pkm –config prompt.	A/O

```
FullMAX# pkm–config
```

pkm-v2-config-table

This table conatins the configuration of the pkm attributes that are needed to pkm operation.

Command	Purpose	Privileges
FullMAX(pkm–config)# show pkm-v2-config-table	The command allows the user display all the Pkm V2 Config table parameter values.	A/O

```
Example:
 FullMAX(pkm–config)# show pkm-v2-config-table
     pmk-pre-handshake-lifetime 10 second
     pmk-lifetime 3600 seconds
     sa-tek-challenge-timeout 10000 milliseconds
     max-sa-tek-challenge 3
     max-sa-tek-request 3
```

pkm-pmk-pre-handshake-lifetime

Defines the PkmPmkPrehandshakeLifetime.

Command	Purpose	Privileges
FullMAX(pkm–config)#set pkm-pmk-pre-handshake-lifetime <val>	The command allows the user update PkmPmkPrehandshakeLifetime.	A/O
FullMAX(pkm–config)#show pkm-pmk-pre-handshake-lifetime	The command allows the user to display PkmPmkPrehandshakeLifetime value	A/O

```
Example:
  FullMAX(pkm–config)# set pkm-pmk-pre-handshake-lifetime
11
     Updated pkm-pmk-pre-handshake-lifetime 11 second


  FullMAX(pkm–config)# show pkm-pmk-pre-handshake-lifetime
     pmk-pre-handshake-lifetime 10 second
```

pkm-pmk-lifetime

Defines the PMK life time

Command	Purpose	Privileges
FullMAX(pkm–config)#set pkm-pmk-lifetime <val>	The command allows the user to update pkm-pmk-lifetime value	A
FullMAX(pkm–config)#show pkm-pmk-lifetime	The command allows the user display pkm-pmk-lifetime.	A/O

```
Example:
  FullMAX(pkm–config) # set pkm-pmk-lifetime 3300
      Updated pkm-pmk-lifetime 3300 seconds
  FullMAX(pkm–config) # show pkm-pmk-lifetime 3600 seconds
      pkm-pmk-lifetime 3300 seconds
```

sa-challenge-timeout

This object defines the timeout value for SA-TEk challenge Retransmission.

Command	Purpose	Privileges
FullMAX(pkm–config)#set sa-challenge-timeout <val>	The command allows the user to update sa-challenge-timeout.	A
FullMAX(pkm–config)#show sa-challenge-timeout	The command allows the user display sa-challenge-timeout.	A/O

```
Example:
 FullMAX(pkm–config) # set sa-challenge-timeout 666
     updated value of sa-tek-challenge-timeout 666
millisecond

 FullMAX(pkm–config) # show sa-challenge-timeout
     sa-tek-challenge-timeout 10000 milliseconds
```

max-sa-tek-challange

This object defines the maximum number of SA-TEK-Challenge Transmissions

Command	Purpose	Privileges
FullMAX(pkm–config)#set max-sa-tek-challenge <val>	The command allows the user to update sa-challenge-timeout.	A
FullMAX(pkm–config)#show max-sa-tek-challange	The command allows the user display max-sa-tek-challenge.	A/O

```
Example:
      FullMAX(pkm–config)# set max-sa-tek-challange 2
     updated value of max-sa-tek-challenge 2
```

```
FullMAX(pkm–config)# show max-sa-tek-challange
    max-sa-tek-challenge 3
```

max-sa-tek-request

This object defines the maximum number of SA-TEK -Request retransmission.

Command	Purpose	Privileges
FullMAX(pkm–config)#set max-sa-tek-request <val>	The command allows the user to update max-sa-tek-request.	A
FullMAX(pkm–config)#show max-sa-tek-request	The command allows the user to display max-sa-tek-request.	A/O

```
Example:
 FullMAX(pkm–config)# set max-sa-tek-request  2
    updated value of max-sa-tek-request 2
 FullMAX(pkm–config)# show max-sa-tek-request
    max-sa-tek-request 3
```

all

The command allows the user to display all the parameters of the tables in this group.

Command	Purpose	Privileges
FullMAX(pkm–config)#show all	The command allows the user to display all the parameters values of the in this group.	A/O

```
FullMAX(pkm–config) # show all
     pmk-pre-handshake-lifetime 10 second
     pmk-lifetime 3600 seconds
     sa-tek-challenge-timeout 10000 milliseconds
     max-sa-tek-challenge 3
     max-sa-tek-request 3
```

4.2.14 bs-private

```
FullMAX#
     FullMAX# bs-private
FullMAX(bs-private)#
```

Command	Purpose	Privileges
FullMAX#bs-private	The command allows the user to lock to bs-private group and display the bs-	A/O

	private prompt.	

bs-rx-amc-count-table

This table contains statistical information that can be used to characterize the adaptive modulation and coding performance in the uplink.

Command	Purpose	Privileges
`FullMAX(bs-private)# show bs-rx-amc-count-table <uiuc-index>`	This command shows all the parameters and their values for AmcCountTable	A/O

```
Example:
FullMAX(bs-private)# show bs-rx-amc-count-table 1
     bs-rx-octets for uiuc index 1 is 0
     bs-rx-packets for uiuc index 1 is 0
     bs-tx-erroredpackets for uiuc index 1 is 0
```

bs-rx-uiuc-index

The Uplink Interval Usage Code indicates the uplink burst profile in the UCD message, and is used along with ifIndex to identify an entry in the wmanIf2BsOfdmaUcdBurstProfileTable.

Command	Purpose	Privileges
`FullMAX(bs-private)#show bs-rx-uiuc-index`	Show all the Uplink Interval Usage Code index available.A/O	A/O

```
Example:
 FullMAX(bs-private)# show  bs-rx-uiuc-index
   uiuc indices are
     bs-ul-uiuc-index: 1
     bs-ul-uiuc-index: 2
     bs-ul-uiuc-index: 3
          bs-ul-uiuc-index: 4
     bs-ul-uiuc-index: 5
     bs-ul-uiuc-index: 6
     bs-ul-uiuc-index: 7
     bs-ul-uiuc-index: 8
     bs-ul-uiuc-index: 9
     bs-ul-uiuc-index: 10
```

bs-rx-octets

This object counts the number of octets received in the uplink using the uplink burst profile indexed by wmanPriBsRxUiucIndex.

Command	Purpose	Privileges

`FullMAX(bs-private)#show bs-rx-octets <uiuc-index>`	Show the no of octet received in the uplink for the given index	A/O

```
Example:
 FullMAX(bs-private)# show bs-rx-octets 1
     bs-rx-octets for uiuc index 1 is 0
```

bs-rx-packets

This object counts the number of packets received in the uplinkusing the uplink burst profile indexed by UiucIndex

Command	Purpose	Privileges
`FullMAX(bs-private)#show bs-rx-packets <uiuc-index>`	Shows the number of packets received in the uplink for the given index	A/O

```
Example:
 FullMAX(bs-private)# show  bs-rx-packets 1
     bs-rx-packets for uiuc index 1 is 0
```

bs-rx-erroredPackets

This object counts the number of errored packets received in the uplink using the uplink burst profile indexed by UiucIndex.

Command	Purpose	Privileges
`FullMAX(bs-private)#show bs-rx-erroredPackets <uiuc-index>`	Shows the number of errored packets received in the uplink for the given index	A/O

```
Example:
 FullMAX(bs-private)# show bs-rx-erroredPackets 1
     bs-tx-errored packets for uiuc index 1 is 0
```

bs-tx-amc-count-table

This table contains statistical information that can be used to characterize the adaptive modulation and coding performance in the downlink.

Command	Purpose	Privileges
`FullMAX(bs-private)#show bs-tx-amc-count-table <diuc-index>`	Show all the parameters and their values of the TxAmcCountTable table for the given index	A/O

```
Example:
 FullMAX(bs-private)# show bs-tx-amc-count-table 1
```

```
     bs-tx-octets for diuc index 1 is 0
     bs-tx-packets for diuc index 1 is 0
```

bs-tx-diuc-index

The Downlink Interval Usage Code indicates the downlink burst profile in the DCD message.

Command	Purpose	Privileges
`FullMAX(bs-private)#show bs-tx-diuc-index`	Show all the available Downlink Interval Usage indices.	A/O

```
Example:
 FullMAX(bs-private)# show bs-tx-diuc-index
    diuc indices are
     bs-dl-diuc-index: 0
     bs-dl-diuc-index: 1
     bs-dl-diuc-index: 2
     bs-dl-diuc-index: 3
     bs-dl-diuc-index: 4
     bs-dl-diuc-index: 5
     bs-dl-diuc-index: 6
     bs-dl-diuc-index: 7
          bs-dl-diuc-index: 8
     bs-dl-diuc-index: 9
     bs-dl-diuc-index: 10
     bs-dl-diuc-index: 11
     bs-dl-diuc-index: 12
```

bs-tx-octets

This object counts the number of octets transmitted in the downlink using the downlink burst profile indexed by DiucIndex.

Command	Purpose	Privileges
`FullMAX(bs-private)# show bs-tx-octets <diuc-index>`	Shows the number of octets transmitted in the downlink for the given index	A/O

```
Example:
 FullMAX(bs-private)# show bs-tx-octets 1
     bs-tx-octets for diuc index 1 is 0
```

bs-tx-packets

This object counts the number of packets transmitted in the downlink using the downlink burst profile indexed by Diuc Index.

Command	Purpose	Privileges

`FullMAX(bs-rivate)#show bs-tx-packets <diuc-index>`	Shows the number of packets transmitted in the downlink for the given index	A/O

```
Example:
 FullMAX(bs-private)# show bs-tx-packets 1
     bs-tx-packets for diuc index 1 is 0
```

cmn-sf-table

This Table measures service flow traffic .

Command	Purpose	Privileges
`FullMAX(bs-private)#show cmn-sf-table <sfid>`	This command show all the parameters and their values of Cmn-sf-table.	**A/O**

```
Example:
 FullMAX(bs-private)# show cmn-sf-table 2001
     sf-total-octets for sfid 2001 is 100
     sf-total-pkts for sfid 2001 is 2
     sf-errored-pkts for sfid 2001 is  1
     sf-frag-orig for sfid 2001 is  1
     sf-frag-total for sfid 2001 is 2
          sf-missing-frag for sfid 2001 is 0
```

cmn-pm-sfid

This is a 32 bit quantity that uniquely identifies a service flow to both the subscriber station and base station.

Command	Purpose	Privileges
`FullMAX(bs-private)#show cmn-pm-sfid <mac-ddress>`	This command shows all the avaliable Service Flow Id's Avaliable for a particular MSID.	A/O

```
Example :
FullMAX(bs-private)# show cmn-pm-sfid 112233:445566
     cmn-pm-sfid 2001
     cmn-pm-sfid 2002
     cmn-pm-sfid 2003
     cmn-pm-sfid 2006
```

sf-total-octets

This determines the total octets received/transmitted on this service flow.

Command	Purpose	Privileges
`FullMAX(bs-private)# show sf-total-octets <sfid>`	This command allows the user to diplay the total octets received or	A/O

	transmitted for this service-flow.	

```
Example:
 FullMAX(bs-private)#show sf-total-octets  2001
     sf-total-octets for sfid (2001) : 1000
```

sf-total-pkts

This determines the total number of packets received /transmitted on this service flow.

Command	Purpose	Privileges
`FullMAX(bs-private)#show sf-total-pkts <sfid>`	This Command allows the user to display the total packets received or trasmitted for this service-flow	A/O

```
Example:
 FullMAX(bs-private)#show sf-total-pkts 2001
     sf-total-pkts for sfid (2001): 22
```

sf-errored-pkts

This determines number of packets that were dropped due to missing fragments / bad ARQ blocks.

Command	Purpose	Privileges
`FullMAX(bs-private)#show sf-errored-pkts <sfid>`	This Command Allows the user to display the total errored packets received or transmitted for this service flow.	A/O

```
Example:
 FullMAX(bs-private)# show sf-errored-pkts 2001
     sf-errored-pkts for sfid (2001): 1
```

sf-frag-orig

This determines number of fragments / ARQ blocks originally transmitted/received on this service flow.

Command	Purpose	Privileges
`FullMAX(bs-private)#show sf-frag-orig <sfid>`	This Command allows the user to display the total fragments received or transmitted originally on this service flow.	A/O

```
Example:
FullMAX(bs-private)#show sf-frag-orig 2001
     sf-frag-orig for sfid (2001) : 2
```

sf-frag-total

This determines total fragments / ARQ blocks transmitted / received on this service flow.

Command	Purpose	Privileges
`FullMAX(bs-private)#show sf-frag-total <sfid>`	This Command allows the user to display the total fragments received or transmitted on this service flow.	A/O

```
Example:
FullMAX(bs-private)# show sf-frag-total  2001
     sf-frag-total for sfid (2001): 2
```

sf-missing-frag

Description

This determines the number of missing received fragments received or NACK.

Command	Purpose	Privileges
`FullMAX(bs-private)# show sf-missing-frag <sfid>`	This command allows the user to display the number of missing received fragments or NACK.	A/O

```
Example:
FullMAX(bs-private)# show sf-missing-frag 2001
     sf-missing-frag for sfid (2001): 1
```

4.2.15 trap-config

trap-config

This Command allows the user to lock to trap config group.

Command	Purpose	Privileges
`FullMAX # trap-config`	This command allows the user to Locks to the trap config group and displays the coresponding group prompt.	A/O

Example:
FullMAX # trap-config
FullMAX(trap-config) #

std-trap-ctrl

The object is used to enable or disable Base Station traps From left to right, the set bit indicates the corresponding Base Station trap is enabled

{wmanIf2BsSsStatusNotification (0),
wmanIf2BsSsDynamicServiceFail (1),
wmanIf2BsSsRssiStatusChange (2),
wmanIf2BsSsRegister (3),
wmanIf2BsSsPkmFail (4),
wmanIf2BsPerformanceCounters (5)}

Command	Purpose	Privileges
FullMAX(trap-config) # set std-trap-ctrl <val>	This command Allows the user to update the value of std-trap-ctrl parameter.	A
FullMAX(trap-config) # show std-trap-ctrl	This command Allows the user to display the value of std-trap-ctrl parameter.	A/O

```
Example:
FullMAX(trap-config) # set std-trap-ctrl 25
 updated bs-trap-control {wmanIf2BsSsStatusNotification(0),
                          wmanIf2BsSsRegister(3),
                          wmanIf2BsPerformanceCounters (4)
}

FullMAX(bs-private)# show std-trap-ctrl
bs-trap-control  enabled are {
wmanIf2BsSsStatusNotification(0),
                              wmanIf2BsSsRegister(3),
                              wmanIf2BsPerformanceCounters
(4) }
```

std-trap-status-ctrl

The object is used to enable or disable Base Station status notification traps.
The set bit indicates the corresponding Base Station trap is enabled.

{ unused(0), ssInitRangingSucc(1), ssInitRangingFail(2), ssRegistered(3),
ssRegistrationFail(4), ssDeregistered(5), ssBasicCapabilitySucc(6),
ssBasicCapabilityFail(7), ssAuthorizationSucc(8), ssAuthorizationFail(9),
tftpSucc(10), tftpFail(11), sfCreationSucc(12), sfCreationFail(13) }

Command	Purpose	Privileges
FullMAX(trap-config) # set std-trap-status-ctrl	This command Allows the user to update the value of std-trap-status-ctrl parameter.	A

<val>		
FullMAX(trap-config) # show std-trap-status-ctrl	This command Allows the user to display the value of std-trap-status-ctrl parameter.	A/O

```
FullMAX(bs-private)# set std-trap-status-ctrl 10900
     updated bs-trap-status-ctrl
                    {ssInitRangingFail(2),
ssRegistrationFail(4),

ssBasicCapabilityFail(7),ssAuthorizationFail(9),
                     tftpFail(11), sfCreationFail(13) }

 FullMAX(bs-private)# show std-trap-status-ctrl
     bs-trap-status-ctrl enabled are
                    {ssInitRangingFail(2),
ssRegistrationFail(4),

ssBasicCapabilityFail(7),ssAuthorizationFail(9),
                     tftpFail(11), sfCreationFail(13) }
```

private-trap-ctrl

The object is used to enable or disable Base Station traps From left to right, the set bit indicates the corresponding Base Station trap is enabled.

{ wmanPriPowerStatusChange (0), wmanPriFanStatusChange (1), wmanPriTemperatureChange (2), wmanPriConfigChange (3), wmanPriAfeBitError (4) }

Command	Purpose	Privileges
FullMAX(trap-config) # set private-trap-ctrl <val>	This command Allows the user to update the value of private-trap-ctrl parameter.	A
FullMAX(trap-config) # show private-trap-ctrl	This command Allows the user to display the value of private-trap-ctrl parameter.	A/O

```
FullMAX(bs-private)# set private-trap-ctrl 21
     updated private-trap-ctrl
                    { wmanPriPowerStatusChange(0),
                      wmanPriPowerStatusChange(2),
                      wmanPriPowerStatusChange (4)}

 FullMAX(bs-private)# show private-trap-ctrl
     private-trap-ctl enabled
```

```
{ wmanPriPowerStatusChange(0),
 wmanPriPowerStatusChange(2),
 wmanPriPowerStatusChange (4)}
```

4.2.16 lapc-config

Lapc-config

This group contains commands to manipulate the Link Adaption and Power Control configuration parameters for the Base Station MAC.

Command	Purpose
FullMAX#lapc-config	The command allows the user to lock to config group and display the config prompt.

```
FULLMAX#lapc-config
FULLMAX(lapc-config)]#
```

uiuc

Command	Purpose
FullMAX(lapc-config)# show uiuc	Shows the values of uiuc avaliable.

```
Example:
 FULLMAX(lapc-config)#show uiuc
     uiuc 1
     uiuc 2
```

Uplink_FEC_Code_Type

Command	Purpose
FullMAX(lapc-config)# set Uplink_FEC_Code_Type <uiuc index> value	The command sets the value of Uplink_FEC_Code_Type for the given index
FullMAX(lapc-config)# show Uplink_FEC_Code_Type <uiuc index>	The command show the value of Uplink_FEC_Code_Type for the particunlar uiuc index

```
 Example:
 FULLMAX(lapc-config)#set Uplink_FEC_Code_Type 1 333
     Updated Uplink_FEC_Code_Type for uiuc index 1 is 333

 FULLMAX(lapc-config)#show Uplink_FEC_Code_Type 1
     Uplink_FEC_Code_Type for uiuc index 1 is 0
```

Ranging _Data _Ratio

Command	Purpose
FullMAX(lapc-config)# set Ranging_Data_Ratio <uiuc index>	The command sets the value of Ranging_Data_Ratio for the given index.
FullMAX(lapc-config)# show Ranging_Data_Ratio <uiuc index>	The command shows the value of Ranging_Data_Ratio for the given index.

```
Example:
 FULLMAX(lapc-config)#set  Ranging_Data_Ratio 1 22
     Updated Ranging_Data_Ratio for uiuc index 1 is 22

 FULLMAX(lapc-config)#show  Ranging_Data_Ratio 1
     Ranging_Data_Ratio for uiuc index 1 is 19
```

Normalised _C _by _N _Mantissa

Command	Purpose
FullMAX(lapc-config)# set Normalised_C_by_N_Mantissa <uiuc index>	The commnad sets the value of Normalised_C_by_N_Mantissa for the given index
FullMAX(lapc-config)# show Normalised_C_by_N_Mantissa <uiuc index>	The commnad shows the value of Normalised_C_by_N_Mantissa for the given index

```
Example:
FULLMAX(lapc-config)#set Normalised_C_by_N_Mantissa 1 77
     Updated Normalised_C_by_N_Mantissa for uiuc index 1 is
77

FULLMAX(lapc-config)#show Normalised_C_by_N_Mantissa 1
     Normalised_C_by_N_Mantissa for uiuc index 1 is 60
```

Normalised _C _by _N _Exponent

Command	Purpose
FullMAX(lapc-config)# set Normalised_C_by_N_Exponent <uiuc index>	The command sets the value of Normalised_C_by_N_Exponent for the given index
FullMAX(lapc-config)#	The command shows the value of

show Normalised_C_by_N_Exponent <uiuc index>	Normalised_C_by_N_Exponent for the given index

```
Example:
FULLMAX(lapc-config)#set Normalised_C_by_N_Exponent 1 1
     Updated Normalised_C_by_N_Exponent for index 1 is 1

FULLMAX(lapc-config)#show Normalised_C_by_N_Exponent 1
     Normalised_C_by_N_Exponent for index 1 is -1
```

FIR _filter _coefficient _mantissa

Command	Purpose
FullMAX(lapc-config)# set FIR_filter_coefficient_mantissa <index> value	The command sets the value of FIR_filter_coefficient_mantissa for the given index
FullMAX(lapc-config)# show FIR_filter_coefficient_mantissa <index>	The command shows the value of FIR_filter_coefficient_mantissa for the given index

```
Example:
FULLMAX(lapc-config)#set FIR_filter_coefficient_mantissa 1
65
     Updated FIR_filter_coefficient_mantissa for index 1 is
65

FULLMAX(lapc-config)#show FIR_filter_coefficient_mantissa 1
     FIR_filter_coefficient_mantissa for index 1 is 65
```

FIR _filter _coefficient _TenPwr

Command	Purpose
FullMAX(lapc-config)#set FIR_filter_coefficient_TenPwr <index> <val>	The command sets the value of FIR_filter_coefficient_TenPwr for the given index.
FullMAX(lapc-config)#show FIR_filter_coefficient_TenPwr <index>	The command shows the value of FIR_filter_coefficient_TenPwr for the given index.

```
Example:
FULLMAX(lapc-config)#set FIR_filter_coefficient_TenPwr 1 3
     Updated FIR_filter_coefficient_TenPwr for index 1 is 3

FULLMAX(lapc-config)#show FIR_filter_coefficient_TenPwr 1
```

```
FIR_filter_coefficient_TenPwr for index 1 is 3
```

Dl _Benchmark _Entry _Threshold _CINR

Description

Command	Purpose
FullMAX(lapc-config)#set Dl_Benchmark_Entry_Threshold_CINR <dl_fec_code> <dl_repetition> <val>	Sets the value of Dl_Benchmark_Entry_Threshold_CINR for the given fec code and repetition .
FullMAX(lapc-config)#show Dl_Benchmark_Entry_Threshold_CINR <dl_fec_code> <dl_repetition>	Displays the value of Dl_Benchmark_Entry_Threshold_CINR for the given fec code and repetition .

```
Example:
FULLMAX(lapc-config)#set Dl_Benchmark_Entry_Threshold_CINR
4 2 41e3
     Updated Dl_Benchmark_Entry_Threshold_CINR for fec code
4
     and repition 2 is 41e3

FULLMAX(lapc-config)#show Dl_Benchmark_Entry_Threshold_CINR
4 2
     Dl_Benchmark_Entry_Threshold_CINR for fec code 4 and
     repition 2 is 19e1
```

Dl _Benchmark _Exit _Threshold _CINR

Description

Command	Purpose
FullMAX(lapc-config)#set Dl_Benchmark_Exit_Threshold_CINR <dl_fec_code> <dl_repetition> <val>	Sets the value of Dl_Benchmark_Exit_Threshold_CINR for the given fec code and repetition .
FullMAX(lapc-config)#show Dl_Benchmark_Exit_Threshold_CINR <dl_fec_code> <dl_repetition>	Displays the value of Dl_Benchmark_Exit_Threshold_CINR for the given fec code and repetition .

```
Example:
FULLMAX(lapc-config)#set Dl_Benchmark_Exit_Threshold_CINR 4
2 41e3
     Updated Dl_Benchmark_Exit_Threshold_CINR for fec code
4 and
```

```
     repition 2 is 41e3

FULLMAX(lapc-config)#show Dl_Benchmark_Exit_Threshold_CINR
4 2
     Dl_Benchmark_Exit_Threshold_CINR for fec code 4 and
     repition 2 is 19e1
```

Ul _Benchmark _Entry _Threshold _CINR

Command	Purpose
FullMAX(lapc-config)#set Ul_Benchmark_Entry_Threshold_CINR <dl_fec_code> <dl_repetition> <val>	Sets the value of Ul_Benchmark_Entry_Threshold_CINR for the given fec code and repetition .
FullMAX(lapc-config)#show Ul_Benchmark_Entry_Threshold_CINR <dl_fec_code> <dl_repetition>	Displays the value of Ul_Benchmark_Entry_Threshold_CINR for the given fec code and repetition .

```
FULLMAX(lapc-config)#set Ul_Benchmark_Entry_Threshold_CINR
4 2 41e3
     Updated Ul_Benchmark_Entry_Threshold_CINR for fec code
4
     and repition 2 is 41e3

FULLMAX(lapc-config)#show Ul_Benchmark_Entry_Threshold_CINR
4 2
     Ul_Benchmark_Entry_Threshold_CINR for fec code 4 and
     repition 2 is 19e1
```

Ul _Benchmark _Exit _Threshold _CINR

Description

Command	Purpose
FullMAX(lapc-config)#set Ul_Benchmark_Exit_Threshold_CINR <ul_fec_code> <ul_repetition> <val>	Sets the value of Ul_Benchmark_Exit_Threshold_CINR for the given fec code and repetition .
FullMAX(lapc-config)#show Ul_Benchmark_Exit_Threshold_CINR <ul_fec_code> <ul_repetition>	Displays the value of Ul_Benchmark_Exit_Threshold_CINR for the given fec code and repetition .

Example:

```
FULLMAX(lapc-config)#set Dl_Benchmark_Exit_Threshold_CINR 4
2 41e3
     Updated Dl_Benchmark_Exit_Threshold_CINR for fec code
     4 and repition 2 is 41e3

FULLMAX(lapc-config)#show Dl_Benchmark_Exit_Threshold_CINR
4 2
     Dl_Benchmark_Exit_Threshold_CINR for fec code 4 and
     repition 2 is 19e1
```

Burst _Profile _evaluation _Timer

Command	Purpose
FullMAX(lapc-config)#set Burst_Profile_evaluation_Timer	The command sets the value of _Profile_evaluation_Timer
FullMAX(lapc-config)#show Burst_Profile_evaluation_Timer	The command shows the value of _Profile_evaluation_Timer

```
Example:
FULLMAX(lapc-config)#set Burst_Profile_evaluation_Timer 222
     Updated Burst_Profile_evaluation_Timer: 250

FULLMAX(lapc-config)#show Burst_Profile_evaluation_Timer
     Burst_Profile_evaluation_Timer: 250
```

Mantissa _Lower _Thld _Rx _Power _Density

Description

Command	Purpose
FullMAX(lapc-config)# set Mantissa_Lower_Thld_Rx_Power_Density <val>	Sets the value of Mantissa_Lower_Thld_Rx_Power_Density
FullMAX(lapc-config)# show Mantissa_Lower_Thld_Rx_Power_Density	Displays the value of Mantissa_Lower_Thld_Rx_Power_Density.

```
Example:
FULLMAX(lapc-config)#set
Mantissa_Lower_Thld_Rx_Power_Density 22
Updated Mantissa_Lower_Thld_Rx_Power_Density -100

FULLMAX(lapc-config)#show
Mantissa_Lower_Thld_Rx_Power_Density
Mantissa_Lower_Thld_Rx_Power_Density -100
```

Mantissa _Higher _Thld _Rx _Power _Density

Description

Command	Purpose
FullMAX(lapc-config)#set Mantissa_Higher_Thld_Rx_Power_Density	Sets the value of Mantissa_Higher_Thld_Rx_Power_Density to the given value.
FullMAX(lapc-config)#show Mantissa_Higher_Thld_Rx_Power_Density	Display the value of Mantissa_Higher_Thld_Rx_Power_Density

```
Example:
FULLMAX(lapc-config)#set
Mantissa_Higher_Thld_Rx_Power_Density 22
     Updated Mantissa_Higher_Thld_Rx_Power_Density 22

     FULLMAX(lapc-config)#show
     Mantissa_Higher_Thld_Rx_Power_Density
     Mantissa_Higher_Thld_Rx_Power_Density -60
```

Max _Length _Of _DLMAP _Mesg

Command	Purpose
FullMAX(lapc-config)#set Max_Length_Of_DLMAP_Mesg <value>	The command sets the value of _Length_Of_DLMAP_Mesg to the value given
FullMAX(lapc-config)#show Max_Length_Of_DLMAP_Mesg	The command shows the value of _Length_Of_DLMAP_Mesg

```
Example:
FULLMAX(lapc-config)#set Max_Length_Of_DLMAP_Mesg 22
Updated Max_Length_Of_DLMAP_Mesg: 22

FULLMAX(lapc-config)#show Max_Length_Of_DLMAP_Mesg
Max_Length_Of_DLMAP_Mesg: 2
```

Max _Aggregate _Length _Of _Control _Messages

Command	Purpose
FullMAX(lapc-config)# set Max_Aggregate_Length_Of_Control_Messages <value>	The command sets the value of _Aggregate_Length_Of_Control_Messages to the given value.
FullMAX(lapc-config)# show Max_Aggregate_Length_Of_Control_Messages	The command shows the value of _Aggregate_Length_Of_Control_Messages.

```
Example:
 FULLMAX(lapc-config)#set
 Max_Aggregate_Length_Of_Control_Messages 22
 Updated Max_Aggregate_Length_Of_Control_Messages: 22

FULLMAX(lapc-config)#show
Max_Aggregate_Length_Of_Control_Messages
Max_Length_Of_DLMAP_Mesg: 48
```

Max_No_Of_Slots_Used_For_Future_Allocation_In_DL

Command	Purpose
FullMAX(lapc-config)# set Max_No_Of_Slots_Used_For_Future_Allocation_In_DL <value>	The command sets the value of _No_Of_Slots_Used_For_Future_Allocation_In_DL to the given value.
FullMAX(lapc-config)# show Max_No_Of_Slots_Used_For_Future_Allocation_In_DL	The command shows the value of _No_Of_Slots_Used_For_Future_Allocation_In_DL.

```
Example:
[FULLMAX(lapc-config)]$set
Max_No_Of_Slots_Used_For_Future_Allocation_In_DL 33

Updated Max_No_Of_Slots_Used_For_Future_Allocation_In_DL:
33

[FULLMAX(lapc-config)]$show
Max_No_Of_Slots_Used_For_Future_Allocation_In_DL

Max_Aggregate_Length_Of_Control_Messages: 90
```

Max_No_Of_Slots_Used_For_Future_Allocation_In_UL

Command	Purpose
FullMAX(lapc-config)# set Max_No_Of_Slots_Used_For_Future_Allocation_In_UL <value>	The command sets the value of _No_Of_Slots_Used_For_Future_Allocation_In_UL to the given value.
FullMAX(lapc-config)# show Max_No_Of_Slots_Used_For_Future_Allocation_In_UL	The command shows the value of _No_Of_Slots_Used_For_Future_Allocation_In_UL.

```
Example:
```

```
FULLMAX(lapc-config)#set
Max_No_Of_Slots_Used_For_Future_Allocation_In_UL 44

Updated Max_No_Of_Slots_Used_For_Future_Allocation_In_DL:
44
FULLMAX(lapc-config)#show
Max_No_Of_Slots_Used_For_Future_Allocation_In_UL

Max_No_Of_Slots_Used_For_Future_Allocation_In_DL: 10
```

Max_No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_UL_Frame

Command	Purpose
FullMAX(lapc-config)#set Max_No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_UL_Frame <value>	The command sets the value of _No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_UL_Frame to the given value.
FullMAX(lapc-config)#show Max_No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_UL_Frame	The command shows the value of _No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_UL_Frame.

```
Example:
FULLMAX(lapc-config)#set
Max_No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_U
L_Frame 22

Updated
Max_No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_U
L_Frame: 22

FULLMAX(lapc-config)#show
Max_No_Of_Slots_Can_Be_Used_For_CDMA_Allocation_In_Single_U
L_Frame

Max_No_Of_Slots_Used_For_Future_Allocation_In_DL: 10
```

No_Of_CDMA_Ranging_Slots

Command	Purpose
FullMAX(lapc-config)# set No_Of_CDMA_Ranging_Slots <value>	The command sets the value of _Of_CDMA_Ranging_Slots to the given value.
FullMAX(lapc-config)# show No_Of_CDMA_Ranging_Slots	The command shows the value of _Of_CDMA_Ranging_Slots.

```
FULLMAX(lapc-config)#set No_Of_CDMA_Ranging_Slots 33
```

```
Updated No_Of_CDMA_Ranging_Slots: 33

FULLMAX(lapc-config)#show No_Of_CDMA_Ranging_Slots
No_Of_CDMA_Ranging_Slots: 1
```

CDMA _Ranging _Period

Command	Purpose
FullMAX(lapc-config)# set CDMA_Band_Width_Period <value>	The command sets the value of CDMA_Band_Width_Period to the given value.
FullMAX(lapc-config)# show CDMA_Band_Width_Period	The command shows the value of CDMA_Band_Width_Period

```
FULLMAX(lapc-config)#set CDMA_Band_Width_Period 33
Updated CDMA_Band_Width_Period: 33

FULLMAX(lapc-config)#show CDMA_Band_Width_Period
CDMA_Band_Width_Period: 6
```

No _Of _CDMA _Band _Width _Slots

Command	Purpose
FullMAX(lapc-config)# set No_Of_CDMA_Band_Width_Slots <value>	The command sets the value of _Of_CDMA_Band_Width_Slots to the given value
FullMAX(lapc-config)# show No_Of_CDMA_Band_Width_Slots	The command shows the value of _Of_CDMA_Band_Width_Slots

```
Example:
FULLMAX(lapc-config)#set No_Of_CDMA_Band_Width_Slots 33
Updated No_Of_CDMA_Band_Width_Slots: 33

FULLMAX(lapc-config)#show No_Of_CDMA_Band_Width_Slots
No_Of_CDMA_Band_Width_Slots: 3
```

CDMA _Band _Width _Period

Command	Purpose
FullMAX(lapc-config)# set CDMA_Band_Width_Period <value>	The command sets the value of _Band_Width_Period to the given value.
FullMAX(lapc-config)# show CDMA_Band_Width_Period	The command shows the value of _Band_Width_Period.

```
Example:
     FULLMAX(lapc-config)#set CDMA_Band_Width_Period 33
```

```
     Updated CDMA_Band_Width_Period: 33

FULLMAX(lapc-config)#show CDMA_Band_Width_Period
     CDMA_Band_Width_Period: 6
```

Max _Frame _Slots _Dl _Harq _Retransmission

Command	Purpose
FullMAX(lapc-config)# set Max_Frame_Slots_Dl_Harq_Retransmission <value>	The command sets the value of _Frame_Slots_Dl_Harq_Retransmission to the given value.
FullMAX(lapc-config)# show Max_Frame_Slots_Dl_Harq_Retransmission	The command shows the value of _Frame_Slots_Dl_Harq_Retransmission.

```
Example:
FULLMAX(lapc-config)#set
Max_Frame_Slots_Dl_Harq_Retransmission 33
Updated Max_Frame_Slots_Dl_Harq_Retransmission 33

FULLMAX(lapc-config)#show
Max_Frame_Slots_Dl_Harq_Retransmission
Max_Frame_Slots_Dl_Harq_Retransmission: 20
```

Max _Frame _Slots _Ul _Harq _Retransmission

Command	Purpose
FullMAX(lapc-config)# set Max_Frame_Slots_Ul_Harq_Retransmission <value>	The command sets the value of Max_Frame_Slots_Ul_Harq_Retransmission to the given value.
FullMAX(lapc-config)# show Max_Frame_Slots_Ul_Harq_Retransmission	The command shows the value of _Frame_Slots_Ul_Harq_Retransmission.

```
Example:
FULLMAX(lapc-config)#set
Max_Frame_Slots_Ul_Harq_Retransmission 33
     Update Max_Frame_Slots_Ul_Harq_Retransmission: 33

FULLMAX(lapc-config)#show
Max_Frame_Slots_Ul_Harq_Retransmission
     Max_Frame_Slots_Ul_Harq_Retransmission: 20
```

Max _Ul _Harq _Ack _slots

Command	Purpose
FullMAX(lapc-config)# set Max_Ul_Harq_Ack_slots <value>	The command sets the value of Max_Ul_Harq_Ack_slots to the givan value.
FullMAX(lapc-config)# show Max_Ul_Harq_Ack_slots	The command shows the value of Max_Ul_Harq_Ack_slots

```
Example:
FULLMAX(lapc-config)#set Max_Ul_Harq_Ack_slots 24
     Updated Max_Ul_Harq_Ack_slots: 24

FULLMAX(lapc-config)#show Max_Ul_Harq_Ack_slots
     Max_Ul_Harq_Ack_slots: 2
```

Initial _Ranging _Backoff _Start

Command	Purpose
FullMAX(lapc-config)# set Initial_Ranging_Backoff_Start <value>	The command sets the value of _Ranging_Backoff_Start to the given value.
FullMAX(lapc-config)# show Initial_Ranging_Backoff_Start	The command shows the value of _Ranging_Backoff_Start

```
Example:
     FULLMAX(lapc-config)#set Initial_Ranging_Backoff_Start
     55
     Updated Initial_Ranging_Backoff_Start: 55

FULLMAX(lapc-config)#show Initial_Ranging_Backoff_Start
     Initial_Ranging_Backoff_Start: 15
```

Initial _Ranging _Backoff _End

Command	Purpose
FullMAX(lapc-config)# set Initial_Ranging_Backoff_End <value>	The command sets the value of _Ranging_Backoff_End to the given value.
FullMAX(lapc-config)# show Initial_Ranging_Backoff_End	The command shows the value of _Ranging_Backoff_End.

```
FULLMAX(lapc-config)#set Initial_Ranging_Backoff_End 44
Updated Initial_Ranging_Backoff_End: 44

FULLMAX(lapc-config)#show Initial_Ranging_Backoff_End
Initial_Ranging_Backoff_End: 12
```

Bandwidth _Request _Backoff _Start

Command	Purpose
FullMAX(lapc-config)# set Bandwidth_Request_Backoff_Start <value>	The command sets the value of _Request_Backoff_Start to the given value.
FullMAX(lapc-config)# show Bandwidth_Request_Backoff_Start	The command shows the value of _Request_Backoff_Start.

```
Example:
FULLMAX(lapc-config)#set Bandwidth_Request_Backoff_Start 44
     Updated Bandwidth_Request_Backoff_Start: 44

FULLMAX(lapc-config)#show Bandwidth_Request_Backoff_Start
     Bandwidth_Request_Backoff_Start: 3
```

Bandwidth _Request _Backoff _End

Command	Purpose
FullMAX(lapc-config)# set Bandwidth_Request_Backoff_End <value>	The command sets the value of _Request_Backoff_End to the given value.
FullMAX(lapc-config)# show Bandwidth_Request_Backoff_End	The command shows the value of _Request_Backoff_End.

```
Example:
FULLMAX(lapc-config)#set Bandwidth_Request_Backoff_End 55
     Updated Bandwidth_Request_Backoff_End: 55

FULLMAX(lapc-config)#show Bandwidth_Request_Backoff_End
     Bandwidth_Request_Backoff_End: 2
```

Percentage _Of _Reserved _Symbols

Command	Purpose
FullMAX(lapc-config)# set Percentage_Of_Reserved_Symbols <value>	The command sets the value of _Of_Reserved_Symbols to the given value.
FullMAX(lapc-config)# show Percentage_Of_Reserved_Symbols	The command shows the value of _Of_Reserved_Symbols.

```
Example:
```

```
FULLMAX(lapc-config)#set Percentage_Of_Reserved_Symbols 99
     Updated Percentage_Of_Reserved_Symbols: 99

FULLMAX(lapc-config)#show Percentage_Of_Reserved_Symbols
     Percentage_Of_Reserved_Symbols: 10
```

Percentags _Of _Head _Room _For _MAC

Command	Purpose
`FullMAX(lapc-config)# set Percentags_Of_Head_Room_For_MAC <value>`	The command sets the value of _Of_Head_Room_For_MAC to the given value.
`FullMAX(lapc-config)# show Percentags_Of_Head_Room_For_MAC`	The command shows the value of _Of_Head_Room_For_MAC.

```
Example:
FULLMAX(lapc-config)#set Percentags_Of_Head_Room_For_MAC 88
     Updated Percentags_Of_Head_Room_For_MAC: 88

FULLMAX(lapc-config)#show Percentags_Of_Head_Room_For_MAC
     Percentags_Of_Head_Room_For_MAC: 10
```

4.3 FS4000 and MS4000 Operation

The FullMAX MS CLI supports the following commands. The access to this commands are based on the user privileges. The Admin has the privilege to control and monitor all the information supported by the FullMAX MS CLI commands, where as the operator has limited privileges.
After the successful authentication, the user gets the access permission to the command line interface. Based on the user privileges, the help menu will be displayed to the user.

4.3.1 Main Group

When user logs in to the CLI it will lock to the default group which is the main group.When ever the user enters the Main group,CLI will display the main prompt .Help command in main group will show the commands supported in main group along with the group lock commands. Only commands related to main group can be executed in main group.

```
FullMAX# main group
```

ip-address

System IP address.

Command	Purpose	Privileges
`FullMAX# set` ip-address	Updates the system IP	A/O

<ip-address>	address.	
`FullMAX# show ip-address`	Displays the system IP address.	A/O

```
Example:
FullMAX#set ip-address 10.60.4.42

Updated IP address: 10.60.4.42

FullMAX# show ip-address

IP address: 10.60.4.56
```

4.3.2 ss-config

The ms-config group define the commands that monitors or updates the configuration information. The user upon entering the ms-config command locks into the CLI to execute commands only related to MS configuration.

```
FullMAX#
FullMAX# ss-config
FullMAX(ss-config)#
```

Command	Purpose	Privileges
`FullMAX# ss-config`	The command allows the user to lock into the group ss-config and execute all the commands related to the group.	A/O

The commands supported by the ss-config group are.

Lost-dl-map-interval

Time since last received DL-MAP message before downlink synchronization is considered lost in ms.

Command	Purpose	Privileges
`FullMAX(ss-config)# set lost-dl-map-interval <val>`	The command allows the user to update timer value since last received DL-MAP message before downlink synchronization is considered lost.	A
`FullMAX(ss-config)# show lost-dl-map-interval`	The command allows the user to display the timer value since last received DL-MAP message before downlink synchronization is considered lost.	A/O

```
Example:
FullMAX(ss-config) # set  lost-dl-map-interval 300
     Updated lost-dl-map-interval 300 milliseconds

FullMAX (ss-config) # show lost-dl-map-interval
     lost-dl-map-interval 300 milliseconds
```

Lost-ul-map-interval

Time since last received UL-MAP message before downlink synchronization is considered lost in ms.

Command	Purpose	Privileges
`FullMAX(ss-config)# set lost-ul-map-interval <val>`	The command allows the user to update timer value since last received UL-MAP message before downlink synchronization is considered lost.	A
`FullMAX(ss-config)# show lost-ul-map-interval`	The command allows the user to display the timer value since last received UL-MAP message before downlink synchronization is considered lost.	A/O

```
Example:
FullMAX(ss-config)# set  lost-ul-map-interval 300
     Updated lost-ul-map-interval 300 milliseconds

FullMAX(ss-config)# show lost-ul-map-interval
     lost-ul-map-interval 300 milliseconds
```

Contention-rng-retries

Number of retries on contention ranging requests.

Command	Purpose	Privileges
`FullMAX(ss-config)# set contention-rng-retries <val>`	The command allows the user to update the contention ranging retries parameter.	A
`FullMAX(ss-config)#show contention-rng-retries`	The command allows the user to display the contention ranging retries parameter.	A/O

```
Example:
FullMAX(ss-config)# set  contention-rng-retries 20
     Updated contention-rng-retries 20

FullMAX(ss-config)# show contention-rng-retries
     contention-rng-retries 20
```

Request-retries

Number of retries on bandwidth allocation request.

Command	Purpose	Privileges
`FullMAX(ss-config)# set request-retries <val>`	The command allows the user to update the number of retries on bandwidth allocation request.	A
`FullMAX(ss-config)# show request-retries`	The command allows the user to display the number of retries on bandwidth allocation request.	A/O

```
Example:
FullMAX(ss-config)# set  request-retries 88
     Updated request-retries 88

FullMAX(ss-config)# show request-retries
     request-retries 88
```

Reg-requset-retries

Number of retries on registration request.

Command	Purpose	Privileges
`FullMAX(ss-config)# set reg-requset-retries <val>`	The command allows the user to update the number of retries on registration request.	A
`FullMAX(ss-config)# show reg-requset-retries`	The command allows the user to display the number of retries on registration request.	A/O

```
Example:
FullMAX(ss-config)# set  reg-requset-retries 8
     Updated reg-requset-retries 8

FullMAX(ss-config)# show reg-requset-retries
reg-requset-retries 8
```

T1-timeout

Wait for DCD timeout in milliseconds.

Command	Purpose	Privileges
`FullMAX(ss-config)# set t1-timeout <val>`	The command allows the user to update the DCD timeout parameter.	A
`FullMAX(ss-config)# show t1-timeout`	The command allows the user to display the DCD timeout parameter.	A/O

```
Example:
FullMAX(ss-config)# set  t1-timeout 9000
     Updated t1-timeout 9000 milliseconds.

FullMAX(ss-config)# show t1-timeout
     t1-timeout 9000 milliseconds.
```

T2-timeout

Wait for broadcast ranging timeout in milliseconds.

Command	Purpose	Privileges
`FullMAX(ss-config)# set t2-timeout <val>`	The command allows the user to update the broadcast ranging timeout parameter	A
`FullMAX(ss-config)# show t2-timeout`	The command allows the user to display the broadcast ranging timeout parameter	A/O

```
Example:
FullMAX(ss-config) # set  t2-timeout 8000
     Updated t2-timeout 8000 milliseconds.

FullMAX(ss-config)# show t2-timeout
     t2-timeout 8000 milliseconds.
```

T3-timeout

Ranging response reception timeout following the transmission of Ranging Request in milliseconds.

Command	Purpose	Privileges
`FullMAX(ss-config)# set t3-timeout <val>`	The command allows the user to update the ranging response timeout parameter.	A
`FullMAX(ss-config)# show t3-timeout`	The command allows the user to display the ranging response timeout parameter.	A/O

```
Example:
FullMAX(ss-config)# set  t3-timeout 45
     Updated t3-timeout 45 milliseconds.

FullMAX(ss-config)# show t3-timeout
     T3-timeout 45 milliseconds.
```

T4-timeout

Wait for ranging opportunity or data grant. If pending until complete field was used earlier by this SS, then the value of that field shall be added to this interval in second.

Command	Purpose	Privileges
`FullMAX(ss-config)# set t4-timeout <val>`	The command allows the user to update the wait for ranging opportunity timeout parameter.	A
`FullMAX(ss-config)# show t4-timeout`	The command allows the user to display the wait for ranging opportunity timeout parameter.	A/O

```
Example:
FullMAX(ss-config) # set  t4-timeout 45
     Updated t4-timeout 45 milliseconds.

FullMAX(ss-config)# show t4-timeout
     T4-timeout 45 milliseconds.
```

T16-timeout

Wait for Registration Response in milliseconds.

Command	Purpose	Privileges
`FullMAX(ss-config)#set t16-timeout <val>`	The command allows the user to update the Registration response wait timer.	A
`FullMAX (ss-config)#show t16-timeout`	The command allows the user to display the Registration response wait timer.	A/O

```
Example:
FullMAX(ss-config)#set  t16-timeout 540
     Updated t16-timeout 540 milliseconds.

FullMAX (ss-config) # show t16-timeout
     T16-timeout 540 milliseconds.
```

T12-timeout

Wait for UCD descriptor in milliseconds.

Command	Purpose	Privileges
`FullMAX(ss-config)# set t12-timeout <val>`	The command allows the user to update wait for UCD descriptor timer.	A
`FullMAX(ss-config)# show`	The command allows the user to	A/O

t12-timeout	display the wait for UCD descriptor timer.	

```
Example:
FullMAX(ss-config) # set  t12-timeout 12000
     Updated t12-timeout 12000 milliseconds.

FullMAX (ss-config) # show t12-timeout
     t12-timeout 12000 milliseconds.
```

T18-timeout

Wait for SBC-RSP timeout in milliseconds.

Command	Purpose	Privileges
FullMAX(ss-config)# set t18-timeout <val>	The command allows the user to update wait for SBC-RSP timeout parameter.	A
FullMAX(ss-config)# show t18-timeout	The command allows the user to display the wait for SBC-RSP timeout parameter.	A/O

```
Example:
FullMAX(ss-config) # set  t18-timeout 7000
     Updated t18-timeout 7000 milliseconds.

FullMAX (ss-config) # show t18-timeout
     t18-timeout 7000 milliseconds.
```

T19-timeout

Time DL-channel remains unusable in ms.

Command	Purpose	Privileges
FullMAX(ss-config)#set t19-timeout <val>	The command allows the user to update time for DL-channel remains unusable in ms..	A
FullMAX(ss-config)#show t19-timeout	The command allows the user to display the time for DL-channel remains unusable in ms.	A/O

```
Example:
FullMAX(ss-config)# set  t19-timeout 7000
     Updated t19-timeout 7000 milliseconds.

FullMAX(ss-config)# show t19-timeout
     t19-timeout 7000 milliseconds.
```

T20-timeout

Time SS searches for preambles on a given channel in milliseconds.

Command	Purpose	Privileges
`FullMAX(ss-config)#set t20-timeout <val>`	The command allows the user to update the time to search for preambles on a given channel.	A
`FullMAX(ss-config)#show t20-timeout`	The command allows the user to display time to search for preambles on a given channel.	A/O

```
Example:
FullMAX(ss-config) # set t20-timeout 600
     Updated t20-timeout 600 milliseconds.

FullMAX (ss-config) # show t20-timeout
     t20-timeout 600 milliseconds.
```

T21-timeout

Time SS searches for DL-MAP on a given channel in milliseconds.

Command	Purpose	Privileges
`FullMAX(ss-config)#set t21-timeout <val>`	The command allows the user to update the time to search for DL-MAP on a given channel.	A
`FullMAX(ss-config)#show t21-timeout`	The command allows the user to display time to search for DL-MAP on a given channel.	A/O

```
Example:

FullMAX(ss-config)# set  t21-timeout 1200
     Updated t21-timeout 1200 milliseconds.

FullMAX(ss-config)# show t21-timeout
     t21-timeout 1200 milliseconds.
```

4.3.3 device

The device group define the commands that monitors or updates the device related information in the private MIB. The user upon entering the device command locks into the CLI to execute commands only related to device.

```
FullMAX#
      FullMAX# device
```

```
FullMAX(device)#
```

Command	Purpose	Privileges
FullMAX#	The command allows the user to lock into the group device and execute all the commands related to the group.	A/O

type

Type of the device (BS / MS / SS).

Command	Purpose	Privileges
FullMAX(device)#show type	The command allows the user display the device type (BS/MS/SS)	A/O

```
Example:
 FullMAX(device)# show type
     type SS
```

gpos

The geographical position of the device ,
i.e. the real number describing the longitude and latitusde encoded as a printable string.
Longitude - the precision is within the range -90..90 degrees.Positive numbers indicate locations north of the equator.
Latitude - The precision is within the range -180..180 degrees.Positive numbers indicate locations east of the prime meridian

Command	Purpose	Privileges
FullMAX(device)#set gpos <val>	The command allows the user to send the command to the GPS avaliable on the system.	A
FullMAX(device)#show gpos	The command allows the user display geographical position of the device.	A/O

```
Example:
 FullMAX(device)# set gpos 64.000 88.3400
     updated gpos  64.000 88.3400
 FullMAX(device)# show gpos
     gpos  64.000 88.3400
```

boot-time

The absolute time of last device boot up.

Command	Purpose	Privileges

`FullMAX(device)# show boot-`	`time`The command allows the user display the device boot up time.	A/O

```
Example:
FullMAX(device)# show boot-time
     boot-time 230404:18052008
```

commit-save

Setting this object to TRUE causes the device to write all configuration changes in FLASH memory. On next boot the changes will be relevant. If this operation does not occur, configuration changes will not be maintained through reset Reading this object always returns FALSE

Command	Purpose	Privileges
`FullMAX(device)#set commit-save <val>`	The command allows the user to set the value to TRUE so as to save the configuration changes in FLASH.	A
`FullMAX(device)#show commit-save`	The command allows the user display the device commit-save	A/O

```
Example:
 FullMAX(device)# set commit-save
     commit-save TRUE

 FullMAX(device)# show commit-save
     commit-save  FALSE
```

gps-card

GPS card availability in the device.

Command	Purpose	Privileges
`FullMAX(device)#show gps-card`	The command allows the user display the availability of GPS card in the device.	A/O

```
Example:
FullMAX(device)# show gps-card
     gps-card YES
```

bpc-hw-version

Hardware version of baseband processor card.

Command	Purpose	Privileges
`FullMAX(device)#show bpc-hw-version`	The command allows the user display the hardware version of baseband processor card.	A/O

```
Example:
 FullMAX(device)# show bpc-hw-version
     bpc-hw-version 1.10
```

afe-hw-ver

Hardware version of the Analog Front End (AFE)

Command	Purpose	Privileges
`FullMAX(device)#show afe-hw-ver`	The command allows the user display the hardware version of AFE.	A/O

```
Example:
 FullMAX(device)# show afe-hw-ver
     device-afe-hw-version 1.3
```

afe-sw-ver

Software version of the Analog Front End (AFE)

Command	Purpose	Privileges
`FullMAX(device)#show afe-sw-ver`	The command allows the user display the software version of AFE.	A/O

```
Example:
 FullMAX(device)# show afe-sw-ver
     device-afe-sw-version 1.3
```

build-sw-ver

Software version of the device general embedded software.

Command	Purpose	Privileges
`FullMAX(device)#show build-sw-ver`	The command allows the user display the software version of the software build	A/O

```
Example:
 FullMAX(device)#show build-sw-ver
      build-sw-version
```

4.3.4 Measurements

The Measurement group define the commands that monitors or updates the measurement related information in the private MIB. The user upon entering the device command locks into the CLI to execute commands only related to Measurement.

```
FullMAX#
FullMAX# measurement
FullMAX(measurement)#
```

Command	Purpose	Privileges
`FullMAX# measurement`	The command allows the user to lock into the group Measurement and execute all the commands related to this group.	A/O

Temperature

Temperature degree in Celsius

Command	Purpose	Privileges
`FullMAX(measurement)# show temperature`	The command allows the user display temperature of the device.	A/O
`FullMAX(measurement)# track [-rN][-iN] temperature`	The command allows the user to display real time temperature sample of the device.	A/O

```
Example:
FullMAX(measurement)# show temperature
     Temperature 45 degrees-Celsius
 FullMAX(measurement)# track –r3 –i2 temperature
     Temperature 45 degrees-Celsius
     Temperature 46 degrees-Celsius
     Temperature 45 degrees-Celsius
```

Voltage

Voltage measurement

Command	Purpose	Privileges
`FullMAX(measurement)# show voltage`	The command allows the user display voltage of the device.	A/O
`FullMAX(measurement)# track [-rN][-iN] voltage`	The command allows the user to display multiple voltage samples of the device.	A/O

```
Example:
 FullMAX(measurement)# show voltage
     Voltage 3 volts
```

```
FullMAX(measurement)# track –r3 –i10 voltage
    Voltage 3 volts
    Voltage 3 volts
    Voltage 3 volts
```

Current

Current measurements

Command	Purpose	Privileges
`FullMAX(measurement)#show current`	The command allows the user display the current in the device.	A/O
`FullMAX(measurement)#track [-rN][-iN] current.`	The command allows the user to display multiple current measurements in the device	A/O

Example:

```
FullMAX(measurement)# show current
    Current 2 amp
FullMAX(measurement)# track –r4 current
    Current 2 amp
    Current 2 amp
    Current 2 amp
```

Tx-power

Transmit power

Command	Purpose	Privileges
`FullMAX(measurement)#show tx-power`	The command allows the user display the transmit power.	A/O
`FullMAX(measurement #track [-rN][-iN] tx-power`	The command allows the user to display multple transmit power measurements.	A/O

Example:

```
FullMAX(measurement)# show tx-power
    Tx-power 45 dBm
FullMAX(measurement)# track –r2 tx-power
    Tx-power 45 dBm
    Tx-power 43 dBm
```

Rx-power

Receive power

Command	Purpose	Privileges
`FullMAX(measurement)#show rx-power`	The command allows the user display the receive power.	A/O
`FullMAX(measurement)#track [-rN][-iN] rx-power`	The command allows the user to display multiple receive power measurements.	A/O

```
Example:
 FullMAX(measurement)# show rx-power
     rx-power 45 dBm
 FullMAX(measurement)# track –r2  -i2 rx-power
     rx-power 45 dBm
     rx-power 45 dBm
```

afe-temperature

Read the temperature from the Analog Front End.

Command	Purpose	Privileges
`FullMAX(measurement)#show afe-temperature`	The command allows the user display temperatue from Analog Front End.	A/O.
`FullMAX(measurement)#track [-rN][-iN] afe-temperature`	The command allows the user to display multiple temperatue measurements from Analog Front End	A/O

```
Example:
 FullMAX(measurement)# show afe-temperatue
     afe-temperature 27 celcius
 FullMAX(measurement)# track -r4 -i30 afe-temperatue
     afe-temperature 27 celcius
     afe-temperature 27 celcius
     afe-temperature 27 celcius
     afe-temperature 27 celcius
```

afe-rssi

Read the Receive Signal Strength Indicator (RSSI) from the Analog Front End.

Command	Purpose	Privileges
`FullMAX(measurement)#show afe-rssi`	The command allows the user display RSSI from Analog Front End.	A/O
`FullMAX(measurement)#track [-rN][-iN] afe-rssi`	The command allows the user to display multiple RSSI measurements from Analog Front End .	A/O

```
Example:
 FullMAX(measurement)# show afe-rssi
```

```
    afe-rssi 80 dBm
FullMAX(measurement)# track -r4 -i30 afe-rssi
    afe-rssi 80 dBm
    afe-rssi 80 dBm
    afe-rssi 80 dBm
    afe-rssi 80 dBm
```

4.3.5 ss-private

The bs-private group define the commands that monitors or updates the private mib related information. The user upon entering the ss-private command locks into the CLI to execute commands only related to BS private mib.

```
FullMAX#
FullMAX# ss-private
FullMAX(ss-private)#
```

Command	Purpose	Privileges
`FullMAX# ss-private`	The command allows the user to lock into the group ss-private and execute all the commands related to the group.	A/O

ss-rx-amc-count-table

This table contains statistical information that can be used to characterize the adaptive modulation and coding performance in the uplink.

Command	Purpose	Privileges
`FullMAX(ss-private)#show ss-rx-amc-count-table <diuc-index>`	This command shows all the parameters and their values for RxAmcCountTable..	A/O

```
Example:
FullMAX(ss-private)# show ss-rx-amc-count-table 1
    ss-rx-octets for diuc-index 1 is 0
    ss-rx-packets for diuc-index 1 is 0
    ss-tx-erroredpackets for diuc-index 1 is 0
```

ss-rx-diuc-index

The Downlink Interval Usage Code indicates the uplink burst profile in the UCD message.

Command	Purpose	Privileges
`FullMAX(ss-private)# show ss-rx-diuc-index`	This command allows the users to display the avaliable diuc-index	A/O

```
Example:
 FullMAX(ss-private)# show  ss-rx-diuc-index
```

```
ss-ul-diuc-index: 1
ss-ul-diuc-index: 2
ss-ul-diuc-index: 3
ss-ul-diuc-index: 4
ss-ul-diuc-index: 5
ss-ul-diuc-index: 6
ss-ul-diuc-index: 7
ss-ul-diuc-index: 8
ss-ul-diuc-index: 9
ss-ul-diuc-index: 10
```

ss-rx-octets

This object counts the number of octets received in the downlink using the downlink burst profile indexed by diuc-index.

Command	Purpose	Privileges
`FullMAX(ss-private)#show ss-rx-octets <diuc-index>`	This command allows the user to display the number of octets received in DL burst profile indexed by diuc-index.	A/O

Example:

```
FullMAX(ss-private)# show ss-rx-octets 1
    ss-rx-octets for diuc-index 1 is 0
```

ss-rx-packets

This object counts the number of packets received in the downlink using the downlink burst profile indexed by

Command	Purpose	Privileges
`FullMAX(ss-private)#show ss-rx-packets <diuc-index>`	This Command allows the user to display the number of packets received in DL burst profile indexed by diuc-index	A/O

Example:

```
FullMAX(ss-private)#show  ss-rx-packets 1
    ss-rx-packets for diuc-index 1 is 0
```

ss-rx-erroredPackets

Command	Purpose	Privileges
`FullMAX(ss-private)#show ss-rx-erroredPackets <diuc-index>`	This command allows the use rto display the number of errored packets indexed by diuc-index	A/O

Example:

```
FullMAX(ss-private)# show ss-rx-erroredPackets 1
```

```
     ss-tx-errored packets for uiuc index 1 is 0
```

ss-tx-amc-count-table

This table contains statistical information that can be used to characterize the adaptive modulation and coding performance in the downlink.

Command	Purpose	Privileges
`FullMAX(ss-private)#show ss-tx-amc-count-table <uiuc-index>`	This command allows the user to display the parametes and values of the TxAmcCount Table.	A/O

```
Example:
FullMAX(ss-private)# show ss-tx-amc-count-table 1
     ss-tx-octets for uiuc-index 1 is 0
     ss-tx-packets for uiuc-index 1 is 0
```

ss-tx-uiuc-index

The Uplink Interval Usage Code indicates the uplink burst profile in the UCD message.

Command	Purpose	Privileges
`FullMAX(ss-private)# show ss-tx-uiuc-index`	This command allows the user to display avaliable uiuc- indices	A/O

```
Example:
 FullMAX(ss-private)# show ss-tx-uiuc-index
     ss-dl-uiuc-index: 0
     ss-dl-uiuc-index: 1
     ss-dl-uiuc-index: 2
     ss-dl-uiuc-index: 3
     ss-dl-uiuc-index: 4
     ss-dl-uiuc-index: 5
     ss-dl-uiuc-index: 6
     ss-dl-uiuc-index: 7
     ss-dl-uiuc-index: 8
     ss-dl-uiuc-index: 9
     ss-dl-uiuc-index: 10
     ss-dl-uiuc-index: 11
     ss-dl-uiuc-index: 12
```

ss-tx-octets

This object counts the number of octets transmitted in the uplink using the uplink burst profile indexed by uiuc-index

Command	Purpose	Privileges
`FullMAX(ss-private)#show ss-tx-octets <uiuc-index>`	This command allows the user to display the Octets indexed by	A/O

	uiuc-index.	

```
Example:
 FullMAX(ss-private)# show ss-tx-octets 1
     ss-tx-octets for uiuc-index 1 is 0
```

ss-tx-packets

This object counts the number of packets transmitted in the uplink using the uplink burst profile indexed by uiuc-index .

Command	Purpose	Privileges
`FullMAX(ss-private)#show ss-tx-packets <diuc-index>`	This command allows the user to display the packets in UL burst indexed by uiuc-index	A/O

```
Example:
 FullMAX(ss-private)# show ss-tx-packets 1
     ss-tx-packets for uiuc-index 1 is 0
```

cmn-sf-table

This Table measures service flow traffic

Command	Purpose	Privileges
`FullMAX(ss-private)# show cmn-sf-table <sfid>`	This command allows the user to display the parameters and values for cmn-sf-table for this SFID	A/O

```
Example:
 FullMAX(ss-private)#show cmn-sf-table 2001
     sf-total-octets for sfid 2001 is 0
     sf-total-pkts for sfid 2001 is 0
     sf-errored-pkts for sfid  2001 is 0
     sf-frag-orig for sfid 2001 is 0
     sf-frag-total for sfid 2001 is 0
     sf-missing-frag for sfid 2001 is 0
```

cmn-pm-sfid

Command	Purpose	Privileges
`FullMAX(ss-private)#show cmn-pm-sfid`	This command allows the user to display the avlaibale SFID.	A/O

```
Example:
 FullMAX(ss-private)# show cmn-pm-sfid
           cmn-pm-sfid 2001
```

```
cmn-pm-sfid 2002
cmn-pm-sfid 3000
```

sf-total-octets

This determines the total octets received/transmitted on this service flow.

Command	Purpose	Privileges
`FullMAX(ss-private)#show sf-total-octets <sfid>`	This command allows the user to diplay the total octets received or transmitted for this service-flow.	A/O

```
Example:
FullMAX(ss-private)# show sf-total-octets  2001
     sf-total-octets for sfid (2001) : 1000
```

sf-total-pkts

This determines the total number of packets received /transmitted on this service flow.

Command	Purpose	Privileges
`FullMAX(ss-private)#show sf-total-pkts <sfid>`	This Command allows the user to display the total packets received or trasmitted for this service-flow	A/O

```
Example:
 FullMAX(bs-private)#show sf-total-pkts 2001
     sf-total-pkts for sfid (2001): 22
```

sf-errored-pkts

This determines number of packets that were dropped due to missing fragments / bad ARQ blocks.

Command	Purpose	Privileges
`FullMAX(ss-private)#show sf-errored-pkts <sfid>`	This Command Allows the user to display the total errored packets received or transmitted for this service flow.	A/O

```
Example:
 FullMAX(ss-private)# show sf-errored-pkts 2001
     sf-errored-pkts for sfid (2001): 1
```

sf-frag-orig

This determines number of fragments / ARQ blocks originally transmitted/received on this service flow.

Command	Purpose	Privileges
`FullMAX(ss-private)# show sf-frag-orig <sfid>`	This Command allows the user to display the total fragments received or transmitted originally on this service flow.	A/O

```
Example:
 FullMAX(ss-private)# show sf-frag-orig 2001
     sf-frag-orig for sfid (2001) : 2
```

sf-frag-total

This determines total fragments / ARQ blocks transmitted / received on this service flow.

Command	Purpose	Privileges
`FullMAX(ss-private)# show sf-frag-total <sfid>`	This Command allows the user to display the total fragments received or transmitted on this service flow.	A/O

```
Example:
 FullMAX(ss-private)# show sf-frag-total  2001
     sf-frag-total for sfid (2001): 2
```

sf-missing-frag

Description

This determines the number of missing received fragments received or NACK.

Command	Purpose	Privileges
`FullMAX(ss-private)# show sf-missing-frag <sfid>`	This command allows the user to display the number of missing received fragments or NACK.	A/O

```
Example:
 FullMAX(ss-private)# show sf-missing-frag 2001
     sf-missing-frag for sfid (2001): 1
```

4.3.6 ss-chconfig

The ss-chconfig group define the commands that monitors or updates the channel config MIB related information. The user upon entering(locking) the ss-chconfig group can execute commands only related to ss-chconfig group.

```
 FullMAX#
```

```
FullMAX# ss-chconfig
FullMAX(ss-chconfig)#
```

Command	Purpose	Privileges
FullMAX#ss-chconfig	The command allows the user to lock into the group ss-chconfig and execute all the commands related to the group.	A/O

Channel-config-table

Each entry in the table contains optional channels configuration. A table can include a single active channel configuration and some inactive channel configurations A MS when searching for a new BS will scan the table for available channels.

Command	Purpose	Privileges
FullMAX(ss-chconfig)#show ss-channel-config-table <chn-index>	The command allows the user display the channel configuration based on index. A/O	A/O

```
Example:
 FullMAX(ss-chconfig)# show channel-config-table 1
          center-channel-frequency for chn-index 1 is 12000
Hz
          center-bandwidth for chn-index 1 is 120 Hz
          center-config-status for chn-index 1 is ACTIVE
```

Channel-config-index

Index in channel-config-table.

Command	Purpose	Privileges
FullMAX(ss-chconfig)# show channel-config-index	The command allows the user display all the channel configuration indices	A/O

```
Example:
 FullMAX(ss-chconfig)# show channel-config-index
     Channel-config-index 1
     Channel-config-index 2
```

Center-channel-frequency

sets an optional center frequency for the transmitter and receiver Units are in Hz

Command	Purpose	Privileges
FullMAX(ss-chconfig)# show center-channel-frequency <chn-index>	The command allows the user display center frequencies for the given index.	A/O

```
Example:
```

```
FullMAX(ss-chconfig)# show center-channel-frequency 1
    center-channel-frequency for chn-index 1 16000 Hz
```

Channel-bandwidth

sets the bandwidth of the channel in the associated center frequency Units are in Hz.

Command	Purpose	Privileges
`FullMAX(ss-chconfig)#show center-bandwidth <chn-index>`	The command allows the user display bandwidth for the given index.	A/O

```
Example:
FullMAX(ss-chconfig)# show center-bandwidth 2
    center-bandwidth for chn-index 2 is 1600 Hz
```

sampling-clock

The channel sampling clock

Command	Purpose	Privileges
`FullMAX(ss-chconfig)#show sampling-clock <chn-index>`	The command allows the user display sampling clock time for the given index.	A/O

```
Example:
FullMAX(ss-chconfig)# show sampling-clock 2
    sampling-clock for chn-index 2 is 16
```

filter-id

The ID of the PHY filter to use for this channel.

Command	Purpose	Privileges
`FullMAX(ss-chconfig)#show filter-id <chn-index>`	The command allows the user display filter id for the given index.	A/O

```
Example:
FullMAX(ss-chconfig)# show filter-id 2
    filter-id for chn-index 2 is 16
```

Channel-config-status

Indicates the current state of this entry
inactiveOption(0) - indicates that this entry is a scanning option that is not currently in use.
currentActive(1) - indicates that this entry is the current channel channel configuration

Command	Purpose	Privileges
FullMAX(ss-chconfig)#show channel-config-status <chn-index>	The command allows the user display the current status for the given index	A/O

```
Example:
 FullMAX(ss-chconfig)# show channel-config-status 2
     channel-config-status for chn-index 2 is ACTIVE
```

channel-row-status

This determines the row status of the Channel config table for this config-index.

Command	Purpose	Privileges
FullMAX(ss-chconfig)#show channel-row-status	The command allows the user display the row status for the given index	A/O

```
Example:
 FullMAX(ss-chconfig)# show channel-row-status 2
     channel-row-status for chn-index 2 is ACTIVE
```

4.3.7 ss-trap

The trap-ctrl-register group defines the commands that monitors or updates the trap mib related information. The user upon entering the trap-ctrl-register command locks into the CLI to execute commands only related to BS and MS trap control register mib.

```
FullMAX#
FullMAX# ss-trap
FullMAX (ss-trap)#
```

Command	Purpose	Privileges
FullMAX# ss-trap	The command allows the user to lock into the group ss-trap and execute all the commands related to the group	A/O

Within this group we can get the following parameters.

SstrapControlRegister
PriTrapControlRegister.

ss-trap-control-register

The parameter is used to enable or disable the SS traps.

Command	Purpose	Privileges
FullMAX(ss-trap)# set ss-trap-control-register <val> (enable or disable)	The command allows the user to enable or disable the SS traps	A

`FullMAX(ss-trap)#show ss-trap-control-register`	The command allows the user display the enable or disable status of the SS traps.	A/O

```
Example:
 FullMAX(ss-trap)# set ss-trap-control-register 0
                Updated ss-trap-control-register 0 (disable)
 FullMAX(ss-trap)# show ss-trap-control-register
                ss-trap-control-register 0 (disable)
```

Rssi-low-threshold

Low Rssi threshold for generating the RSSI alarm trap.

Command	Purpose	Privileges
`FullMAX(ss-trap)# set rssi-low-threshold <val>`	The command allows the user to update the lower threshold for generating RSSI alaram trap	A
`FullMAX(ss-trap)#show rssi-low-threshold`	The command allows the user to display the lower threshold for generating RSSI alaram trap	A/O

```
Example:
 FullMAX(ss-trap)# set  rssi-low-threshold 34
     Updated rssi-low-threshold 34 dBm

 FullMAX(ss-trap)# show rssi-low-threshold
     rssi-low-threshold 34 dBm
```

Rssi-high-threshold

High Rssi threshold for generating the RSSI alarm trap.

Command	Purpose	Privileges
`FullMAX(ss-trap)# set rssi-high-threshold <val>`	The command allows the user to update the higher threshold for generating RSSI alaram trap	A
`FullMAX(ss-trap)# show rssi-high-threshold`	The command allows the user to display the higher threshold for generating RSSI alaram trap.	A/O

```
Example:
 FullMAX(ss-trap)# set  rssi-high-threshold 34
     Updated rssi-high-threshold 54 dBm

FullMAX(ss-trap)# show rssi-high-threshold
     rssi-high-threshold 54 dBm
```

private-trap-ctrl

The object is used to enable or disable Base Station traps From left to right, the set bit indicates the corresponding Base Station trap is enabled.

{ wmanPriPowerStatusChange (0), wmanPriFanStatusChange (1),
wmanPriTemperatureChange (2), wmanPriConfigChange (3),
wmanPriAfeBitError (4) }

Command	Purpose	Privileges
FullMAX(ss-trap)#set private-trap-ctrl <val>	This command allows the user to display the value of the private trap control	A
FullMAX(ss-trap)#show private-trap-ctrl	This command allows the user to display the value of the private trap control	A/O

```
Example:
 FullMAX(ss-trap)# set private-trap-ctrl 21
     updated private-trap-ctrl
               { wmanPriPowerStatusChange(0),
                 wmanPriPowerStatusChange(2),
                 wmanPriPowerStatusChange(4)}

 FullMAX(ss-trap)# show private-trap-ctrl
     private-trap-ctl enabled
                     { wmanPriPowerStatusChange(0),
                      wmanPriPowerStatusChange(2),
                      wmanPriPowerStatusChange (4)}
```