

3 BTS3012 Signal Protection Subsystem

About This Chapter

The signal protection subsystem provides lightning protection for the E1 signals and other signals and provides signal access. The functions of the signal protection subsystem are performed by the top subrack of the BTS3012 cabinet.

[3.1 Components of the BTS3012 Signal Protection Subsystem](#)

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[3.2 Functions of the BTS3012 Signal Protection Subsystem](#)

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3.1 Components of the BTS3012 Signal Protection Subsystem

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Internal Composition

Figure 3-1 shows the configuration of boards in the BTS3012 top subrack.

Figure 3-1 Configuration of boards in the BTS3012 top subrack

D M L C	D E L C 1	D E L C 0	D S A C
0	1	2	3

Table 3-1 lists the relation between the boards and the slot numbers.

Table 3-1 Relation between the boards and the slot numbers in the top subrack

Board	Slot No.
DMLC	Slots 0, 1, or 2
DELC	Slots 0, 1, or 2
DSAC	Slot 3

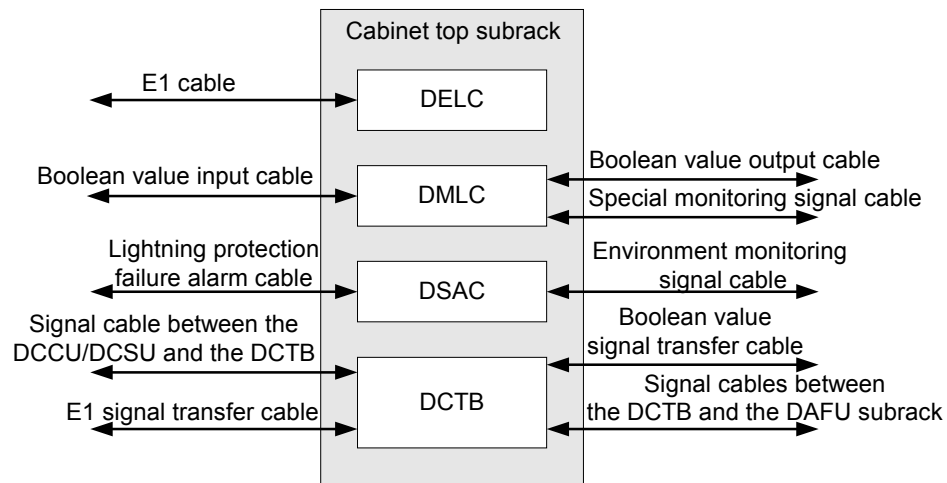
NOTE

- The DMLC is an optional board delivered with the DEMU. One DMLC is delivered when the DEMU is configured in the cabinet.
- The DELC is a mandatory board. One BTS3012 cabinet can be configured with 1–3 DELCs.
- The DSAC is a mandatory cabinet delivered with the DTMU. One DSAC must be configured when the DTMU is configured in the cabinet.

External Cabling

Figure 3-2 shows the external cabling of the BTS3012 top subrack.

Figure 3-2 External cabling of the BTS3012 top subrack



NOTE

The DCTB is the backplane in the DTRU subrack.

3.2 Functions of the BTS3012 Signal Protection Subsystem

The BTS3012 signal protection subsystem provides lightning protection for the E1 signals and provides Boolean value input and signal access.

The signal protection subsystem performs the following functions:

- Providing lightning protecting for E1 signals
- Providing lightning protection for signals from the combined cabinets and the cabinet groups
- Accessing Boolean value inputs
- Providing input of the lightning protection arrester failure alarm
- Providing access protection for the BITS clock input
- Providing access protection for the signals from the smoke, water, access, infrared, humidity, temperature, and humidity sensors

