



Cabling the Fast Ethernet (10/100) Line Card

This chapter provides information on the Fast Ethernet Line Card (FLC2) interfaces and instructions for installing the cables.

This chapter includes the following section:

- [FLC2 Interfaces, page 1](#)

FLC2 Interfaces

The Fast Ethernet Line Card (FLC2, Ethernet 10/100) has eight RJ-45 interfaces, as shown in the figure below. Each of these is an auto-sensing 10Base-T/100Base-TX Ethernet interface that terminates a shielded twisted-pair (STP) copper cable. The interfaces are labeled 1 through 8 from top to bottom.

**Important**

To comply with GR-1089 intra-building, lightning-immunity requirements and ensure compliance with FCC Radiated Emissions Criteria, you must use shielded-twisted pair (STP) cable and ensure that it is properly terminated at both ends.

The 10/100Base-TX ports of the FLC2 are suitable for connection to intra-building or unexposed wiring or cabling only. These intra-building ports **MUST NOT** be metallically connected to interfaces that connect to the outside plant (OSP) or its wiring. These interfaces are designed for use as intra-building interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE, Issue 5) and require isolation from the exposed OSP cabling. The addition of Primary Protectors is not sufficient protection in order to connect these interfaces metallically to OSP wiring.

Figure 1: Fast Ethernet Line Card Interface Connectors



The system uses these interfaces to connect to other elements in the packet data network.

Each of these interfaces is equipped with two light emitting diodes (LEDs):

- **Link:** This green LED shows whether or not the line card is connected to the network. The LED is illuminated when the card is connected.
- **Activity:** This green LED shows when data is transmitted or received. The LED is illuminated when data is passing through the interface.

Refer to the following figure and table for pinouts for the RJ-45 Ethernet ports.

Figure 2: 10/100 Ethernet Interface Pinouts



Table 1: 10/100 Ethernet Interface Pinouts 0

Pin	100Base-T 100Mbps Cat5
1	TX+
2	TX-
3	RX+
4	Not applicable
5	Not applicable
6	RX-
7	Not applicable
8	Not applicable
RX = Receive Data TX = Transmit Data	



Important

Be sure to label the interface cables with their destinations prior to connecting them to the FLC2. This will assure proper reconnection should the card need to be serviced.

To cable the FLC2, simply plug an STC Ethernet cable from a network device into the desired port.

