



Cable and Port Pinouts

This appendix provides cabling and port pinout information for the SLB switch. This appendix includes the following sections:

- Fast Ethernet Ports, page B-2
- Gigabit Ethernet Ports, page B-3
- Console Port, page B-5
- Auxiliary Port, page B-6

Fast Ethernet Ports

Use modular, RJ-45, straight-through UTP cables to connect the 10/100 Fast Ethernet ports to end systems. Use modular, RJ-45 cross-connect cables to connect to external switches and routers. Figure B-1 shows straight-through cables and Figure B-2 shows cross-connect cables.

Figure B-1 *Straight-Through Cables*

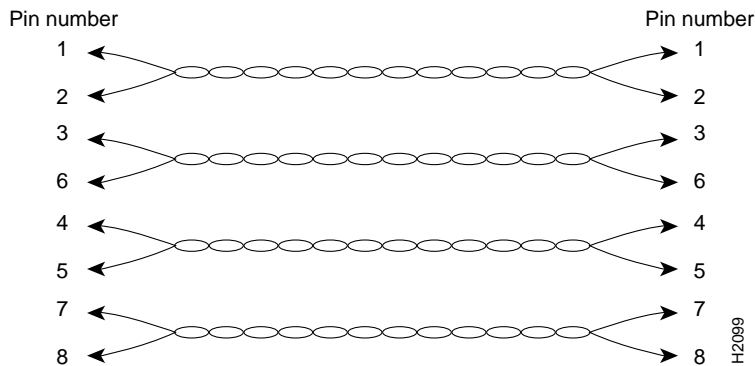
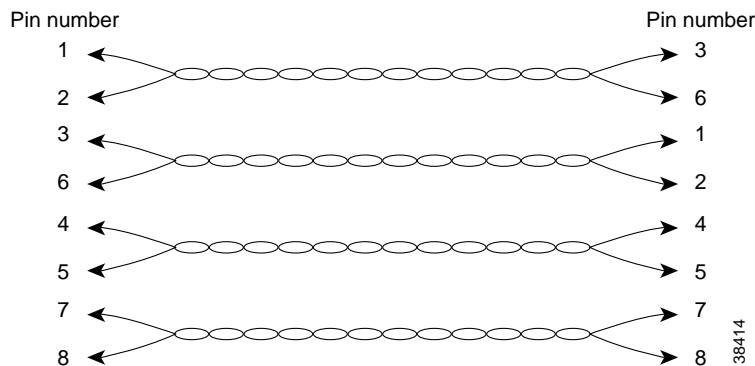


Figure B-2 *Cross-Connect Cables*



The 10/100 Fast Ethernet ports support RJ-45 connectors. Table B-1 lists the signals for RJ-45 cable connectors.

Table B-1 Fast Ethernet Port Pinouts

Pin	Signal	Description
1	RxD+	Receive data +
2	RxD-	Receive data -
3	TxD+	No connection
4	NC	No connection
5	NC	No connection
6	TxD-	No connection
7	NC	Transmit data +
8	NC	Transmit data -

Gigabit Ethernet Ports

Table B-2 describes cabling specifications for the GBICs that you install into the Gigabit Ethernet port modules. All GBICs use SC-type connectors, and the minimum cable distance for all GBICs listed is 6.5 feet (2 meters).

Gigabit Ethernet Ports

Table B-2 Gigabit Ethernet Port Cabling Specifications

GBIC	Wavelength (nm ¹)	Fiber Type	Core Size (micron)	Modal Bandwidth (MHz–km ²)	Cable Distance
SX ^{3,4}	850	MMF ⁵	62.5	160	722 ft (220 m)
			62.5	200	902 ft (275 m)
			50.0	400	1640 ft (500 m)
			50.0	500	1804 ft (550 m)
LX/LH ⁶	1300	MMF ⁷	62.5	500	1804 ft (550 m)
			50.0	400	1804 ft (550 m)
			50.0	500	1804 ft (550 m)
		SMF ⁸ (LX/LH)	9/10	—	32,810 ft (10 km)
ZX ⁹	1550	SMF	Not conditional	—	70 to 100 km

1. nm = nanometers
2. MHz–km = modal bandwidth in MHz transmitted over a distance of 1 km
3. SX = short wavelength
4. MMF only
5. MMF = multimode fiber
6. LX/LH = long wavelength/long haul
7. Patch cord required (see the “Patch Cord” section on page 2-9 for details)
8. SMF = single-mode fiber
9. ZX = extended distance

Console Port

The console port is an RJ-45 receptacle. Data terminal ready (DTR) and data set ready (DSR) handshake signals are supported by this port. The Request To Send (RTS) signal tracks the state of the Clear To Send (CTS) signal. Table B-3 lists the console port pinouts.

Table B-3 Console Port Pinouts

Pin	Signal	Direction	Description
1 ¹	RTS/CTS	Output	Request to send / Clear to send
2	DTR	Output	Data terminal ready
3	TxD	Output	Transmit data
4	SGND	—	Signal ground
5	SGND	—	Signal ground
6	RxD	Input	Receive data
7	DSR	Input	Data set ready
8 ¹	RTS/CTS	Input	Request to send / Clear to send

1. Pin 1 and pin 8 are connected.

Auxiliary Port

The auxiliary port is an RJ-45 receptacle that supports remote console interfaces using a modem. Table B-4 lists the auxiliary port pinouts.

Table B-4 Auxiliary Port Pinouts

Pin	Signal	Direction	Description
1	RTS	Output	Request to send
2	DTR	Output	Data terminal ready
3	TxD	Output	Transmit data
4	SGND	—	Signal ground
5	SGND	—	Signal ground
6	RxD	Input	Receive data
7	DSR	Input	Data set ready
8	CTS	Input	Clear to send