

Troubleshooting

This chapter provides information about troubleshooting issues, if any, on the device:

- Pinouts, on page 1

Pinouts

The following sections describe the pinouts for the device interfaces:

BITS Port Pinouts

The following table summarizes the BITS port pinouts.

Table 1: BITS Port Pinouts

Pin	Signal Name	Direction	Description
1	RX Ring	Input	Receive Ring
2	RX Tip	Input	Receive Tip
3	—	—	Not used
4	TX Ring	Output	TX Ring
5	TX Tip	Output	TX Tip
6	—	—	Not used
7	—	—	Not used
8	—	—	Not used

Time-of-Day Port Pinouts

The following table summarizes the ToD/1-PPS port pinouts.

Table 2: RJ-45 1PPS/ToD Port Pinouts

Pin	Signal Name	Direction	Description
1	RESERVED	Output	Do Not Connect
2	RESERVED	Input	Do Not Connect
3	1PPS_N	Output or Input	1PPS RS422 signal
4	GND	—	—
5	GND	—	—
6	1PPS_P	Output or Input	1PPS RS422 signal
7	TOD_N	Output or Input	Time-of-Day character
8	TOD_P	Output or Input	Time-of-Day character

Alarm Port Pinouts

The following table summarizes the external alarm input pinouts.

Table 3: External Alarm Input Pinouts

Pin	Signal Name	Description
1	ALARM0_IN	Alarm input 0
2	ALARM1_IN	Alarm input 1
3	—	No connect
4	ALARM2_IN	Alarm input 2
5	ALARM3_IN	Alarm input 3
6	—	No connect
7	—	No connect
8	COMMON	Alarm common

Management Ethernet Port Pinouts

The following table summarizes the Management Ethernet port pinouts.

Table 4: Fan Alarm Port Pinout

Pin	Signal Name
1	TRP0+

Pin	Signal Name
2	TRP0-
3	TRP1+
4	TRP2+
5	TRP2-
6	TRP1-
7	TRP3+
8	TRP3-

USB Console Port Pinouts

The table below summarizes the USB console port pinouts.

Table 5: Single USB Console Port Pinouts

Pin	Signal Name	Description
A1	Vcc	+5VDC
A2	D-	Data -
A3	D+	Data +
A4	Gnd	Ground



Note The USB console port +5VDC is input, and operates as an USB peripheral device.

USB Flash or MEM Port Pinouts

The table below summarizes the USB flash or MEM port pinouts.

Table 6: Single USB Flash or MEM Port Pinouts

Pin	Signal Name	Description
A1	Vcc	+5VDC (500mA)
A2	D-	Data -
A3	D+	Data +
A4	Gnd	Ground

Note USB TYPE-A receptacle is used.

Note The USB flash or MEM port +5VDC is output. Cisco ASR 920 Series Aggregation Services Router provides power for USB flash or MEM port. This port operates as a USB host device.

Check Optical Fiber Specifications

Optical fiber transmission defines two types of fiber specification:

- Single mode with three transmission types: short reach, intermediate reach, and long reach.
- Multimode with only short reach.

For information about optical SFP modules, see Connecting Gigabit Ethernet High-Speed WAN Interface Cards.

Check Alarm Conditions

The following table summarizes the meaning of alarm conditions on the device.

Table 7: Alarm Conditions Summary

Alarm Type	Alarm Meaning
Critical	Port in down state. Environmental sensor threshold exceeded critical level (voltage, temperature).
Major	Environmental sensor threshold exceeded major level (voltage, temperature).
Info	Port is administratively shut down.