

LEDs

You can perform the following check on LEDs that assist you with the troubleshooting process:

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Chassis LED

The LEDs indicate whether each type of module (Route Processor, line cards, fabric cards, fan trays, and power supplies) is fully functional or have a fault condition.

Table 1: Chassis LED Descriptions

LED	Color	Status
ATTN (Attention) 	Blue	The operator has activated this LED to identify this chassis.
	Off	The chassis is not functional.

Port Status LEDs

Note The 8800-LC-48H does not have port LEDs.

Each port on the 8800-LC-36FH has an LED. The following table describes port status LEDs.

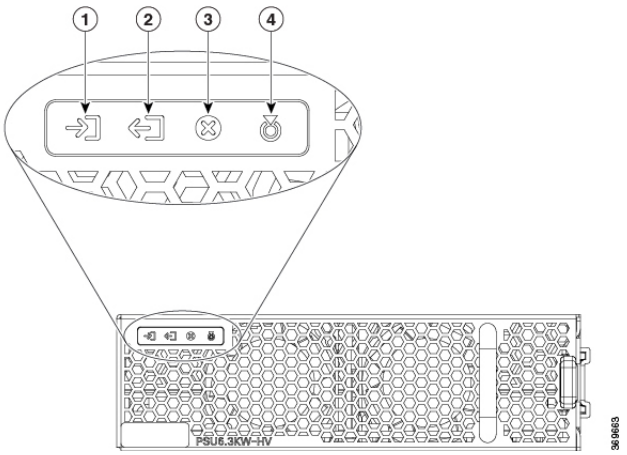
Table 2: Port Status LEDs (One Per Port)

LED Color	Description
Off	Port is administratively shut down.
Green	Port is administratively enabled and the link is up.
Amber	Port is administratively enabled and the link is down.
Flashing Amber	Port is faulty and disabled.

Power Supply LEDs

The power supply LEDs are located on the front portion of the module.

Figure 1: Power Supply LEDs



1	Input OK	3	Fault
2	Output OK	4	ATTN (Attention)

Table 3: Power Supply LED Descriptions

LED	Color	Status
Input OK	Green	Both input voltages are present.
	Flashing Green	Only one input power is present.
	Off	No input power is present.

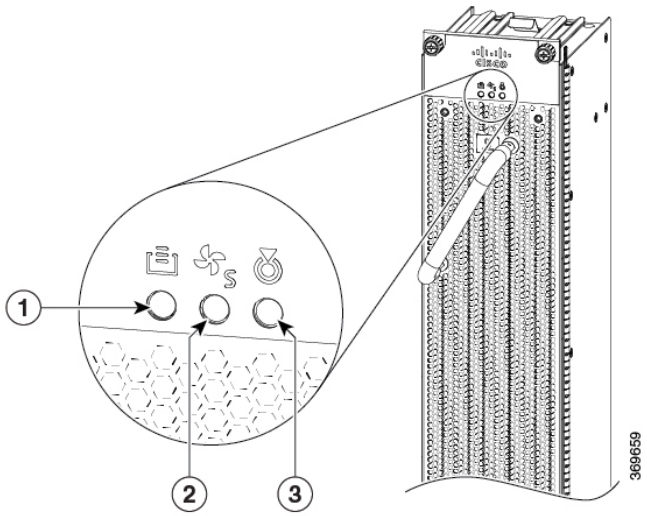
LED	Color	Status
Output OK	Green	Output power is enabled.
	Flashing Green	Output power in power limit, or in overcurrent condition, or is in the sleep-mode.[1]
	Off	Output disabled, or no inputs present, or firmware upgrade in-progress.
Fault	Red	Output voltage is out of the specified range, or a fan has failed, or internal fault.
	Flashing red	Firmware upgrade in-progress.
ATTN (Attention) 	Flashing blue	User configured action *config hw-module attention-led location 0/PTx/PMy*.
	Off	No user configuration is set.

[1] Sleep mode is not applicable for DC-60 power module.

Fan Tray LEDs

The fan tray LEDs are located on the top portion of the module.

Figure 2: Fan Tray LEDs



1	FC STS (Status)	3	ATTN (Attention)
2	FT STS (Status)		

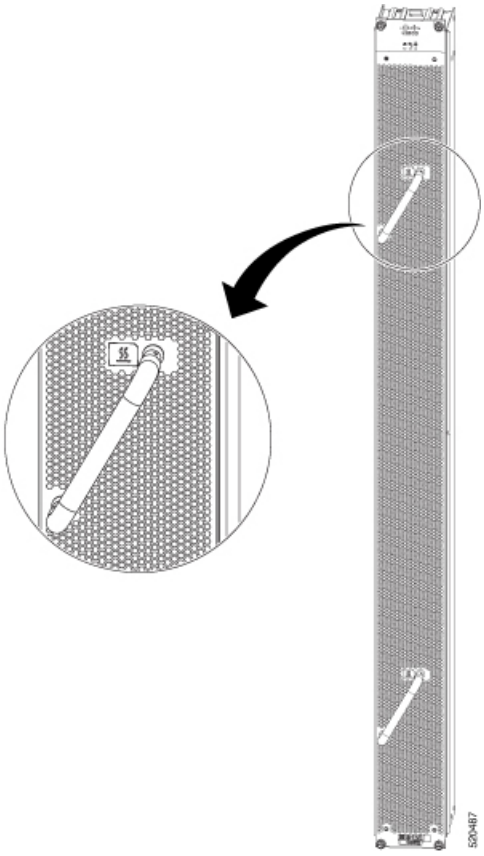
Table 4: Fan Tray LED Descriptions

LED	Color	Status
ATTN (Attention) 	Flashing Blue	The operator has activated this LED to identify the fan tray in the chassis.
	Off	The operator had not activated the LED to identify the fan tray in the chassis.
FT STS	Amber	The fan tray is powered on.
	Green	The fan tray is operational.
	Flashing amber	The module has minor alarm.
	Flashing red	The module has active major or critical alarms.
	Flashing green	FPD upgrade in-progress.
	Off	No power to the fan tray.
FC STS	Amber	The fabric cards are powered on and is in one of the following states: • Either one or more fabric cards behind this fan tray is not operational. • Either one or more fabric cards behind this fan tray have minor, major or critical alarm.
	Green	• One of the fabric modules is operational and other one not present. • Both fabric cards behind this fan tray are operational.
	Off	If both the fabric modules behind this fan tray are plugged out (or not present).

Temperature Warning Label

Every fan tray has a temperature warning label beside its handle. The temperature warning label is temperature sensitive. At normal operating temperatures (less than 55°C), the warning label has a black background with black edges. At temperatures above 55°C, the background color changes to white and the edges' color changes to red.

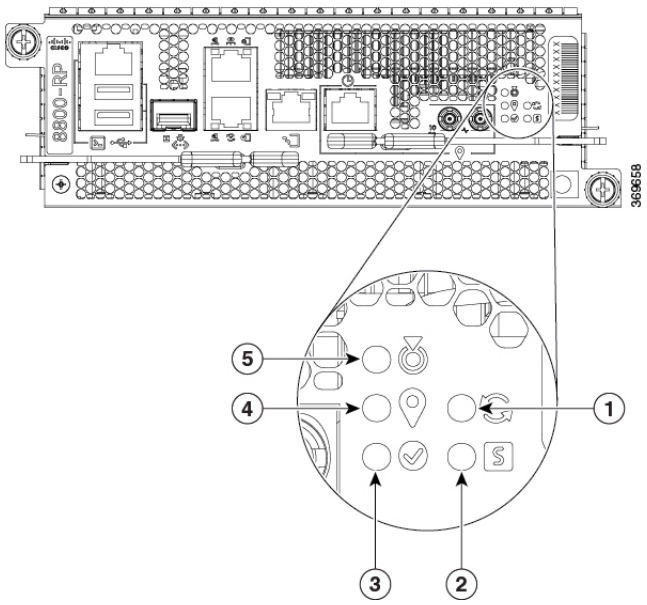
Figure 3: Temperature Warning Label



Route Processor Card LEDs

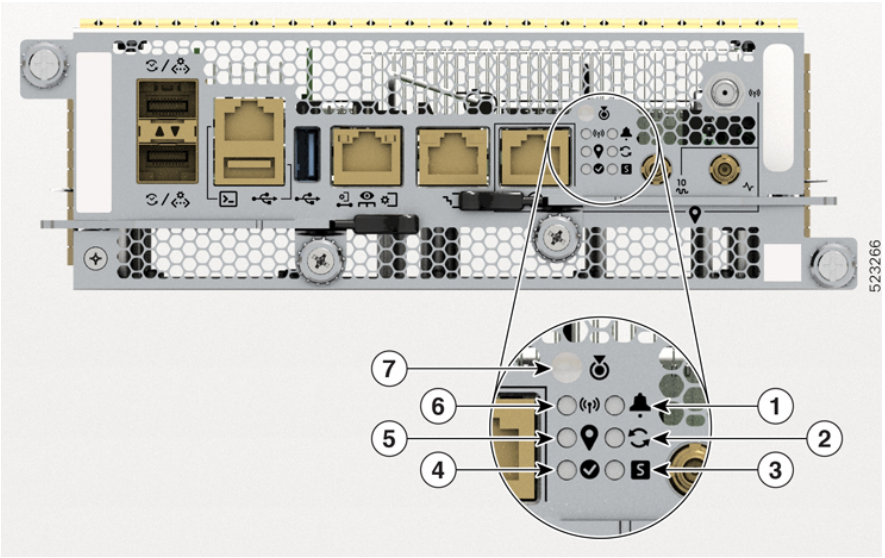
The Route Processor LEDs are located on the front of the module.

Figure 4: Route Processor LEDs - 8800-RP



1	Sync	4	GPS
2	Status	5	Attention
3	Active		

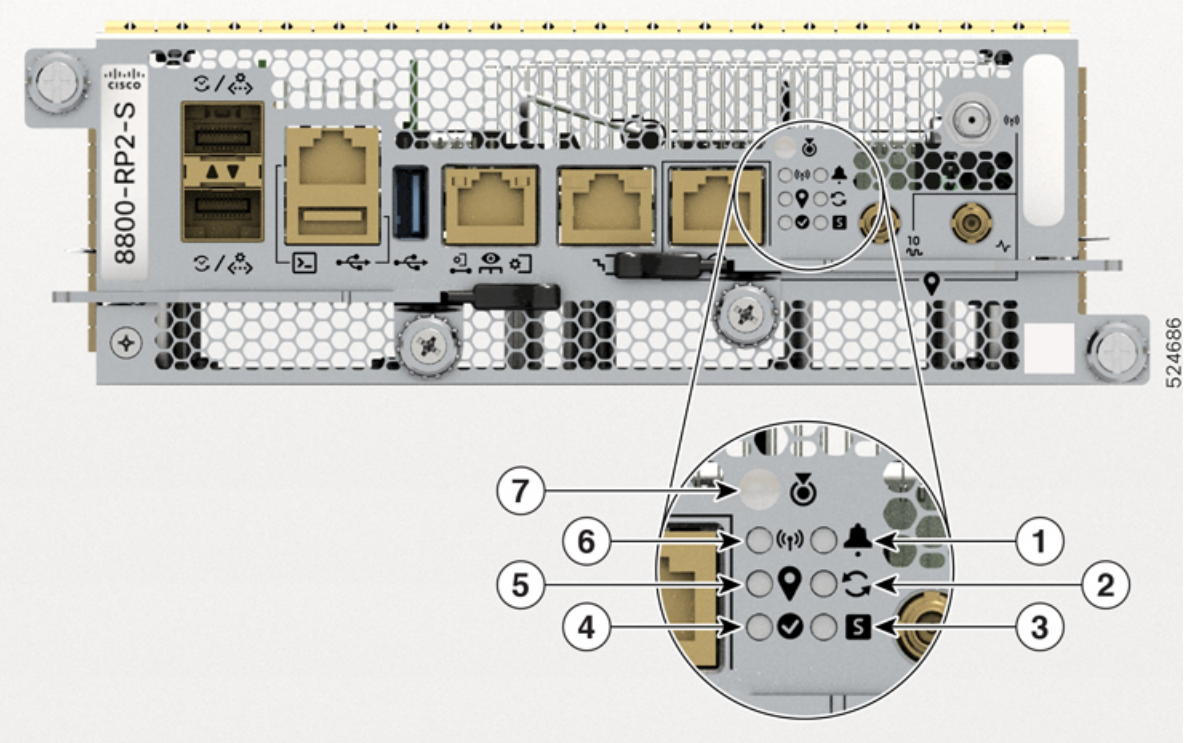
Figure 5: Route Processor LEDs - 8800-RP2



1	Alarm	5	GPS
2	Sync	6	GNSS

3	Status	7	Attention
4	Active		

Figure 6: Route Processor LEDs - 8800-RP2-S



1	Alarm	5	GPS
2	Sync	6	GNSS
3	Status	7	Attention
4	Active		

Table 5: Route Processor Card LED Descriptions

LED	Color	Status
Attention 	Flashing blue	The operator has activated this LED to identify this module in the chassis.
	Off	This module is not being identified.

LED	Color	Status
Status 	Green	This router processor is operational with no issues.
	Flashing green	The auto or manual FPD upgrade in-progress.
	Flashing amber	The module has minor alarm.
	Flashing red	The module has active major or critical alarms.
	Amber	The module is in one of the following states: • Power cycle • Reload or reimage • Shutdown
	Red	For 8800-RP: • BIOS boot failure. Also, the Attention LED remains blue. For 8800-RP2: • BIOS boot failure. • Card power-up failure. Also, the Attention LED remains Off. This allows you to distinguish the status between BIOS boot failure and card power-up failure.
	Off	The module is not enabled.
Active	Green	The RP/RSP is in the Active state.
	Off	The RP/RSP is in the Standby state.
GPS 	Green	The GPS interface is provisioned and frequency, time of day and phase inputs are all operating correctly.
	Off	The GPS interface is not provisioned, or the GPS inputs are not working correctly.
Sync 	Green	The frequency, time, and phase are synchronized to an external interface. The external interface could be: • BITS • GPS • Recovered RX Clock
	Amber	The system is running in holdover or free-run mode and it is not synchronized to an external interface.
	Off	The centralized frequency or time and phase distribution is not enabled.

LED	Color	Status
GNSS 	Green	GNSS receiver interface is up.
	Off	GNSS receiver interface could be: • not provisioned • shutdown
Alarm 	Flashing Red	Chassis-wide Critical Alarm (on active RP)
	Flashing Amber	Chassis-wide Major Alarm (on active RP)
	Solid Amber	Chassis-wide Minor Alarm (on active RP)
	Off	No Alarm (on active RP) Not applicable (on standby RP)

Fabric Card LEDs

The fabric cards are located behind the fan trays.

Note The fabric cards are located behind the fan tray. Therefore, the fabric card LEDs are seen when the fan tray is removed.

Table 6: Fabric Card LED Descriptions

LED	Color	Status
ATTN (Attention) 	Flashing blue	The operator has activated this LED to identify this module in the chassis.
	Off	This module is not being identified.

LED	Color	Status
STS 	Green	The fabric card is operational with no issues.
	Flashing green	Auto or manual FPD upgrade in-progress.
	Amber	The module is in one of the following states: • Power cycle • Reload or reimage • Shutdown
	Flashing red	The fabric card has major or critical alarms.
	Flashing amber	The module has minor alarm.
	Off	No power is going to the fabric card.

Line Card LEDs

The line card has LEDs located on the right of the front panel.

Table 7: Line Card LED Descriptions

LED	Color	Status
ATTN (Attention) 	Flashing blue	The operator has activated this LED to identify this module in the chassis.
	Off	The line card is not enabled.

LED	Color	Status
STS (Status) 	Amber	The module is in one of the following states: • Power cycle • Reload or reimage • Shutdown
	Green	This module is operational with no issues.
	Flashing green	The auto or manual FPD upgrade in-progress.
	Flashing amber	The module has a minor alarm.
	Flashing red	The module has active major or critical alarms.
	Red	BIOS boot failure. Also, the ATTN LED remains blue.
	Off	The module is not enabled.