

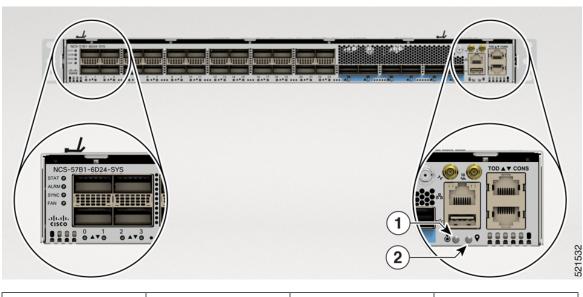
### **LEDs**

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### **Chassis LEDs**

On the NCS-57B1 chassis, the STATUS, ALARM, SYNC, and FAN LEDs are located at the far-left of the front panel. Power and GNSS LEDs are located at the far-right of the front panel, just below the USB port.

Figure 1: NCS-57B1 Chassis LEDs



On the NCS-57C3-MOD chassis, the STATUS and ATTN LEDs are located on the lower-right of the chassis. The SYNC and GNSS LEDs are located below the RPs.

See Route Processor Card LEDs, on page 5 for the NC57-MOD-RP2-E route processor LEDs.

Figure 2: NCS-57C3-MOD Chassis LEDs

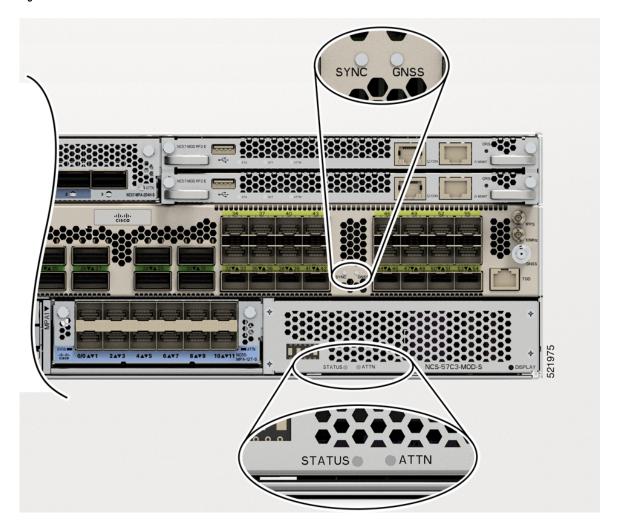
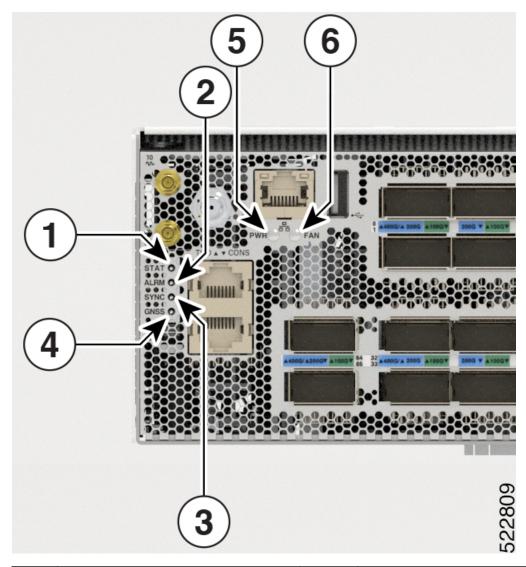


Figure 3: NCS-57D2 Chassis LEDs



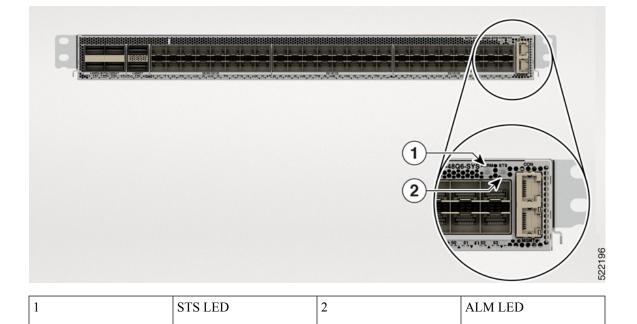
1	STAT LED	4	GNSS
2	ALRM	5	PWR
3	SYNC	6	FAN

Table 1: LED Descriptions

LED	Color	Status	
STAT	Green	The module is operational and has no active major or critical alarms.	
	Blinking Amber	The module is booting up.	
	Amber	Host kernel booted and is ready to start XR.	
	Off	The module is powered-off.	
ALRM	Red	Critical alarm - system-scope (including RP0).	
(ALARM)	Amber	Major alarm - system-scope (including RP0).	
	Off	No alarm.	
SYNC	Green	SyncE PLL is locked to an input source.	
	Amber	SyncE PLL not-locked to any input source.	
	Off	SyncE not configured.	
FAN	Green	Fans are working normally.	
	Amber	System is operating with one fan failure.	
	Red	Missing a fan or multiple fan failures.	
POWER (PWR)	Off	Chassis not receiving power.	
	Green	Chassis powered on and normal.	
	Amber	Chassis powered off and in retry mode due to thermal or fan failure.	
	Red	Chassis power failure.	
		Power supply failure, due to one of the following conditions:	
		Over voltage	
		Over current	
		Over Temperature	
		• Fan failure	
GNSS	Off	GNSS is not configured.	
	Green	GNSS is locked to an RF input (Satellites).	
	Amber	GNSS Receiver not-locked RF input (Satellites).	

On the NCS-57C1 chassis, the STS (status) and ALM (alarm) LEDs are located at the top right corner of the front panel. No LEDs are present for SYNC and GNSS interfaces.

Figure 4: NCS-57C1 Chassis LEDs



**Table 2: LED Descriptions** 

LED	Color	Status
STS (STATUS)	Green	The module is operational.
	Blinking Amber (slow)	The module is booting up.
	Blinking Amber (fast)	The module is booting up, shutting down, or the SysAdmin VM is being reloaded.
	Off	The module is powered-off.
ALM (ALARM)	Red	Critical alarm.
	Amber	Major alarm.
	Blinking Amber	Minor alarm.
	Off	No alarm.

### **Route Processor Card LEDs**

On the NC57-MOD-RP2-E route processor card, the Status (STS), Active (ACT), and Attention (ATTN) LEDs are located on the lower left front of the route processor card. The management port link and active LEDs are located immediately below the port on the front of the module.

Figure 5: NC57-MOD-RP2-E LEDs



1	STS (Status) LED
2	ACT (Active) LED
3	Attention (ATTN) LED

#### **Table 3: Route Processor Card LED Descriptions**

LED	Color	Status
STS (Status)	Green	This module is operational.
	Flashing amber	The module is booting up or shutting down.
	Flashing red	The module has active major or critical alarms.
	Amber	Host kernel booted and is ready to start System Administrator VM.
	Red	Either of the following conditions:
		The module has detected a slot ID parity error and will not power on or boot up.
		The module is not fully inserted.
	Off	The module is not receiving power.
ACT (Active)	Green	XR VM is operational and is in the active redundancy role on this module.
	Amber	XR VM is operational and is in the standby redundancy role on this module.
	Off	XR VM is not operational on this module.
ATTN (Attention)	Flashing blue	The operator has activated this LED to identify this module in the chassis.
	Off	This module is not being identified.
Management port	Green	The management port is linked up.
LINK	Off	The management port is not linked up.

LED	Color	Status
Management port ACT	Flashing green	The management port is transmitting or receiving.
ACI	Off	The management port is not transmitting or receiving.

#### **Port Status LEDs**

The front panel of the NCS-57B1 chassis consists of the following ports for data path connectivity through optical modules:

- NCS-57B1-5DSE-SYS: x24 QSFP28 ports, x5 QSFP-DD
- NCS-57B1-6D24-SYS: x24 QSFP28 ports, x6 QSFP-DD

The front panel of the NCS-57C1 chassis consists of the following ports for data path connectivity through optical modules:

• NCS-57C1: x6 QSFP-DD ports, x16 SFP-50G ports, and x32 SFP-25G ports



Note

In the NCS-57C1 routers, there are additional thermal vent perforations next to the port status LEDs. These perforations are meant to provide additional air flow for cooling the chassis. The LED status of a port can be viewed from these perforations as well.

The front panel of the NCS-57D2 chassis consists of the 66 QSFP-DD ports for data path connectivity through optical modules:

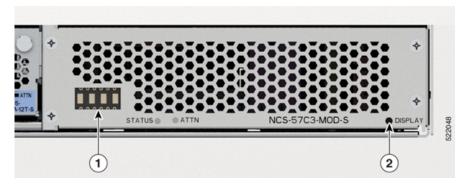
Each port consists a bi-color (Green and Amber) LED for indicating various status information of the optical ports.

Table 4: NCS-57B1, NCS-57C1, NCS-57D2 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.

## **Port Status LED Display**

The NCS-57C3-MOD front panel LED display shows the status of the ports.



Port Status LED Display 2 DispLAY Mode Button	1	Port Status LED Display	2	DISPLAY Mode Button
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The display uses a ##BB format that shows the port number (##) and the status (BB). Status can be green (GN) or yellow (YL) or red (RD). The display cycles through each port number in 1-second intervals.

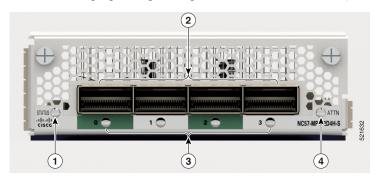
By default, the display shows all ports and their status. You can change the display mode to show only ports that are in yellow (YL) state by pressing the DISPLAY button for less than 4 seconds and release. To return to the default behavior, press and hold the DISPLAY button for more than 5 seconds and release.

Table 5: NCS-57C3 Port Status LED Display

LED Display	Description	XR Show Controller LED Status
GN	Port is administratively enabled, link is up.	Green
YL	Port is administratively enabled, link is down.	Yellow
RD	Port is administratively shut down.	No option to print

### **MPA LEDs**

The STATUS LED is located on the front left of the MPA and the attention (ATTN) is located on the front right of the MPA. The Link LED for each port is located either between the two rows of ports (each of these LEDs is a triangle pointing to the port above or below the LED) or under the port.

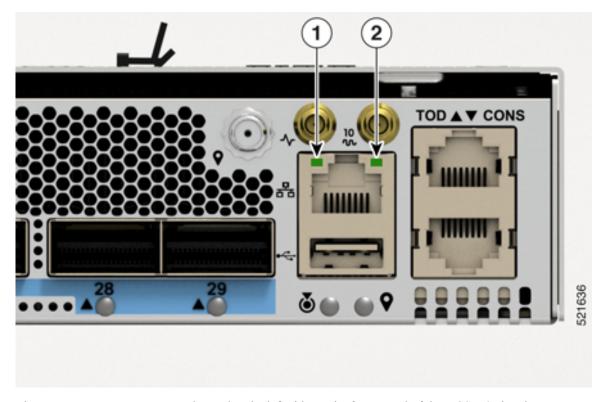


LED	Color	Status
ATTN	Flashing blue	The operator has activated this LED to identify this MPA in the chassis.
	Off	This LED is not being used.
STATUS	Green	This MPA is operational.
	Amber	Either of the following conditions:
		The MPA has detected a slot ID parity error and will not power on or boot up.
		• The MPA is not fully inserted.
	Flashing amber	The MPA is booting up or shutting down.
	Off	The MPA is powered-off and can now be safely removed.
Link (for	Green	The port is active.
each port)	Orange	The port is disabled by the operator or is not initializing.
	Flashing orange	The port is faulty and disabled.
	Off	The port is not active or the link is not connected.

# **Management Port LEDs**

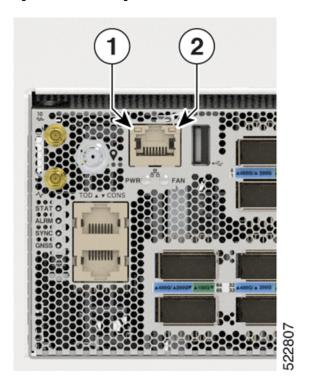
The Management Port LEDs are located at the right-side on the front panel of the NCS-57B1 and NCS-57C3 chassis.

Figure 6: NCS-57B1 and NCS-57C3 Management Port LEDs



The Management Port LEDs are located at the left-side on the front panel of the NCS-D2 chassis.

Figure 7: NCS-57D2 Management Port LEDs



1	Port Activity
2	Port Link

#### Table 6: NCS-57B1, NCS-57C3, and NCS-57D2 Management Port LEDs Description

LED	Color	Status
Port Activity	Green	The ethernet link is up and operational.
	Off	The ethernet link is down.
Port Link	Green Blinking	The port is either receiving or transmitting packets.
	Off	No packets are being received or transmitted.

The Management Port LEDs are located at the bottom right-side on the front panel of the NCS-57C1-48Q6-SYS chassis.

Figure 8: NCS-57C1 Management Port LEDs



1	Port Activity
2	Port Link

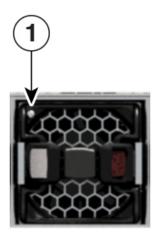
Table 7: NCS-57C1 Management Port LEDs Description

Color	Status
Green	The 1000M link is up and operational.
Green Blinking	The port is either receiving or transmitting packets at 1000M.
Green and Red	The 100M link is up and operational.
Green and Red Blinking	The port is either receiving or transmitting packets at 100M.
Red	The 10M link is up and operational.
Red Blinking	The port is either receiving or transmitting packets at 100M.
Off	The link is down.

## **Fan Module and Fan Tray LED**

The NCS-57B1 and NCS-57C1 fan module LED is located on the top-left corner of the module.

Figure 9: NCS-57B1 or NCS-57C1 Fan Module LED



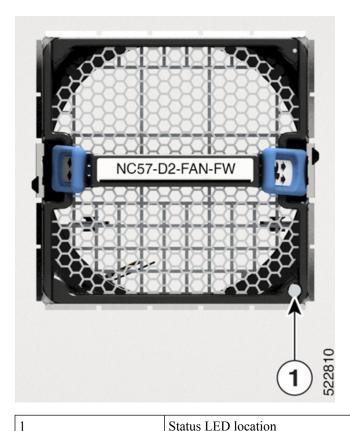
The NCS-57C3-MOD fan tray LED is located on the bottom-left corner of the module.

Figure 10: NCS-57C3-MOD Fan Tray LED



The NCS-57D2 fan tray LED is located on the bottom-right corner of the module.

Figure 11: NCS-57D2 Fan Tray LED



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LED	Color	Status
STATUS	Green	Fan is operating normally.
	Red	Fan failure.
	Off	Fan is not receiving power.

# **Power Supply LED**

In NCS 57B1 and NCS-57C3-MOD routers, the power supply LED is located on the lower-right corner portion of the power module.

Figure 12: NCS 57B1 Power Supply LED

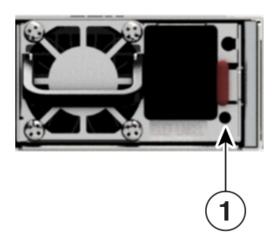


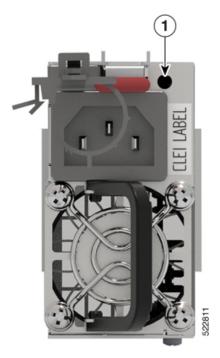
Figure 13: NCS-57C3-MOD Power Supply LED



Power supply LED

In the NCS-57D2 router, the DC power supply LED is located on the top-right corner portion of the power module.

Figure 14: NCS-57D2 DC Power Module



Power supply LED

In the NCS-57D2 router, the AC power supply LED is located on the top-right corner portion of the power module.

Figure 15: NCS-57D2 AC Power Module



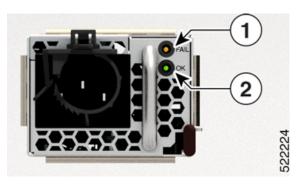
1	Power supply LED	

**Table 8: Power Supply LED Descriptions** 

LED	Color	Status	
STATUS	Green	Power supply is on and transmitting power to the router.	
	Blinking Green	Power supply is connected to input power source but not transmitting power to the router.	
	Amber	Power supply failure, due to one of the following conditions:	
		Over Voltage	
		Over Current	
		Over Temperature	
		• Fan Failure	
	Blinking Amber	Power supply is operating but a warning condition has occurred, due to one of the following conditions:	
		High temperature	
		High power	
		• Slow fan	
	Off	Power supply units are not receiving power.	

In the NCS-57C1 router, the power supply LEDs are located on the top-right corner portion of the power module. Each power module has an OK and a FAIL LED.

Figure 16: NCS-57C1 Power Supply LED



1	Fail	2	OK
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Table 9: NCS-57C1 Power Supply LED Descriptions

OK LED	FAIL LED	Status
Green	Off	Power supply is on and supplying power to the router.

OK LED	FAIL LED	Status	
Flashing green	Off	Power supply is connected to input power source but not supplying power to the router. The power supply might not be properly installed in the chassis.	
Off	Off	Either all of the installed power supplies are not receiving power or an uninstalled power supply is not receiving power.	
Off	Flashing amber	Power supply is operating but a warning condition has occurred—possibly one of the following conditions:  • High temperature  • High power  • Slow power supply fan  • Low voltage  • Power supply is installed in the chassis but was disconnected from the power source	
Off	Amber	Power supply failure—possibly one of the following conditions:  • Over voltage  • Over current  • Over temperature  • Power supply fan failure	