# Overview

The Cisco Catalyst 8500L-8S4X Edge Platform significantly increases services performance, router throughput, and router scale at lower costs. This document covers only hardware installation specific details for Cisco Catalyst 8500-8S4X Edge Platform.

For more information on the features and specifications, refer to the Cisco Catalyst 8500-8S4X Edge Platform datasheet.

This chapter contains the following sections:



# Hardware Features of Cisco Catalyst 8500L-8S4X Edge Platform

This section describes the hardware features of Cisco Catalyst 8500L-8S4X Edge Platform.

***Table 1: Hardware Features***

| Feature | C8500L-8S4X |
|---|---|
| **Description** | 4-port 1/10GE, 8-port 1GE |
| **Rack Unit** | One |
| **SSD Storage** | Optional SSD M.2 NVMe 2 TB upgrade for additional storage on the platform |
| **System Memory (RAM)** | 16 GB default DRAM and can be upgraded to 32 GB ( one 32GB DIMM or two 16 GB DIMM) or 64 GB (two 32 GB DIMM) for higher scale |
| **Boot flash Storage** | 32 GB internal boot flash storage |
| **Management Interface RJ-45** | RJ-45 console port |
| **Micro-USB Console Port** | Supported |

| Feature | C8500L-8S4X | | |
|---|---|---|---|
| Power Supplies | **PID** | **Input-type** | **Input** |
| | PWR-CH1-400WAC | AC | 100 to 240 Vac |
| | PWR-CH1-400WDC | DC | +48 to +60 Vdc<br>-48 to -60 Vdc |
| | PWR-CC1-400WHV | HVAC/HVDC | 100 to 277 Vac<br>240 to 380 Vdc |
| **USB Ports** | Two USB 3.0 ports for USB flash sticks | | |
| **Rack Installation** | Two post and four post | | |
| **Supported Transceivers** | 8X 1GE SFP,4X 10G SFP+<br>1G SFP or 10G SFP+ can be configured with dual-rate 10GE ports as follows:<br>**10G SFP+ on dual-rate 10GE Interface:** Auto-negotiation protocol is not supported, and automatic negotiation cannot be configured using **negotiation auto** command.<br>**1G SFP on dual-rate 10GE Interface:**Auto-negotiation protocol is supported, and automatic negotiation can be configured using **negotiation auto** command. To disable auto negotiation, use **no negotiation auto** command. | | |

# Bay Configuration

The Cisco Catalyst 8500L-8S4X Edge Platform has one RJ-45 Ethernet Management port and multiple Small Form-Factor Pluggable ports.

## GE or SFP Ports

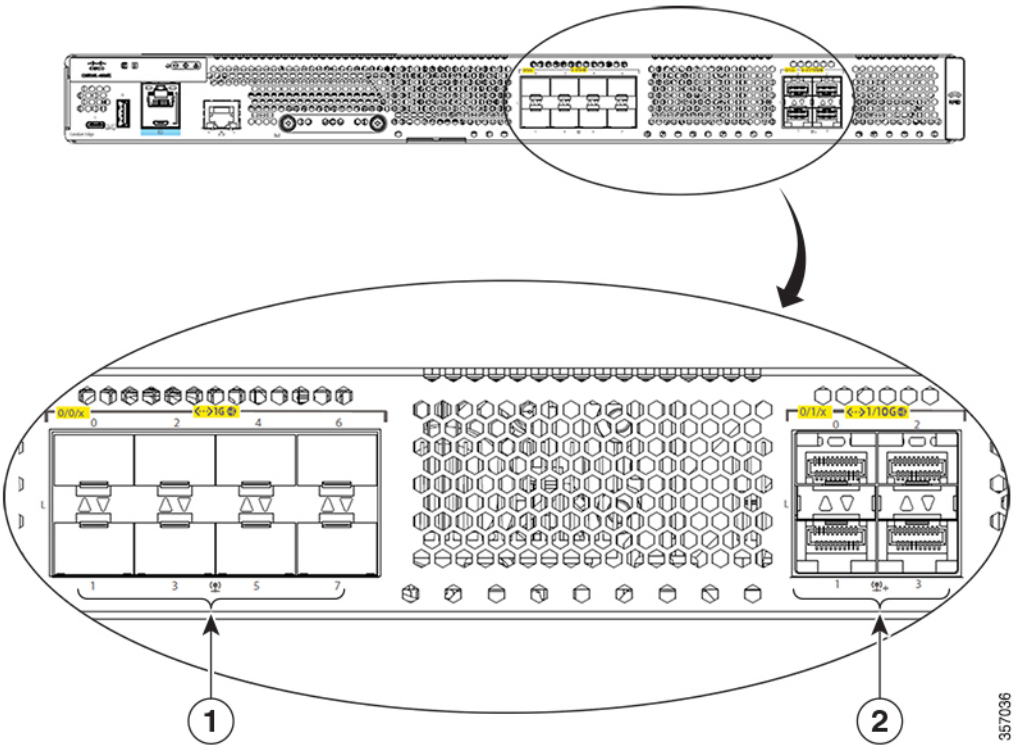
### Management Ethernet Port

The Catalyst 8500L-8S4X Edge Platform has one Gigabit Ethernet Management Ethernet interface. The purpose of this interface is to allow users to perform management tasks on the router, often through Telnet and SSH. It is not designed to forward network traffic. The Gigabit Ethernet Management Ethernet interface supports 10/100/1000Mbps speed.

### SFP Ports

The small form-factor pluggable (SFP) ports support SFP and SFP + modules. The Bay 0 (0/0/n) ports support SFP modules with with maximum 1Gbps speed. The Bay 1 (0/1/n) ports support SFP+ modules with 1Gbps & 10Gbps speed.

*Figure 1: C8500L-8S4X Chassis - GE and SFP Ports*




| | |
|---|---|
| 1 | 8X 1GE SFP Ports |
| 2 | 4X 10G SFP+ Ports |

# Memory

Cisco Cisco Catalyst 8500L-8S4X Edge Platform contain DIMMs that store running configuration and routing tables, and are used for packet buffering by the network interfaces.

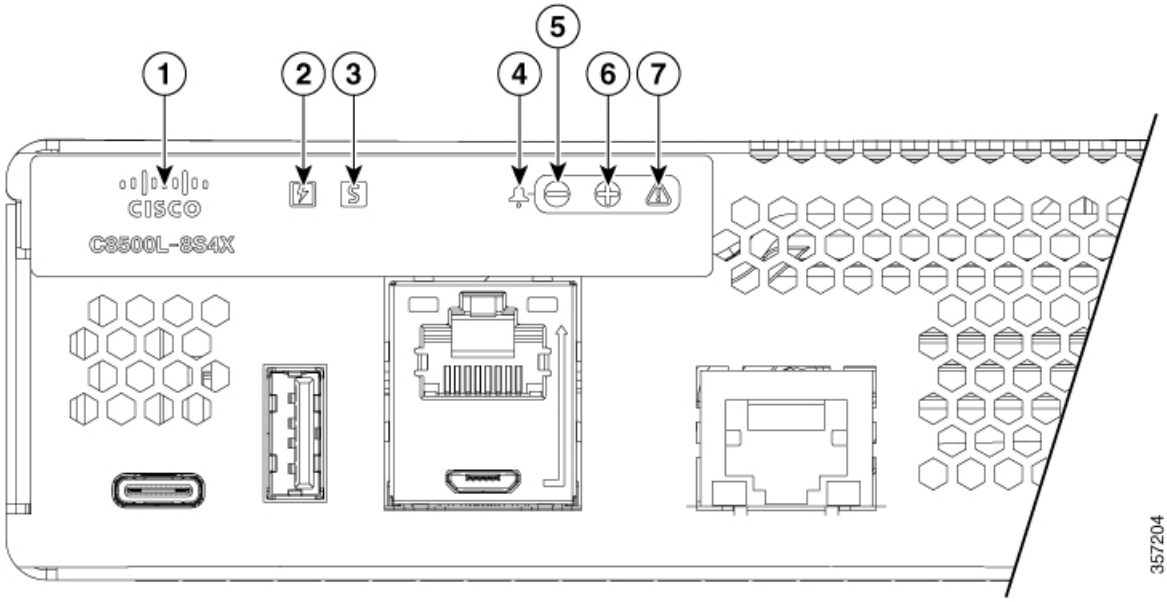
- Boot/NVRAM—Stores the bootstrap program (ROM monitor) and the configuration register. The boot/NVRAM is not serviceable.
- Internal memory—Internal bootflash memory
- Removable slot for M.2 card—Available in 16GB, 32GB M.2 USB and 600GB M.2 NVMe SSD
- DRAM options
  - MEM-C8500L-16GB (default)
  - MEM-C8500L-32GB (upgrade with one 32 GB DIMM or two 16 GB DIMM)
  - MEM-C8500L-64GB (upgrade with two 32 GB DIMM)

# Power Supply

The Cisco Catalyst C8500L-8S4X devices include two Field Raplaceable Unit (FRU) PSUs that support N+1 redundancy and it can function even if one of the two PSUs fail.

# LEDs for Cisco Catalyst C8500L-8S4X Edge Platform

*Figure 2: LEDs for Cisco Catalyst C8500L-8S4X Edge Platform*




| | | | |
|---|---|---|---|
| 1 | Backlit Logo Label | 2 | Power |
| 3 | Status | 4 | Alarm icon (not lit) |
| 5 | Minor Alarm | 6 | Major Alarm |
| 7 | Critical Alarm | | |

*Table 2: LEDs Indicators*

| LED | Color | Description |
|---|---|---|
| CISCO LOGO | Blue | **Cisco Logo LED**<br>Off: The system is powered off<br>Blue: The system is powered on |

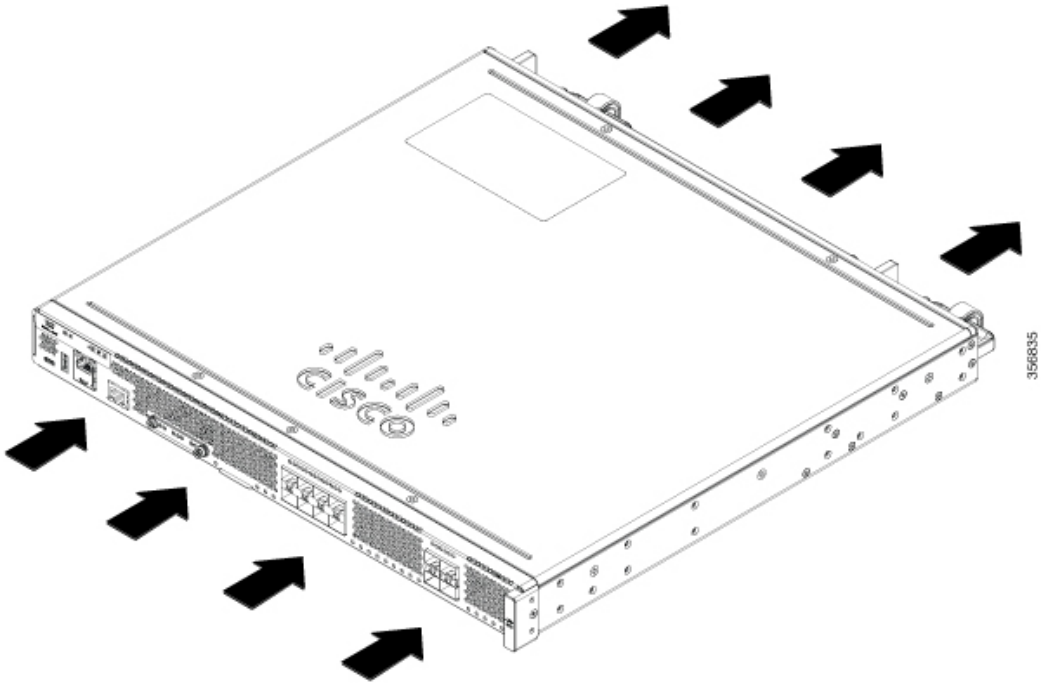
| LED | Color | Description |
|---|---|---|
| POWER | Green/Amber | **Power Supply Status**<br>Off: The system is powered off<br>Yellow: A Power Supply in the system is not functioning correctly<br>Green: Both PSUs are installed and operating correctly |
| STATUS | Green/Amber/Red Blinking | **System Status**<br>Red: The system is booting<br>Red Blinking Red: The system has failed a hardware integrity error<br>Yellow: Rommon has completed booting and system is at Rommon prompt or booting platform software.<br>Green: Normal System Operation |
| USB CON | Green | **USB Console Active**<br>Green indicates that the active console port is USB. |
| RJ-45 CON | Green/Yellow | **Serial Console Active**<br>Green indicates that RJ-45 is the active console port. |
| SFP LINK | Green | **SFP port 0/1 Link LED**<br>Off: No Link (or not present)<br>Green: Link established<br>Yellow: Loss of Signal |

# Fans, Ventilation, and Airflow

## Chassis Ventilation

The chassis temperature is regulated with internal fans. An onboard temperature sensor and pressure sensor controls the fan speed. The fans are always on when the device is powered on. Under all conditions, the fans operate at the slowest speed possible to conserve power and reduce noise. When necessary, the fans operate at higher speeds under conditions of higher ambient temperature and and altitude.

*Figure 3: Airflow of Cisco C8500L-8S4X*




# Chassis Views

This section contains views of the power supply and I/O panels of the Cisco Catalyst 8500L-8S4X Edge Platform, showing the locations of power and signal interfaces, status indicators, and chassis identification labels:

# Chassis Views

*Figure 4: Cisco C8500L-8S4X Chassis - I/O Side*

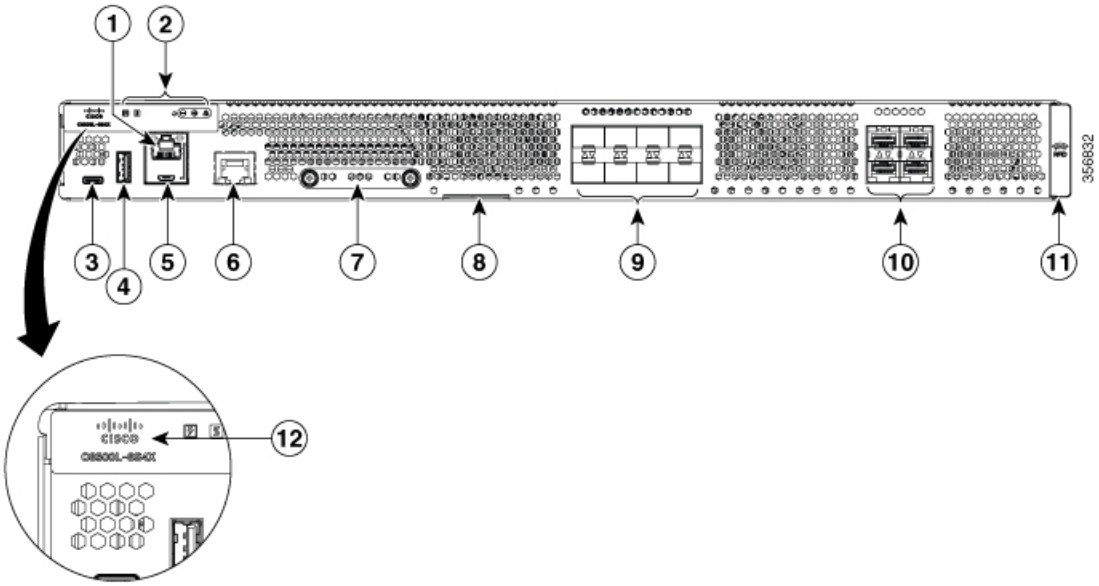



*Table 3: I/O Side*

| | | | |
|---|---|---|---|
| 1 | RJ45 Console Port | 2 | Status Indicator LEDs |
| 3 | USB Type C Slot | 4 | USB Type A Slot |
| 5 | Micro-USB Console | 6 | Management Ethernet Port GigabitEthernet0 |
| 7 | M.2 USB/NVMe Card Slot | 8 | Device Label Tray |
| 9 | SFP Ports GigabitEthernet 0/0/0-0/0/7 | 10 | SFP+ Ports TenGigabitEthernet 0/1/0-0/1/3 |
| 11 | RFID (Provisionable) | 12 | Backlit Logo |

*Figure 5: C8500L-8S4X Chassis - PSU/Fan Tray Side*

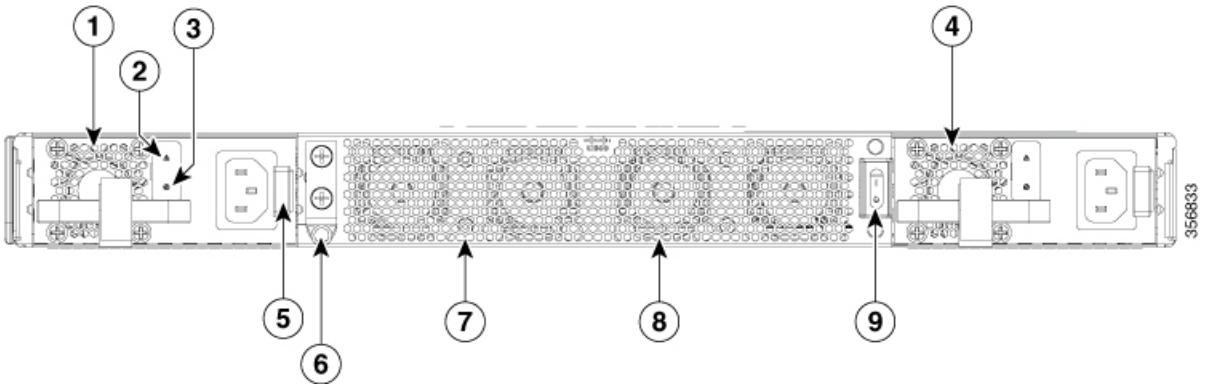


*Table 4: PSU/Fan Tray Side*

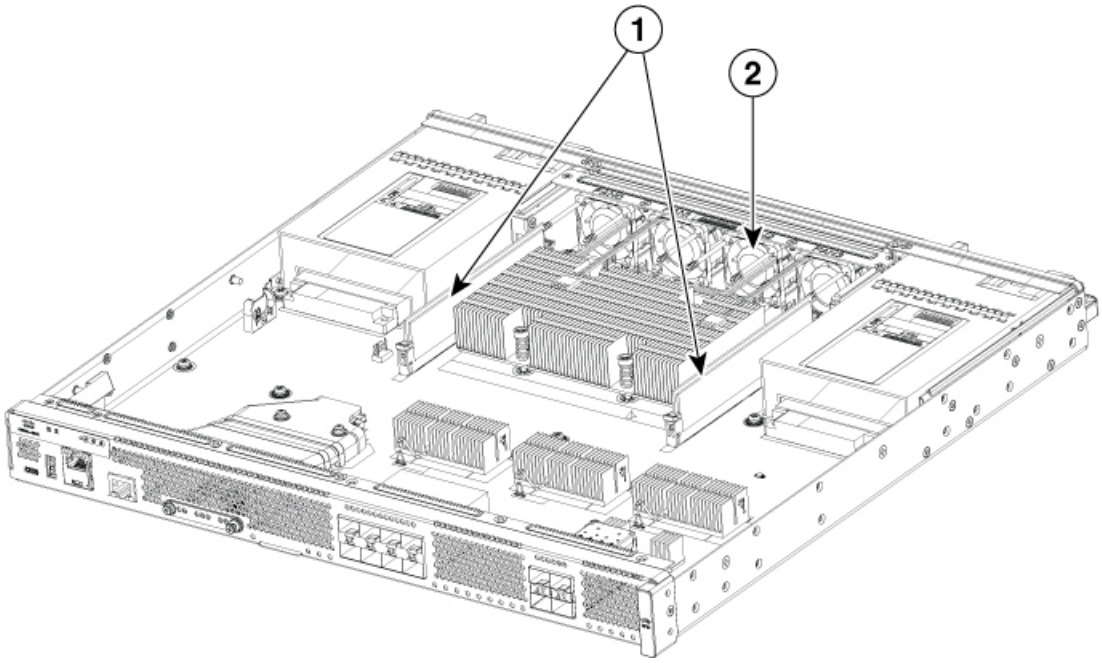
| | | | |
|---|---|---|---|
| 1 | Power Supply 1 (PSU1) | 2 | ALARM Fail LED |
| 3 | Status LED | 4 | Power Supply 0 (PSU0) |
| 5 | PSU Latch | 6 | Ground Lug |
| 7 | Fan Tray Vent | 8 | Internal Fans |
| 9 | Power Switch | | |

For detailed information on LEDs, see the the section on LED indicators.

## Platform Summary

The figure below shows the internal view of with parts and module locations.

*Figure 6: Platform Summary of C8500L-8S4X*




| | |
|---|---|
| 1 | DIMMs |
| 2 | Fan Tray |

# Power Supplies

The Cisco 8500L -8S4X supports dual 400W Power supplies that operate in redundant mode. The 3 different input types are:

- AC
- DC
- HVAC/HVDC

*Table 5: Cisco 8500L-8S4X Power Supplies*

| PID | Input-type | Input |
|---|---|---|
| PWR-CH1-400WAC | AC | 100 to 240 Vac |
| PWR-CH1-400WDC | DC | +48 to +60 Vdc<br>-48 to -60 Vdc |
| PWR-CC1-400WHV | HVAC/HVDC | 100 to 277 Vac<br>240 to 380 Vdc |

**Note** The Cisco Catalyst 8500L-8S4X Edge Platform can support two AC, DC or High Voltage AC or DC (HVAC/HVDC) power supplies. Do not install mixed AC and DC power supply units in the same chassis.

The following table contains specifications for DC-powered systems for the Cisco Catalyst Catalyst 8500L-8S4X Edge Platforms

*Table 6: Cisco Catalyst 8500L-8S4X Edge Platform DC Power Supply System Input Requirements*

| System Input Rating (Amps) | Circuit Breaker Amps | | AWG # Wire |
|---|---|---|---|
| | Minimum | Maximum | |
| 15A | 20 | 30 | 14 |

# Locating Labels on Cisco Catalyst Cisco C8500L-8S4X Edge Platform

Use the Cisco Product Identification (CPI) tool to find labels on the platform. The tool provides detailed illustrations and descriptions of where labels are located on Cisco products. It includes the following features:

- A search option that allows browsing for models by using a tree-structured product hierarchy
- A search field on the final results page that makes it easier to look up multiple products
- End-of-sale products clearly identified in results lists

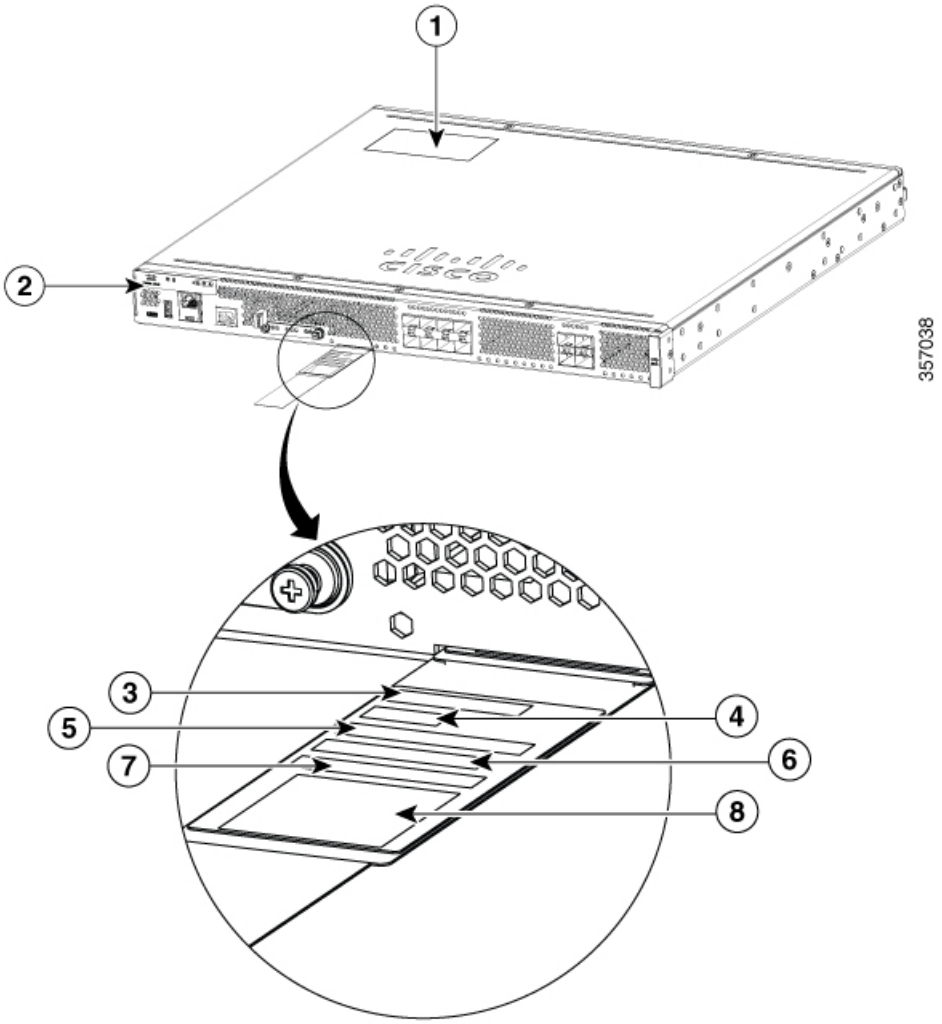
The tool streamlines the process of locating serial number labels and identifying products. Serial number information expedites the entitlement process and is required for access to support services.

# Location of labels on Cisco Catalyst 8500L-8S4X Edge Platform

The figure below shows the location of the labels on the Cisco Catalyst 8500L-8S4X Edge Platform. Labels are located at the same location on all the Cisco Catalyst 8500L-8S4X Edge Platform.

The Serial number (SN), Common language equipment identifier (CLEI), Tax deduction and collection account(TAN), Product ID (PID), PID version ID (VID), and Quick response (QR) code are printed on a label on the back of the platform or on a label tray located on the chassis.

***Figure 7: Label Location on a C8500L-8S4X***




| | | | |
|---|---|---|---|
| 1 | Compliance Label | 2 | PID Label |
| 3 | SN | 4 | CLEI |
| 5 | TAN | 6 | MAC |
| 7 | PIDVID | 8 | QR code |

# Locate Product Identification Details

### Software License

The serial number (SN), product ID (PID), version ID (VID), and Common Language Equipment Identifier (CLEI) are printed on a label on the bottom of the device or on the label tray.

To obtain a software license, you need the unique device identifier (UDI) of the device where the license is to be installed.

The UDI has two main components:

- Product ID (PID)
- Serial number (SN)

The UDI can be viewed using the **show license udi** command in privileged Exec mode in Cisco Internet Operating System (IOS) software.