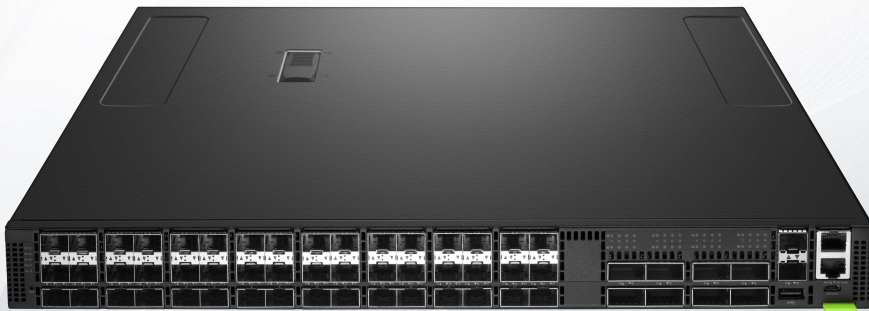


N8550-48B8C Bare Metal Switch

IDEAL FOR DATA CENTER NETWORKS AND HIGH-END CAMPUS NETWORKS

N8550-48B8C bare metal switch is designed for data center networks and high-end campus networks, providing stable, reliable and secure Layer 2/Layer 3 switching services.



Overview

N8550-48B8C is a Top-of-Rack (TOR) switch for high-performance data centers. In a compact 1RU form factor, the switch provides line-rate L2 and L3 switching across the 48x SFP28 + 8x QSFP28 ports, and each QSFP28 port can be configured as 2x 50 GbE, 4x 25 GbE, 1x 40 GbE, or 4x 10 GbE by using DAC breakout cables.

Loaded with the White Box, N8550-48B8C supports the installation of compatible Network Operating System (NOS) software, including the open source options Open Network Linux plus commercial NOS offerings.

COMPATIBLE OPERATING

SYSTEM

- Cumulus - Cumulus Linux
- Pica8 - PICOS®
- IP Infusion OcNOS
- CGS
- Altran/Aricent

What is White Box?

The White Box is an Open Compute Project open source initiative driven by a community to define an open "install environment" for bare metal network switches, such as N-series switches. White Box enables a bare metal network switch ecosystem where end users have a choice among different network operating systems.

This family provides 10G/25G/100G bare metal switches, enabling users to freely install and use Cumulus Linux, PICOS®, etc. As the switch operating system, which breaks the dependency of using vendor-specific, closed-source software development kits (SDK).

Key Features and Benefits

Product Highlights

Cost-effective, bare-metal switch infrastructure for data center fabric.

Deploy as Top-of-Rack switch supporting 10 or 25 GbE to servers, with 40 GbE, 50 GbE, or 100 GbE uplinks.

48x SFP28 + 8 x QSFP28 switch ports, each QSFP28 supporting 1x 100 GbE or 1x 40 GbE, or via breakout cables, 2x 50 GbE, 4x 25 GbE, or 4x 10 GbE.

Layer 2 or Layer 3 forwarding of 4 Tbps (full duplex).

All ports on front; PSUs and fans accessible from rear.

Power Supply and Fan Modules

Hot-swappable, load-sharing, redundant AC.

5+1 redundant, hot-swappable fan modules.

Energy efficient.

Software

Bare-metal hardware switch pre-loaded with diagnostics software and with White Box for automated loading of compatible open source and commercial NOS offerings.

Compatible with Open Network Linux (ONL), an open-source, OCP reference NOS.

Compatible with Cumulus® Linux® r4.2.0 and before version from Cumulus Networks®.

Compatible with PicOS™ from Pica8 Inc.

Compatible with OcNOS™ 1.3.5 and later version from IP Infusion.

Compatible with CGS.

Compatible with Altran/Arcent.

Technical Specification

N8550-48B8C bare metal switch comes with the industry-standard hardware. Here's a look at the details.

CHARACTERISTICS

	N8550-48B8C
Port	
Ports	48x 25 GbE SFP28 and 8x 100 GbE QSFP28
SFP28 Port	Each port supports 1x 10 GbE or 25 GbE
QSFP28 Port	Each port supports 1x 40/100 GbE or 4x 25 GbE or 4x 10 GbE per port using breakout cables
RJ45 Management Port	1
Console Port	1
USB Type A Storage Port	1
Operating System	
OS	White Box (Bare Metal Switch)
Key Components	
Switch Chip	Broadcom BCM56873 Trident III
CPU	Intel® Xeon® D-1518 processor quad-core 2.2 GHz
DRAM	2x 8 GB SO-DIMM DDR4
SPI Flash	2x 16MB
M.2 SSD	64GB MLC
Performance	
Layer Type	Layer 3
Switching Capacity	4 Tbps full duplex

CHARACTERISTICS

	N8550-48B8C
Forwarding Rate	2.9 Bpps
MAC Addresses	32K min./288K max.
Packet Buffer	32MB integrated packet buffer
VLAN IDs	4K
Jumbo Frames	Up to 9216 Bytes
IPv4	16K min./168K max. host entries
IPv6	8K min./100K max. host entries
Status Indicators	
SFP28 Port LEDs	Link Status, Activity, Rate
QSFP28 Port LEDs	Link Status, Activity, Rate
Ethernet Management Port LED	Link Status, Activity
System LEDs	Diagnostic, Locator, PSU and Fan Status
Power	
Input Voltage	100-240VAC, 50-60Hz, 6A
Max. Power Consumption	550W
Physical and Environmental	
Dimensions (HxWxD)	1.71"x17.26"x21.1" (43.5x438.4x536mm)
Rack Space	1U
Hot-swappable Power Supplies	2 (1+1 Redundancy)

CHARACTERISTICS

N8550-48B8C	
Hot-swappable Fans	6 (5+1 Redundancy)
Airflow	Back-to-Front
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)
Operating Humidity	5% to 95% (Non-condensing)
Weight	22.05 lbs (10kg), with two installed PSUs
Warranty	
Warranty	5 Years

Accessories



Console Cable*1



Power Cords*2



Rack Mount Kit Bracket*1



M4 Screws*20



Ear-locking Screws*2



User Manual*1



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