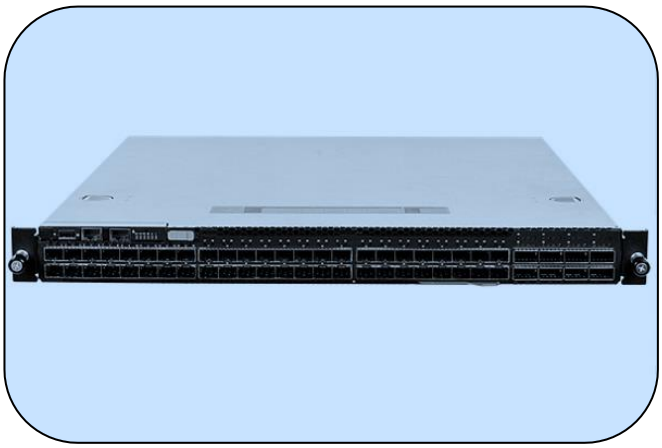
IX8

Enterprise Data Center 25 G Switch



Features

- ONIE Pre-load
- x86 CPU Board
- BMC Built-in

Description

Data center networks face changes with hardware and meeting the requirements of the software it hosts. XenOpt provides a series of Bare Metal Switches (BMS) that address these changes in the data center market. The XenOpt BMS product lines support up to 100 G speeds on its Ethernet Switches. To meet the requirements of high performance, high availability, fast scale out, low latency performance, and continuous serviceability in data center applications, the XenOpt BMS product line is the best choice.

BMC (Baseboard Management Controller) embedded on the server as the core of the Intelligent Platform Management Interface (IPMI) architecture can now be implemented in the Ethernet switch. In addition to providing health monitoring of the temperature, power status, and cooling fans, BMC also aids in the deployment and management of software and hardware peripherals.

XenOpt BMS IX8 supports 48 SFP28 and 8 QSFP28 (10/25/40/50/100 GbE speed) ports and is equipped with BMC in a compact rack unit size. By levering merchant silicon chip, IX8 is fully compliant with IEEE 802.3 standard and is a high performance high density Ethernet switch with advanced features such as smart table, dynamic load balancing, and VxLAN/RIOT support. IX8 also improves the performance for larger packet buffers and reduced latency. With ONIE (Open Network Installation Environment) pre-loaded IX8 can be used for multiple network operating system which supports ONIE installer to achieve agile installation and fast response for the changing demand.

Technical Specification

Physical Ports
- **Port configuration:** 48 SFP28 (10/25 GbE) and 8 QSFP28 ports (10/40 or 25/50/100 GbE)
- **Management Port:** Out-of-band management port (RJ-45, 10/100/1000Base-T)
- **Console Port:** 1 RJ-45 console port
- **USB:** 1 USB 2.0 port

CPU Board 1
- **CPU:** Intel Atom® Processors
- **Memory:** 8 GB DDR3/ECC
- **Storage:** SSD: 32 GB

Performance
- **Switching capacity:** 4 Tbps
- **Maximum forwarding rate:** 2 Bpps
- **Latency:** Ultra-low latency
- **MAC:** BRCM TD3 BCM56873

BMC
- **IPMI:** v1.5/v2.0 compliance
- **Serial over LAN**
- **SNMP:** v1/v2/v3
- **SMASH**
- **HTTPS**
- **Health status and hardware monitoring**
- **Event log**
- **PEF and PET**
- **Chassis management**
- **Watchdog and system re-start**

High Availability
- **Redundant power supply:** 1+1
- **Hot-swappable fan tray:** N+2

Mechanical
- **Dimension (HxWxD):** 43.2x440x508 mm
- **Weight:** 9.71 kg (NET)

Environmental Specifications
- **Operating temperature:** 0~45°C
- **Operating humidity:** 90 % maximum relative humidity
- **Operating Altitude:** 0 to 2952 ft, (0-900 m)

Electrical
- **Power requirement:** 100~240 VAC, 50/60 Hz

Safety
- **UL, cUL, CB, CCC**

EMC
- **CE, FCC, CCC**

RoHS
- **Reduction of Hazardous Substances (RoHS) 6**

Supported Optics and Cables
XCE-QSQSNgg DAC cable (QSFP+), 7 – 100 m
XCE-QS4SNgg DAC cable (QSFP+, 4xSFP+), 7 – 100 m
XCE-S8S8Ngg DAC cable (SFP28), 7 – 100 m
XCE-Q8Q8Ngg DAC cable (QSFP28), 7 – 100 m
XCD-QS4SNgg DAC cable (QSFP+, 4xSFP+), 1 – 5 m
XCD-QSQSNgg DAC cable (QSFP+), 1 – 5 m
XCD-Q8Q8Ngg DAC cable (QSFP28), 1 – 5 m
XTM855-M1LY SFP28, LC, 850 nm, MMF, 25 G, 25GBASE-SR
XQM853-MxPY QSFP+, MPO, 850 nm, MMF, 40 G, 40GBASE-SR4, 100 m, 300 m
XQS313-xxPY QSFP+, MPO, 1310 nm, 40 G, SMF, 40GBASE-LR4, 1 km, 2 km, 10 km
XQS313-xxLY QSFP+, LC, 1310 nm, 40 G, SMF, 40GBASE-LR4, 10 km, 40 km
XQS319-10LY QSFP28, LC, 1310 nm, 100 G, SMF, 100GBASE-LR4, 10 km

Ordering information[1]

PN	Description
Switches	
X1IX8UZZ0000	IX8, AC, 48 SFP28 (10/25 GbE) and 8 QSFP28 ports (10/40 or 25/50/100 GbE), front to back fan, with Rail Kit
X1IX8UZZ0001	IX8, AC, 48 SFP28 (10/25 GbE) and 8 QSFP28 ports (10/40 or 25/50/100 GbE), back to front fan, with Rail Kit
Cables 25 G, 40 G, 100 G	
XCE-QSQSNgg	DAC cable, optic, QSFP+ to QSFP+, 40 Gb, length gg = {07 – 7 m; 10 – 10 m; 20 – 20 m; 50 – 50 m; C1 – 100 m}
XCE-QS4SNgg	DAC cable, optic, QSFP+ to 4xSFP+, 40 Gb, length gg = {07 – 7 m; 10 – 10 m; 20 – 20 m; 50 – 50 m; C1 – 100 m}
XCE-S8S8Ngg	DAC cable, optic, SFP28 to SFP28, 25 Gb, length gg = {07 – 7 m; 10 – 10 m; 20 – 20 m; 50 – 50 m; C1 – 100 m}
XCE-Q8Q8Ngg	DAC cable, optic, QSFP28 to QSFP28, 100 Gb, length gg = {07 – 7 m; 10 – 10 m; 20 – 20 m; 50 – 50 m; C1 – 100 m}
XCD-QS4SNgg	DAC cable, copper, QSFP+ to 4xSFP+, 40 Gb, length gg = {01 – 1 m, 03 – 3 m, 05 – 5 m}
XCD-QSQSNgg	DAC cable, copper, QSFP+ to QSFP+, 40 Gb, length gg = {01 – 1 m, 03 – 3 m, 05 – 5 m}
XCD-Q8Q8Ngg	DAC cable, copper, QSFP28 to QSFP28, 100 Gb, length gg = {01 – 1 m, 03 – 3 m, 05 – 5 m}
Pluggables	
XTM855-M1LY	SFP28, multi mode, 850 nm, 25 Gbps, 100 m, LC
XQM853-MxPY	QSFP+, multi mode, 850 nm, 40 Gbps, 40GBASE-SR4, x = {1 - 100 m, 3 – 300 m}, MPO
XQS313-xxPY	QSFP+, single mode, 1310 nm, 40 Gbps, 40GBASE-LR4, x = {01 – 1 km, 02 - 2 km, 10 – 10 km}, MPO
XQS313-xxLY	QSFP+, single mode, 1310 nm, 40 Gbps, 40GBASE-LR4, x = {10 - 10 km, 40 - 40 km}, LC
XQS319-10LY	QSFP28, single mode, 1310 nm, 100 G, 100GBASE-LR4, 10 km, LC
Services	
Power Supply Unit	
X1HY9ZZZ071Y	Red, F-2-B, AC, 750W
X1HY9ZZZ0720	Blue, B-2-F, AC, 750W
Fan	
X1HYQZZZ0165	FAN Module F-2-B
XHYQZZZ0166	FAN Module B-2-F

Notes:

[1] For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information.

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