



C3632

Layer 2/3 40 G/100 G Ethernet Switch

Description

The C3632 Layer 2/3 Ethernet Switch is the latest entry from XenOpt in the Open Networking arena. Open Networking provides customers with the ability to maximize the efficient and flexible use of valuable data center resources while providing an ideal platform for managing and maintaining those resources in a manner in tune with the needs of the organization.

Offering thirty-two 40Gbps/100Gbps Ethernet ports, C3632 switch enables robust layer-3 IP fabric for flexible layer-2 overlay in Ethernet fabric architecture. For modern scale-out, leaf-and-spine data center network deployments, C3632 is positioned as the high-speed spine layer to provide scalable bi-sectional fabric bandwidth for leaf layer. Depending on deployment connectivity, physical Ethernet QSFP28 ports in C3632 can be configured for either 40 Gbps or 100 Gbps port, thus allow flexible physical connectivity option between spine layer and leaf layer in the data center Ethernet fabric. Compact 1U form factor gives users the ability to optimize deployment in standalone or top-of-rack environments. A rail kit facilitates rack-mounting installations. Reverse-airflow model, the C3632R, is available for use in large data centers with alternating hot and cold equipment aisles. These switches are ideal for deployment in Data Center, Cloud and Enterprise environments with the capability of handling access for the most demanding applications.

The C3632 comes with Cumulus Linux preinstalled. Cumulus Linux is an OS for open networking incorporating a true Linux distribution with extensive networking features plus hardware acceleration of routing and switching functions. It allows use of many of the same tools employed for management of servers and virtual switches and enables unified software based control of complete datacenter environment. There are software extensions available that enable easy integration of C3632/R switch in native network management environments of VMWare and OpenStack based Cloud installations. Optionally C3632/R comes as white box device with only Open Network Install Environment (ONIE) installed, that supports automatic loading of network operating system of your choice.

Features

- 1U ToR 40Gbps/100Gbps Ethernet Switch
- ONIE installed
- Cumulus Linux installed
- Data Center Friendly SDN Switch
 - Dual Redundant Hot-swappable power supplies
 - Regular and Reverse Air-Flow Models
- Powerful Broadcom Tomahawk Switch Chip
 - 3.2Tbps Switching Capacity
 - Non-blocking
- Versatile Intel Rangeley Processor stock
 - 4Gbyte DRAM
 - 8Gbyte SSD

Specifications

Ports

- 32 x 40Gbps Ethernet QSFP28 ports
- 32 x 100Gbps Ethernet QSFP28 ports
- 1 x 10Gbps Ethernet SFP+ ports
- RJ-45 Gigabit Ethernet management port
- RJ-45 serial console
- Type A USB 2.0 port

Data Forwarding

- Full Duplex 3.2Tbps Switching Capacity
- Broadcom Tomahawk Switch SoC
- Non-blocking, wire-speed Layer 3 Routing
- NVGRE/VXLAN overlay support

Control Plane

- Intel Rangeley CPU
- 4Gbyte DRAM

- 8Gbyte SSD
- Cumulus Linux installed

Power

- Redundant hot-pluggable power supplies
- AC Input: 100-127/200-240 V, 50/60 Hz
- 800W@ 12V/65 A
- Power Consumption: < 650 Watts

Physical/Environmental

- Weight: Net weight: 10.18kg (with 2 PSUs)
- Regular and Reverse Airflow Models
- Size (W x D x H): 433.8 x 520 x 44 mm (17.07 x 20.47 x 1.73 inches)
- Temperature: Operating 0°C to 40 °C (32°F to104°F)
- Humidity: Operating: 5% to 95%

General

- Consists of
 - Supermicro SSE-C3632S switch
 - Cumulus Linux
- Cumulus Linux preinstalled
- Bare metal available
- 1U form factor for flexible installation
- Mounting Rails (included)

Warranty

- Parts and labor: three years
- Cross shipment, DOA: one year
- Extended warranty: please contact your XenOpt reseller



Ordering information^{1,2}

PN	Description
Switches	
C36321	Switch, 1U, 32 40/100 Gbps Ethernet QSFP28 and 1 10 Gbps Ethernet SFP+ ports, bare metal – ONIE installed, dual PSU, Regular Air Flow Direction, three years labor and parts warranty Cumulus Linux installed, one year support
C3632R1	Switch, 1U, 32 40/100 Gbps Ethernet QSFP28 and 1 10 Gbps Ethernet SFP+ ports, bare metal – ONIE installed, dual PSU, Reverse Air Flow Direction, three years labor and parts warranty Cumulus Linux installed, one year support
C36323	Switch, 1U, 32 40/100 Gbps Ethernet QSFP28 and 1 10 Gbps Ethernet SFP+ ports, bare metal – ONIE installed, dual PSU, Regular Air Flow Direction, three years labor and parts warranty Cumulus Linux installed, three years support
C3632R3	Switch, 1U, 32 40/100 Gbps Ethernet QSFP28 and 1 10 Gbps Ethernet SFP+ ports, bare metal – ONIE installed, dual PSU, Reverse Air Flow Direction, three years labor and parts warranty Cumulus Linux installed, three years support
C36325	Switch, 1U, 32 40/100 Gbps Ethernet QSFP28 and 1 10 Gbps Ethernet SFP+ ports, bare metal – ONIE installed, dual PSU, Regular Air Flow Direction, three years labor and parts warranty Cumulus Linux installed, five years support

C3632R5	Switch, 1U, 32 40/100 Gbps Ethernet QSFP28 and 1 10 Gbps Ethernet SFP+ ports, bare metal – ONIE installed, dual PSU, Reverse Air Flow Direction, three years labor and parts warranty Cumulus Linux installed, five years support
Cables 40 G	
XCE-QSQSNgg	Cable, 40 Gb, Direct attach, Optic, QSFP+ to QSFP+, length: gg = {07 - 7m; 10 - 10m; 20 - 20m; 50 - 50m; C0 - 100m}
XCE-QS4SNgg	Cable, 40 Gb, Direct attach, Optic, QSFP+ to 4 x SFP+, length: gg = {07 - 7m; 10 - 10m; 20 - 20m; 50 - 50m; C0 - 100m}
XCD-QS4SNgg	Cable, 40 Gb, Direct attach, Copper, QSFP+ to 4 x SFP+, gg = {01 - 1m, 03 - 3m, 05 - 5 m}
XCD-QSQSNgg	Cable, 40 Gb, Direct attach, Copper, QSFP+ to QSFP+, gg = {01 - 1m, 03 - 3m, 05 - 5 m}
Cables 100 G	
XCE-Q8Q8Ngg	Cable, 100Gb, Direct attach, Optic, QSFP28 to QSFP28, gg = {01 - 1m, 03 - 3m, 05 - 5 m}
XCD-Q8Q8Ngg	Cable, 100Gb, Direct attach, Optic, QSFP28 to QSFP28, gg = {01 - 1m, 03 - 3m, 05 - 5 m}
Pluggables	
XQM853-ffPY	QSFP+, multimode, 40 Gbps, ff = {M1 = 100 m; M3 = 300 m}, MPO, with DDMI (0 .. 70°C)
XQS313-ffPY	QSFP+, single mode, 40 Gbps, ff = {01 = 1,4 km; 02 = 2 km}, MPO, with DDMI (0 .. 70°C)
XQS313-10PY	QSFP+, single mode, 40 Gbps, 10 km, MPO, with DDMI (0 .. 70°C)
XQS313-ffLY	QSFP+, single mode, 40 Gbps, ff = {10 = 10 km; 40 = 40 km}, LC, with DDMI (0 .. 70°C)
XQM859-ffPY	QSFP+, multimode, 100 Gbps, ff = {M1 = 100 m; M3 = 300 m}, MPO, DDMI (0 .. 70°C)
XQS319-ffPY	QSFP+, single mode, 100 Gbps, ff = {01 = 1,4 km; 02 = 2 km}, MPO, with DDMI (0 .. 70°C)
XQS319-10PY	QSFP+, single mode, 100 Gbps, 10 km, MPO, with DDMI (0 .. 70°C)
XQS319-10LY	QSFP+, single mode, 100 Gbps, 10 km, LC, with DDMI (0 .. 70°C)
XQC273-ffLY	QSFP+, CWDM, 1270/1290/1310/1330 nm, 40 Gbps, ff = {02 = 2 km ; 10 = 10 km; 30 = 30 km}, LC, with DDMI (0 .. 70°C)
Services	
Spare PS Unit	Spare Power Supply Unit
SW&FW	Cumulus Linux installed ONIE installed, bare metal available on request

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.

² For accurate Cumulus FW ordering part number please refer to <http://www.cumulusnetworks.com/>, or contact Xenopt Reseller.