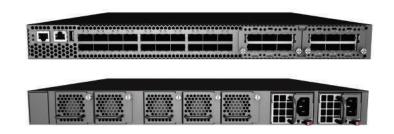


AS6700-32X

40GbE Data Center Switch Bare-Metal Hardware



Product Overview

The Edge-Core AS6700-32X switch is a Top-of-Rack (TOR) or spine switch for high-performance data centers. In a compact 1RU form factor, the switch provides line-rate L2 and L3 switching across up to 32 x QSFP ports, supporting up to 32 x 40 GbE connections or 104 x 10 GbE connections. The AS6700-32X can be deployed as a TOR switch supporting 10 GbE or 40 GbE server connections, or as a spine switch, supporting 10 GbE or 40 GbE spine interconnects. The switch provides 20 fixed QSFP ports and two module slots, each capable of supporting a 6 x QSFP option module or a future NPU module for application processing. The AS6700-32X is a bare-metal switch loaded with the Open Network Install Environment (ONIE), which supports the installation of compatible independent switchOS offerings.

Key Features and Benefits

- Cost-effective, bare-metal switch infrastructure for data center fabric.
- Up to 32 x 40GbE ports in compact 1RU form factor.
- Modular design allowing cost-effective build-out of an infrastructure with switching capacity added as required.
- 20 x QSFP switch ports, each supporting 40 GbE or 4 x 10 GbE via breakout cables.
- Two module slots, each supporting 6 x QSFP module or future NPU processing module.
- Layer 2 or Layer 3 forwarding of 2.56 Tbps full duplex.
- Supports hot/cold aisle with port-to-power and power-to-port airflow SKUs.
- All ports on front; PSUs and fans on rear.
- Hot-swappable, load-sharing, redundant AC or -48V DC PSUs.
- 4+1 redundant, hot-swappable fans.
- Energy Efficiency: 267 W typical power consumption.
- Hardware switch pre-loaded with Open Network Install Environment (ONIE) for automated loading of compatible independent switchOS software.
- AS6701 SKUs compatible with Cumulus®Linux® r2.0.1 and later switchOS software from Cumulus Networks™.
- AS6700 SKUs compatible with Switch Light OS from Big Switch Networks.

Features

Ports

Switch Ports:

20 QSFP fixed ports: 40 GbE or 4 x 10 GbE per port 2 expansion module slots, for optional modules: 6 QSFP: 40 GbE or 4 x 10 GbE per port NPU module (future)

Total switch capacity: 32 x 40 GbE; or 104 x 10 GbE Management ports on port side:

1 x RJ-45 serial console

1 x RJ-45 100/1000BASE-T management port

1 x USB Type A storage port

Key Components

Switch Silicon: Broadcom BCM56850 Trident II 1.28 Tbps CPU Module: Freescale P2041 quad-core 1.5GHz in AS6700 Freescale P2020 dual-core 1.2GHz in AS6701 2GB DDR3 SDRAM ECC memory 8 MB NOR Flash, 2 GB NAND Flash 8 GB SD Card

Performance

Switching Capacity: 2.56 Tbps full duplex, with packets>200 bytes

Forwarding Rate: 1.44 Bpps MAC Addresses: 320K VLAN IDs: 4 K

Jumbo frames (9216 Bytes) L3 Routes IPv4 64K. IPv6 20K

Packet Buffer Size: 12 MB shared buffer pool Latency (RFC2544): 600 to 720 ns cut thru

LEDs

40G QSFP Port LEDs: Link Status, Activity

Ethernet Management Port LED: Link Status, Activity

Console Port LED: Link Status System LEDs: Diagnostic, Locator

Supported Optics and Cables

QSFP Ports:

40GBASE-CR4 DAC; 0.5 m to 7 m; passive and active 40GBASE-CR4 DAC to 4 x SFP+ 10GBASE-CR DAC; 0.5 to 7 m

40GBASE-SR4: Up to 100 m over OM3 MMF, 150 m over OM4 MMF

40GBASE-SR4 to 4 x 10GBASE-SR: 100 m over OM3, 150 m OM4

40GBASE-LR4: Up to 10 km over SMF

Software

Switch is loaded with Open Network Install Environment (ONIE) software installer

AS6701 SKUs compatible with Cumulus Linux r2.0.1 or later from Cumulus Networks

AS6700 SKUs compatible with Switch Light OS from Big Switch Networks and their Big Tap and Big Cloud applications

Physical and Environmental

Dimensions (WxDxH): 440 x 470 x 44 mm (17.3 x 18.5 x 1.73 inches)

Weight: 8.4 kg (18.52 lbs), total with 2 modules

Fans: 4+1 redundant, hot-swappable

Operating Temperature: 0°C to 40°C (32°F to 104°F) Storage Temperature: -40°C to 70°C (-40°F to 158°F) Operating Humidity: 5% to 95% non-condensing

Power

PSUs: 2 redundant, load-sharing, hot-swappable AC or -48VDC Input Voltage: 90 to 264 VAC at 50-60 Hz. -48 to -72 VDC. Input Current: Max 6A @100/120 VAC, 3 A @200/240 VAC, 10 A @-72 VDC PSU Efficiency: Up to 93% for AC PSUs

Max Power: 315 W, line-rate, 32 x 40G SR4, AC Typical Power: 267 W, line-rate, 32 x 40G DAC, AC

Regulatory

EMI

CE Mark (EN55022 Class A) FCC Part 15 Class A VCCI Safety CB, EN 60950

UL/CUL Environmental:

Temperature: IEC 68-2-14

Drop: ISTA 2A RoHS-6 Compliant

Warranty

Please check www.edge-core.com.au for the warranty terms in your country. The warranty provides return-to-factory hardware replacement for a three year period in Australia.

For More Information

To find out more about Edge-Core Networks products and solutions, visit www.edge-core.com.au.

About Edge-Core Networks

Edge-Core Networks is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edge-Core Networks delivers the software and systems that transform the way the world connects. Edge-Core Networks serves customers and partners worldwide. Additional information can be found at www.edge-core.com.au.

Edge-Core Networks is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edge-Core data center switches are developed and manufactured by Accton.

To purchase Edge-Core solutions, please contact your Edge-Core Network representatives on 1300 725 323.

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Ordering Information

Base Model: AS6700-32X 20-Port 40GbE QSFP switch with ONIE software Installer					
Model Number	CPU	Module	PSU	Airflow	Region (power cord)
6700-32X-O-AC-F-US	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	N. America
6700-32X-O-AC-B-US	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	N. America
6700-32X-O-AC-F-EU	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	Europe
6700-32X-O-AC-B-EU	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	Europe
6700-32X-O-AC-F-UK	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	UK
6700-32X-O-AC-B-UK	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	UK
6700-32X-O-AC-F-JP	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	Japan
6700-32X-O-AC-B-JP	P2041 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	Japan
6700-32X-O-48V-F	P2041 CPU Module	dual 6-port 40G module	dual -48V DC PSUs	port-to-power airflow	
6700-32X-O-48V-B	P2041 CPU Module	dual 6-port 40G module	dual -48V DC PSUs	power-to-port airflow	
6701-32X-O-AC-F-US	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	N. America
6701-32X-O-AC-B-US	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	N. America
6701-32X-O-AC-F-EU	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	Europe
6701-32X-O-AC-B-EU	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	Europe
6701-32X-O-AC-F-UK	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	UK
6701-32X-O-AC-B-UK	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	UK
6701-32X-O-AC-F-JP	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	port-to-power airflow	Japan
6701-32X-O-AC-B-JP	P2020 CPU Module	dual 6-port 40G module	dual AC PSUs	power-to-port airflow	Japan
6700-32X-O-48V-F	P2020 CPU Module	dual 6-port 40G module	dual -48V DC PSUs	port-to-power airflow	
6700-32X-O-48V-B	P2020 CPU Module	dual 6-port 40G module	dual -48V DC PSUs	power-to-port airflow	
PSU-AC-400-F			400W AC Power Supply FRU	port-to-power airflow	no power cord
PSU-AC-400-B			400W AC Power Supply FRU	power-to-port airflow	no power cord
PSU-48V-400-F			400W AC Power Supply FRU	port-to-power airflow	no power cord
PSU-48V-400-B			400W AC Power Supply FRU	power-to-port airflow	no power cord
FAN-1U-1x1B-F			Fan FRU	port-to-power airflow	
FAN-1U-1x1B-B			Fan FRU	power-to-port airflow	

Ordering Information

Model Number	Description
6701-32X-SVC-RTF	AS6700-32X Annual Hardware Service, Return-to-Factory (after warranty)
6700-32X-MOD-40G	AS6700-32X option module FRU, 6x40G QSFP ports
CBL-PWR-US	AC Power Cable - US (125V/13A, 1830mm, C13) – required with Power Supply FRUs only
CBL-PWR-EU	AC Power Cable - Europe (250V/10A, 1830mm, C13) – required with Power Supply FRUs only
CBL-PWR-UK	AC Power Cable - UK (250V/10A, 1830mm, C13) – required with Power Supply FRUs only
CBL-PWR-JP	AC Power Cable - Japan (250V/12A, 1830mm, C13) – required with Power Supply FRUs only