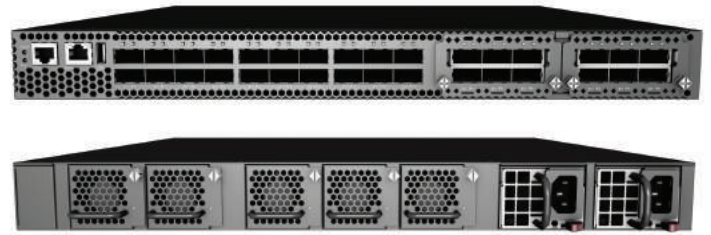


AS6700-32X/AS6701-32X 40GbE Data Center Switch Bare-Metal Hardware



Product Overview

The Edgecore 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[®].
- AS6701 SKUs Compatible with PicOS[™] r2.5 and later version from Pica8 Inc.
- 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: Up to 288 K
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 for the warranty terms in your country. The warranty provides return-to-factory hardware replacement for a three year period in North America.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

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

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore Data Center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (877) 828-CORE (877-828-2673) or authorized resellers.

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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 |
| RKIT-85-6700 | Rack mount kit (for AS6700-32X/AS6701-32X) |
| 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 |