

Innovative Datacenter Switch

32 x 40GE QSFP+ Ports



High-density, datacenter innovation unleashed.

The exponential growth in demand for bandwidth shows no signs of slowing, requiring datacenters to continually build upon the existing density of their networking environments. The S8810-32Q switch is a datacenter-class 40G switch product designed to meet customers' large capacity data switching needs with superior performance and unsurpassed reliability. By providing a high number of 40GE QSFP+ ports in a single compact switch, the S8810-32Q makes automation and orchestration easier than ever, simplifying datacenter network infrastructure through its innovative architecture and extensive datacenter-ready features. In fact, each QSFP+ port can be split into 4 SFP+ ports, yielding tremendous flexibility in datacenter design. With its low-latency, high-density ports, the S8810-32Q makes scale-out easy, giving datacenters unmatched capacity to meet whatever demands the future may bring. Flexible, reliable, powerful – maximize your return on investment and ensure compliance with environmental policies with the next-generation S8810-32Q.

Key applications

- High-density 40GE full mesh topology, optimizing end-of-row (EoR) scaling.
- QSFP+ break out into four individual fiber pairs links for tremendous flexibility.
- Hot/cold aisle airflow support, front to rear and rear to front.
- Enables cost-effective application of 40GE uplinks through small-scale implementation in Spine-Leaf networks.
- Proven delivery of high-bandwidth, low-latency, nonblocking server-to-server connectivity.
- Open network install environment (ONIE) support for network switches.
- VXLAN/NVGRE capable hardware supporting virtual machine mobility.
- Extensive transition technologies for IPv4, IPv6, and dual stack management functions.
- Superior management and security through console and out-of-band interface options.
- High-speed Layer 2 deployment support to connect nonvirtualized infrastructure with hyper visor-based overlay networks.

Key features

- 32 x 40GE QSFP+ ports for downlinking and uplinking capability.
- Modular dual power supply and fan assembly with overcurrent, overvoltage, and overheating protection.
- Next-generation spine-leaf network architecture, enhancing capacity and optimizing scaling.
- CPU: Intel® Rangeley C2558 2.4G 4-Core.
- Specifically designed for utilization in high-performance datacenter environments.
- Hot and cold backup switching without system reboot or reconfiguration ensuring uninterrupted data processing and operation.
- Non-blocking switching architecture.

Specifications

Physical

- Compact full featured modular 40GE datacenter switch
- 1 RJ45 console/management port with RS232 signaling
- 1 10/100/1000 Base-T Ethernet for Out-of-Band management
- 1 USB 2.0 Type-A port

Processor	Intel® Rangeley C2558 2.4G 4-Core
Memory	DDR3 8GB w/ ECC SODIMM
Storage	M.2 SSD 64GB
ASIC	Broadcom BCM56850 (Trident 2)
Built-in Interfaces	Total 40GE: 32
LED	Power, system, link & activity, fan & PSU status
Chassis	1 RU, 440w x 44h x 406d mm (17.32" x 1.73" x 15.98") Weight (including 2 x PSUs & 4 x fans): 9.02 kg (19.88 lb)
Redundancy	Two hot swappable power supplies with integrated fans and trays

Environmental

- Fresh air compliant to 45°C (113°F)
 - Rack mounting kit
- Power supply** AC input : 100V-240V,7-3.5A 60/50Hz
DC input : 240V, 2.75A (240Vdc China only)
Typical/Max power draw: 360/440 Watts
- Max. operating Specs.** Operating temperature: 0°C to 45°C (32°F to 113°F)
Operating humidity: 10% to 90% (RH), noncondensing
- Max. non-operating Specs.** Storage temperature: -40°C to 70°C (-40°F to 158°F)
Storage humidity: 5% to 95% (RH), non-condensing

Performance

Switching Capacity	2.56Tbps
Packet throughput	1904Mpps

Regulatory compliance

EMC	EN55032 Class A EN61000-3-2/EN61000-3-3 EN55024 FCC P15B Class A BSMI (CNS 13438) Class A CCC (GB9254) Class A RoHS: RoHS 6 UL
Safety	IEC/EN 60950-1/A2 BSMI (CNS 14336-1) CCC (GB4943)

8810-32Q Views



S8810-32Q front view



S8810-32Q rear view

Supported Accessories

Transceiver	40GE, SR4 QSFP+ 40GE, LR4 QSFP+
Cable types	40GE, QSFP+ to QSFP+, AOC 40GE, QSFP+ to QSFP+, DAC 40GE, MTP to 4 x LC optical breakout 40GE, 4 x 10GE, QSFP+ to 4 x SFP+, DAC
Power supply types	CRPS550W-AC-FTB, 550W AC/DC PSU, airflow from panel to rear side (front to rear) CRPS550W-AC-BTF, 550W AC/DC PSU, airflow from rear to panel side (rear to front)
Fan types	Fan normal airflow from panel to rear side Fan reverse airflow from rear side to panel Fan spare supports normal and reverse airflow operations