DS4001

1U 32-port 400GbE Data Center Switch

The Celestica DS4001 is a 32 QSFP-DD port 400GbE switch in a compact 1U form factor that provides 12.8Tbps bandwidth for the most demanding data center needs.

The DS4001 can support port level configuration of sub-rates between 10GbE and 400GbE. System maximum of 168 50GbE ports or 128 100GbE ports or 64 200GbE ports using breakout cables provides a superior fabric device for large radix CLOS networks. It provides superior low latency and power efficiency in a clean PHYless design, while offering high-reliability features such as redundant and hot swappable power supplies and fans.

The DS4001 supports current and future network requirements, including a COMe x86 based control plane processor module and a BMC management module for easier integration of automation tools familiar to server administrators. An ONIE installer to support third party network operating systems is also included.

The DS4001 is ideal for:

- 400GbE Data Center Leaf / Spine
- Scalable Data Centers and Big Data Applications
- Cloud Computing
- Enterprise Aggregation / Core

FEATURES

Interfaces: 32 QSFP-DD 400GbE Ports, CPU/BMC shared Ethernet Management (RJ45) and Serial Console (RJ45) ports, USB 2.0 (Type A) port

Switching Capacity: 12.8Tbps IO Bandwidth, 70 MB Byte Buffer

Latency: Low latency cut-through mode supported

Data Center Protocols: IPinIP, IPinGRE, VxLAN and Flexibility to handle new tunnel types

CPU and Memory: XEON-D x86 processor (up to 8 cores), Up to 32 GB ECC DDR4, configurable M.2 SSD

Transceivers/Optics:
- QSFP-DD (Up to 3M DAC Cable Support): Up to 12W in Back to Front airflow
- QSFP-DD (Up to 3M DAC Cable Support): Up to 20W in Front to Back airflow

BMC SYSTEM MANAGEMENT OPTION

1GB DDR4

Dual 32MB Flash for dual boot

NC-SI shared management port

Serial over LAN (SOL) enabled

Supports remote (BIOS/firmware) online upgrading

IPMI 2.0

Enterprise-Class Quality. Cloud Economics.

LAYER TWO HARDWARE SUPPORTED

VLAN (IEEE 802.1Q)

Commonly used STP flavors

8K Bridge domains

Jumbo frame support

Support for LAG (IEEE 802.3 ad)

LAYER THREE HARDWARE SUPPORTED

Ingress and Egress ACLs

Policer support

Flexible counters

Rich set of IP tunneling protocols
• IPinIP
• IPinGRE
• VXLAN
• Flexibility to handle new tunnel types

Ingress and Egress sflow and FlexMirroring
• Support for SPAN, RSPAN and ERSPAN

POWER AND COOLING

1+1 redundant, hot swap PSUs, 1500W each

AC 47~63Hz, 100 ~ 240 V nominal, 90~264V max

6+1 Redundant/Hot-Swappable fans, front to back and back to front airflow.

PHYSICAL DIMENSIONS

Height: 43.1 mm (1.73") 1 EIA unit

Width: 438.5 mm (17.3")

Depth: 657.5 mm (25.8")

ENVIRONMENTAL: OPERATING

Temperature: 0°C to 45°C @ 900m

Humidity: 5% to 90%, non-condensing

APPROVALS

EMC: CN (GB/T9254-2008 Class A), EU (EN550032, EN55035, EN300386), FCC, VCCI, CCC

Safety: UL/CSA/IEC/EN60950-1/62368-1, UL, CB, CCC (GB4943.1-2011)

Environment: RoHS

ORDER INFORMATION

R3240-F9102-A0: DS4001, 1U, 32X400GBE, COME 4C/16GB-DDR/64GB-SSD (F2B)

R3240-F9103-A0: DS4001, 1U, 32X400GBE, COME 4C/16GB-DDR/64GB-SSD (B2F)

Note: All specifications and figures are subject to change without prior notice.