DS3001

2U 64-Port 100GbE Data Center Switch

The Celestica DS3001 is a 64 (QSFP28) port 100GbE switch in a 2U form factor that provides 6.4Tbps bandwidth for the most demanding data center needs.

The DS3001 can support port level configuration of sub-rates between 10GbE and 100GbE. System maximum port configuration of 168 10/25GbE, but physically 128 ports of 50GbE (as 2x25GbE) or 64 ports of 100GbE (4x25GbE) using breakout cables provides a superior fabric device for large radix CLOS networks. DS3001 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 DS3001 supports current and future network requirements, including a COM-E modular x86-based control plane with BMC Management plane for an easier integration of automation tools familiar to network administrators, and an ONIE installer to support third party network operating systems.

The DS3001 is ideal for:

- High Density 100Gb Data Center Leaf/Spine
- Open and Third-Party Network Operating Systems
- High-Radix Network Topologies
- Enterprise Aggregation/Core

FEATURES

Interfaces: 64 QSFP28 100GbE Ports, CPU/BMC shared Management (RJ45) and Console (RJ45) ports, Type A USB 2.0 ports

Switching Capacity: 6.4 Tbps IO Bandwidth, 70MB Buffer

Latency: Low Latency cut-through mode support

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

CPU and Memory: Intel Denverton/HewittLake-DE (4/8 core support), up to 32GB ECC DDR4, up to 1TB M.2 SSD

Content Aware Processing: Layer 2-7 packet classification, FCoE

Transceivers: QSFP28 (Up to 3M DAC): Up to 5W

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

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)

Enterprise-Class Quality. Cloud Economics.

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, 1300W each

AC 47-63Hz, 100~127V/200~240V nominal

3+1 Redundant/Hot-Swappable Fans, front to back and back to front airflow

PHYSICAL DIMENSIONS

Height: 87 mm (2U)

Width: 438.5 mm

Depth: 520 mm

ENVIRONMENTAL: OPERATING

Temperature: 0°C to 45°C @900 m

Humidity: 5% to 90%, non-condensing

APPROVALS

Acoustic: EN300753

Waste Electrical and Electronic Equipment (WEEE): Directive 2012/19/E

European Union ROHS directive: 2011/65/EU& 2015/863

SVHC requirements of REACH directive: (EC) No. 1907/2006

EMC: Class A - USA, Canada, Europe, China, Japan

Safety: UL/CSA/IEC/EN 60950-1/62368-1

PSU: CE, CCC, KC, TUV, UL/cUL, BIS and BSMI

ORDER INFORMATION

R3250-F9102-A0: DS3001, 2U, 64x 100GbE, COMe 4C/16GB-DDR/64GB-SSD (B2F)

R3250-F9101-A0: DS3001, 2U, 64x 100GbE, COMe 4C/16GB-DDR/64GB-SSD (F2B)

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

090924