



Silverstone™ DX400

400GbE Datacenter Infrastructure Switch



Celestica's Silverstone DX400 is an industry leading 32 QSFP-DD port 400GbE switch in a compact 1U form factor that provides 12.8Tbps bandwidth for the most demanding datacenter needs.

The DX400 can support port level configuration of sub-rates between 10GbE and 100GbE. System maximum of 144 10/25/50GbE ports or 128 40/100GbE 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 Silverstone DX400 supports current and future network requirements, including a COM-E modular x86-based control plane with BMC Management Plan and Precision Timing options for easier integration of automation tools familiar to server administrators, and an ONIE installer to support 3rd party network operating systems.

FEATURES

Interfaces: 32 QSFP-DD 400GbE Ports (144 available sub-rate ports), CPU/BMC shared Management (RJ45) and Console (RJ45) ports, USB (Type A)

Switching Capacity: 12.8Tbps IO Bandwidth, 64M Byte Buffer

Latency: Less than 500ns port to port (cut-through mode)

EEE: 802.3az

Datacenter: DCB, TRILL, Virtual Port (VM) Switching, L2 GRE, NVGRE and VXLAN (encap/decap TEP)

CPU: Intel Xeon D 2.2Ghz Dual-core (up to 16-core), 4-32GB ECC DDR4, 64GB up to 1TB M.2 SSD

Routing Tables: Unified Forwarding Tables: 512K, Configurable, ECMP: 64K, L3 LPM: 960K, LAG: 2014, Virtual Ports: 16.7M (VXLAN)

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

Transceivers: QSFP-DD (up to 12W)

IEEE1588 & SYNC E TIMING OPTION

Supports IEEE1588 1-step and 2-step time stamping

Supports TC and BC mode

Supports SyncE recovery

BMC SYSTEM MANAGEMENT OPTION

DDR3 1Gb-4Gb/SPI 8Mb-64Mb 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

802.3ad LACP
 802.1D STP, 802.1w RSTP, 802.1s MSTP, TRILL
 802.1Q VLAN 4096, SVLAN, PVLAN
 802.1 Q-in-Q double-tagged VLAN
 802.1P L2 Prioritization
 802.1AB LLDP
 802.1x Network Access Control
 IGMP/MLD Snooping
 PBB/PBB-TE
 VM Switching/VEPA/VN-Tag/802.1Qbh
 Mirroring
 Storm Control

LAYER THREE HARDWARE SUPPORTED

Hardware-based IP Forward
 IPv4/v6 Routing Protocols: OSPF, RIP, IS-IS, BGP
 VRF, ECMP/WCMP, VRRP
 VPWS, VPLS, L3 VPN
 Hardware Based Tunneling: IPv4/v6, GRE, MiM
 IGMPv1/v2/v3
 IP Multicast: PIM-SM, PIM-DM, PIM-SSM
 Hierarchical ECMP
 Enhanced IPF width and keys for SDN

TRAFFIC MANAGEMENT HARDWARE SUPPORTED

Flexible QoS Queuing for UC Packets
 Separate QoS Queues for UC and MC Packets (10 each/port)
 2-Rate, 3-Color Policing
 SP, WRR, WDRR Queuing
 DCBX (ETS, PFC, CN/QCN)
 Per-Port DSCP
 Per-Port Oversubscription

POWER AND COOLING

1100W peak consumption with 12W QSFP-DD,
 1+1 redundant, hot swap PSUs
 100-240VAC auto-ranging, 47-63Hz or
 180-300VDC auto input
 5+1 redundant fans, front to back system cooling

PHYSICAL DIMENSIONS

Height: 43.8 mm (1.73") 1 EIA unit
 Width: 438 mm (17.3")
 Depth: 656 mm (25.8")

ENVIRONMENTAL: OPERATING

Temperature: 0°C to 45°C
 Humidity: 5% to 90% non-condensing

APPROVALS

EMC: CN(GB9254-2008), EU(EN55022, EN55024),
 FCC, VCCI, CCC
 Safety: IEC60950-1, GB4943, UL/CSA, CB, CCC

ORDER INFORMATION

DX400-2C4G16-BMC-F2B - 2Core Intel Xeon D
 CPU, 4GB RAM, 16GB SSD, BMC, Front to Back,
 AC/HVDC PSU

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

