



Questone2™ D3030

25GbE Top of Rack Datacenter Switch



Celestica's Questone2 D3030 is a 48 port 25GbE and 8 port 100GbE switch in a compact 1U form factor that provides 2.0Tbps bandwidth, ideally suited for datacenter top of rack deployments.

The D3030 provides programmable data plane innovation and can support port level configuration of 10GbE or 25GbE with 8 100GbE QSFP28 uplink ports. 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 in forward and reverse airflow configurations.

The Questone2 D3030 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: 48 SFP28 25GbE ports, 8 QSFP28 ports, Rear CPU/BMC shared Management (RJ45) and Console (RJ45) ports, USB (Type A)

Switching Capacity: 2.0Tbps IO Bandwidth, 32M 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)

Telemetry: Improved Instrumentation with Transient Capture Buffer, Packet Timestamp and Buffer Statistics

CPU: Intel Atom C 1.6Ghz Dual-core (up to 8-core), 4-32GB ECC DDR4, 16GB up to 1TB M.2 SSD

Routing Tables: Unified Forwarding Tables: upto 354K MPLS labels, 350K LPM, 128K ACL

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

Transceivers: SFP28 upto 2W, QSFP28 upto 4.5W power, SR to 300m, LR to 10km, DAC (to 5m passive)

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

Under 550W peak consumption with maximum optics, 1+1 redundant, hot swap PSUs
 100-240VAC auto-ranging, 47-63Hz or, 180-300VDC auto input
 48V PSU option available
 3+1 redundant fans, front to back and back to front system cooling

DIMENSIONS

Height: 43.8 mm (1.73") 1 EIA unit
 Width: 442 mm (17.3")
 Depth: 521 mm (20.5")

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

D3030-2C4G16-F2B - 2Core Intel Atom C CPU, 4GB RAM, 16 GB SSD, BMC, Front to Back Airflow, Dual AC/HVDC PSU

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

