

# DCSL3M-04C16X-PTP

Data Center White Box Switch PTP with Renesas

16x10G SFP+, 4 x100G QSFP28



### **Overview**

The device is a high density and low latency switch with 16x10G SFP+ and 4x100G QSFP28 ports in a single 1RU for data centers and high-end campus networks. It is high performance aggregation ToR (Top of Rack) switch for telco access, security and cloud, with advanced best- in- class, open-source network platform that line- rate L2 / L3 up to 2.18Tbps (1.09Tbpsx2) switching performance of Marvell Aldrin2 is paired with multi service features.

The power supply and fan modules are hot-swappable, supporting 1+ 1 and 4+ 1 redundancy respectively. Allowing maximum flexibility, the port speeds span from 10Gbps to 100Gbps per port and port density that enables full rack connectivity to any server at any speed. Each 100G QSFP28 port can be configured 40G, 4x25GbE or 4x10GbE via breakout cables.

We support open-source Open Network Install Environment (ONIE) for zero touch installation of SONiC networking operating system or commercial OcNOS system.



#### **Features**

- Compact 1RU standard, 19-inch rack mountable design
- Cut-through with ultra-low-latency
- 2 (1+1 redundant) Redundant Hot-swappable PSU
- 5 (4+1 redundant) Hot-swappable Fan
- 16 x 10G SFP+ ports and 4 x 100G QSFP28 ports
- Each 100G QSFP28 port can be configured 40G, 4x25GbE or 4x10GbE via breakout cables
- Up to 2.18Tbps (1.09Tbpsx2) of switching performance
- Open automated configuration and zero-touch provisioning capabilities
- Simplify management of network environments
- Interface flexibility & Power efficiency

### **Specifications**

Provided Fix Ports	16 x 10G (SFP+) ports, 4 x 100G (QSFP28) ports
Management Ports	1x RJ45 100/1000Base-T Out-of-band 1x RJ45 Console 1x USB2.0
Switching Chip	Marvell Aldrin2 98DX8548
CPU	Maverll Octeon TX2 CN9130
PTP	Renesas 8A34002E
Memory	8GB DDR4
Storage	SSD: 64GB eMMC, optional M.2 STAT slot
Power Supply Units	2 x AC110~240V, 350w 1+1 Hot-swappable
Power Consumption	≤250 Watts
Fan Unit	5 (4+1 Redundant), Hot-swappable
Form Factor and Dimension	445×469×44mm (WxDxH), 1RU
Net Weight (kg)	9.7 Kgs
Operating Temperature	0°C ~ 45°C
Storage Temperature	-40°C ~ 70°C
Relative Humidity	5%-95% (non-condensing)
Operating Altitude	3000m Max.
MTBF	40 Years



MTTR	1 Hour
Switching Capacity	2.18 Tbps (1.09 Tbps x 2)
Forwarding Rate	0.6 Gpps
Jumbo Frames	Yes
Packet Buffer Size	6MB
Bridge FDB Entries	32K
Router IPv4 Host Entries	Up to 16K Unicast prefixes (LP32M)1 or Up to 3K (*,G) addresses
Router IPv6 Host Entries	Up to 8K Unicast prefixes (LPM) 3 or Up to 0.5K (*,G) addresses
Router LPM	IPv4 - up to 16K unicast prefixes IPv6 - up to 8K unicast 64-bit prefixes
TCAM Resources (Shared between TTI, IPCL and EPCL Classification Engines)	9K x 10B rules
Virtual Ports (ePorts)	8K
Bridge Domains (eVLANs)	8K
Multicast Physical Port Groups (VIDX)	4K
Multicast Virtual Port Groups (eVIDX)	16K
Multicast Linked List (MLL) Entries	16K
Tunnel-Start/ARP Table	Up to one of the following - 32K ARP entries - 8K Non-IPv6 Tunnel-Start entries - 4K IPv6 Tunnel-Start entries
Router Next Hop Entries	8K
Router ECMP Groups	8K
ePort ECMP Groups	8K
Trunk ECMP Group	4K
QoS Profiles	1K
Hardware OAM Flows	2K
Spanning Tree Groups	1K



### **Optional Software**

- \* License fee will be quoted separately according to different project management requirements.
- \* Optional features supported by Hardware but limited to Software roadmap.
- MAC-Based VLANs
- Voice VLAN
- Multicast TV VLAN
- Triple Play, MVR
- Q-in-Q, Selective Q-in-Q
- Multicast Bridging Mode
- Static Multicast Groups
- IGMP Snooping
- MLD Snooping
- Flooding of Unregistered Multicast Frames
- Per-device Spanning Tree
- Rapid Spanning Tree
- Multiple Spanning Tree
- STP Root Guard
- BPDU Filtering
- STP BPDU Guard
- Per-device Loopback Detection (LBD)
- LACP
- LAG Balancing
- Static and Dynamics (DHCP/BootP) IP assignment
- DNS Client
- IPv6 Host
- Dual Stack
- ISATAP Tunneling
- MAC-based Port Security (Locked Port)
- 802.1x Port-Based Authentication
- Time Based 802.1x
- Guest VLAN
- Unauthenticated VLANs
- 802.1x MAC Authentication
- Action-on-Violation
- Flow Monitoring (sFlow)
- RADIUS Remote Authorization and Authentication
- RADIUS Accounting
- TACACS+
- DHCP Snooping













Utilizing Diverse Platforms and Operating Systems for Tailored Solutions.



- IP Source Address Guard
- ARP Inspection
- DoS Attack Prevention
- SSL
- SSH
- QoS Across the Stack
- QoS statistics
- Egress Rate Limiting (Shaping)
- Ingress Rate Limiting
- Packet Storm Control
- Dynamic VLAN Assignment

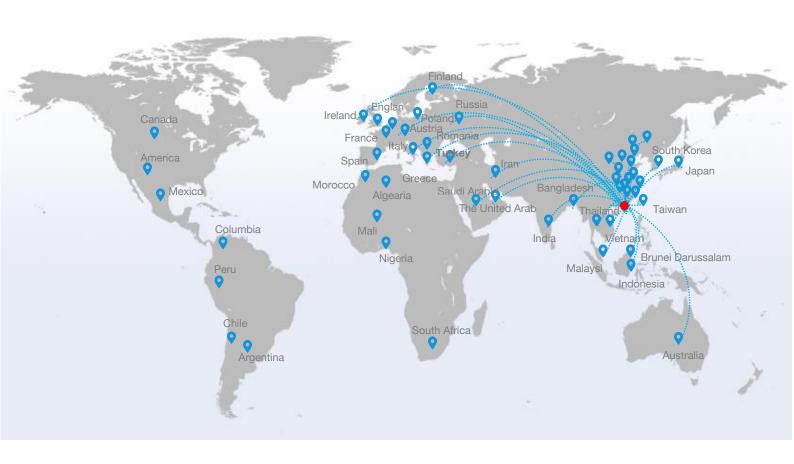
#### MPLS/MPLS-TP Feature list\*

- MPLS Architecture Support\*
- LDP, RSVP support\*
- RSVP Traffic Engineering support\*
- RSVP FRR with 1:1 and 1:n support\*
- Pseudowire setup and maintenance using LDP\*
- Pseudowire setup and maintenance using BGP\*
- EVPN support over VPLS\*
- MPLS L3VPN for IPv4/IPv6\*
- Differentiated Services over MPLS\*
- BFD for Pseudowire VCCV\*
- OAM for MPLs based transport networks, proactive connectivity check, RDI\*
- MPLS TP, Transport Profile Support\*
- MVPN Support\*

## **Ordering Information**

P/N	Description
DCSL3M-04C16X-PTP	Data Center Managed Switch 16 x 10G SFP+, 4 x 100G QSFP28 PTP with Renesas





# https://www.lanaotek.com



Specifications & design are subject to change without prior notice.

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