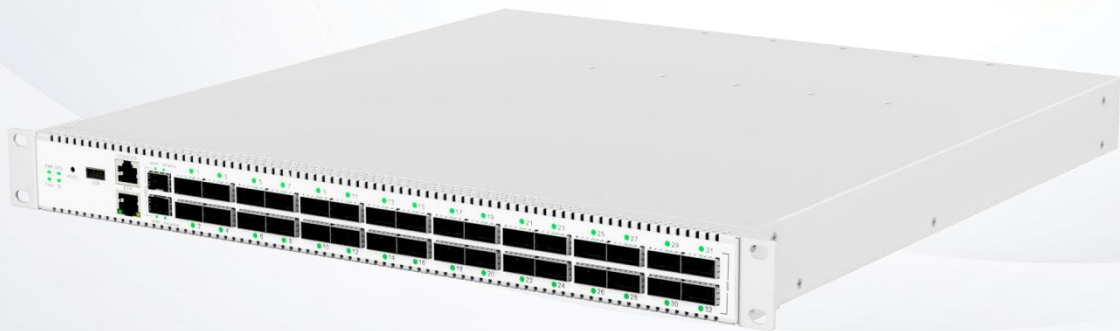# LA-SWM3-DC400G32X10G02M

Data Center White Box Switch 32x400G QSFP56-DD, 2x10G SFP+

Overview

LA-SWM3-DC400G32X10G02M is a high port density switch with 32xQSFP56-DD ports in a single 1RU and single packet forwarding engine for Data centers that need unprecedented speed. With 32xQSFP56-DD 400G ports it is ideally suited for deployment at leaf/spine in data centers, where high performance is the most important, with 25.6Tbps (12.8Tbpsx2) total performance - as ultra-powerful appliance.

Primarily packaged to meet the requirements of deployments that require smaller form factor and access to all network ports and management ports from the front side of the product. Be used to provide 32x400G+2x10G ports solution. In the interest of achieving the smallest possible form factor, minimum cost and the lowest system power consumption. In order to be able to fit all access, uplink and data ports on the front side of a 1U system, all data plane connectivity to it is provided through QSFP56-DD sockets. Each QSFP56-DD socket can operate as a single 400GbE port. Main Ethernet access ports are QSFP56-DD sockets which support 400GBASE-SR8, FR8, LR8, ER8 and DR4 physical layers. The total system contains a CPU subsystem with 16GB of DDR4 RAM and 64GB of M.2 SSD storage by the default setting. The CPU is connected to a set of central management pro- cessors that reside elsewhere in the system through an out of band control plane Ethernet connection.

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
- 32x400G QSFP56-DD in 1U form factor
- 256x56G High Speed Serdes MAC in a single PFE Packet Forwarding Engine that support 1/10/25/56 port speed modes
- 2x10Gpbe SFP+ and 1xGBaseT RJ45 Management Port

Specifications

Provided Fix Ports	32 x 400G QSFP56-DD, 2 x 10G SFP+
Management Ports	1x RJ45 100/1000Base-T Out-of-band 1x RJ45 Console 1x USB2.0
Switching Chip	Marvell Falcon 98CX8580
CPU	Intel Broadwell-DE D1508
Memory	8GB DDR4
Storage	SSD: 64GB eMMC, optional M.2 STAT slot
Power Supply Units	2 x AC110~240V, 1600w 1+1 Hot-swappable
Power Consumption	≤1200 Watts
Fan Unit	5 (4+1 Redundant), Hot-swappable
Form Factor and Dimension	445×540×44mm (WxDxH), 1RU
Net Weight (kg)	13.0 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	25.6 Tbps (12.8 Tbps x 2)
Forwarding Rate	5.6 Gpps

Jumbo Frames	Yes
Packet Buffer Size	48MB
Transmit Descriptors	384K
Bridge FDB Entries	Up to 256K
Router IPv4 Host Entries	Up to 256K
Router IPv6 Host Entries	Up to 128K
Router LPM	IPv4 - up to 512K unicast prefixes IPv6 - up to 256K unicast 64-bit prefixes
TCAM Resources (Shared between TTI, IPCL and EPCL Classification Engines)	72K x 10B rules (18K x 10B per dual control pipe)
Virtual Ports (ePorts)	8K
Bridge Domains (eVLANs)	Up to 8K
Multicast Physical Port Groups (VIDX)	Up to 4K
Multicast Virtual Port Groups (eVIDX)	16K
Multicast Linked List (MLL) Entries	16K
Tunnel-Start/ARP Table	U p to 192K ARP entries Up to 48K Non-IPv6 Tunnel-Start entries Up to 24K IPv6 Tunnel-Start entries
Router Next Hop Entries	24K
Router ECMP Groups	12K
ePort ECMP Groups	16K
Trunk ECMP Group	Up to 4K
L2 ECMP Table (Shared by ePort ECMP group and Trunk ECMP groups)	16K ECMP members Each ECMP group may contain up to 4K EMCP members
Hardware OAM Flows	16K ECMP members 4K OAM flows (1K OAM flows per control pipe
Spanning Tree Groups	Up to 4K

Optional Software

*License fee will be quoted separately according to different project management requirements.
*Optional features supported by Hardware but limited to Software roadmap.

Layer 2 Feature list

- 802.1D Spanning Tree Protocol/802.1 w Rapid
- Spanning Tree / 802.1 s Multiple Spanning Tree / RPVST+
- VLAN's with QinQ
- 802.1Q VLAN's / Trunking support
- Private VLAN's
- 802.1 AB Link Layer Discovery protocol
- 802.3x Flow control
- 802.1x Authentication*
- 802.3ad Link aggregation group support
- Multi-chassis Link aggregation group support
- CFM 802.1ag*
- Y.1731*
- VxLAN support with EVPN
- TRILL*
- QCN, ETS, PFC*

Utilizing Diverse Platforms and Operating Systems for Tailored Solutions.

Layer 3 Feature list

- Static IPv4/Ipv6
- OSPFv2/v3, ISIS (v4/v6), MP-BGP, RIPv2
- Multi-path ECMP
- VRF Lite – IPv4
- BFD for IPv4, IPv6, Protocol support for OSPF, BGP
- in Global and VRF space
- IGMP v2/v3
- IGMP Snooping, querier, proxy report suppression
- MLD
- MSDP
- PIM-SM, PIM-SSM, PIM-DM (IPv4/IPv6
- VRRP

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*

Management, Security and Qos Features

- Access control list
- RADIUS & TACACS+ support
- Role based access control
- Modular QOS for Policing, Marking and Shaping
- Hierarchical QOS*
- Flexible flow classification and action rule-set
- NETCONF support*
- Ansible Integration*
- Sflow support
- DCHP Relay/Client
- Syslog
- SNMP Support
- Industry standard CLI

Ordering Information

P/N	Description
LA-SWM3-DC400G32X10G02M	Data Center Managed Switch 32 x 400G QSFP56-DD, 2 x 10G SFP+

https://www.lanaotek.com

Specifications & design are subject to change without prior notice.

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