

**LN-4332Z4** is a high port density switch with 32 x QSFP56-DD ports in a single 1RU and single packet forwarding engine, suitable for Datacenters that need unprecedented speed.



## Product Highlights

- Cut-through with ultra-low-latency
- 32x400Gbps QSFP56-DD in 1U form factor
- 256x56Gbps 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 Plane Ports
- Six hot-swappable FAN AFI/AFO
- Two hot-swappable PSU

With 32 QSFP56-DD 400Gpbs ports it is ideally suited for deployment at leaf/spine in data centers, where high performance is the most important, or, with 12.8Tbps total performance - as ultra-powerful appliance.

LN-4332Z4 is 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. RSEM-W1-32 will be used to provide 32 x 400GbE +2 x 10GbE 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 LN-4332Z4 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, 400GBASE-FR8, 400GBASE-LR8, 400GBASE-ER8 and 400GBASE-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 processors that reside elsewhere in the system through an out of band control plane Ethernet connection.

## MAIN APPLICATION

- Enterprise
- Campus Aggregation and Core
- Data Center Aggregation and Core
- Spine/Leaf Switches

## NOS OPTIONS

- Microsoft SONIC NOS
- LarchOS – full-featured telecom/datacenter grade management system

# HARDWARE SPECIFICATION

Function/parameter	32x400G QSFP56-DD
Marvell Chipset	Falcon
FLASH	64 GB
RAM	16 GB
Maximum Bandwidth	12.8Tbps
FANS	5+1 AFI/AFO in and out option
Airflow in both directions	Air flow in; back-to-front Air flow out; front-to-back
PSU	2x1600W hotswap AFI/AFO
Case	440*558*44mm
400 GbE QSFP56-DD ports	32
Other Ports	Console, 2x10 + 1x1 OOB, USB 2.0

## LARCH OS SOFTWARE FEATURES

### Layer 2 Feature list

802.1D Spanning Tree Protocol/802.1w Rapid Spanning Tree / 802.1s Multiple Spanning Tree / RPVST+  
VLAN's with QinQ  
802.1Q VLAN's / Trunking support  
Private VLAN's  
802.1AB 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\*

### 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

\*-Optional features supported by Hardware but limited to SW roadmap.