LN-4348Y-8Z is a high port density switch with 48 x SFP28 + 8 x QSFP28 ports in a single 1RU for data centers and high-end campus networks.

Product Highlights

- 1RU, 19-inch rack mountable design

- Cut-through with ultra-low-latency

- 48 x 25 Gbps (SFP28) ports and 8 x 100 Gbps (QSFP28) ports

- Up to 2Tbps of switching I/O bandwidth (full duplex)

- Open automated configuration and zero-touch provisioning capabilities

- Simplify management of network environments

LN-4348Y-8Z with 48 x 25 Gbps and 8 x 100 Gbps ports is ideally suited for deployment at the server access layer in large enterprise data centers.

LN-4348Y-8Z delivers high-performance, high interface density and low latency to allow enterprises and carriers to build cloud-oriented data center networks.

LN-4348Y-8Z switch is an ideal spine and top of rack (ToR) solution, allowing maximum flexibility, with port speeds spanning from 10Gbps to 100Gbps per port and port density that enables full rack connectivity to any server at any speed.

Use of Marvell Falcon ASIC and Intel Broadwell CPU with DDR4 memory and flash expansion enables custom software configurations. LN-4348Y-8Z switch supports the open source Open Network Install Environment (ONIE) for zero touch installation of SONiC networking operating system.

HARDWARE SPECIFCATION

Management ports	1x RJ45 100/1000Base-T out-of-band 1 x RJ-45 Console 1 x USB Type A
Switching Chip	Marvell Falcon 98CX8512
CPU	Intel Broadwell-DE D1517
Memory	Default 8GB DDR4 Max 32GB DDR4
Storage	16GB eMMC NAND FLASH SSD module optional
BMC	AST2520 optional
Power supply units	2 x 100–240 VAC, 650W Redundant, hot swappable
Power consumption	520W max
Fan units	5 (4+1 redundant) Hot swappable
Form factor and dimension	1 RU (W) 440 mm x (D) 470 mm x (H) 44 mm
Weight, kg	9.7 kg
Operating temperature	0°C – 40°C
Storage temperature	-40°C – 70°C
Operating humidity	5% – 95% (non-condensing)
Storage humidity	5% – 95% (non-condensing)
Operating altitude	3000m max
Safety regulation compliance	UL/CSA, cUL, CB, CCC

PERFORMANCE AND SCALABILITY

Switching Capacity.. 2 Tbps

Forwarding Rate.. 2.8 Bpps

Jumbo frames.. Yes

Packet Buffer Size... 24 MB

Transmit Descriptors... 192K

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)... 36K 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................................... Up 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 Groups.. 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

LARCH OS SOFTWARE FEATURES

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

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, pro-active connectivity check, RDI

MPLS TP, Transport Profile Support

MVPN Support

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

Management, Security and Qos Features

Access control list

RADIUS & TACACS+ support

Role based access control

Modular & Hierarchical QOS for Policing, Marking and Shaping

Flexible flow classification and action rule-set

NETCONF support

Ansible Integration

Sflow support

DCHP Relay/Client

Syslog

SNMP Support

Industry standard CLI