

PRODUCT OVERVIEW



LN-4832Z4

Highlights

- ▶ Powered by the Marvell Teralynx7® Chipset with 12.8 Tbps Switching Bandwidth
- ▶ Features 32x QSFP56-DD Ports Supporting 400GbE, with Flexible Breakout Options (2x 200G, 4x 100G, 4x 25G)
- ▶ Includes Teralynx Flashlight™ Telemetry for Deep, Real-Time Network Monitoring
- ▶ Supports High Radix (up to 512)
- ▶ Marvell ROS Support
- ▶ SONiC OS Support



HARDWARE SPECIFICATIONS

Switching Hardware

Switching Ports 400G QSFP-DD	32
Switching Chip	Marvell Teralynx7 IVM77700
CPU	Intel Denverton COMe Type 7 Module
Capacity	12.8 Tbps
Memory	32GB with ECC support
VLANs Support	4096
Maximum Jumbo Frame Size	9,216 bytes

Management Port

USB	1
Serial Console	1
Management Port	1

Physical and Environmental

Power Supply Units	AC CRPS 1300W, Hot-Swappable, 1+1 Redundancy
Power Consumption	≤1200 Watts
Fan Unit	6 (5+1 redundant) Hot swappable
Form Factor and Dimension	445×515×44mm (WxDxH)
Net Weight (kg)	9.6 Kgs
Operating Temperature	0°C ~ 45°C
Storage Temperature	-40°C ~ 70°C
Relative Humidity	5%-95% (non-condensing)
Operating Altitude	3000m max
Predicted MTBF	350000 hours

Safety

Safety	UL (CSA 22.2 No 62368-1 & UL 62368-1)
Certification	

EMC

EMC	EN 55032 Class A
Certification	AS/NZS CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Class A, VCCI-CISPR32, ICES-003

MARVELL ROS SOFTWARE FEATURES

Basic Functions

Port Speed/duplex management	VLANS (Protocol / MAC / IPv4 based)
Port Auto management	GVRP/GARP
VCT Diagnostics Port features	Multicast/CPE(Triple Play) VLAN
Jumbo Frames (FE and GE)	QinQ
LAG / LACP	Flow Control 802.3x
Green Ethernet	Back Pressure
STP/RSTP/MSTP etc.	Loopback and UDLD (Unidirectional link) detection
Optical Transceiver Analysis	

Quality of Service

Basic / Advanced QOS (Port/Flow)	CoS/QoS
Ingress/egress Rate Limiting/Shaping	SP/WRR Queue settings
L2/L3 CoS->Queue mapping	Per-Flow Actions

Security

Access Control and logging	Radius Authentication/Accounting/802.1x
Time based ACL	TACACS+ Client and Accounting
MAC/Port based security	Syslog
Ace priority	DHCP Snooping
802.1x enhanced (all variants)	ARP inspection
802.1x MAC/Port/Web/Time based	IP Source Guard
Secure Control Technology (protect CPU)	DoS Attack prevention

Monitoring

Mirroring SPAN/RSPAN	Environmental PS/RPS, FAN, Temperature
RMON/SMON	SFLOW v5
SNMP v1/2/3 with MIBs	Counters with History

Multicast

IGMP Snooping v1/2/3	*PIM-SM (optional)
MLD Snooping v1/2	IGMP/MLD Proxy
MLD Querier	Ports, Flows, CP
Unregistered Mcast	

MARVELL ROS SOFTWARE FEATURES

Management

OOB & serial Console support	DNS, DHCP, SNTP, LLDP-MED, UpnP
CLI/SNMP management (IPv4,IPv6) over Telnet or SSH	LLDP 802.1ab + LLDP MED
USB/SD flash storage support	WEB-GUI interface for basic management
DHCP based Self-Configuration/Update	Time based scheduled features
Multi-File Configs, Dual-Firmware	*Detailed REST compatible API (Optional)
RMON, Syslog, Radius, TACACS+	

*IP Routing (Optional)

L3 DHCP Relay	IP SLA
Proxy ARP for IP Routing	Loopback IP interface (Source Address Selection)
OSPF / RIP	Directed Broadcast
Equal Cost Multiple Path (ECMP)	UDP Relay
VRRP	IPv6 static unicast routing

*Stacking (Optional)

Optional Stacking up to 8(16) units using uplinks	Real cross-unit features, not just Management
Stand-alone and Stack-mode operation	Stack Master Election process
Firmware Version Control	Stack Backup capabilities
Unit joining or leaving the stack	Stacking Fast Failover
Stacking LAG	

*Optional Features for ROS

Ring protection	VxLAN
WEB-GUI with flexible configuration options	Radius COA
PTP	BGP

SONIC OS SOFTWARE FEATURES

Layer 2/3 Feature list

BGP / BGP MP	BGP/Neighbor-down fib-accelerate
BGP-EVPN support (type 5), (related HLD Fpmsyncd,Vxlanmgr,template)	ECMP
LAG	ACL permit/deny, IPv6 ACL
LLDP	DHCP
VLAN	CoPP
IPv6	VLUN Trunk
FRR	Priority Flow Control
Asymmetric PFC	PFC Watermark
DHCP Relay Agent	Tunnel Decap
LACP Fallback	MTU Setting
Vlan Trunk	Static Port breakout
Dynamic ACL Upgrade	MAC Aging
L3 RIF counter support	Configurable drop counters

Monitoring

SNMP	Syslog
EverFlow	OOM
TCPDump	Critical Recourse Monitor
Dtel	Mirroring
Egress mirroring	ACL action support check via SAI
Streaming Telemetry	Everflow enhancement
sFlow	HW resource monitor

QoS

RDMA	ECN
PFC WD	WRED
COS	Watermark

Virtualization

L3 VxLAN	VRF
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SONIC OS SOFTWARE FEATURES

System

NTP	ONIE Install
CLI	TACACS+
ConfigDB	SONiC to SONiC upgrade
Multiple Images support	gRPC
Sensor transceiver monitoring	LLDP extended MIB: Ildpretable, Ildploporttable, Ildpremanaddrttable, Ildplomanaddrttable, Ildploporttable, IldpLocalSystemData
Warm Reboot	Incremental Config (IP, LAG, Port shut/unshut)
Routing Stack Graceful Restart	Mgmt VRF
Management Framework	Multi-DB optimization-Part 1
Sub-port support	



ORDERING INFORMATION

Model

Description

LN-4832Z4

32x QSFP56-DD ports