

PRODUCT OVERVIEW



LN-4332Z1

Highlights

- ▶ Cut-Through with Ultra-Low-Latency
- ▶ Marvell ROS Support
- ▶ SONiC OS Support
- ▶ 32x100Gbps QSFP28 in 1U Form Factor
- ▶ 128x56Gbps High Speed Serdes MAC in a Single PFE Packet Forwarding Engine that Support 1/10/25/56 Port Speed Modes
- ▶ 2x10Gbps SFP+ and 1xGbaseT RJ45 Management Plane Ports
- ▶ Six Hot-Swappable FAN AFI/AFO
- ▶ Two Hot-Swappable PSU
- ▶ 16GB RAM
- ▶ 64GB eMMC



HARDWARE SPECIFICATIONS

Switching Performance

Marvell Chipset	Falcon
FLASH	64 GB
RAM	16 GB
Maximum Bandwidth	3.2Tbps
Maximum jumbo frame size	9,216 bytes
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
Power Supply	2x PSU + PSU Hot-Swap
Case	440x558x44mm
Ports	32x100 GbE QSFP28
Pluggable transceivers support	40GBase-SR, 40GBase-LR, 100GBase-SR, 100GBase-LR
Other Ports	Console, 2x10 + 1x1 OOB, USB 2.0
Mac-address entries	>82,000

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	IEEE 802.3az Energy Efficient Ethernet
RSTP	LACP
MC-LAG	DHCP

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
MACsec	

Monitoring

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

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+	

Power Over Ethernet

PoE 802.3af 802.3at 60W PoE	Time Based PoE
PoE Budget with LLDP negotiation	PoE Consumption monitor
PSE/PD if HW supported	

*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
IPv4/IPv6	

*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	Virtual stacking support

*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
Policy Based Routing (PBR)	Private VLAN

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
----------	-----

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: lldpremtable, lldploctable, lldpremanaddrtable, lldplocmanaddrtable, lldploctable, lldpLocalSystemData
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-4332Z1	L3, 32x100 Dual Hot Pluggable PSU, Hot Pluggable FANS. 16GB RAM, 64GB eMMC
-----------	--

Model includes a 3-year HW Warranty.