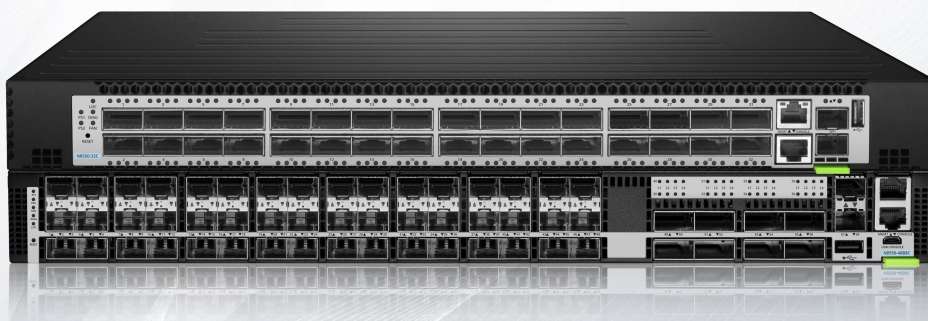


N8550 Series Switches

IDEAL FOR DATA CENTER NETWORKS AND HIGH-END CAMPUS NETWORKS

Models: N8550-48B8C; N8550-32C



Overview

The N8550 Series Data Center Switches are a series of high-performance switches that provide 10G/25G/40G/100G wirespeed connectivity for high-density availability and uplink options, designed to be deployed as Top-of Rack (ToR) or leaf-spine switches in data center applications.

Combined with self-developed extensible open networking operating system FSOS, the N8550 series switches is packed with software features that support complete Layer 3 IPv4 and IPv6 routing protocol, VXLAN, M-LAG, etc. built for the small and medium data center, and the medium and large campus networks.

Benefits

- Broadcom Switch Chip
- Complete IPv4/IPv6 Dual Stack Protocol
- VXLAN Scales Data Center Capacity
- M-LAG, GR+BFD for VRRP Enhances Reliability
- CLI/ SNMPv1/v2/v3/Telnet
- 1+1 Redundant Power Supplies
- N+1 Redundant Fan Modules
- Open Network Install Environment (ONIE)

Key Features

Performance and Scalability

Support rich and complete Layer 2 switching and Layer 3 routing functions.

Support IPv4/IPv6 dual stack protocol.

Support VxLAN, MLAG,.

Support x86, ARM, PPC, MIPS and other architecture CPUs.

Support various switch chips from mainstream manufacturers.

Support flexible upgrade method, such as ONIE, USB, remote online upgrade.

Superior Network Management

Support varied management interfaces, such as Console, MGMT port, USB port.

Support SNMPv1/v2/v3.

Support Command Line Interface (CLI) and Telnet to make management more convenient.

Support SSH2.0, SSL to make management more secure.

Support user operation logs.

Quality of Service (QoS)

Support traffic classification based on Layer 2 headers, Layer 3 protocols, Layer 4 protocols, and 802.1p priority.

Support ACLs and actions such as Committed Access Rate (CAR), re-marking, and scheduling.

Support Queuing algorithms, such as PQ, RR, WRR, DRR, PQ+WRR, and PQ+DRR.

Support Layer 2/3/4 packet filtering, providing based on source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP port number, protocol type, VLAN traffic classification.

Security Control Features

Support RADIUS and TACACS authentication for login users.

Support command line hierarchical protection.

Support dynamic or static binding of user identification elements such as IP, MAC, VLAN, port, etc, to prevent illegal access by users.

Technical Specification

N8550 series switches come with the industry-standard hardware and FSOS. Here’s a look at the details.

CHARACTERISTIS

	N8550-48B8C	N8550-32C
Port		
Ports	2x 10G, 48x 25G SFP28 and 8x 100G QSFP28	2x 10G and 32x 100G QSFP28
100G QSFP28	8	32
40G QSFP+	8	32
25G SFP28	48	--
10G SFP+	2	2
RJ45 Management Port	1	1
Console Port	1	1
USB Type A Storage Port	1	1
Operating System		
OS	FSOS	FSOS
Key Components		
Switch Chip	Broadcom BCM56873 Trident III	Broadcom BCM56870 Trident III
CPU	Intel® Xeon® D-1518 processor quad-core 2.2 GHz	Intel® Xeon® D-1518 processor quad-core 2.2 GHz
DRAM	2x 8 GB SO-DIMM DDR4	2x 8GB DDR4 SO-DIMM
SPI Flash	2x 16MB	2x 16MB
SSD	64GB MLC	64GB MLC

CHARACTERISTICS

	N8550-48B8C	N8550-32C
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Performance

Layer Type	Layer 3	Layer 3
Switching Capacity	4 Tbps full duplex	6.4 Tbps full duplex
Forwarding Rate	2.9 Bpps	4.7 Bpps
MAC Addresses	98K	98K
Packet Buffer	32MB integrated packet buffer	32MB integrated packet buffer
VLAN IDs	4K	4K
Jumbo Frames	Up to 9216 Bytes	Up to 9216 Bytes

Status Indicators

10G SFP+ Port LEDs	--	--
25G SFP28 Port LEDs	Link Status, Activity, Rate	--
40G QSFP+ Port LEDs	--	--
100G QSFP28 Port LEDs	Link Status, Activity, Rate	Link Status, Activity, Rate
Ethernet Management Port LED	Link Status, Activity	Link Status, Activity
Console Port LED	--	Link Status
System LEDs	Diagnostic, Locator, PSU and Fan Status	Diagnostic, Locator, PSU and Fan Status

Power

Input Voltage	100-240VAC, 50-60Hz, 6A	100-240VAC, 50-60Hz, 6A max.
Max. Power Consumption	550W	550W

CHARACTERISTICS

	N8550-48B8C	N8550-32C
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Physical and Environmental

Dimensions (HxWxD)	1.71"x17.26"x21.1" (43.5x438.4x536mm)	1.72"x17.26"x20.28" (43.8x438.4x515mm)
Rack Space	1U	1U
Hot-swappable Power Supplies	2 (1+1 Redundancy)	2 (1+1 Redundancy)
Hot-swappable Fans	6 (5+1 Redundancy)	6 (5+1 Redundancy)
Airflow	Back-to-Front	Back-to-Front
Operating Temperature	32°F to 104°F (0°C to 40°C)	32°F to 113°F (0°C to 45°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Operating Humidity	5% to 95% (Non-condensing)	5% to 95% (Non-condensing)
Weight	22.05 lbs (10kg), with two installed PSUs	23.96 lbs (10.87kg), with two installed PSUs

Warranty

Hardware Warranty	5 Years	5 Years
Software Warranty	5 Years	5 Years

FEATURES

Functionality	Description
Layer 2 Features	Ethernet Features
	IEEE 802.3x for full duplex mode
	Port Statistics
	Port rate control
	MTU configuration of vlanif interface
	M-LAG
	Eth-Trunk
	LACP for link aggregation
	Port isolation
	Broadcast/Multicast/Unknown Unicast Storm Control
	Support loopback interface
Layer 3 Features	VLAN Features
	Access, trunk, and hybrid interface types
	1:1 VLAN Mapping
	N:1 VLAN Mapping
	VLAN mapping based on 802.1p
	IEEE 802.1ad QinQ
	IPv4 address and IPv6 address for VLAN interface
	MVRP/compatible GVRP
	Private VLAN
	MAC Address Table
Layer 4 Features	Dynamic MAC address learning and aging
	Static, dynamic, and blackhole MAC address entries
	ARP
	Static ARP
	Dynamic ARP
	ARP entry aging
	Proxy ARP
	FLINK
	Flexible link and Monitor link
	VXLAN
Layer 5 Features	Static VXLAN
	EVPN VXLAN
	LLDP
	Link Layer Discovery Protocol (LLDP)

FEATURES

Functionality	Description
Layer 2 Features	UDLD
	MSTP
	Spanning Tree Protocol (STP)
	<ul style="list-style-type: none">• Rapid Spanning Tree Protocol (RSTP)• Multiple Spanning Tree Protocol (MSTP)• Bridge Protocol Data Unit (BPDU), root protection, loop protection and TC-BPDU protection
Layer 3 Features	G.8032
	<ul style="list-style-type: none">• G.8032 Ethernet Ring Protection Switching (ERPS)
	IPv4
	<ul style="list-style-type: none">• Unicast static routing• IPv4 dynamic routing protocols: RIP, OSPF, IS-IS, and BGP• DHCP snooping• DHCP Server/Relay/client• Support BFD for BGP/IS-IS/OSPF• Route-policy• ECMP
IPv6	Neighbor Discovery Protocol (NDP)
	PINGv6
	Trace route v6
	IPV6TELNET Server
Multicast Features	IPV6TELNET Client
	IPv6 static routing
	ACLv6
	OSPFv3
	BGP4+
	Support IGMP v1/v2/v3
	IGMP v1/v2/v3 snooping
	IGMP Snooping Proxy
	PIM-SM (ASM/SSM)
	Fast leave
	Multicast VLAN
	Multicast querier
	Multicast protocol packet suppression
	Multicast replication

FEATURES

Functionality	Description
Quality of Service (QoS)	Traffic Classification Traffic classification based on Layer 2 headers, Layer 3 protocols, Layer 4 protocols, and 802.1p priority
	Traffic Action ACLs and actions, such as Committed Access Rate (CAR), re-marking, and scheduling
	Queuing Algorithms Queuing algorithms, such as PQ, RR, WRR, DRR, PQ+WRR, and PQ+DRR
Configuration and Maintenance	Terminal Services Command-Line Interface (CLI) access via console, Telnet and SSH
	File Transfer Upload and download files through FTP client Upload and download files through TFTP client and server
	Configuration and Maintenance User operation logs Switched port analyzer (SPAN) Network Time Protocol(NTP)
	Reliability VRRP BFD for VRRP
	Software Upgrade Open Network Install Environment (ONIE) USB Upgrade Online upgrade
	Security RADIUS and TACACS authentication for login users L2 ACL/IPv4 ACL/hybrid ACL/IPv6 ACL SSH v2.0 Port isolation CPU Protection (CPP) IP source guard Command line authority control based on user levels to prevent unauthorized users from using command configurations

FEATURES

Functionality	Description
Management	Simple Network Management Protocol (SNMP) v1/v2/v3 Command Line Interface (CLI) SSL Ping and traceroute RMON

Accessories



Console Cable*1



Power Cords*2



Rack Mount Kit Bracket*1



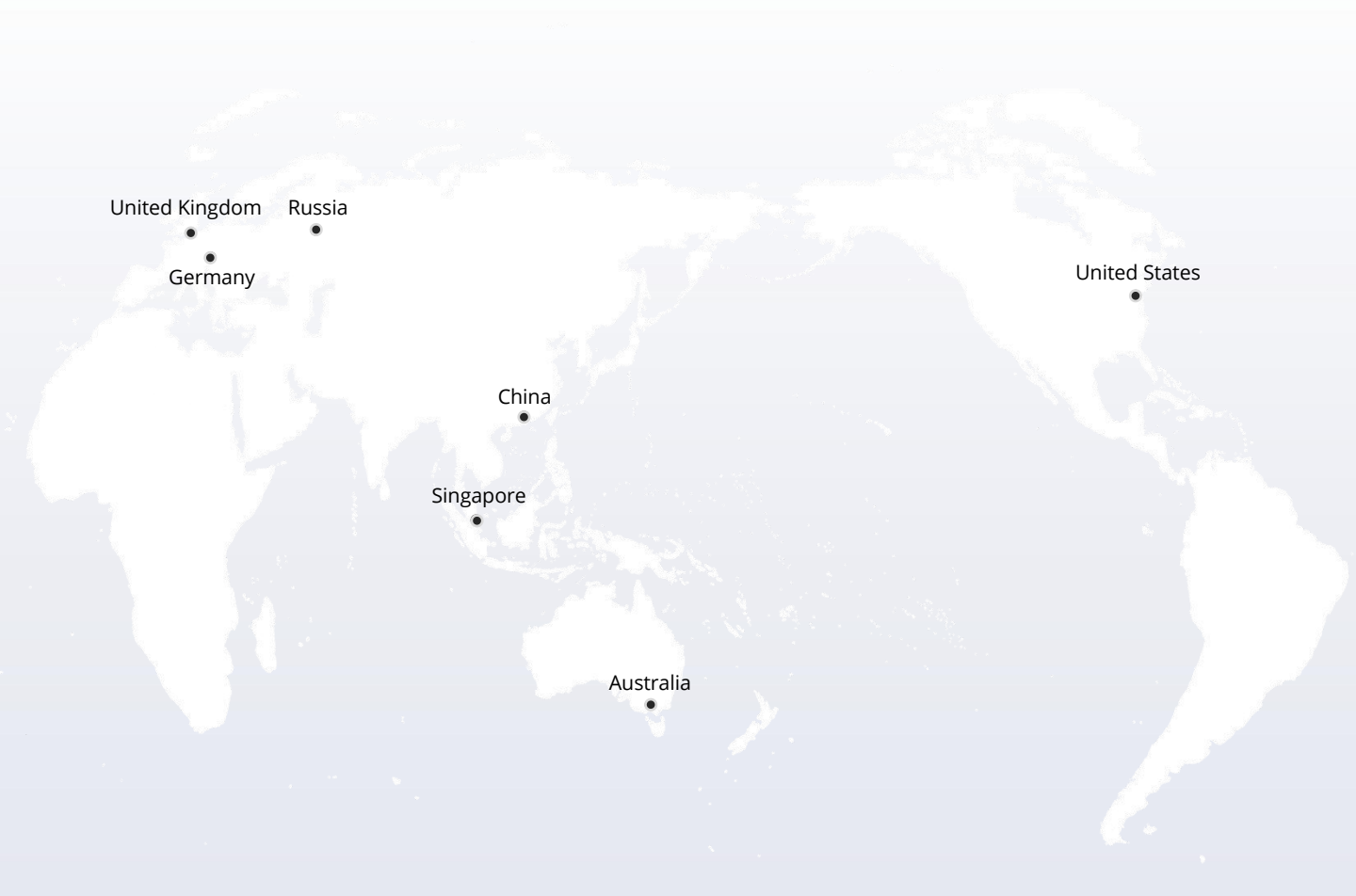
M4 Screws*20



Ear-locking Screws*2



User Manual*1



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