

NE40E Series Main Processing Units



Product Overview

The Main Processing Unit (MPU) integrates multiple functional units. By integrating the system control and management unit, clock unit, and system maintenance unit, the MPU provides the functions of the control plane and maintenance plane.

The NE40E Series Routers support several kinds of modular MPUs, as shown in Figure 1.

Figure 1. Modular MPU Components in NE40E Series Routers



Main Processing Unit B5(16G Memory)



Switch and Route Processing Unit A8(16G Memory)



Switch and Route Processing Unit A9(16G Memory)



Switch and Route Processing Unit B5



Main Processing Unit D4(16G Memory)



Main Processing Unit D3(Including 4G Memory and 2G USB)



Switch and Route Processing Unit A8(16G
Memory)



Main Processing Unit B6

Product Features

As the system control and management unit, the MPU provides the following functions on the system control panel:

- Route calculation: All routing protocol packets are sent by the forwarding engine to the MPU for processing. In addition, the MPU broadcasts and filters packets, and downloads routing policies from the policy server.
- Outband communication between boards: The LAN switch modules integrated on the MPU provide outband communications between boards. In this manner, messages can be controlled, maintained, and exchanged between SFUs and LPUs.
- Device management and maintenance: Devices can be managed and maintained through the management interfaces (serial interfaces) provided by the MPU.
- Data configuration: The MPU stores configuration data, startup files, charging information, upgrade software, and system logs.
- Data storage: The MPU provides two interfaces for CF cards, which serve as mass storage devices to store data files.
- System clock unit: provides accurate and reliable SDH clock signals for LPUs.

Two MPUs work in 1:1 backup mode. Each MPU monitors the status of the other. If the master MPU is faulty, the slave MPU automatically takes over as the master MPU.

Table 1. Features of the NE40E Series MPU Components

Feature	Description
Support for Huawei VRP Software	<ul style="list-style-type: none"> • Multi-core or multi-process CPUs • Distributed applications • Virtualization for Virtual Routers (VSs) • NSx, including Non-Stop Service (NSS), Non-Stop Routing (NSR), Non-Stop Bridge (NSB), and Non-Stop Forwarding (NSF) and In-Service Software Upgrade (ISSU) • VRRPv8 supports Netconf and two-phase configuration validation and configuration rollback
High availability	NE40E provides optional redundant-processor, the main control modules, clock modules, and LAN switch modules on the MPU working in 1:1 hot backup mode, improving system reliability.
System clock	<p>The system clock unit of the MPU provides NSPs and PICs with reliable and synchronous SDH clock signals. The MPU can provide three-channel 2.048 MHz synchronous clock signals for the downstream devices, or receive 2.048 MHz or 2.048 Mbps external reference clock signals.</p> <p>To support IEEE 1588v2, that is, the Precision Time Protocol (PTP), the SDH clock interface can input time information in multiple formats by selecting specific software.</p>
Multiple media for storage, such as USB, CF card, SSD card, Sata, etc.	As a massive storage, allows for easier manageability for configuration data, startup files, charging information, upgrade software, and system logs, etc.
Modularity	The MPU in NE40E are modularized, which offers maximum investment protection and flexibility by allowing customers to upgrade to future MPU on NE40E.

Product Compatibility

Table 2. MPU Compatible Chassis("●" indicates supported items, "-" indicates unsupported items)

BOM	Order Name	Description	NE40E-					
			X3	X8	X16	X3A	X8A	X16A
03057244	CR5DoMPUB571	Main Processing Unit B5(16G Memory)	-	-	●	-	-	●
03057257	CR5DoSRUA871	Switch and Route Processing Unit A8(16G Memory)	-	-	-	-	●	-
03057261	CR5DoSRUA971	Switch and Route Processing Unit A9(16G Memory)	-	-	-	-	●	-
03057248	CR5DoMPUD471	Main Processing Unit D4(16G Memory)	-	-	-	●	-	-
03057054	CR5DoSRUB570	Switch and Route Processing Unit B5	-	●	-	-	-	-
03055705	CR5DoMPUD270	Main Processing Unit D3(Including 4G Memory and 2G USB)	●	-	-	-	-	-
03057822	CR5DoSRUA872	Switch and Route Processing Unit A8(16G Memory)	-	-	-	-	●	-
03057366	CR5DMPUX8670	Main Processing Unit B6	-	-	-	-	-	●

Connectivity Support

NE40E Series MPUs are pluggable and there are two MPU slots in each NE40E chassis.

NE40E Series MPUs use Huawei VRP Software that allows these routers to use the industry-leading high-availability features, such as, Integrated Software Service Upgrade (ISSU), Nonstop Forwarding (NSF), Non-Stop Routing (NSR), etc.

Table 3. Interfaces of Main Processing Unit B6

Interface Name	Interface Type	Connector Type	Description	Cable
FSP0, FSP1	Serial interface	RJ45	Reserved. It functions as an interface for fast chassis switchovers.	8-core shielded cable

Interface Name	Interface Type	Connector Type	Description	Cable
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	Super category 5 shielded twisted pair
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
CON	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	-
CLK	External synchronization interface	RJ45	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, 1pps time signals.	120-ohm clock cable
TOD	External synchronization interface	RJ45	Used to input or output 1pps+ASCII time signals, or two channels of DCLS time signals.	120-ohm clock cable
CLK-INT	External synchronization interface	RJ45	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, 1pps+ASCII time signals, or two channels of DCLS time signals.	120-ohm clock cable
SMB	External synchronization interface	SMB	Used to external synchronization interface.	75-ohm clock cable
USB	Reserved for further expansion	USB	USB Type A	-

Table 4. Interfaces of Main Processing Unit B5(16G Memory)

Interface Name	Interface Type	Connector Type	Description	Cable
FSP0, FSP1	Serial interface	RJ45	Reserved. It functions as an interface for fast chassis switchovers.	-
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	-

Interface Name	Interface Type	Connector Type	Description	Cable
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
Console	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	8-core shielded cable
CLK/TOD0, CLK/TOD1	External synchronization interface	RJ45	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, 1pps+ASCII time signals, or two channels of DCLS time signals.	120-ohm clock cable
CLK/1PPS	External synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or 1 PPS signals.	75-ohm clock cable
CLK/Serial	External synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or RS-232 signals.	75-ohm clock cable

Table 5. Interfaces of Switch and Route Processing Unit A8(16G Memory)

Interface Name	Interface Type	Connector Type	Description	Cable
FSP0, FSP1	Serial interface	RJ45	Reserved. It functions as an interface for fast chassis switchovers.	-
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	-
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
Console	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable

Interface Name	Interface Type	Connector Type	Description	Cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	8-core shielded cable
CLK/TOD ₀ , CLK/TOD ₁	External synchronization interface	RJ45	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, 1pps+ASCII time signals, or two channels of DCLS time signals.	120-ohm clock cable
CLK/1PPS	External synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or 1 PPS signals.	75-ohm clock cable
CLK/Serial	External synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or RS-232 signals.	75-ohm clock cable

Table 6. Interfaces of Switch and Route Processing Unit A8(16G Memory)

Interface Name	Interface Type	Connector Type	Description	Cable
FSP ₀ , FSP ₁	Serial interface	RJ45	Reserved interface for fast chassis switchovers	-
GE/10GE	GE/10GE	SFP+/SFP	Reserved inter-chassis cascading interface	-
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
Console	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	8-core shielded cable
CLK/TOD ₀ , CLK/TOD ₁	External synchronization interface	RJ45	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, 1pps+ASCII time signals, or two channels of DCLS time signals.	120-ohm clock cable

Interface Name	Interface Type	Connector Type	Description	Cable
CLK/1PPS	ExterN/AI synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or 1 PPS signals.	75-ohm clock cable
CLK/Serial	ExterN/AI synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or RS232 signals.	75-ohm clock cable

Table 7. Interfaces of Switch and Route Processing Unit A9(16G Memory)

Interface Name	Interface Type	Connector Type	Description	Cable
FSP0, FSP1	Serial interface	RJ45	Reserved. It functions as an interface for fast chassis switchovers.	-
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	-
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
Console	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	8-core shielded cable
CLK/TOD0, CLK/TOD1	ExterN/AI synchronization interface	RJ45	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, 1pps+ASCII time signals, or two channels of DCLS time signals.	120-ohm clock cable
CLK/1PPS	ExterN/AI synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or 1 PPS signals.	75-ohm clock cable
CLK/Serial	ExterN/AI synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or RS-232 signals.	75-ohm clock cable

Table 8. Interfaces of Main Processing Unit D4(16G Memory)

Interface Name	Interface Type	Connector Type	Description	Cable
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
Console	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	8-core shielded cable
GE0, GE1	GE	SFP	Reserved cascading interface.	optical fiber
CLK	External synchronization interface	RJ45	Used to input or output external synchronization clock signals.	120-ohm clock cable
TOD	External synchronization interface	RJ45	Used to input or output external synchronization time signals.	120-ohm clock cable
USB	USB 2.0	USB Type A	The USB interface functions are unavailable and reserved.	-

Table 9. Interfaces of Main Processing Unit D3(Including 4G Memory and 2G USB)

Interface Name	Interface Type	Connector Type	Description	Cable
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
Console	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	8-core shielded cable

Interface Name	Interface Type	Connector Type	Description	Cable
CLK	ExterN/AI synchronization interface	RJ45	Used to input or output exterN/AI synchronization clock signals.	120-ohm clock cable
TOD	ExterN/AI synchronization interface	RJ45	Used to input or output exterN/AI synchronization time signals.	120-ohm clock cable
USB	USB 2.0	USB Type A	The USB interface functions are uN/Available and reserved.	-

Table 10. Interfaces of Switch and Route Processing Unit B5

Interface Name	Interface Type	Connector Type	Description	Cable
FSP0, FSP1	Serial interface	RJ45	Reserved. It functions as an interface for fast chassis switchovers.	-
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	-
MGMT-ETH	Ethernet interface (10M/100M/1000M Base-TX autonegotiation)	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded twisted pair
Console	RS-232 serial interface	RJ45	It connects to the console for on-site system configuration. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
AUX	RS-232 serial interface	RJ45	It connects to the modem for remote maintenance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be managed through the AUX interface. The AUX interface is reserved for further expansion.	8-core shielded cable
CLK/TOD0, CLK/TOD1	ExterN/AI synchronization interface	RJ45	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, 1pps+ASCII time signals, or two channels of DCLS time signals.	120-ohm clock cable
CLK/1PPS	ExterN/AI synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or 1 PPS signals.	75-ohm clock cable
CLK/Serial	ExterN/AI synchronization interface	SMB	Used to input or output 2-Mbit/s clock signals, 2-MHz clock signals, or RS-232 signals.	75-ohm clock cable

Product Specifications

Table 11. Main Processing Unit B6 Specifications

Item	Description
Order Name	CR5DMPUX8670
Silkscreen	MPUB6
Dimensions (H x W x D)	41 mm x 398 mm x 554 mm (1.61 in. x 15.67 in. x 21.81 in.)
Weight	7.5 kg (16.54 lb)
Typical power consumption	170.0 W
Typical heat dissipation	551.6 BTU/hour
Ambient temperature	Long terms: 0 °C to 40 °C (32°F to 104°F) Short terms: -5 °C to 50 °C (23°F to 122°F)
Processing unit	Octa-core 2.3GHZ
SDRAM	32 GB
Flash	16 MB
Storage	SSD card: 32GB
Reliability and availability	1:1 backup mode.

Table 12. Main Processing Unit B5(16G Memory) Specifications

Item	Description
Order Name	CR5DoMPUB571
Silkscreen	MPUB5
Dimensions (H x W x D)	40.1 mm x 399.2 mm x 535.6 mm (1.58 in. x 15.72 in. x 21.09 in.)
Weight	4.5 kg (9.92 lb)
Typical power consumption	93.0 W
Typical heat dissipation	301.7 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Processing unit	Quad-core 2.0GHz
SDRAM	8 GB x 2
Flash	16 MB
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

Table 13. Switch and Route Processing Unit A8(16G Memory) Specifications

Item	Description
Order Name	CR5DoSRUA871
Silkscreen	SRUA-480-A
Dimensions (H x W x D)	30 mm x 386.8 mm x 534.3 mm (1.18 in. x 15.23 in. x 21.04 in.)
Weight	6.3 kg (13.89 lb)
Typical power consumption	203.0 W
Typical heat dissipation	658.6 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Processing unit	Quad-core 2.0GHz
SDRAM	8 GB x 2
Flash	16 MB
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

Table 14. Switch and Route Processing Unit A8(16G Memory) Specifications

Item	Description
Order Name	CR5DoSRUA872
Silkscreen	SRUA-480-A
Dimensions (H x W x D)	30 mm x 386.8 mm x 534.3 mm (1.18 in. x 15.23 in. x 21.04 in.)
Weight	6.3 kg (13.8 lb)
Typical power consumption	140.0 W
Typical heat dissipation	454.2 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Processing unit	Quad-core 2.0GHz
SDRAM	8 GB x 2
Flash	16 MB
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

Table 15. Switch and Route Processing Unit A9(16G Memory) Specifications

Item	Description
Order Name	CR5DoSRUA971
Silkscreen	SRUA-1T-A
Dimensions (H x W x D)	30 mm x 386.8 mm x 534.3 mm (1.18 in. x 15.23 in. x 21.04 in.)
Weight	6.3 kg (13.89 lb)
Typical power consumption	243.0 W
Typical heat dissipation	788.4 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Processing unit	Quad-core 2.0GHz
SDRAM	8 GB x 2
Flash	16 MB
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

Table 16. Main Processing Unit D4(16G Memory) Specifications

Item	Description
Order Name	CR5DoMPUD471
Silkscreen	MPUD4
Dimensions (H x W x D)	40.1 mm x 199.2 mm x 535.6 mm (1.58 in. x 7.84 in. x 21.09 in.)
Weight	2.4 kg (5.18 lb)
Typical power consumption	61.0 W
Typical heat dissipation	197.9 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Processing unit	Quad-core 2.0GHz
SDRAM	8 GB x 2
Flash	16 MB
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

Table 17. Main Processing Unit D3(Including 4G Memory and 2G USB) Specifications

Item	Description
Order Name	CR5DoMPUD270
Silkscreen	MPU
Dimensions (H x W x D)	40.1 mm x 199.2 mm x 535.6 mm (1.58 in. x 7.84 in. x 21.09 in.)
Weight	1.7 kg (3.75 lb)
Typical power consumption	33.0 W
Typical heat dissipation	107.1 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Processing unit	Single-core 1.2GHZ
SDRAM	4 GB(9*4Gb)
Flash	16 MB
Storage	eUSB:2 GB
Reliability and availability	1:1 backup mode

Table 18. Switch and Route Processing Unit B5 Specifications

Item	Description
Order Name	CR5DoSRUB570
Silkscreen	SRUB5-200
Dimensions (H x W x D)	35.1 mm x 399.2 mm x 535.6 mm (1.38 in. x 15.72 in. x 21.09 in.)
Weight	5.1 kg (11.25 lb)
Typical power consumption	177.0 W
Typical heat dissipation	574.3 BTU/hour
Ambient temperature	Long terms: 0 °C to 45 °C (32°F to 113°F) Short terms: -5 °C to 55 °C (23°F to 131°F)
Processing unit	Quad-core 2.0GHz
SDRAM	8 GB x 2
Flash	16 MB
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

Product Performance

Table 19. MPUB6 Performance

Feature	Specification
IPv4 BGP routes	Up to 25,000,000
IPv6 BGP routes	Up to 10,000,000
MPLS LDP labels	256,000
Generic routing encapsulation (GRE) tunnels	Total of IPV4 GRE & IPV6 GRE: 8,000/slot; 8,000/chassis IPV6 GRE: 1,000/slot; 1,000/chassis
Layer 3 VPN (L3VPN)	Up to 16,000 IPv4 Virtual Route Forwarding (VRF) instances Up to 16,000 IPv6 VRF instances
IPoE/PPPoE	IPv4: 1,024,000 subscribers/chassis IPv6: 512,000 subscribers/chassis Dual-Stack: 512,000 subscribers/chassis IPv4 in virtual access scenarios: 512,000 subscribers/chassis IPv6 in virtual access scenarios: 256,000 subscribers/chassis Dual-Stack in virtual access scenarios: 256,000 subscribers/chassis
L2TP sessions	128,000/chassis
	LAC: 16,000/chassis; LNS: 48,000/chassis

Table 20. MPUB5 Performance

Feature	Specification
IPv4 BGP routes	Up to 25,000,000
IPv6 BGP routes	Up to 10,000,000
MPLS LDP labels	256,000
Generic routing encapsulation (GRE) tunnels	Total of IPV4 GRE & IPV6 GRE: 8,000/slot; 8,000/chassis IPV6 GRE: 1,000/slot; 1,000/chassis
Layer 3 VPN (L3VPN)	Up to 16,000 IPv4 Virtual Route Forwarding (VRF) instances Up to 16,000 IPv6 VRF instances
IPoE/PPPoE	IPv4: 1,024,000 subscribers/chassis IPv6: 512,000 subscribers/chassis Dual-Stack: 512,000 subscribers/chassis IPv4 in virtual access scenarios: 512,000 subscribers/chassis IPv6 in virtual access scenarios: 256,000 subscribers/chassis

Feature	Specification
	Dual-Stack in virtual access scenarios: 256,000 subscribers/chassis
L2TP sessions	128,000/chassis
L2TP tunnels	LAC: 16,000/chassis; LNS: 48,000/chassis

Table 21. SRUA8 Performance

Feature	Specification
IPv4 BGP routes	Up to 25,000,000
IPv6 BGP routes	Up to 10,000,000
MPLS LDP labels	256,000
Generic routing encapsulation (GRE) tunnels	Total of IPV4 GRE & IPV6 GRE: 8,000/slot; 8,000/chassis IPV6 GRE: 1,000/slot; 1,000/chassis
Layer 3 VPN (L3VPN)	Up to 16,000 IPv4 Virtual Route Forwarding (VRF) instances Up to 16,000 IPv6 VRF instances
IPoE/PPPoE	IPv4: 512,000 subscribers/chassis IPv6: 512,000 subscribers/chassis Dual-Stack: 512,000 subscribers/chassis IPv4 in virtual access scenarios: 512,000 subscribers/chassis IPv6 in virtual access scenarios: 256,000 subscribers/chassis Dual-Stack in virtual access scenarios: 256,000 subscribers/chassis
L2TP sessions	128,000/chassis
L2TP tunnels	LAC: 16,000/chassis LNS: 48,000/chassis

Table 22. SRUA9 Performance

Feature	Specification
IPv4 BGP routes	Up to 25,000,000
IPv6 BGP routes	Up to 10,000,000
MPLS LDP labels	256,000
Generic routing encapsulation (GRE) tunnels	Total of IPV4 GRE & IPV6 GRE: 8,000/slot; 8,000/chassis IPV6 GRE: 1,000/slot; 1,000/chassis
Layer 3 VPN (L3VPN)	Up to 16,000 IPv4 Virtual Route Forwarding (VRF) instances

Feature	Specification
	Up to 16,000 IPv6 VRF instances
IPoE/PPPoE	IPv4: 512,000 subscribers/chassis IPv6: 512,000 subscribers/chassis Dual-Stack: 512,000 subscribers/chassis IPv4 in virtual access scenarios: 512,000 subscribers/chassis IPv6 in virtual access scenarios: 256,000 subscribers/chassis Dual-Stack in virtual access scenarios: 256,000 subscribers/chassis
L2TP sessions	128,000/chassis
L2TP tunnels	LAC: 16,000/chassis LNS: 48,000/chassis

Table 23. MPUD₄ Performance

Feature	Specification
IPv4 BGP routes	Up to 25,000,000
IPv6 BGP routes	Up to 10,000,000
MPLS LDP labels	256,000
Generic routing encapsulation (GRE) tunnels	Total of IPv4 GRE & IPv6 GRE: 8,000/slot; 8,000/chassis IPv6 GRE: 1,000/slot; 1,000/chassis
Layer 3 VPN (L3VPN)	Up to 16,000 IPv4 Virtual Route Forwarding (VRF) instances Up to 16,000 IPv6 VRF instances
IPoE/PPPoE	IPv4: 512,000 subscribers/chassis IPv6: 512,000 subscribers/chassis Dual-Stack: 512,000 subscribers/chassis IPv4 in virtual access scenarios: 512,000 subscribers/chassis IPv6 in virtual access scenarios: 256,000 subscribers/chassis Dual-Stack in virtual access scenarios: 256,000 subscribers/chassis
L2TP sessions	128,000/chassis
L2TP tunnels	LAC: 16,000/chassis LNS: 48,000/chassis

Table 24. MPUD₃ Performance

Feature	Specification
IPv4 BGP routes	Up to 12,500,000
IPv6 BGP routes	Up to 10,000,000

Feature	Specification
MPLS LDP labels	256,000
Generic routing encapsulation (GRE) tunnels	Total of IPv4 GRE & IPv6 GRE: 8,000/slot; 8,000/chassis IPv6 GRE: 1,000/slot; 1,000/chassis
Layer 3 VPN (L3VPN)	Up to 16,000 IPv4 Virtual Route Forwarding (VRF) instances Up to 16,000 IPv6 VRF instances
IPoE/PPPoE	IPv4: 128,000 subscribers/chassis IPv6: 128,000 subscribers/chassis Dual-Stack: 64,000 subscribers/chassis IPv4 in virtual access scenarios: 128,000 IPv6 in virtual access scenarios: 128,000 subscribers/chassis Dual-Stack in virtual access scenarios: 64,000 subscribers/chassis
L2TP sessions	128,000/chassis
L2TP tunnels	LAC: 16,000/chassis; LNS: 48,000/chassis

Table 25. SRUB5 Performance

Feature	Specification
IPv4 BGP routes	Up to 25,000,000
IPv6 BGP routes	Up to 10,000,000
MPLS LDP labels	256,000
Generic routing encapsulation (GRE) tunnels	Total of IPv4 GRE & IPv6 GRE: 8,000/slot; 8,000/chassis IPv6 GRE: 1,000/slot; 1,000/chassis
Layer 3 VPN (L3VPN)	Up to 16,000 IPv4 Virtual Route Forwarding (VRF) instances Up to 16,000 IPv6 VRF instances
IPoE/PPPoE	IPv4: 512,000 subscribers/chassis IPv6: 512,000 subscribers/chassis Dual-Stack: 512,000 subscribers/chassis IPv4 in virtual access scenarios: 512,000 subscribers/chassis IPv6 in virtual access scenarios: 256,000 subscribers/chassis Dual-Stack in virtual access scenarios: 256,000 subscribers/chassis
L2TP sessions	128,000/chassis
L2TP tunnels	LAC: 16,000/chassis LNS: 48,000/chassis

For More Information

For more information about the Huawei NE40E Series Routers, visit <http://e.huawei.com> or contact us in the following ways:

- Global service hotline: <http://e.huawei.com/en/service-hotline>
- Logging into the Huawei Enterprise technical support web: <http://support.huawei.com/enterprise/>
- Sending an email to the customer service mailbox: support_e@huawei.com

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