

## **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.

Modular MPU Components in NE40E Series Routers



### MPUB4



#### MPUB5



MPUD2



MPUD3



SRUA5



SRUA7



SRUA8



SRUA9



SRUB5

### **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.

Feature	Description
Support for Huawei VRP Software	<ul> <li>Multi-core or multi-process CPUs</li> <li>Distributed applications</li> <li>Virtualization for Virtual Routers (VSs)</li> <li>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)</li> <li>VRPv8 supports Netconf and two-phase configuration validation and configuration rollback</li> </ul>
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	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.
	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.
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 madulared, which offers maximum investment protection and flexibility by allowing customers to upgrade to future MPU on NE40E.

## **Product Compatibility**

## MPU Compatible Chassis

MPU Compatible Chassis( "•" indicates supported items, "-" indicates unsupported items).

вом	Order Name	Description	-	-	-	-	-	-
03057244	CR5D0M PUB571	Main Processing Unit B5(16G Memory)	-	-	•	-	-	•
03057257	CR5D0S RUA871	Switch and Route Processing Unit A8(16G Memory)	-	-	-	-	•	-
03057261	CR5D0S RUA971	Switch and Route Processing Unit A9(16G Memory)	-	-	-	-	•	-
03057248	CR5D0M PUD471	Main Processing Unit D4(16G Memory)	-	-	-	•	-	-
03057054	CR5D0S RUB570	Switch and Route Processing Unit B5	-	•	-	-	-	-
03055705	CR5D0M PUD270	Main Processing Unit D3(Including 4G Memory and 2G USB)	•	-	-	-	-	-
03057366	CR5DMP UX8670	Main Processing Unit B6	-	-	-	-	-	•
03057822	CR5D0S RUA872	Switch and Route Processing Unit A8(16G Memory)	-	-	-	-	•	-
03058135	CR5D0S RUAA70	Switch and Route Processing Unit A10(32G Memory)	-	-	-	-	•	-
03058859	CR5D0M PUB871	Main Processing Unit B8	-	-	-	-	-	•
03058860	CR5D0S RUAC71	Switch and Route Processing Unit A16	-	-	-	-	•	-
03059315	CR5D0S RUAC73	Switch and Route Processing Unit A161	-	-	-	-	•	-

## MPU Compatible SFU

MPU Compatible SFU( "•" indicates supported items, "-" indicates unsupported items).

BOM	Order Name	Description	S F U I-1 0 0 - D (0 3 0 5 4 2 3 0)	X 1 6 : SFUI-200 - B (03053547)	X8: SFUI-200-C (03053548)	X16A:SFUI-480-B CR5DSFUIM07B (03055780)	X16A:SFUI-480-B CR5DSFUIM17B (03057824)	X8A:SFUI-480-C CR5DSFUIM07C (03056095)	X8A:SFUI-480-C CR5DSFUIM17C (03057823)	X16:SFUI-400-G CR5DSFUGK070(03058355)	X8:SFUI-400-FCR5DSFUFK070(03058388)	X16A SFUI-1T-B (03056091)	X8A SFUI-1T-C (03056094)	X 1 6 A S F U I - 2 T - B (0 3 0 5 7 8 2 5)	X8A SFUI-2T-D (03058136)	X16A TB:SFUI-2T-E (03058565)	X8A TB:SFUI-2T-F(03058568)
03057244	CR5D0M PUB571	Main Processing Unit B5(16G Memory)	-	•	-	•	•	-	-	-	-	•	-	•	-	-	-
03057248	CR5D0M PUD471	Main Processing Unit D4(16G Memory)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03055705	CR5D0M PUD270	Main Processing Unit D3(Including 4G Memory and 2G USB)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03057366	CR5DMP UX8670	Main Processing Unit B6	-	-	-	•	•	-	-	-	-	•	-	•	-	-	-
03058859	CR5D0M PUB871	Main Processing Unit B8	-	-	-	•	•	-	-	-	-	•	-	•	-	•	-

## **Interfaces of Main Processing Unit B6**

#### Management interfaces

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
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	Optical fiber/Super category 5 shielded twisted pair
MGMT-ETH	Ethernet interface (10M/100M/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	-
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 clock interface	SMB	Used to External clock interface.	75-ohm clock cable
USB	USB	USB Type A	USB interface, reserved for further expansion.	-

## **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.	-
MGMT-ETH	Ethernet interface (10M/100M/1000	RJ45	It connects to an NMS and can work in half-duplex or full-duplex mode.	Super category 5 shielded

Interface Name	Interface Type	Connector Type	Description	Cable
	M Base-TX autonegotiation)			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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable. Currently the device cannot be maN/Aged 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

# **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/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	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	SMB	Used to input or output 2-Mbit/s clock signals, 2-	75-ohm clock

Interface Name	Interface Type	Connector Type	Description	Cable
	interface		MHz clock signals, or 1 PPS signals.	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

## **Interfaces of Switch and Route Processing Unit A8(16G Memory)**

### Management interfaces

Interface Name	Interface Type	Connector Type	Description	Cable
FSP0, FSP1	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/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	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 RS232 signals.	75-ohm clock cable

# **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.	-

Interface Name	Interface Type	Connector Type	Description	Cable
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	-
MGMT-ETH	Ethernet interface (10M/100M/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	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

## **Interfaces of Switch and Route Processing Unit A16A**

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
10GE	10GE	SFP+	Reserved cascading interface.	Optical fiber
MGMT-ETH	Ethernet interface (10M/100M/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	-
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	RJ45	Used to input or output 1pps+ASCII time	120-ohm clock

Interface Name	Interface Type	Connector Type	Description	Cable
	synchronization interface		signals, or two channels of DCLS time signals.	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
SMA	External clock interface	SMA	Used to External clock interface.	50-ohm clock cable
USB	USB	USB Type A	USB interface, reserved for further expansion.	-

## **Interfaces of Switch and Route Processing Unit A16A1**

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
10GE	10GE	SFP+	Reserved cascading interface.	Optical fiber
MGMT-ETH	Ethernet interface (10M/100M/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	-
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
SMA	External clock interface	SMA	Used to External clock interface.	50-ohm clock cable
USB	USB	USB Type A	USB interface, reserved for further expansion.	-

# **Interfaces of Switch and Route Processing Unit A10(32G Memory)**

#### Management interfaces

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
GE/10GE	GE/10GE	SFP+/SFP	Reserved cascading interface.	Super category 5 shielded twisted pair
MGMT-ETH	Ethernet interface (10M/100M/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	-
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	USB	USB Type A	USB interface, reserved for further expansion.	-

## **Interfaces of Main Processing Unit D4(16G Memory)**

Interface Name	Interface Type	Connector Type	Description	Cable
MGMT-ETH	Ethernet interface (10M/100M/1000 M 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

Interface Name	Interface Type	Connector Type	Description	Cable
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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	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 uN/Available and reserved.	-

## **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/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	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

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

### Management interfaces

Interface Name	Interface Type	Connector Type	Description	Cable
MGMT-ETH	Ethernet interface (10M/100M/1000 M 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 mainteN/Ance by means of dial-up. Baud rate: 9600 bit/s (default value), which is configurable.	8-core shielded cable
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 uN/Available and reserved.	-

## **Main Processing Unit B6 Specifications**

#### 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: 8GB

Item	Description
Reliability and availability	1:1 backup mode.

## Main Processing Unit B5(16G Memory) Specifications

Main Processing Unit B5(16G Memory) Specifications

Item	Description
Order Name	CR5D0MPUB571
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

## **Switch and Route Processing Unit A8(16G Memory) Specifications**

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

Item	Description
Order Name	CR5D0SRUA871
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

Item	Description
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

## **Switch and Route Processing Unit A8(16G Memory) Specifications**

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

Item	Description
Order Name	CR5D0SRUA872
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	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

# **Switch and Route Processing Unit A9(16G Memory) Specifications**

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

Item	Description
Order Name	CR5D0SRUA971
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

Item	Description
SDRAM	8 GB x 2
Flash	16 MB
Storage	SSD card:8 GB
Reliability and availability	1:1 backup mode

## **Switch and Route Processing Unit A16 Specifications**

Switch and Route Processing Unit A16 Specifications

Item	Description
Order Name	CR5D0SRUAC71
Silkscreen	SRUA-2T-B
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	7.6 kg (16.76 lb)
Typical power consumption	290.0 W
Typical heat dissipation	940.9 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	16-core 2.0GHz
SDRAM	32 GB
Flash	64MB
Storage	SSD card: 8GB
Reliability and availability	The 1:1 backup mode is used for MPUs. The 3+1 backup mode is used for SFUs. The four SFUs balance services at the same time. If one SFU is faulty or replaced, the other three SFUs automatically take over its services to prevent service interruptions.

## **Switch and Route Processing Unit A161 Specifications**

Switch and Route Processing Unit A161 Specifications

Item	Description
Order Name	CR5D0SRUAC73
Silkscreen	SRUA-2T-B
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	7.6 kg (16.76 lb)
Typical power consumption	290.0 W
Typical heat dissipation	940.9 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)

Item	Description
Processing unit	16-core 2.0GHz
SDRAM	32 GB
Flash	64MB
Storage	SSD card: 8GB
Reliability and availability	1:1 backup mode

# **Switch and Route Processing Unit A10(32G Memory) Specifications**

Switch and Route Processing Unit A10(32G Memory) Specifications

Item	Description
Order Name	CR5D0SRUAA70
Silkscreen	SRUA-2T-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	7.6 kg (16.76 lb)
Typical power consumption	290.0 W
Typical heat dissipation	940.9 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: 8GB
Reliability and availability	The 1:1 backup mode is used for MPUs. The 3+1 backup mode is used for SFUs. The four SFUs balance services at the same time. If one SFU is faulty or replaced, the other three SFUs automatically take over its services to prevent service interruptions.

## Main Processing Unit D4(16G Memory) Specifications

Main Processing Unit D4(16G Memory) Specifications

Item	Description
Order Name	CR5D0MPUD471
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 (5.29 lb)
Typical power consumption	61.0 W

Item	Description
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

## **Switch and Route Processing Unit B5 Specifications**

Switch and Route Processing Unit B5 Specifications

Item	Description
Order Name	CR5D0SRUB570
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

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

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

Item	Description
Order Name	CR5D0MPUD270
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)

Item	Description
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

### **For More Information**

For more information about the Series Routers, visit http://e.huawei.comor 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

#### Copyright © Huawei Technologies Co., Ltd. 2019. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

#### **Trademarks and Permissions**

₩ HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

#### Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

#### $\label{thm:eq:huawei} \textbf{Huawei Technologies Co., Ltd.}$

Address:Huawei Industrial Base Bantian, Longgang Shenzhen 518129 People's Republic of China

Website:www.huawei.com