Product Overview

Huawei NE40E Series Universal Service Routers support 200Gbps integrated line processing units (LPUI-200 Series). LPUI-200 Series integrated line processing units handle all the network data-plane traffic-processing tasks of Huawei NE40E series universal service routers.

Product Features

The LPUI-200 Series supports the following integrated line processing units:

- 2-port 100GE integrated line processing unit: has industry-leading 100G line-rate Ethernet interfaces, which can replace a large number of 10GE link aggregation bundles to simplify network operations.

- 20-port 10GE integrated line processing unit: boasts industry-leading high interface density and supports large-scale aggregation for scalable Ethernet and IP/Multiprotocol Label Switching (IP/MPLS) networks.

- 1-port 100GE and 10-port 10GE integrated line processing unit: has the advantages of the 2-port 100GE integrated line processing unit and the 20-port 10GE integrated line processing unit.

These high-capacity integrated line processing units are designed to remove bandwidth bottlenecks that are caused by next-generation high-speed and high-requirement computing applications and technologies. These line cards provide economical, scalable, and reliable line-rate Ethernet and IP/MPLS services.

The LPUI-200 provides powerful service capability. The LPUI-200 supports the combination of IP, MPLS, Ethernet, L2VPN, and L3VPN services. In addition, the LPUI-200 supports the 1588v2 feature, which allows for submicrosecond time synchronization based on specific hardware to ensure high-precision time synchronization between devices for applications and services that require 1588v2 clock synchronization, such as IP RAN and TDM migration. The LPUI-200 supports IPv6, which helps implement smooth IPv4-to-IPv6 transition. The LPUI-200 has a flexible programmable architecture. Microcode programming can be used for new service deployment, without the need to replace hardware, which reduces investments. In addition, this architecture drastically shortens the technological innovation cycle and accelerates new service rollout, helping customers build flexible and scalable networks.

LPUI-200 Series routers can dynamically change the number of forwarding chip processing cores, frequency, and bus bandwidth to compensate for service traffic changes, reducing boards' power consumption. The LPUI-200 Series also support dynamic frequency adjustment and intelligent fan speed adjustment, which significantly reduces power consumption, with less than 0.9 W for each gigabit, lowest in the industry.

Product Compatibility

LPUF-200 Series Compatible Chassis

LPUF-200 Series Compatible Chassis("●" indicates supported items, "-" indicates unsupported items).

BOM	Order Name	Description	-	-	-	-	-	-
03056598	CR5DLPUFE070	Flexible Card Line Processing Unit(LPUF-200)	-	-	-	●	●	●
03057713	CR5DLPUFE07B	Flexible Card Line Processing Unit B(LPUF-200-B)	-	-	-	●	●	●
03030QDF	CR5D00E1NC74	1-Port 100GBase-CFP Flexible Card A(P240-A)	-	●	●	●	●	●
03030TUL	CR5D00LAXF70	10-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A)	●	-	-	●	●	●
03032GLA	CR5D00E1NC7A	1-Port 100GBase-CFP2 Flexible Card A(P240-A)	●	●	●	●	●	●
03030QDD	CR5D00LBXF71	12-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A)	●	●	●	●	●	●
03032HGG	CR5D00E1ND73	1-Port 100GBase-QSFP28 Flexible Card A(P240-A)	●	●	●	●	●	●

LPUF-200 Series Compatible Optical/Electrical Modules

LPUF-200 Series Compatible Optical/Electrical Modules

BOM Number	Order Name	Board Name	Optical type supported
03030QDD	CR5D00LBXF71	12-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A)	1Gbps electrical module 1.25Gbps eSFP optical module 1.25Gbps eSFP CWDM optical module 1.25Gbps eSFP BIDI optical module 125M~2.67Gbps eSFP DWDM optical module 10Gbps SFP+ optical module 10Gbps SFP+ CWDM optical module 10Gbps SFP+ BIDI optical module 10Gbps SFP+ DWDM optical module 1.25/9.953/10.3125Gbps SFP+ optical module
03030QDF	CR5D00E1NC74	1-Port 100GBase-CFP Flexible Card A(P240-A)	100Gbps CFP optical module
03032GLA	CR5D00E1NC7A	1-Port 100GBase-CFP2 Flexible Card A(P240-A)	100Gbps CFP2 optical module **NOTE** When optical modules with the BOM number 02311LYG are

BOM Number	Order Name	Board Name	Optical type supported
			used, 2x40G and 10x10G breakout optical fibers are not supported.
03032HGG	CR5D00E1ND73	1-Port 100GBase-QSFP28 Flexible Card A(P240-A)	100Gbps QSFP28 optical module 40Gbps QSFP+ optical module
03030TUL	CR5D00LAXF70	10-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A)	1Gbps electrical module 1.25Gbps eSFP optical module 1.25Gbps eSFP CWDM optical module 1.25Gbps eSFP BIDI optical module 125M~2.67Gbps eSFP DWDM optical module 10Gbps SFP+ optical module 10Gbps SFP+ CWDM optical module 10Gbps SFP+ BIDI optical module 10Gbps SFP+ DWDM optical module 1.25/9.953/10.3125Gbps SFP+ optical module

Flexible Card Line Processing Unit(LPUF-200) Specifications

Flexible Card Line Processing Unit(LPUF-200) Specifications

Item	Description
Order Name	CR5DLPUFE070
Silkscreen	LPUF-200
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	8.4 kg (18.52 lb)
Typical power consumption	191.0 W
Typical heat dissipation	619.7 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)
Reliability and availability	Hot swappable.

Flexible Card Line Processing Unit B(LPUF-200-B) Specifications

Flexible Card Line Processing Unit B(LPUF-200-B) Specifications

Item	Description
Order Name	CR5DLPUFE07B
Silkscreen	LPUF-200-B
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	8.4 kg (18.52 lb)
Typical power consumption	191.0 W
Typical heat dissipation	619.7 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)
Reliability and availability	Hot swappable.

1-Port 100GBase-CFP Flexible Card A(P240-A) Specifications

1-Port 100GBase-CFP Flexible Card A(P240-A) Specifications

Item	Description
Order Name	CR5D00E1NC74
Silkscreen	P240-1x100GBase LAN-CFP-A
Dimensions (H x W x D)	37.2 mm x 178.7 mm x 193.3 mm (1.46 in. x 7.04 in. x 7.61 in.)
Weight	1.3 kg (2.87 lb)
Typical power consumption	51.0 W
Typical heat dissipation	165.5 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)
Connector type	CFP
Working mode	Full-duplex
Frame format	Ethernet_II, Ethernet_SAP and Ethernet_SNAP
Reliability and availability	Hot swappable.

1-Port 100GBase-CFP2 Flexible Card A(P240-A) Specifications

1-Port 100GBase-CFP2 Flexible Card A(P240-A) Specifications

Item	Description
Order Name	CR5D00E1NC7A
Silkscreen	P240-1x100GBase-CFP2-A
Dimensions (H x W x D)	37.2 mm x 178.7 mm x 193.3 mm (1.46 in. x 7.04 in. x 7.61 in.)
Weight	0.8 kg (1.76 lb)
Typical power consumption	40.0 W
Typical heat dissipation	129.7 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)
Connector type	CFP2
Working mode	Full-duplex
Frame format	Ethernet_II, Ethernet_SAP and Ethernet_SNAP
Reliability and availability	Hot swappable.

1-Port 100GBase-QSFP28 Flexible Card A(P240-A) Specifications

1-Port 100GBase-QSFP28 Flexible Card A(P240-A) Specifications

Item	Description
Order Name	CR5D00E1ND73
Silkscreen	P240-1x100GBase-QSFP28-A
Dimensions (H x W x D)	37.2 mm x 178.7 mm x 193.3 mm (1.46 in. x 7.04 in. x 7.61 in.)
Weight	0.8 kg (1.76 lb)
Typical power consumption	34.0 W
Typical heat dissipation	110.3 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)
Connector type	QSFP28/QSFP+
Working mode	Full-duplex
Frame format	Ethernet_II, Ethernet_SAP and Ethernet_SNAP
Reliability and availability	Hot swappable.

10-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A) Specifications

10-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A) Specifications

Item	Description
Order Name	CR5D00LAXF70
Silkscreen	P240-10x10GBase LAN/WAN-SFP+ -A
Dimensions (H x W x D)	37.2 mm x 178.7 mm x 193.3 mm (1.46 in. x 7.04 in. x 7.61 in.)
Weight	0.8 kg (1.76 lb)
Typical power consumption	52.0 W
Typical heat dissipation	168.7 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)
Connector type	SFP/SFP+
Working mode	Full-duplex
Frame format	Ethernet_II, Ethernet_SAP and Ethernet_SNAP
Reliability and availability	Hot swappable.

12-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A) Specifications

12-Port 10GBase LAN/WAN-SFP+ Flexible Card A(P240-A) Specifications

Item	Description
Order Name	CR5D00LBXF71
Silkscreen	P240-12x10GBase LAN/WAN-SFP+-A
Dimensions (H x W x D)	37.2 mm x 178.7 mm x 193.3 mm (1.46 in. x 7.04 in. x 7.61 in.)
Weight	0.8 kg (1.76 lb)
Typical power consumption	52.0 W
Typical heat dissipation	168.7 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)
Connector type	SFP/SFP+
Working mode	Full-duplex
Frame format	Ethernet_II, Ethernet_SAP and Ethernet_SNAP
Reliability and availability	Hot swappable.

For More Information

For more information about the   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