Product Overview

Huawei NE9000's 4T Integrated Line Process Units (LPUI-4T for short) are used to process traffic on all data planes of Huawei NE9000 series universal service routers.

40-Port 100GE/50GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM)

8-Port 400GE-QSFP-DD + 8-Port 100GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM, 8*100G RTU Enabled by default)

Product Characteristics

The LPUI-4T series provide various service support capabilities. IP, MPLS, Segment Routing, SRv6, Ethernet, L2VPN, L3VPN and EVPN services can be deployed simultaneously. The boards support IEEE 1588v2 and G.8275.1 sub-microseconds time synchronization precision with hardware-assisted processing. Therefore, time synchronization between devices equipped with such boards is highly accurate. The boards can be used for services and applications (for example, IP RAN or private line) that require clock synchronization. The boards support IPv6/SRv6 and smooth transition from IPv4 to IPv6. With the flexible and fully programmable architecture, the boards implement new services through microcode programming. Customers do not need to replace existing hardware with new hardware, which reduces device investment costs. In addition, the service innovation period is greatly shortened to help customers quickly launch new services and build flexible and scalable networks.

- A 40-port 100GE integrated line processing board is designed to provide high-density ports. The board supports a maximum of 40 QSFP28 100GE or 50GE ports. Each port equipped with a QSFP+ optical module can be used as a 40GE port. The port can fan out to 4x10GE ports to support large-scale aggregation access.

- An 8-port 400GE and 8-port 100GE integrated line processing board is designed to provide ultra-bandwidth. The board supports a maximum of 8 QSFP-DD 400GE ports and 8 QSFP28 100GE ports or 50GE ports. Each 100GE port equipped with a QSFP+ optical module can be used as a 40GE port. The port can fan out to 4x10GE ports to support large-scale aggregation access.

These large-capacity integrated line processing boards help eliminate the network bandwidth bottleneck stemming from new-generation high-speed and high-demand computing applications and technologies (such as server virtualization and cloud

computing, data center fiber integration, and terminal users' requirements for higher performance computing). The boards provide economical, scalable, high-reliability, and line-speed Ethernet and IP/MPLS services.

In addition, the Huawei-developed Solar chip has the following advantages: It is reliable and secure and supports the dynamic adjustment of the number of processing cores, frequency, and bus bandwidth of the forwarding chip based on service traffic changes, which dynamically adjusts board power consumption. Combined with dynamic frequency modulation and intelligent fan rotation speed adjustment, the chip implements dynamic energy conservation and helps greatly reduce device power consumption.

Product Compatibility

LPUI-4T Series Compatible Chassis

LPUI-4T Series Compatible Chassis ("●" indicates supported items, "-" indicates unsupported items).

BOM	Order Name	Description	-8	-20
03050DJC	CR9D00EKNB8S	40-Port 100GE/50GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM)	●	●
03050DJE	CR9DE8KE8N8W	8-Port 400GE-QSFP-DD + 8-Port 100GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM, 8*100G RTU Enabled by default)	●	●

LPUI-4T Series Compatible Optical Modules

LPUI-4T Series Compatible Optical Modules

BOM Number	Order Name	Board Name	Optical type supported
03050DJC	CR9D00EKNB8S	40-Port 100GE/50GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM)	40Gbps QSFP+ Optical Module 50Gbps QSFP28 Optical Module 50Gbps QSFP28 BIDI Optical Module 100Gbps QSFP28 Optical Module
03050DJE	CR9DE8KE8N8W	8-Port 400GE-QSFP-DD + 8-Port 100GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM, 8*100G RTU Enabled by default)	40Gbps QSFP+ Optical Module 50Gbps QSFP28 Optical Module 50Gbps QSFP28 BIDI Optical Module 100Gbps QSFP28 Optical Module 400Gbps QSFP-DD Optical Module

Product Specifications

LPUI-4T Series Specifications

40-Port 100GE/50GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM) Specifications

Item	Description
Order Name	CR9D00EKNB8S

Item	Description
Silkscreen	NE9000 LPUI-4T-CM 40x100GE-QSFP28
Dimensions (H x W x D)	45.2 mm x 521.9 mm x 533.4 mm (1.78 in. x 20.55 in. x 21.0 in.)
Weight	14.5 kg (32 lb)
Typical power consumption	997 W
Typical heat dissipation	3235 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)
Connector type	QSFP28/QSFP+
Working mode	Full-duplex
Frame format	Ethernet_II, Ethernet_SAP and Ethernet_SNAP
Reliability and availability	Hot swappable

8-Port 400GE-QSFP-DD + 8-Port 100GE-QSFP28 Integrated Line Process Unit CM(LPUI-4T-CM, 8*100G RTU Enabled by default) Specifications

Item	Description
Order Name	CR9DE8KE8N8W
Silkscreen	NE9000 LPUI-4T-CM 8x400GE-QSFP-DD+8x100GE-QSFP28
Dimensions (H x W x D)	45.2 mm x 521.9 mm x 533.4 mm (1.78 in. x 20.55 in. x 21.0 in.)
Weight	14.8 kg (32.63 lb)
Typical power consumption	1002 W
Typical heat dissipation	3251 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)
Connector type	QSFP-DD, QSFP28/QSFP+
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

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