Nokia 16P200 Muxponder Card

The Nokia 16P200 Muxponder provides the ideal solution for aggregating 10GE, 25GE, 100GE, Fibre Channel (FC), 10G OTN, and 10G SONET/SDH services into nx100G high speed ports. Since most networks are composed of a mix of legacy service types, a high-density multi-service aggregation card provides an efficient solution for combining multiple client services into high speed ports. The 16P200 can be used as a standalone card with 100G black and white optics, or paired with the Nokia cohernet transponders to provide 100G – 600G wavelengths for transport over metro, regional, and long-haul WDM line systems.

The Nokia 1830 Photonic Service Switch (PSS) product family enables cost-effective, efficient aggregation and transport of client services over access, metro, regional and long-haul optical networks. The 16P200 muxponder is supported in the 1830 PSS-8, -16ii, and -32 systems.

Benefits

- Single Muxponder card provides efficient aggregation of multiple service types, including Ethernet, OTN, SONET/SDH, Fiber Channel
- High-density, supporting 16 high speed ports
- Supports 8/10/16/32FC services for storage area network based Fibre Channel applications
- Standalone muxponder applications or paired with WDM transponder
- Supported on Nokia 1830 PSS-8, -16ii, -32 systems

Applications

- High capacity aggregation applications
- 10GE 25GE mobile fronthaul applications
- SAN backup applications requiring high-speed fiber channel connections
- General purpose 10GE Ethernet, OTN, SONET/SDH multi-service aggregation into nx100G ports
- Ideal solution for metro service aggregation into 100G – 600G wavelengths

Product description

The 16P200 is a high-density muxponder card with (14) client ports, supporting 10GE, 25GE, 100GE, OTU2/2e, 8/10/16/32FC, OC-192 SONET, and STM-64 SDH services, along with (2) 100G line ports.

Services are mapped into standard OTN ODU or ODUflex payloads and then combined into nx100G signals for transport over 100G line ports, including paired 100G – 600G WDM transponder cards.

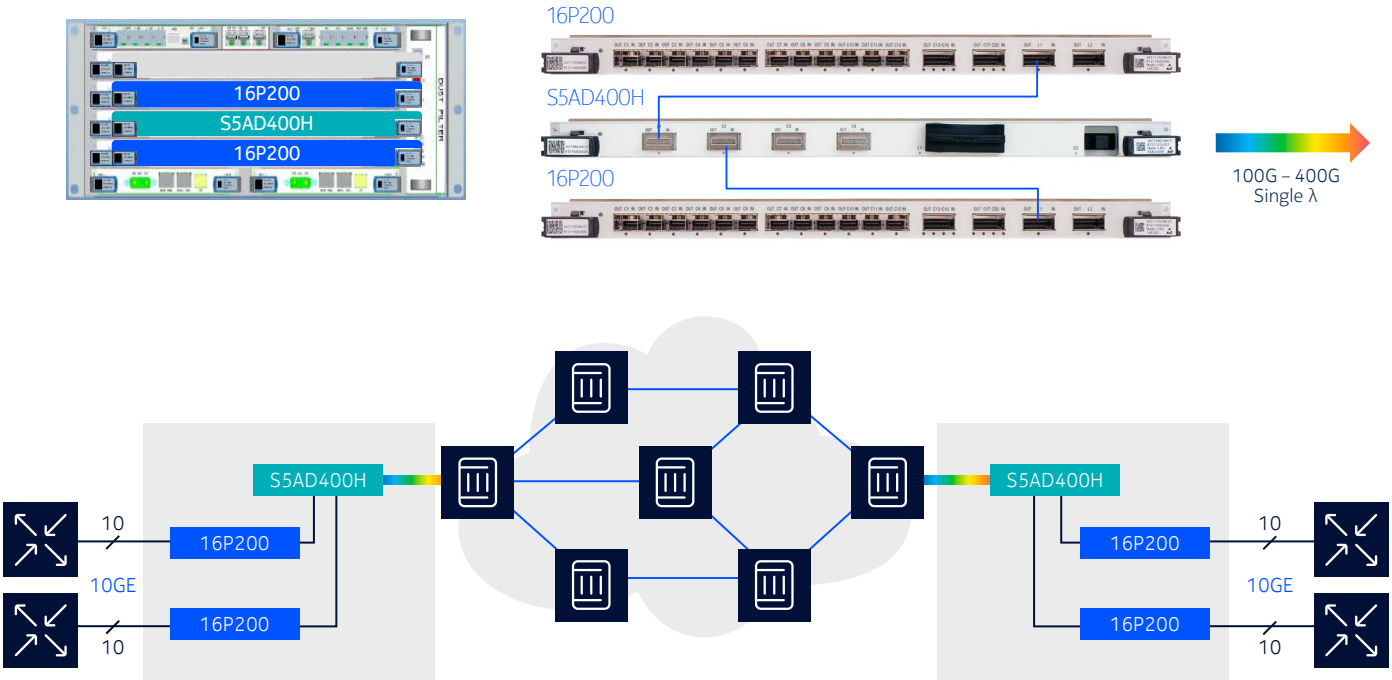
A typical application is shown in figure 1, where the two 16P200 cards provide aggregation of 20 x 10GE ports. In this example, the 16P200 cards are paired with the S5AD400H transponder to provide a 200G WDM signal for transport over metro, regional, or LH networks.

Since most modern WDM networks operate at 100G and higher wavelength speeds, the 16P200 provides the ideal solution for aggregating metro telecom, data, and SAN services onto these modern, high-speed WDM backbone networks.

Nokia supported products

The 16P200 muxponder is supported on Nokia 1830 PSS-8, -16ii, -32 platforms.

Figure 1. Nokia 16P200 aggregation example



200G Muxponder	Part #	Description
16P200	3KC71203AA	nx10G Muxponder

Technical specifications

Specifications	16P200
I/O ports	• 12 x SFP+ client ports: 10GE, 25GE, OTU2/2e, 8/10/16/32FC, OC-192/STM64 • 2 x QSFP28 client ports: 100GE, 4x10GE • 2 x QSFP28 aggregation ports: OTU4
Applications	• Standalone n x 10G multi-service to 100G muxponder • Paired with transponder cards, for WDM coherent line interfaces – S2AD200H – S4X400H – S5AD400H – S6AD600H
Features	Multi-service aggregation for 10GE, 25GE, FC, OTN, SONET/SDH services Front panel (standalone) or paired transponder card applications SyncE and PTP message insertion and extraction GCC0/1/2 remote management Client/line loopback with test signal injection and monitoring OPSB and ODUk SNCP protection options
Power consumption	120 W
Operating environment	Normal: 5°C to 40°C (41°F to 104°F) Short-term: -5°C to 50°C (23°F to 122°F) Humidity: 5% to 85%
Physical	1-slot, full height
1830 PSS shelves	8, 16ii, 32

About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

Nokia OYJ
Karakaari 7
02610 Espoo
Finland
Tel. +358 (0) 10 44 88 000

Document code: (September) CID210771