Nokia S5AD400H Muxponder Card

The high capacity, high performance Nokia S5AD400H muxponder provides an ideal solution for nx100G aggregation and 400GE transponder applications over metro, regional, and long haul networks. Based on Nokia's photonic service engine (PSE-Vc) coherent optics, the S5AD400H utilizes Nokia's new CFP2-DCO pluggable line optics, supporting 100G – 400G wavelengths.

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 new S5AD400H muxponder is supported in the 1830 PSS-8, -16ii, and-32 systems, providing aggregation of nx100G client services, as well as WDM transport for 400GE client services.

Benefits

- Compact, efficient transport for nx100G and 400G client interfaces
- Modular, compact CFP2-DCO line optics based on Nokia latest generation PSE-Vc technology
- Compact, only a single slot size
- Backward compatibility with prior generations of PSE based transponders
- Supported on Nokia 1830 PSS-8, -16ii, -32 systems.

Applications

- High capacity metro, regional, and long-haul applications
- Regional data center interconnect (DCI) applications
- Aggregation of nx100GE router interfaces over optical networks
- WDM transponder for 400GE client services
- Low speed aggregation of 10GE, OTN and Fiber Channel client services to 400G WDM wavelengths, when paired with 16P200 card

Product description

The S5AD400H is a new, high-capacity muxponder for aggregating 100GE, OTU4, and 400GE client services. The WDM line interface is based on the latest generation Nokia PSE-Vc coherent optics.

The unit includes four QSFP28 client ports for 100GE/OTU4 services and one QSFP56-DD client port for 400GE services. The WDM line port supports 100G – 400G line rates, depending on the provisioned modulation and baud rate profile.

The WDM line interface is based on the new Nokia CFP2-DCO module, which incorporates the latest generation PSE-Vc DSP.

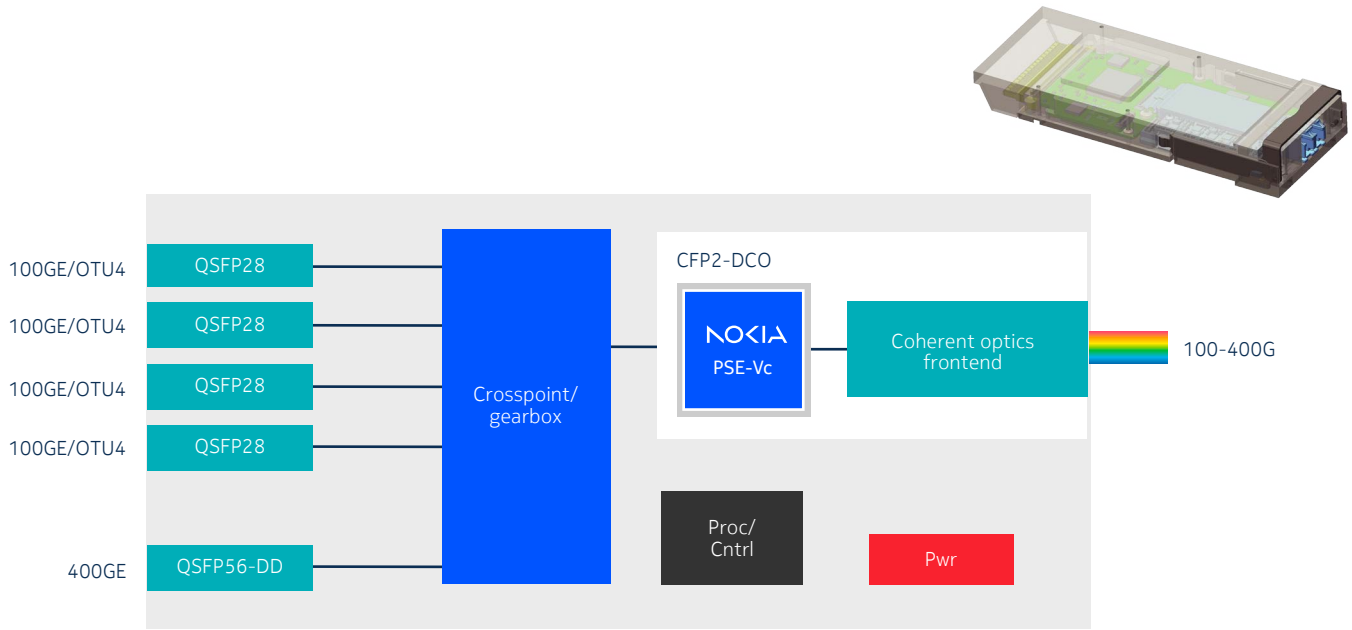
Supporting a high performance multi-haul optical interface, the CFP2-DCO optics offer the simplicity and low cost of a pluggable module, combined with performance required for metro, regional, or long-haul distances.

In addition to standalone configurations, the S5AD400H can be paired with the 16P200 multi-service muxponder to provide low speed aggregation of 10GE Ethernet, OTU2/2e OTN, and 16FC/32FC fiber channel services to 100-400G WDM wavelengths

Nokia supported products

The S5AD400H unit is supported on Nokia 1830 PSS-8, -16ii, -32 platforms.

Figure 1. 1830 PSS S5AD400H



400G Muxponder	Part #	Description
S5AD400H	3KC70803AA	nx100G/400GE Muxponder

Specifications	S5AD400H
Application	Metro, Regional, LH, DCI
Line Port	1 x CFP2-DCO WDM line port 100G – 400G provisioned (QPSK / 8QAM / 16QAM) 28 – 63 Gbaud Nokia PSE-Vc DSP
FEC Options	Nokia SDFEC-G2/C-FEC/C-FEC+/SC-FEC
Client ports	4 x QSFP28 100GE/OTU4/OTUC1 FlexE 1 x QSFP56-DD 400GE
Perforrmance	400G metro/regional, 100G/200G LH CD 48,000 ps/nm (QPSK) DGD 30 ps
Power consumption	100 W (typ)
Features	4x100G muxponder or 400GE (client) transponder GCC0 remote management LLDP snooping L0 restoration (GMPLS)
Protection	O-SNCP via OPSB OCH protection via OPSFlex
Operating environment	Normal 5°C to 40°C (41°F to 104°F) Humidity 5% to 85%
Physical	1-slot, full height
1830 PSS shelves	32, 16ii, 8,

About Nokia

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

As a B2B technology innovation leader, we are pioneering the future where networks meet cloud to realize the full potential of digital in every industry.

Through networks that sense, think and act, we work with our customers and partners 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: (May) CID210098