

Nokia 1830 PSS-24x 1 Terabit 100G/400G Client Card 10AN1T

The Nokia 1830 PSS-24x 10AN1T is a 1 Terabit configurable multiservice client card that offers footprint and power efficiency with pay-as-you-grow, scalable services for client connectivity. The card provides ten high-density interfaces for multi-rate services, including 100GE and OTU4, as well as interfaces for 400GE client services

The 10-port client card 10AN1T is a member of Nokia's 1830 PSS-x family that is part of the Nokia 1830 Photonic Service Switch (PSS) portfolio. The 1830 PSS-x family of packet/OTN switches mate switching and photonic scale, delivering multi-terabit packet/OTN scale by leveraging the Nokia Transport Switching Engine (TSE) and the Photonic Service Engine (PSE). The 1830 PSS-24x platform is optimized for core and large metro packet/optical transport network (OTN) switching applications, placing industry-leading electrical switching scale at international/ national, regional and metro core network locations.



Benefits

- Multi-rate, high-capacity services with programmable 100G/400G client interfaces
- Footprint and power efficiency in compact single slot size
- 1 Tb/s transmission capacity per card
- Efficient ODUflex (GFP-F, CBR) switching and protection
- Client protection using OPSB or Y-cable

Applications

- Business services, wholesale services, and multiservice transport applications
- Scalable, pay-as-you-grow any service point-to-point connectivity
- High-density, high-capacity Ethernet clients
- Flexible OTU4 interfaces programmable as clients or lines
- Beyond 100G applications, including 400GE services

Product description

The 10AN1T is a programmable, 10-port client card for the PSS-24x platform with 1 Tb/s per slot transmission capacity. The unit provides high-capacity, high-density multiservice offerings, allowing network operators to migrate to higher service rates.

The 10AN1T is a single slot card, with up to 24 cards supported per PSS-24x shelf. The 10AN1T card supports ten programmable QSFP28 client ports for 100GE/OTU4 services, including two ports that can be configured for QSFP56-DD 400GE services. When provisioned as OTU4, the ports can be used in line or client configuration.

The client card offers efficient and reliable multi-layer networking using ODUk switching and protection from ODU0 to ODU4, including ODUflex. ODUflex offers scalable and flexible OTN service

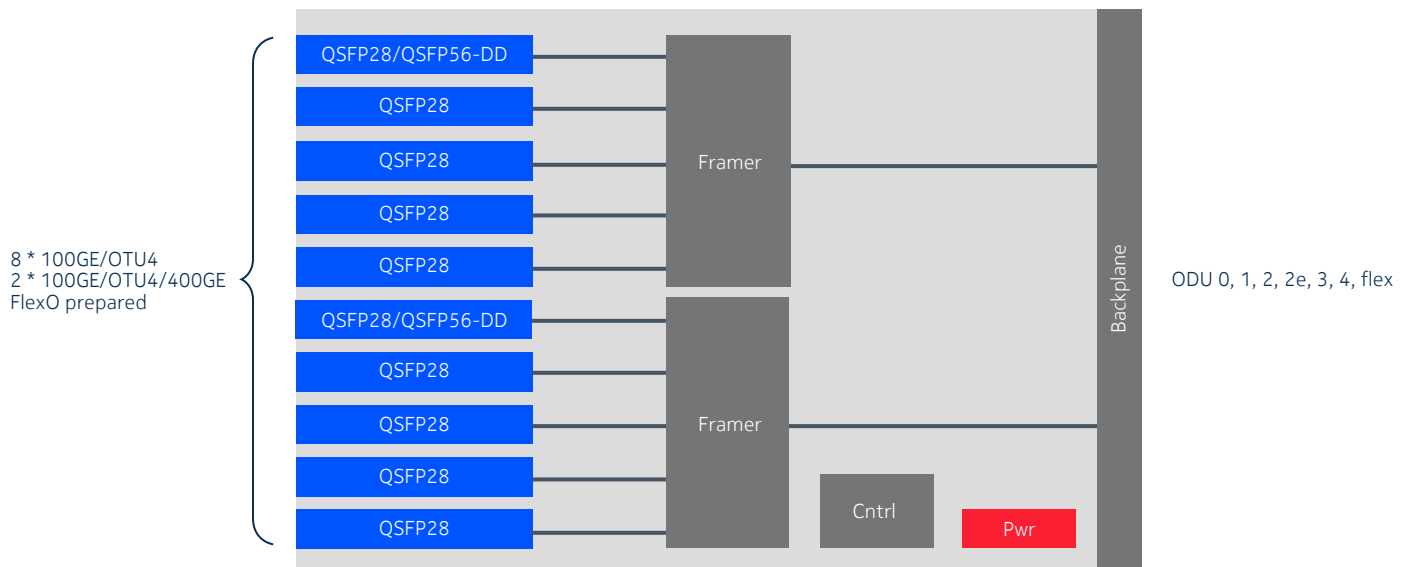
mapping with the same switching and protection. In addition, the card supports robustness features like Y-cable, OPSB protection, and GMPLS control plane.

The 10AN1T card supports scalable, pay-as-you-grow client options for business services, wholesale services, and multiservice transport. Nokia PSS-24x isolates line cards from client cards for investment and operational decoupling. For example, the 10AN1T client card works efficiently with coherent WDM uplink cards like 4UC1T to provide flexible and reliable end-to-end transport; this significantly and simultaneously scales network capacity and density, making feasible the mass delivery of high-capacity, multi-rate services.

Nokia supported products

The 10AN1T client card is supported on Nokia 1830 PSS-24x platform.

Figure 1. 1830 PSS-24x 10AN1T



Unit Name	Part #	Description
10AN1T	3KC61010AB	1 Terabit 10-port 100G/400G client card



Technical specifications

Specifications	10AN1T
Applications	Business services, wholesale services, multiservice transport
Interfaces	8 x QSFP28 100GE/OTU4/FlexO ¹ 2 x QSFP28/QSFP56-DD 100GE/OTU4/400GE/FlexO ¹
Transmission capacity	1 Tb/s
Power consumption	177 W (typ)
Features	1 Terabit capacity 10-port scalable multi-rate 100G/400G client card Configurable hold-off timer Trail (DMt) and Path (DMp) latency measurement LLDP snooping GMPLS control plane
ODUk/flex	ODUk (ODU0/1/2/2e/3/4) switching and protection ODUflex (CBR, GFP-F) switching and protection ODUflex (GFP-F, BMP) mapping
Client protection	OPSB (revertive and Signal Degrade) Y-cable
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	24x
Compliance	UL/CSA 62368-1 IEC/EN 62368-1 AS/NZS 62368.1 IEC/EN 60825-1, 60825-2 GR-63 NEBS, GR-1089 ROHS6 CE Mark

¹ FlexO prepared

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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.

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