

QEPT 100G NRZ

100Gbps High-Speed Optical Module HIGH PERFORMANCE UNDER EXTREME CONDITIONS

Amphenol AOP 28Gbps extended temperature "Quad Embedded Pluggable Transceiver" is designed for highly challenging applications where both reliability and performance are critical.

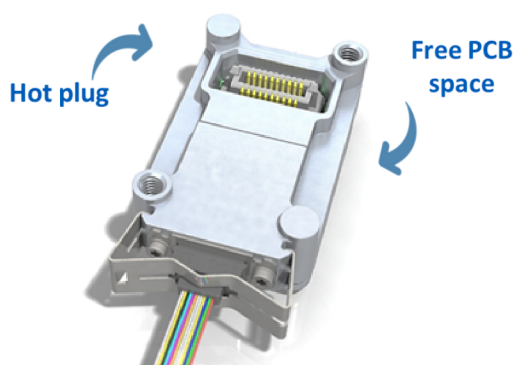
- Capable of speeds up to 28Gbps at distances up to 70m for the full extended temperature range
- Aggregate 100Gbps over 4 channels on an efficient footprint
- **Optically and electrically pluggable**
- **Mountable clip for quick fiber replacement.**



EASY PATH TO

FEATURES

- Dimensions: 29 x 18 mm with an effective PCB area used of 180 mm²
- **Operating temperature range: -40°C to 85°C**
- Optically pluggable
- Mezzanine-type connection
- Screw-locking feature for board mounting
- Two wire control and diagnostic interface
- **Data rate transparent from 1.25Gbps to 28.05Gbps per channel**
- Flat-top design
- Integrated CDR
- Programmable Equalization
- Programmable output amplitude and emphasis



BENEFITS

- Half the size of a QSFP28 transceiver
- Enables easy and efficient PCB routing
- Facilitates temperature-challenging system designs
- Replaceable patchcord - Easy to install
- Interchangeable solution
- **Mechanical shock and vibration resistant**
- Allows for transceiver optimization and monitoring connection discovery, channel diagnostics, and signal status monitoring
- Supports standard and non-standard protocols in this range of data rates (10GbE, 25GbE, 8G/16G/32G Fiber Channel...)
- Enables use of heat-sink for better thermal performance
- Water cooled compatible
- Lower power consumption and latency
- CDR can be bypassed to support lower or non-standard data rates
- Capable to compensate more than 14dB insertion loss @ 14GHz
- Compensate for PCB traces loss for proper signal conditioning.

TECHNICAL INFORMATION

MATERIAL

- Electrical mezzanine-type connector
- Optical interface mates with standard MT-ferrule

ELECTRICAL PERFORMANCE

- Power Supply Voltages: 3.3V and 1.8V
- Bit Error Rate @ 25.78 Gbps below 10⁻¹²
- Lanes per device: 4Transmit and 4 Receive
- Power Consumption below 2W
- Transmitter Type: 850nm VCSEL Laser
- Receiver Type: PIN Photodiode

ENVIRONMENTAL

- RoHS 6/6compliant
- Operating Case Temperature: -40°C to +85°C

PACKAGING

- Individual Blister Package

PART NUMBER SELECTOR

TR - 25 - 2 - 04 - 1 - P - MT - X - X - C - 00		
Operating case temperature	C	[0°C, +70°C] commercial temp.
	E	[-5°C, +85°C] extended temp.
	A	[-40°C, +85°C] mil aero
Coating	0	no coating
	1	conformal coating

SUPPORTED STANDARDS

- 40GBASE-SR4
- 100GBASE-SR4
- EDR Infiniband
- 32G FiberChannel
- SFF 8636 Management Interface

TARGET MARKET & APPLICATIONS



Network Systems



Radar



Ground Communication



Industrial Control

LOW POWER

HIGH-DENSITY

EFFICIENT DESIGN



FOR VIDEOS

CHECK OUT OUR WEBPAGE:

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