

The **QT2025** is a fully integrated 9.95-10.52 Gbps transceiver with fully adaptive Electronic Dispersion Compensation (EDC). The device provides a high performance interface between a MAC or switch device and copper media including Twinax cable and 10GBASE-KR backplanes. The data rate is switchable to 1.25 Gbps, allowing dual 1000BASE-KX / 10GBASE-KR support on a single backplane design using Auto-Negotiation for rate selection. It can also interface to optical media including SFP+, SFP and XFP modules or reside inside a XENPAK or X2 module. When designing for SFP+ applications, customers can generate one dual-rate design that supports SFP+ modules (10GBASE-R) and SFP modules (1000BASE-X), as well as Twinax cable, providing maximum medium flexibility.

Features

- 1G/10G: 1/10GE LAN/WAN & 1/10GFC
- Advanced EDC engine with auto tap weight adjustment & tracking
- 10G high-speed interface with integrated EDC and transmit wave shaping
- XAUI interface with equalization and transmit wave shaping
- Integrated loopbacks and test features
- Compliant to applicable IEEE & INCITS Specs

Backplane Specific Features

- 1000BASE-KX
- 10GBASE-KR

SFP+ Specific Features

- SFP+ modules for limiting & linear applications
- 1GE for SFP
- Passive Direct Attach SFP+ cable (twinax)

XFP Module Specific Features

- High performance XFI interface

Applications

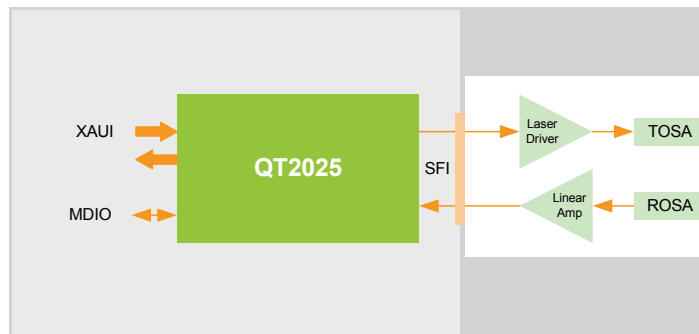
QT2025:

- Backplane 10GBASE-KR /1000BASE-KX
- Hostboard termination for SFP+/SFP limiting modules including 10GBASE-SR, -LR & 1000BASE-X
- Passive Direct Attach SFP+ cable support
- Hostboard termination for XFP modules including 10GBASE-R & W protocols.

QT2025-1:

- Hostboard Termination for SFP+/SFP limiting & linear modules: 10GBASE-LRM, -SR, -LR & 1000BASE-X
- Passive Direct Attach SFP+ cable support
- XENPAK/X2 modules for 10GBASE-LRM, -R & -W protocols

QT2025 System Block Diagram



For technical support inquiries, submit your product related questions to support@appliedmicro.com.

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