

Indian optical modulator QSFP-DD



Overview

QSFP-DD is a new module and cage/connector system similar to current QSFP, but with an additional row of contacts providing for an eight lane electrical interface. It is being developed by the QSFP-DD MSA as a key part of the industry's effort to enable high-speed solutions. At the heart of this leap forward lies QSFP-DD (Quad Small Form Factor Pluggable Double Density) — an enhanced version of the proven QSFP form factor, designed to double the lane density and support data rates up to 400Gbps and beyond. Cisco offers a range of GBIC, SFP, XFP, SFP+, CXP, CFP, Cisco CPAK, and QSFP+ pluggable. Amphenol's QSFP-DD Linear Pluggable Optical (LPO) Transceiver delivers low-latency, high-bandwidth PCIe[®] Gen 5.0 over optical link, enabling scalable server disaggregation and efficient rack-to-rack interconnects ideal for AI/ML and rack-scale data center expansion.

Article Content

Understanding the QSFP-DD Standard: The Foundation of 400G

The QSFP-DD standard represents the pinnacle of optical interconnect evolution — enabling unprecedented bandwidth density, efficiency, and scalability for modern data centers.

Cisco 400G Digital Coherent Optics QSFP-DD Optical

These small, modular optical interface transceivers offer a convenient and cost-effective solution for an array of applications in the data center,

QSFP-DD Linear Pluggable Optics (LPO)

Amphenol's QSFP-DD Linear Pluggable Optical (LPO) Transceiver delivers low-latency, high-bandwidth PCIe® Gen 5.0 over optical link, enabling

QSFP-DD TRANSCEIVERS for 400G and 800G

Smartoptics QSFP-DD transceivers provide cost-efficient 400G and 800G optical networking. QSFP-DD (Quad Small Form-Factor Pluggable Double Density)

Specification – QSFP-DD

July 11, 2019 – QSFP-DD Hardware Specification for QSFP DOUBLE DENSITY 8X PLUGGABLE TRANSCEIVER – Rev 5.0 May 8, 2019 – Common Management Interface

ODM Optical Modulator QSFP-DD

QSFP-DD (Quad Small Form-Factor Pluggable Double Density) represents a transformative advancement in optical transceiver technology, addressing the exponential growth in data center

Study Of 400GbE QSFP-DD Transceiver Module For OFC.

M-4 data from the switch to the optical interface. At the optical module, a 400G 8:4 gearbox PHY like Broadcom's BCM8740x can be used to convert 50G PAM-4 electrical I/Os to 100G per lam

Cisco DP04QSDD-HE0 Compatible 100-400GbE DCO

QSFP-DD 400G ZR and ZR+/ZR+ Pro coherent optical modules have obvious differences in transmission distance, module specifications, power consumption,

QSFP-DD Product Family » Acacia

Quad Small Form-factor Pluggable Double Density (QSFP-DD) solution that fits into high-density switch and router client ports for optical interconnect links

800G Module Packaging: QSFP-DD or OSFP, Which Fits Your Needs?

Discover the differences between 800G QSFP-DD and OSFP modules. Learn which packaging offers the best performance, heat dissipation, and scalability.

InnoLight's QSFP-DD Optical Transceiver

The InnoLight's 400G QSFP-DD is one of the first 400G optical transceivers on the market and it allows to communicate up to 2km in PSM4. The InnoLight solution is based on the INPHI chipset, the

EML vs VCSEL vs CW Laser: Optical Transceiver Guide (2025)

Compare EML, VCSEL, and CW laser technologies in optical transceivers. Covers cost, reach, speed, the 2025 EML shortage, and silicon photonics alternatives.

QSFP-DD TRANSCEIVERS for 400G and 800G

QSFP-DD transceivers double the number of high-speed electrical interfaces in QSFP to achieve 400G Ethernet speeds – and double them again to reach 800G.

400G PAM4 QSFP-DD DR4/DR4+ Transceiver

400 Gb/s DR4+ (Data Center Reach 4-lane) QSFP-DD Optical Transceiver is a small form-factor, high speed, and low power consumption product targeted for use in optical interconnects for data

SFP, SFP+, And QSFP Form Factor Standards

QSFP modules draw from 3.5W (SR4) to 6.0W (LR4) for 100G applications, with newer DSP-based QSFP-DD modules requiring up to 12W for 400G. Reach and Optical Budget: Standardized over 11

QSFP-DD Optical Transceivers for High-Speed Connections

Cisco helped define the QSFP-DD form factor Multisource Agreement (MSA) to meet the requirements of next-generation switching and routing applications. Cisco offers a comprehensive portfolio of

Cisco 400G QSFP-DD Ultra Long Haul Coherent Optics Module Data

The Cisco 400G QSFP-DD Ultra Long-Haul Coherent Optics Module enables 400G traffic anywhere over dense wavelength division multiplexing amplified networks, and is available in both C

PAM4 Optical Modulation: Meeting the Demands of Increasing

As a result, optical transceivers capable of 400G will consume more power than their 100G and lower-rate counterparts. As the next generation switches and routers are deployed with

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