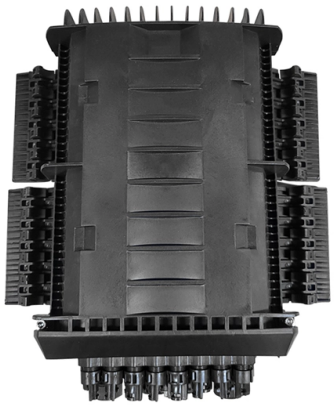
Industrial Ethernet Active Optical Module QSFP-DD



Overview

QSFP-DD (Quad Small Form Factor Pluggable Double Density) is an evolution of the QSFP family, extending its lane capacity from 4 to 8 high-speed electrical lanes. When combined with higher transmission rates per electrical interface (28 Gbps to 56 Gbps to 112 Gbps), QSFP-DD optical transceivers can. Amphenol's QSFP-DD high-speed connector family features a scalable, high-performance interconnect platform with 76 contacts on a 0. 8mm pitch and a dual-mating interface. The QSFP-DD family supports legacy QSFP channels on the front interface and four additional channels on the rear interface. In other words, a total of 256 differential pairs with 32 ports delivers double-lane density within the same form factor. Customers can upgrade their box in advance of new cables. Quad Small Form-factor Pluggable Double Density (QSFP-DD) solution that fits into high-density switch and router client ports for optical interconnect links Powered by Greylock and Delphi DSP ASICs, and silicon photonic integrated circuits (PICs) for an optimized co-packaged design with 3D. 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. The QSFP-DD specification, maintained by the QSFP-DD. Siemon's 50G per lane PAM4 Ethernet QSFP-DD Active Optical Cable assemblies (AOCs) are designed to exceed industry standard performance offering a cost-effective, low latency, low-power option for high-speed data center interconnects. The Active Optical Cable assemblies support 400G PAM4.

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Article Content

QSFP-DD Optical Transceivers for High-Speed Connections

QSFP-DD ports incorporate a riding heatsink that can be sized independently of the optical module, added on top of the module, or placed between modules. This flexibility enables switch and routing

QSFP-DD Connectors | High Speed I/O | Amphenol

The QSFP-DD family supports legacy QSFP channels on the front interface and four additional channels on the rear interface. This interconnect

QSFP-DD Connector System

QSFP-DD Interconnect System enables faceplate density equal to the current 2x1 QSFP form factor, but with 8-lane ports. In other words, a total of 256 differential

QSFP-DD Product Family » Acacia

Powered by Greylock and Delphi DSP ASICs, and silicon photonic integrated circuits (PICs) for an optimized co-packaged design with 3D Siliconization.

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

QSFP-DD (Quad Small Form Factor Pluggable Double Density) is an evolution of the QSFP family, extending its lane capacity from 4 to 8 high-speed electrical lanes. Each lane supports

Spec Sheet

Siemon''s 50G per lane PAM4 Ethernet QSFP-DD Active Optical Cable assemblies (AOCs) are designed to exceed industry standard performance offering a cost-effective, low latency, low-power option for

400G QSFP-DD Cable and Transceiver Modules Data Sheet | FS

400G QSFPDD active optical cables (Figure 10) are designed for use in 400 Gigabit Ethernet links over OM4 multimode fibers, and contain eight multi-mode fibers (MMF) optic transceivers per end, each

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)

400G QSFP-DD Active Optical Cable

Discover how we power manufacturing and research across the world''s most innovative markets — from smartphones to EVs, from semiconductor wafers to

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QSFP-DD Optical Transceivers Unlocking Faster

QSFP-DD Optical Transceivers deliver up to 800Gbps speeds, offering high bandwidth, energy efficiency, and compatibility for modern networks

How Optical Modules Power the Evolution of 5G Networks

Optical modules enable high-speed, low-latency 5G networks by converting signals for fast, reliable data transfer, supporting seamless

QSFP-DD Connectors | High Speed I/O | Amphenol

The cage and connector design provides backwards compatibility to QSFP56 modules which can be inserted into a QSFP DD port to offer utmost

Optical Transceivers | Coherent

Get the pluggable module performance you need from the manufacturer of choice for all major networking equipment vendors worldwide.

TAOC-400G-CUXX 1-100m 400G QSFP-DD AOC Active Optical

Key attributes Type Active Optical Cable Module Use Data Center Network Wired LAN Model Number TAOC-400G-CUXX Brand Name Top-trans Place of Origin Guangdong, China Warranty Time 1year

Wholesale Optical Transceivers Module | 100G

Shop high-speed optical transceivers from Unitekfiber. We offer 100% compatible 40G, 100G, and 400G QSFP-DD modules for data centers. Expert technical

Unleashing 800G Efficiency: A Technical Guide to OSFP DAC Solutions

What is the difference between OSFP and QSFP-DD 800G DACs? OSFP is physically larger and features integrated cooling fins, allowing it to handle higher power envelopes (up to 15W

EthernetRoadmap 2025-Side1-Final-RGB

The current high speed optical market is dominated by retimed optics, but there is rapidly growing interest in linear-based solutions for optical modules which can dramatically reduce the

Optical Transceiver Market Size, Share, Industry Report

Optical Transceiver Market Size & Share 2026-2035 Market Size By Form Factor (SFP family, QSFP family, OSFP, CFP family, XFP, CXP), By Data Rate (Less

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