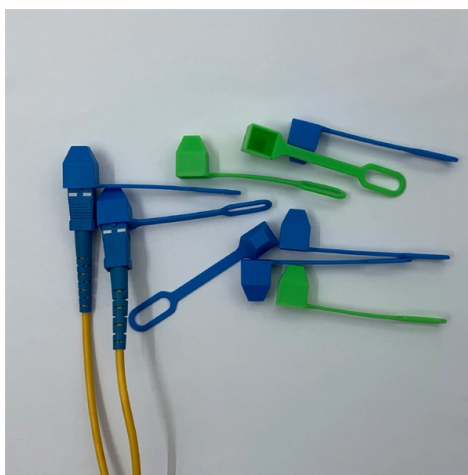


Inquiry about QSFP-DD optical modules SFP



Overview

OEM-compatible optical transceivers from 1G to 800G—SFP, SFP28, QSFP28, QSFP-DD & OSFP. MSA-compliant, TAA-certified, lifetime warranty. Find your module today.

Key Takeaways

QSFP-DD (Quad Small Form Factor Pluggable Double Density) modules are high-speed optical transceivers designed for 200G and 400G networks, offering backward compatibility and high bandwidth density for modern data centers. Overview QSFP-DD is the next-generation optical module standard, defined by IEEE802.bs and the Multi-Source Agreement (MSA). The "Double Density" designation refers to doubling the number of high-speed electrical interfaces compared to QSFP28, enabling higher data throughput in the same compact form factor.

These modules are widely used in high-performance computing, cloud networks, and enterprise data centers. Data Rates and Modulation NRZ modulation: Each channel can reach up to 25Gb/s, achieving a total of 200Gbps for the module. PAM4 modulation: Each channel can reach 50Gb/s, enabling a maximum transmission rate of 400Gbps.

This flexibility allows QSFP-DD modules to support both 200G and 400G Ethernet applications, making them suitable for evolving network demands. Compatibility and Form Factor QSFP-DD modules are backward compatible with previous QSFP generations, including QSFP+, QSFP28, and QSFP56, which provides flexibility for network upgrades without replacing existing infrastructure. The modules are compact, plug-and-play, and designed for high-density deployments, maximizing port density in switches and routers.

Applications

Data Center Interconnects (DCI): QSFP-DD modules support high-speed links between data centers. Enterprise Networks: Ideal for upgrading to 200G/400G Ethernet while maintaining compatibility with existing QSFP infrastructure. Cloud and Hyperscale Networks: Provide high bandwidth density for large-scale computing environments.

Advantages

High bandwidth density: Supports 200G–400G in a small form factor. Backward compatibility: Works with older QSFP modules, reducing upgrade costs. Flexible deployment: Suitable for both short-reach and long-reach applications depending on the specific module type.

Scalability: Supports future network growth with higher data rates and advanced modulation technologies. QSFP-DD modules are a critical component for modern high-speed networks, offering a balance of performance, density, and compatibility, making them a preferred choice for data centers and enterprise network upgrades.

Article Content

Cisco 400G QSFP-DD High-Power (Bright) Optical Module

These small, modular optical interface transceivers offer a convenient and cost-effective solution for an array of applications in the data center, campus, metropolitan-area access and ring network, storage

The Ultimate Reference Table for SFP & QSFP Optical Transceiver ...

The definitive guide to SFP, QSFP, and QSFP-DD standards for 2025. Compare 400G/800G optics, understand PAM4 complexity, and master QSFP-DD vs OSFP deployment

Optical Transceivers SFP SFP28 QSFP28 QSFP-DD 1G to 400G Range

OEM-compatible optical transceivers from 1G to 800G—SFP, SFP28, QSFP28, QSFP-DD & OSFP. MSA-compliant, TAA-certified, lifetime warranty. Find your module today.

QSFP-DD Optical Transceivers - MapYourTech

What is QSFP-DD? QSFP-DD is an advanced hot-pluggable optical transceiver form factor that doubles the bandwidth density of traditional QSFP28 modules by implementing a double

Comprehensive Guide to 400G/800G QSFP-DD Optical Modules

400G and 800G QSFP-DD optical modules play a key role in high-bandwidth, low-latency networks, with their technical advantages and flexibility making them the preferred choice for data

QSFP DD Guide: High-Speed QSFP DD Optical Modules

In this comprehensive guide, we will explore how QSFP DD works, why it has become a preferred optical module standard, and how it is deployed in

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

It provides a QSFP-DD-to-QSFP-DD copper direct-attach solution. They are suitable for very short links and offer a cost-effective way to establish a 400-Gigabit link between QSFP-400G ports of

400G OSFP/QSFP-DD/QSFP112 Module Introduction and Selection

This article explores the technical characteristics, product lineup, and use cases of 400G OSFP/QSFP-DD/QSFP112 modules to choose the most suitable 400G solution for your data centers.

The Ultimate Guide to Optical Transceivers: SFP, QSFP-DD, OSFP,

This comprehensive guide breaks down the categories of optical modules, including SFP, SFP+, SFP28, QSFP+, QSFP28, QSFP56/QSFP112, QSFP-DD, and OSFP. We will explore their

Specifications of the Fiber Gigabit Ethernet SFP, XFP, SFP+, QSFP+ ...

Topic The following specifications are for the available Fiber Gigabit Ethernet modules and the platforms that support those modules. Important: The end user must ensure suitability of

400G Optical Module Selection Guide: QSFP-DD vs.

Compare QSFP-DD, QSFP28, and OSFP form factors. Learn about compatibility, power constraints, migration TCO, and data center selection

What is QSFP & QSFP+ Transceiver: An Ultimate

What is a QSFP & QSFP+ Transceiver? QSFP stands for Quad Small Form-factor Pluggable. By integrating four-lane signals into a single

Wholesale Optical Transceivers Module | 100G QSFP28, 40G QSFP+

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

OSFP vs QSFP-DD Comparison | 800G Optical Module Form Factors

Detailed analysis of OSFP and QSFP-DD form factors for 800G optical modules. Compare specifications, thermal management, backward compatibility, and choose the right solution

SFP vs SFP+ vs SFP28 vs QSFP+ vs QSFP28 vs QSFP-DD vs

The diversity of optical transceivers is reflected in various connector types and form factors, including SFP, SFP+, SFP28, QSFP+, QSFP28, QSFP-DD, and OSFP. But what are the

Top Optical Transceiver Modules for Data Center Applications

Explore the best optical transceiver modules for modern data centers, including SFP+, QSFP28, QSFP-DD, and OSFP. Learn how to select the right module for speed, distance, and

QSFP-DD Optical Module Overview: What is the differ?

The QSFP-DD is the smallest 400G form factor optical module on the market today. It is also the optical module that offers the highest transmission

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

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: <https://cgweb.co.za>

Technical inquiry: <https://cgweb.co.za/project-enquiry.html>

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

