Fiji Air-cooled Switch QSFP-DD



Overview

Full support of DAC, AEC IMDD Optics and Coherent optics. The intrinsic flexibility available for cooling solutions with QSFP designs is its biggest advantage. This guide provides a comprehensive overview of QSFP-DD compatible switches across major vendors, explains the fundamentals of backward compatibility at the port level, and outlines how to verify transceiver compatibility before procurement. This whitepaper offers comprehensive. The Quantum-2 NDR InfiniBand and Spectrum-4 SN5600 Ethernet line of OSFP air-cooled, 400Gb/s network switches are based on 100G-PAM4 signal modulation. Although 400Gb/s is the speed rating, these switches use connector cages that house two 400Gb/s ports in a single cage called 2x400G twin-port OSFP. 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. QSFP-DD extends the use. QSFP-DD (quad small form-factor pluggable double density) doubles the capacity of QSFP interconnects with an eight-lane electrical interface capable of 28 Gbps NRZ, 56 Gbps PAM4, and 112 Gbps PAM4 to achieve up to 800 Gbps per port.



© 2026 CJC FIBRE CONSULTANTS - All rights reserved

Article Content

QSFP-DD Compatible Switches: Complete 2025

Find which switches support QSFP-DD modules. Our 2025 guide covers Cisco, Arista, Juniper and NVIDIA platforms with backward compatibility tips.

2023 QSFP-DD MSA Thermal Whitepaper Final (for approval)

This whitepaper offers comprehensive details of QSFP-DD1600 performance enhancements achieved by both module and system designers. Various analyses show the evolved cooling capabilities of 64

Linking DGXs, Switches, ConnectX-7 & ConnectX-8 Adapters, and

Although 400Gb/s is the speed rating, these switches use connector cages that house two 400Gb/s ports in a single cage called 2x400G twin-port OSFP and are used exclusively in these

QSFP-DD Connectors, Cages and Cable Assemblies

QSFP-DD provides high-performance computing capability. The QSFP interconnects density is doubled with electrical interface, providing superior

Cisco Optical Transceiver Handling Guide

The following figure shows the QSFP-DD transceiver, but the procedures outlined in this document apply to all pluggable transceivers. The QSFP-DD transceiver is used primarily in switches, routers, and

Differences Between QSFP-DD and QSFP+ / QSFP28 / QSFP56 /

QSFP-DD ports incorporate a riding heatsink, which can be sized independently of the optical module and is positioned on top of or between modules. This design enables switches and

The future of pluggable modules at 1.6 Tb/s

Full support of DAC, AEC IMDD Optics and Coherent optics. The intrinsic flexibility available for cooling solutions with QSFP designs is its biggest advantage. Cage Independent and additive. Compatible

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

How to Achieve Interconnection Between OSFP and QSFP-DD Ports?

© 2026 CJC FIBRE CONSULTANTS - All rights reserved

These split ports can connect to two 400G QSFP-DD modules on QSFP-DD switches via dual MTP®-12 fiber patch cables. This solution ensures seamless interconnection and provides a

High-Speed Hardware and Immersion Cooling Solutions | FIBERSTAMP

HIGH-SPEED INTERCONNECT HARDWARE AND LIQUID COOLING SOLUTIONS FOR DATA CENTER AND HPC Parallel and WDM DCI Solutions Elevate Data Center Connectivity

QSFP-DD CONNECTORS & CABLE ASSEMBLIES PRODUCT

The QSFP-DD portfolio''s backwards compatibility allows existing QSFP modules to be plugged into QSFP-DD ports. Our QSFP-DD cages feature a proprietary heat sink design, making them the only

QSFP-DD: Enabling 15 Watt Cooling Solutions

The QSFP-DD Management Specification defines the methodology and registers required for the host to control the QSFP-DD module power dissipation. Communication between

QSFP-DD Power & Thermal Management Guide for

Complete QSFP-DD power and thermal guide with module power data, rack calculations, AI cluster planning, and cooling strategies for 400G and

QSFP-DD pluggable modules boost data density

Each QSFP-DD port provides 76 electrical contacts, which can support next-generation switching chips for higher density applications. The

Liquid Cooling Solutions

Ofering a full-range of liquid cooling solutions and wide-range of experience, Delta is the best thermal solution partner for autonomous driving technology QSFP-DD: Designing the 400G Ethernet

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

The Ultimate Guide to QSFP Cage Connectors and Interconnect

In order to find out where the future lies in this competitive quest for speed of data transmission, it is observed that QSFP (Quad Small Form-factor Pluggable) connectors and

© 2026 CJC FIBRE CONSULTANTS - All rights reserved

800G QSFP-DD immersion cooling extender

Immersion cooling extender can also be a important role in liquid immersion solution, existing normal QSFP –DD form transceiver/AOC can be adapted for immersion indirectly.

Contact Us

Continue your research online:

Website: https://cjcconsultants.co.za
Technical inquiry: https://cjcconsultants.co.za/contact.html

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

© 2026 CJC FIBRE CONSULTANTS - All rights reserved