

Can the X520DA2SR2 use a single-mode optical module



Article Overview

The Intel X520-DA2 is designed primarily for TwinAx (direct attach) cabling and does not officially support single-mode optical SFP+ modules.

Compatibility Overview

The X520-DA2 adapter is optimized for direct attach copper (DAC) cables and is not intended for use with removable optical SFP+ modules, including single-mode (SMF) optics. Unlike the X520-SR2, which comes with built-in optical transceivers, the DA2 model is specifically tailored for short-range, high-speed connections using TwinAx cabling.

Supported Modules

Intel's documentation for the X520 series indicates that the adapter supports:

- SFP+ SR (short-range) optical modules for multimode fiber (MMF)
- TwinAx direct attach copper cables
- 1000BASE-T SFP modules for 1 Gb Ethernet However, single-mode SFP+ modules (10GBASE-LR) are not listed as compatible for the DA2 variant. Attempting to use single-mode optics may result in the adapter not recognizing the module or failing to establish a link.

Practical Implications

- If your network requires single-mode fiber, you should consider the X520-SR2 or X520-LR1 adapters, which are designed to support optical SFP+ modules.

Article Content

What Is an Optical Module and Its FAQs (V200)

Describes what an optical module is and FAQs, including the fundamentals, appearance and structure, key performance counters,

Intel® Ethernet SFP+ SR Optics and LR Optics

To ensure maximum flexibility, Intel supports the ability to mix any combination of the SFP+ optical modules, direct attach copper

X520 DA2 Intel Network Card: Real-World Performance ...

Bottom-line: Yes, absolutely deploy X520-DA2 + LR optics combo over true single-mode deployments. Just don't skip verifying

Intel X520-DA2 transceiver compatibility : r/homelab

It's mostly compatible with any kind of a transceiver. If something goes wrong, you can easily patch the driver itself to support

Is the Intel X520-DA2 with SFP+ AOC 5M Cable the Right ...

Unlike copper-based Ethernet connections, which are limited by signal degradation beyond 100 meters, SFP modules use optical

The Difference Between Single-mode and Multi-mode Optical Modules

When using single-mode optical modules, you need to pay attention to the cleanliness of the optical fiber interface to avoid dust and

Intel X520-DA2 Optics Compatibility : r/homelab

I was given this NIC, specifically the Startech version, and couldn't find a good list of compatible optics. I'm hoping I can use a couple

Understanding Optical Modules: Types and Troubleshooting Guide

Optical Modules (also known as Optical Transceivers) are critical components in fiber optic communication systems. As the core

Multimode vs. Single-mode Fiber Optic Cables: Which is Better for You

A single-mode fiber (SMF) can transmit a signal without amplification over a distance of 20 kilometers. This is ideal for

Single-Mode Vs Multimode Optical Modules: Detailed Differences

Is your data center or campus network best served by Single Mode or Multimode Optical Modules? Choosing between Single Mode

How to Choose SFP Module | FIBEYE

Price Single-mode modules are typically more expensive than multi-mode modules because they use more components and more

Intel Ethernet Converged Network Adapter X520-DA2 User Manual

This image shows the Intel Ethernet Converged Network Adapter X520-DA2. It features a green PCB, a silver heatsink covering the

Contact Us

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