

QSFP28 to SFP28 Adapter (QSA) Module

Overview

The E.C.I. NETWORKS QSFP28 to SFP28 Adapter (QSA) enables seamless 25G and 10G connectivity on QSFP28-based platforms by allowing SFP28/SFP+ modules to be used within QSFP28 ports.

This solution provides a cost-effective and flexible migration path from 100G to 25G and 10G infrastructures, maximizing port utilization while maintaining compatibility with existing optics and cabling.

Key Features

- Plug-and-play installation with no configuration required
- Enables 100G QSFP28 ports to operate at 25G or 10G
- Fully compliant with SFF-8665 (QSFP28) and SFF-8432 (SFP28) standards
- Supports data rates up to 25Gbps, backward compatibility for 10Gbps and 5Gbps
- Single-lane mapping (QSFP28 lane to SFP28 interface)
- All-metal housing for superior EMI shielding
- Low insertion loss and low crosstalk
- 100Ω differential impedance system
- Secure latching mechanism
- Low power consumption (< 0.3W)
- Operates on a single +3.3V power supply
- RoHS compliant

Applications

- Data center networking
- Enterprise switching, routing, and servers
- Telecom and wireless infrastructure
- Storage area networks (SAN)
- Test and measurement platforms
- Networked storage systems

Product Description

The QSA adapter enables efficient port speed conversion across modern network infrastructures:

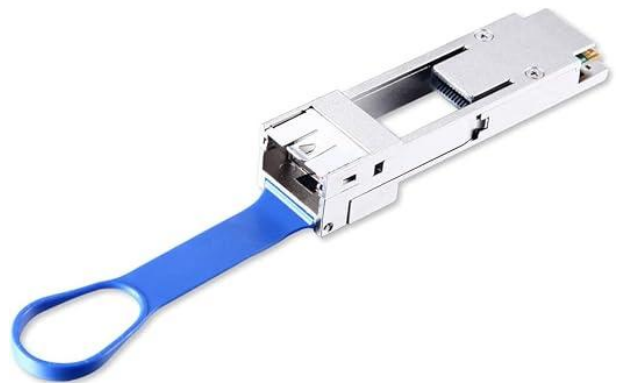
- Enables 25GbE connectivity on 100GbE QSFP28 platforms
- Enables 10GbE connectivity on higher-speed QSFP infrastructure
- The SFP28 interface connects to a single electrical lane of the QSFP28 port
- Remaining QSFP28 lanes are unused
- Supports:
 - SFP28 SR / LR optics
 - SFP+ optics (10G)
 - Passive DAC cables
 - Active Optical Cables (AOC)

This provides a smooth, scalable, and cost-efficient transition path for evolving data center architectures.

Variant-Specific Capabilities

QSA-QSFP28-SFP28 (Universal Version)

- QSFP28 to SFP28 Adapter (100G → 25G)
- Enables 25GbE on 100GbE infrastructure
- Enables 10GbE connectivity on higher-speed platforms
- Compatible with major vendors (Arista, Juniper, Dell, etc.)



CVR-QSFP28-SFP28-ECI (Cisco-Compatible)

- QSFP28 to SFP28 Adapter (100G → 25G)
- Enables 10GbE connectivity on 40GbE infrastructure
- Enables 25GbE connectivity on 100GbE infrastructure
- Designed specifically for: Cisco CVR-QSFP28-SFP25G equivalent environments



QSA-QSFP28-SFP28-MX (Mellanox / NVIDIA)

- QSFP28 to SFP28 Adapter
- Optimized for NVIDIA (Mellanox) switches
- EEPROM behavior aligned with Mellanox compatibility requirements

Technical Specifications

Parameter	Value
Data Rate	Up to 25Gbps
Supported Rates	25G / 10G / 5G
Power Supply	3.3V
Power Consumption	≤ 0.3W
Operating Temperature	0 to 70°C
Storage Temperature	-40 to 85°C
Relative Humidity	Up to 85% (non-condensing)
Differential Impedance	90–110 Ohm

Mechanical Specifications



Parameter	Value
Dimensions (H × W × D)	13.5 × 18.4 × 78 mm
Weight	< 100 g

Ordering Information

Part Number	Description
QSA-QSFP28-SFP28	Universal QSA adapter (100G → 25G / 10G), multi-vendor
CVR-QSFP28-SFP28-ECI	Cisco-compatible QSA adapter (CVR-QSFP28-SFP25G equivalent)
QSA-QSFP28-SFP28-MX	NVIDIA (Mellanox)-optimized QSA adapter



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