

# QSFP28 PRODUCTS

Driving Your Next Generation DataCenter



## QSFP28 to SFP28 Adapter

10Gtek's QSFP28 to SFP28 adapter (QSA28) enables smooth, cost effective connections between a single lane transceiver/cable and a quad-lane port. The QSA28 provides the option to connect an SFP28 transceiver or cable to a QSFP28 port of an Nx100 Gb/s switch or network card. It resolves the systems linking issues between different line rates and different form-factors used in switches and network adapters.

The QSA28 conforms to SFF-8402 for the SFP28 side and to SFF-8665 for QSFP28 standards and is thoroughly tested to meet strict quality requirements. The adapter has a QSFP28 form factor with a receptacle for an SFP28 transceiver/AOC/DAC connector. The QSA28 provides a solution for integrating systems using different vendors' equipment since it is vendor agnostic and provides a direct path to the SFP unit's memory. The QSA28 interoperates with all major optical modules and direct attached copper cable vendors.

Its design assures minimum loss on the conversion path between the QSFP28 cage and the SFP28 receptacle. The high speed data channel of the SFP28 receptacle is connected to lane 0 of the QSFP28 connector. The three remaining channels on the QSFP28 connector are not connected. The low-mass, loop design enables more free airflow through the crowded systems and does not flap-in-the-wind as with larger tabs. The 10Gtek QSA family of port adapters is the answer to many Data Center professional's prayers. In addition, it is inexpensive and a life saver in many system upgrade applications.

10Gtek is capable of providing QSA in two versions: to read the EEPROM configuration on products of SFP28 port via I2C, or read the EEPROM configuration on QSA itself.

### Applications

- Data Servers, Routers, Switches
- Networked storage systems
- Data Center networking
- InfiniBand Trade Association (IBTA)
- IEEE-802.3ba
- QSFP28 MSA SFF-8665
- SFP28 MSA SFF-8402

### Features

- Converts any QSFP28 port to SFP28
- Enabling 25GbE Connectivity on 100GbE Infrastructure
- Low crosstalk, low insertion loss
- Superior signal integrity, matched impedance
- All-metal housing for superior EMI performance
- Inexpensive, easy-to-use, and plug & play
- RoHS, MSA Compliant
- Connects any SFP28 DAC, AOC, or Transceiver to a QSFP28 port
- Resolves system upgrade issues to linking different form-factors and line rates

## Compatibility of this QSA

The 10Gtek's QSA is designed without any compatibility restriction. That is, it can be deployed on any brands' switches/routers with the QSFP28 interfaces. Moreover, it supports all SFP28 optics and cables to be plugged in. That leads trouble-free installation and network bring-up.

This QSA is backwards compatible to 10G SFP+ products and accepts a SFP-based device inserted in the adapter end. This enables passing through a single-channel to the SFP-based device inserted into a larger QSFP port. The faster speed devices are backwards compatible with the slower line speed devices, such as: QSA28 25Gb/s supports 10Gb/s & 25Gb/s and both SFP+ & SFP28 devices. Check below for the workable SFP+ and SFP28 items (see table 1 and table 2).


Table 1: SFP28 Transceivers / Cables Compatibility

Part No.		Product Description
25Gb/s Transceiver	AZS85-S28-M1	25GBASE-SR SFP28 Module for Multi-mode Fiber, 850nm, 100m
25Gb/s Transceiver	AZS13-S28-10	25GBASE-LR SFP28 Module for Single-Mode Fiber, 1310nm, 10km
25Gb/s DAC	CAB-ZSP/ZSP-PxM	SFP28 Copper Cables (1-m to 5-m lengths)
25Gb/s AOC	AOC-S4S4-xxx	SFP28 AOC Active Optical Cables(1-m to 20-m lengths)

Table 2: SFP+ Transceivers / Cables Compatibility

Part No.		Product Description
10Gb/s Transceiver	ASF-10G-T	10GBase-T SFP+ Copper Transceiver, Cat 6a/7, 30M
10Gb/s Transceiver	AXS85-192-M3	10GBASE-SR SFP+ Module for Multi-mode Fiber, 850nm, 300M
10Gb/s Transceiver	AXS13-192-10	10GBASE-LR SFP+ Module for Single-Mode Fiber, 1310nm, 10km
10Gb/s Transceiver	AXS15-192-40	10GBASE-ER SFP+ Module for Single-Mode Fiber, 1550nm, 40km
10Gb/s Transceiver	AXS15-192-80	10GBASE-ZR DWDM SFP+ Modules for Single-Mode Fiber, 1550nm, 80km
10Gb/s DAC	CAB-10GSFP-PxM	SFP+ Copper Cables (1-m to 10-m lengths)
10Gb/s AOC	AOC-S1S1-xxx	SFP+ Active Optical Cables (1-m to 50-m lengths)

## Ordering Information

Part Number		Description
	WADQS-10	QSFP+ to SFP+ Adapter Module (read EEPROM configuration from SFP+ port)
	WADQS-10-A	QSFP+ to SFP+ Adapter Module (read EEPROM configuration from QSA)
	WADQS-28	QSFP28 to SFP28 Adapter Module (read EEPROM configuration from SFP28 port)
	WADQS-28-A	QSFP28 to SFP28 Adapter Module (read EEPROM configuration from QSA)