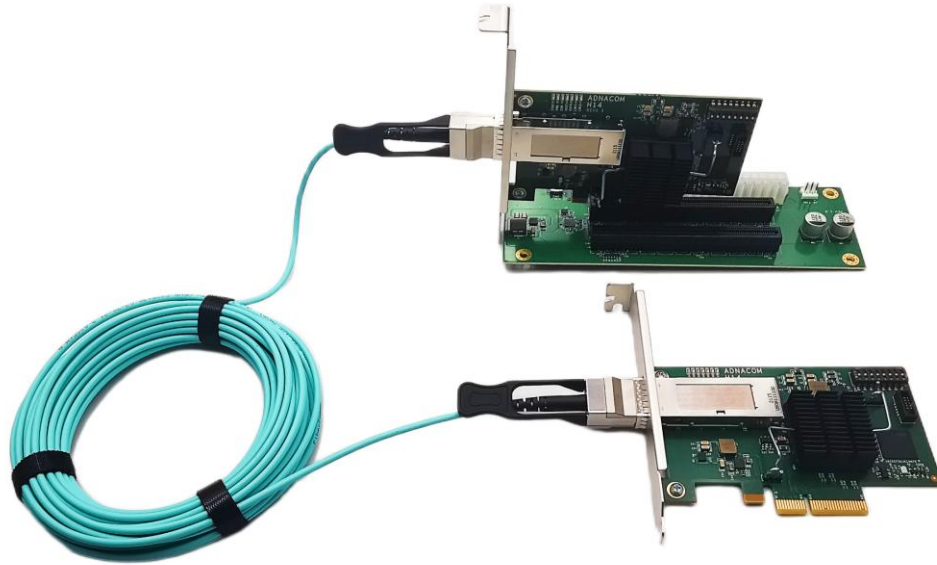


32 Gb/s PCIe Gen 3 Fiber-Optic Extension System



Overview

The Adnacom S14 PCIe Gen 3 extension system enables system integrators to operate a single PCIe Gen 1, Gen 2, or Gen 3 add-in card up to 500 m from the host computer using a fiber-optic cable. The S14 requires no additional host software drivers.

System Components

- H14 host adapter
- H14 target adapter
- R10 remote backplane
- QSFP transceivers and cable (optional)

Product Features

- PCIe Gen 3 communication over a fiber-optic cable
- 32 Gb/s raw bit rate per direction using four PCIe Gen 3 lanes
- Cable lengths up to 500 m (maximum throughput depends on cable length)
- One PCIe x16 slot (x4 electrical) on the remote backplane
- Support for QSFP transceivers, active optical cables (AOCs), and direct attach cables (DACs)
- Manual or automatic power-on/off modes for the remote backplane, selected by DIP switch
- PCIe link, voltage, current, temperature, and QSFP transceiver monitoring via a software utility or API
- Remote backplane mounting in a standard ATX or microATX case

S14 Specifications

PCIe Transfer Rate	PCIe Gen 3, 8 GT/s per lane One cable (x4): 32 Gb/s raw bit rate per direction
Host Adapter	H14 PCIe Gen 3 adapter configured in host mode
Target Adapter	H14 PCIe Gen 3 adapter configured in target mode
Remote Backplane	R10 PCIe Gen 3 backplane with one PCIe x16 slot (x4 electrical)
Transceivers and Cables	One QSFP cable connection (4 PCIe lanes): • Multimode or single-mode optical transceivers with: ○ LC-LC duplex cable (four PCIe lanes optically multiplexed) ○ MPO/MTP cable • Active optical cable (AOC) • Direct attach cable (DAC)

Ordering Information

S14 without transceivers and cable

Part Number: S14

Included items:

- **H14:** host adapter with standard bracket – 1 pc
- **H14:** target adapter with standard bracket – 1 pc
- **LP-H14:** low-profile bracket – 2 pcs
- **R10:** remote backplane – 1 pc

S14 with transceivers and cable

Part Number: S14-C-L

Included items:

S14 – 1 pc

Transceivers and cable – as specified by C and L

Part number fields:

C – Transceiver and cable option (see the options table)

L – Cable length in meters

Transceiver and Cable Options

Option	Manufacturer	Transceiver or Cable	Cable Type
01	Generic	AOC	AOC assembly
02		Single-mode QSFP with LC connector	LC-LC duplex, OS
03		Multimode QSFP with LC connector	LC-LC duplex, OM
04		Multimode QSFP with MPO connector	MPO/MTP, OM
05		DAC	DAC assembly

LC-LC Cable Maximum Length

Cable Type	Typical Maximum Length
Multimode OM3 50/125 μm	250 m
Multimode OM4 50/125 μm	350 m
Single-mode OS1 9/125 μm	500 m
Single-mode OS2 9/125 μm	500 m

Note: Actual data throughput depends on protocol overhead, transaction size, cable length, and system configuration.

For further information, visit <https://adnacom.com/s14/>.