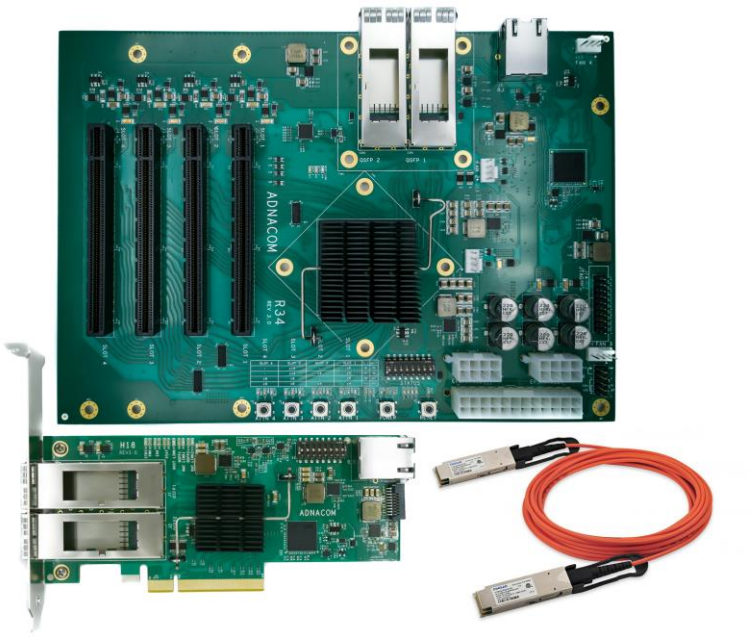
64 Gb/s PCIe Gen 3 Over Fiber Optic Expansion System



The Adnacom S31 PCIe Gen 3 Expansion System allows system integrators to operate 4 PCIe Gen1/Gen2/Gen3 cards over fiber optic cable at distances up to 1 km from the location of the computer system. No additional host software drivers are required during installation or operation. The system consists of a host adapter, a remote backplane, and a fiber optic cable.

Product Features:

- Supports PCIe Gen 3 communication over fiber optic
- 32 or 64 Gb/s cable data rate using 4 or 8 PCIe Gen 3 lanes
- Cable length up to 1 km (the maximum data rate depends on the cable length)
- Remote backplane has 4 PCIe x16 connectors supporting the following configurations:
  – 4 slots: x8, x8, x4, x4
  – 3 slots: x16, x4, x4
  – 3 slots: x8, x8, x8
  – 2 slots: x16, x8
- PCIe slots support hot-plug and bifurcation
- QSFP transceivers, Active Optical Cables (AOC), or Direct Attach Cables (DAC)
- Remote backplane auto power on/off
- PCIe link, voltage, current, temperature, and QSFP transceiver monitor via Ethernet
- Backplane can be mounted in any standard ATX or MicroATX case

S31 Specification:

Cable Data Rate	2 QSFPs: 64 Gb/s data, 8 PCIe Gen 3 lanes 1 QSFP: 32 Gb/s data, 4 PCIe Gen 3 lanes
Host Adapter	H18, PCIe Gen 3 Host Adapter, 2 QSFP connectors
Remote Backplane	R34, PCIe Gen 3 Backplane, 2 QSFP connectors, 4 PCIe x16 slots

Transceivers and Cables	1 or 2 QSFPs (1 QSFP per 4 PCIe lanes):
	• Multi-mode or single-mode optical transceivers
	  ○ LC-LC duplex cable (4 PCIe lanes optically multiplexed)
	  ○ MPO/MPT cable
	• AOC
	• DAC

Ordering Information:

S31 without transceivers and cables

Part Number: S31
Included items:

- **H18**: host adapter – 1 pc
- **LP-H18**: low profile bracket – 1 pc
- **R34**: remote backplane – 1 pc
- **IO-R34**: ATX I/O shield – 1 pc

S31 with transceivers and cables

Part Number: S31-N-C-L
Included items:
S31 – 1 pc
N – Number of transceivers, AOCs or DACs: 1 or 2
C – Transceiver and cable option
L – Cable length in meters

Transceiver and Cable Options

Option	Manufacturer	Part Number	Cable
01	Generic	AOC	AOC
02		Single-mode QSFP with LC connector	LC-LC, Duplex, OM or OS
81		DAC	DAC
11	Finisar finisar.com	FCCN410QD3C	AOC
12		FTL4C1QL2C (LC connector)	LC-LC, Duplex, OM or OS
21	Fiber Store fs.com	QSFP-AO	AOC
22		QSFP-LX4-40G (LC connector)	LC-LC, Duplex, OM or OS

LC-LC Cable Maximum Length

Cable Type	Typical Maximum Length
Multi-Mode OM1 62.5/125 µm	40 m
Multi-Mode OM2 50/125 µm	100 m
Multi-Mode OM3 50/125 µm	350 m
Multi-Mode OM4 50/125 µm	550 m
Single-Mode OS1 9/125 µm	1 km
Single-Mode OS2 9/125 µm	1 km

Note: The maximum cable data rate depends on the cable length.

For further information visit: https://adnacom.com/s31/