

EX-750

PCI Express Backplane/Modular HPC

OVERVIEW

Pico Computing offers a variety of PCI Express (Gen 3) backplanes designed to yield the highest performance/compute density available, while simultaneously making HPC easy to design and deploy. These include full-length and height PCIe boards, GPU-length PCIe boards, and [single-board computers](#).

EX-750

The GPU-length and height EX-750 Backplane is based on a fully-switched 8GB/s, x16 PCI Express Gen 3 Bus from the host, also providing independent x8 PCIe Gen 3 buses to each module mounted on the EX-750 backplane. The EX-750 accommodates up to four single-wide modules and forms the foundation of Pico Computing's modular, scalable, and upgradeable architecture. Use a single EX-750 backplane as a server or workstation accelerator card, or scale up multiple, fully-populated EX-750 backplanes in Pico Computing's SC6 cluster for massively parallel computing performance.

SPECIFICATION SUMMARY

- Accepts up to four single-wide AC-Series FPGA modules
- Fully-switched architecture:
- x16 PCIe Gen 3 interface to host (8GB/s)
- x8 PCIe Gen 3 interface to each AC-Series module
- Low noise design
- Air-cooled
- Separate FPGA loading bus
- FPGA power separate from PCIe bus
- Status LEDs
- GPU-compatible Dimensions (L x H):
 - 9.75 x 4.376 (Inches)
 - 247.65 x 111.15 (mm)
- Environmental
 - Operating temperature: 0°C – 85°C
 - Storage temperature: -20°C – 100°C
- Electrical
 - x16 PCIe Gen 3
 - Input Power: 12.0V 6-pin PCIe power connector

