PCI Express Generation 5 Connectivity 80 Lanes with Broadcom Atlas PCIe Switch

Design Note #139



Accuracy and perfection. PCI Express Generation 5's unforgiving speeds demands attention to detail. OTEC's accurate circuit board routing and lane matching hit the mark.



"Perfect. The entire design first revision is shippable for revenue. Extraordinary, nice job OTEC!"

-President and CTO

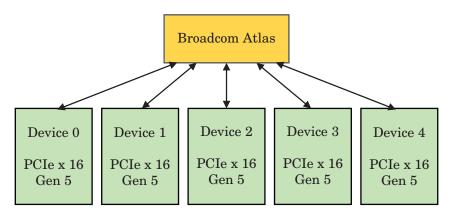
-PCIe Test Systems

PCI Express Generation 5 Connectivity

Operating at 32 Gigahertz per lane, PCI Express Generation 5 connectivity attains extraordinary data transfer rates. Sustained full speed operation requires know how and the art of circuit board architecture and design. TLP retries, system stalls, and faults of any kind reduce performance. Accuracy. Perfection. Two aspects of design and execution that are necessary at all stages in the design process.

Broadcom Atlas PCI Express Switch

Based on the Broadcom PCI Express Generation 5 Atlas Switch, this two board set provides sustained full speed operation. Configured as sixteen lane wide stations, this PCI Express Switch provides communications to multiple high speed devices.

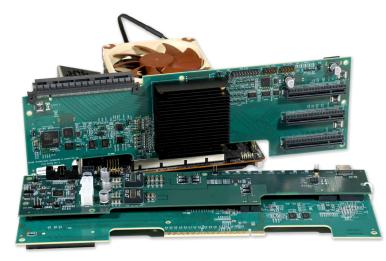


High Current Power / Precision Clocking

Sustained operation of multiple PCI Express Generation 5 lanes requires a lot of power. In support of the numerous PCI Express Generation 5 lanes are a pair of 50 Amp multi-phase power supplies. These low noise supplies together with low jitter clock sources make the entire PCI Express system's infrastructure stable.

Orchid Technologies: PCI Express Generation 5

The development of custom electronic products for our OEM clients is OTEC's entire business. The design of PCI Express Generation 5 devices with rapid design cycles, demanding technical requirements, and unforgiving schedules sets us apart. Call Orchid Technologies today!



Custom Engineering From Concept to Production

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