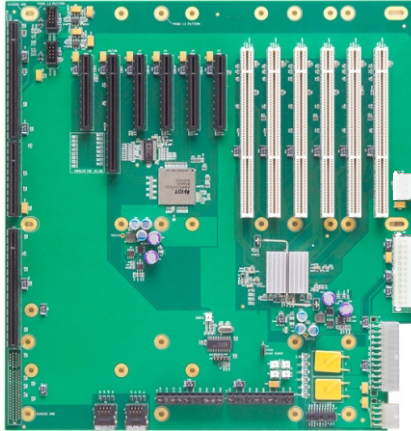


BPX6610

PICMG® 1.3 PCI EXPRESS® BACKPLANE

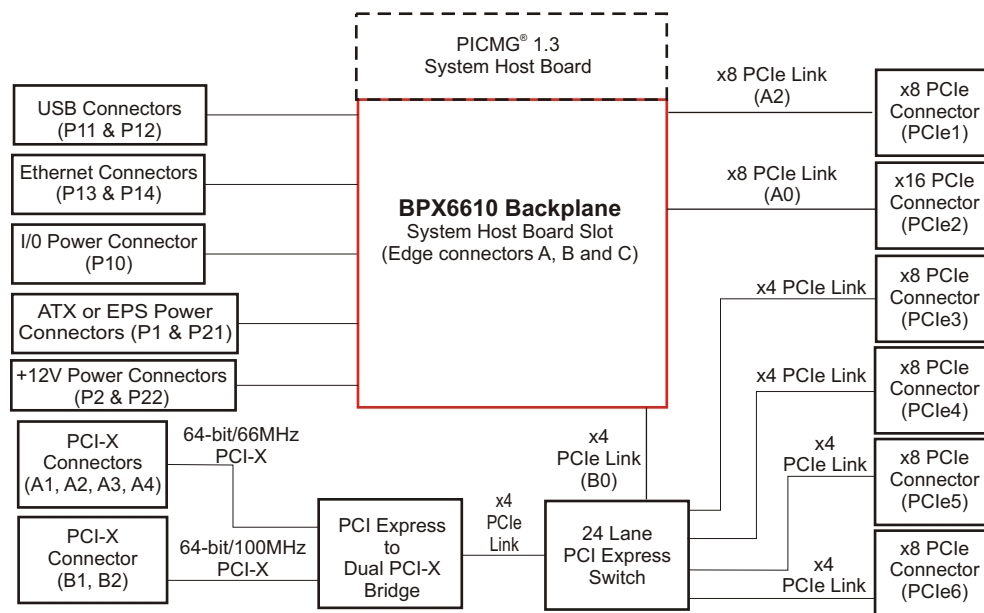


FEATURES

- 14-slot form factor supports one PICMG® 1.3 server-class system host board
- Six PCI Express® and six PCI-X/PCI option card slots
- PCIe card slot configurations: one PCIe x16 mechanical / x8 electrical, one PCIe x8 mechanical / x8 electrical and four PCIe x8 mechanical / x4 electrical
- PCI-X card slot configurations: two 64-bit/100MHz and four 64-bit/66MHz
- Optimized for use with Trenton high-performance PICMG 1.3 system host boards
- Two 10/100/1000Base-T backplane Ethernet ports**
- Four USB 2.0 backplane I/O connections**
- ATX/EPS, +12V AUX and terminal block input power connector configuration options
- Five-year factory warranty
- Made in U. S. A.



BLOCK DIAGRAM:



PCI EXPRESS BACKPLANE WITH SIX PCIe and SIX PCI-X/PCI SLOTS:

The PCI Express® link design of the Trenton BPX6610 backplane supports PICMG® 1.3 server-class SHBs. As shown in the block diagram, a PCI Express switch is used on the backplane to enable support for four of the PCIe card slots. This high-speed PCIe switch has a very low latency that enables high speed data throughput between the SHB and these card slots. Card slots PCIe1 and PCIe2 are connected directly to the SHB. Two of the PCI-X slots support 64-bit/100MHz option cards and the remaining four PCI-X slots offer 64-bit/66MHz card support. All of the PCI-X slots are capable of supporting universal, 64 or 32-bit PCI cards.

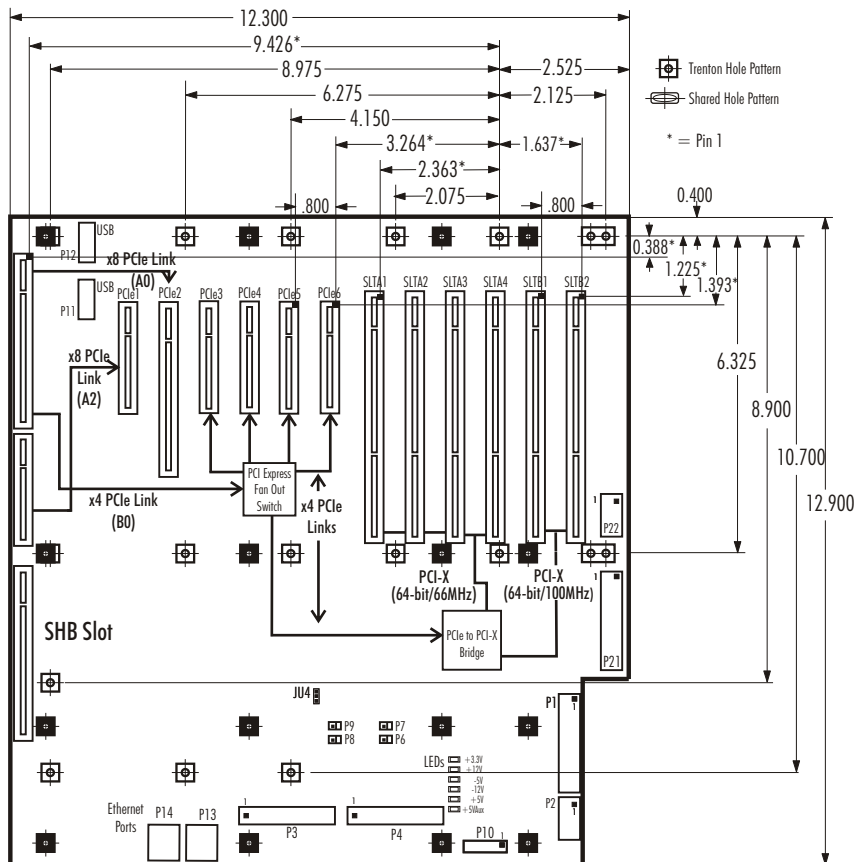
APPLICATION EXAMPLES:

A system design that needs COTS option card support for up to six PCIe and six PCI-X/PCI cards simultaneously is the ideal application scenario for the BPX6610 backplane. Oftentimes COTS option card technology can transition quickly from the PCI-X/PCI parallel bus architecture over to high-speed PCI Express serial interconnects. The backplane design eliminates any service interruptions caused by these technology transitions while maximizing the system's overall ROI. Example applications for the BPX6610 backplane include; medical diagnostics, military, transportation and industrial automation systems.

BACKPLANE MODEL: BPX6610

MODEL#	MODEL NAME	DESCRIPTION
6610-010	BPX6610-RAV	Right-angle and vertical ATX/EPS and +12V AUX connectors with two high-current terminal blocks

BPX6610 LAYOUT - TRENTON MOUNTING HOLE PATTERN DIMENSIONS:



SUGGESTED TRENTON SERVER CLASS

PICMG 1.3 SHBs:

**DUAL PROCESSOR SYSTEM
HOST BOARDS**

MCXT MCXT-E NLT SLT

**SINGLE PROCESSOR SYSTEM HOST
BOARDS**

MCXI NLI SLI

ENVIRONMENTAL SPECIFICATIONS:#

Operating Temp.: 0° C to 60° C

Storage Temp.: -20° C to 70° C

Humidity: 5% to 90%, non-condensing

Environmental specifications for system host boards / single board computers are usually lower than those of the backplane. Check with your SHB/SBC vendor.

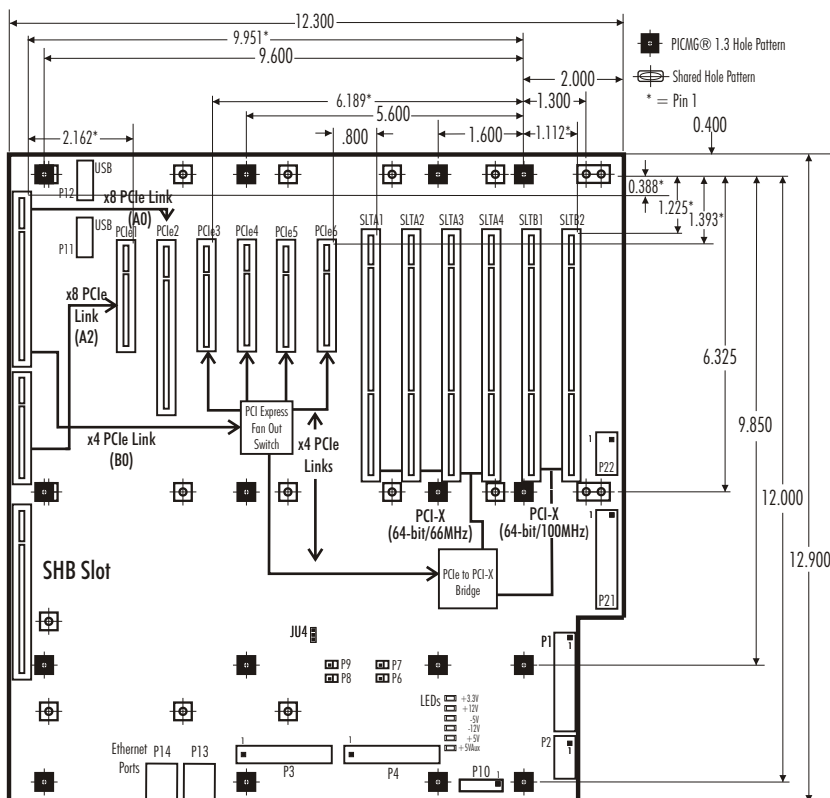
The Trenton BPX6610 is a lead-free, RoHS compliant backplane.

This backplane is designed to meet worldwide EMI emissions requirements, CE conformity and immunity standards. Contact Trenton for the specific standard numbers this product.

The Trenton BPX6610 backplane is designed for UL60950 and CAN/CSA C22.2 No. 60950-00.

Product Photo Note: The photo of the 6610 backplane shown on page one is provided for illustrative purposes only. Actual connector locations are illustrated in the backplane layout drawings and on the Trenton website.

BPX6610 LAYOUT - PICMG 1.3 MOUNTING HOLE PATTERN DIMENSIONS:



Engineering Notes:

All power connectors are shown in the layout drawings. The connectors are populated based on model.

Nominal PCB thickness: 0.080"

Connector spacing: .800" centers

To find the center of a PCI-X/PCI option card connector to the left of the reference dimension hole, add 0.150" to the pin 1 location dimension.

To find the center of a PCI Express option card connector and the SHB slot add 0.049" to the pin 1 location dimension.

Mounting holes: 0.156" diameter

All dimensions are inches.

** Optional USB and Ethernet connectivity provided by the PICMG 1.3 System Host Board. Not all SHBs support this capability.

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