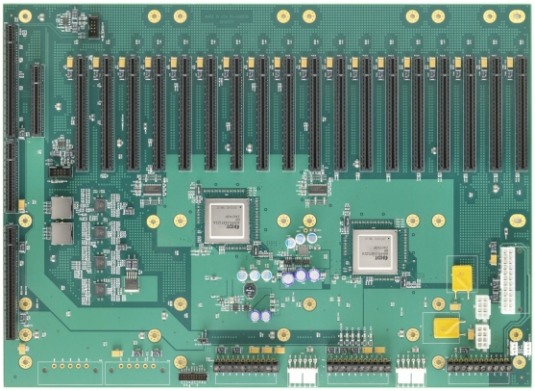
BPX6806

18-SLOT PCI EXPRESS BACKPLANE



FEATURES

- 20-slot form factor supports one PICMG® 1.3 server-class system host board
- Eighteen x16 PCI Express® mechanical slots
- PCIe card slot electrical configuration: Four (4) PCIe x8 and fourteen (14) PCIe x4
- Optimized for use with Trenton high-performance PICMG 1.3 system host boards
- Ideal for communication system applications where support for a large number of PCI Express cards or future system expansion and longevity are key requirements
- Two 10/100/1000Base-T backplane Ethernet ports**
- Four USB 2.0 backplane I/O connections**
- ATX/EPS, terminal block and right-angle/high-current input power connector configuration options
- Five-year factory warranty
- Made in U. S. A.

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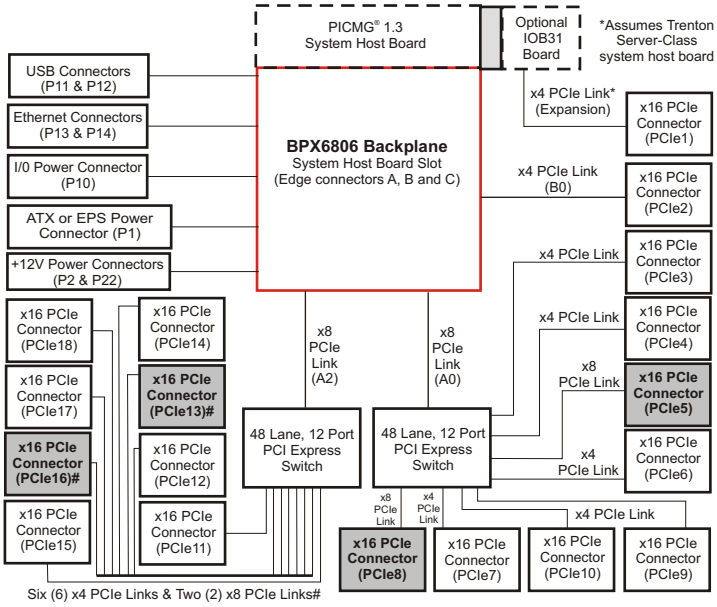
BLOCK DIAGRAM:



EIGHTEEN SLOT PCI EXPRESS BACKPLANE:

The PCI Express® link design of the Trenton BPX6806 backplane supports PICMG® 1.3 server-class SHBs. All the PCI Express slots are x16 mechanical slots and each PCIe slot is driven with either a x8 or x4 PCI Express link. The backplane features two PCI Express switch devices that ensures maximum data throughput speeds with superior communication signal integrity between the host board and a PCI Express option card. There a variety of power connector configurations available with the Trenton BPX6806 backplane. These ATX/EPS, 12V AUX and terminal block power connector options help simplify the system's power wiring.

APPLICATION EXAMPLES:

Communication systems and video servers that need to support a large number of PCI Express switch cards are the typical applications for the Trenton BPX6806 backplane. The slot support of the backplane enables system designs that can grow and adapt to changing requirements without incurring significant system upgrade expense. The ability of the BPX6806 backplane to support up to eighteen PCI Express COTS cards, coupled with the backplane's advanced PCI Express switches and link routing enables system designs that offer robust data and video communications with maximum PCIe option card flexibility.

BACKPLANE MODEL: BPX6806

MODEL#	MODEL NAME	DESCRIPTION
6806-001	BPX6806-ATX	ATX/EPS (straight-in/vertical connector) and two vertical 12V Aux connectors [Power connector configuration: P1, P2 & P22]
6806-002	BPX6806-EXT	Right angle, high-current AMP connectors (2) [Power connector configuration: P48 & P49]
6806-003	BPX6806-E+A	ATX/EPS (straight-in/vertical connector), two vertical 12V Aux connectors and two right angle, high-current AMP connectors [Power connector configuration: P1, P2, P22, P48 & P49]
6806-004	BPX6806-EPS	ATX/EPS (straight-in/vertical connector), two vertical 12V Aux connectors and three terminal block connectors [Power connector configuration: P1, P2, P22, P3, P4 & P5]

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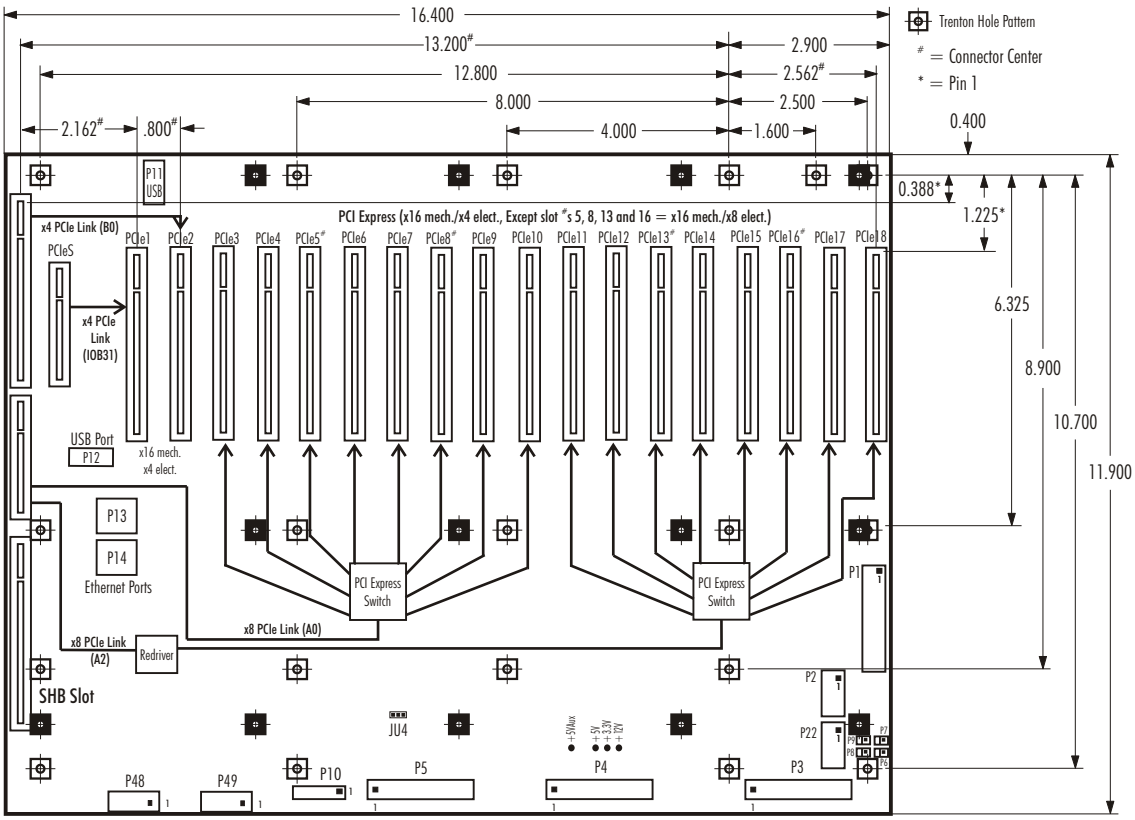
BPX6806 LAYOUT - TRENTON MOUNTING HOLE PATTERN DIMENSIONS:



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 SPECS.:#

Operating Temp.: 0° C. to 60° C
Storage Temp.: -20° C. to 70° C
Humidity: 5% to 90%, non-condensing

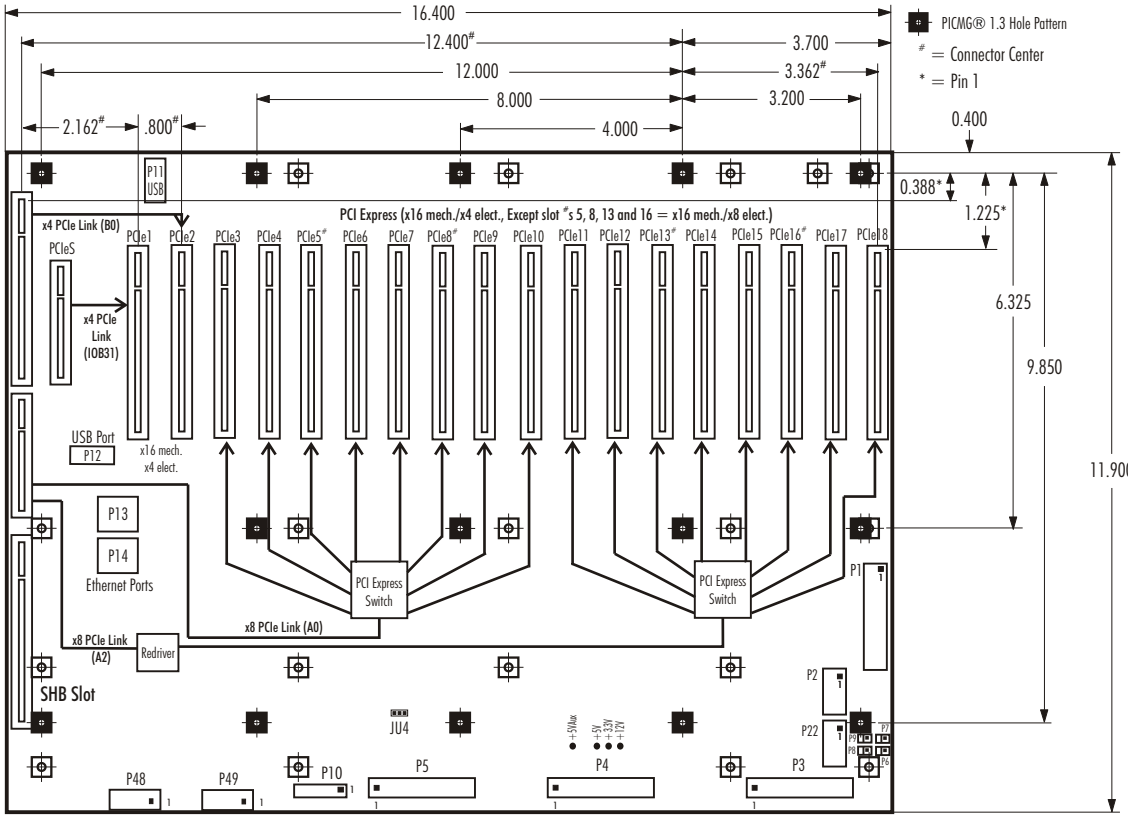
Environmental specifications for system host boards / single board computers are usually lower than those of the backplane. Check with your SHB/SBC vendor.

The Trenton BPX6806 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 BPX6806 backplane is designed for UL60950 and CAN/CSA C22.2 No. 60950-00.

BPX6806 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.
Mounting holes: 0.156" diameter
Nominal PCB thickness: 0.080"
All dimensions are inches.
** Optional USB and Ethernet connectivity provided by the PICMG 1.3 System Host Board. Not all SHBs support this capability.

Product Photo Note: The photo of the 6806 backplane shown on page one is a provided for illustrative purposes only. Actual connector locations are illustrated in the backplane layout drawings and on the Trenton website.

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