BPX3/14

PICMG® 1.3 PCI EXPRESS® BACKPLANE

FEATURES

- 20-slot form factor supports one PICMG® 1.3 server-class system host board
- Fourteen PCI-X and two PCI Express® option card slots
- PCIe card slot configurations: one PCIe x16 mechanical / x4 electrical and one PCIe x8 mechanical / x4 electrical*
- 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-X 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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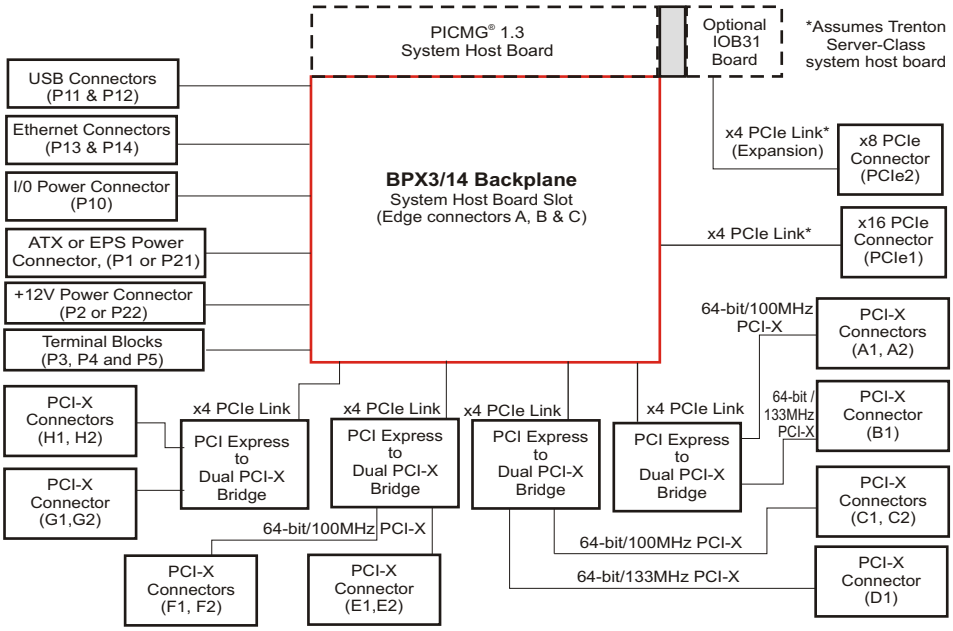
BLOCK DIAGRAM:



PCI EXPRESS BACKPLANE WITH FOURTEEN PCI-X SLOTS:

The PCI Express® link design of the BPX3/14 backplane supports PICMG® 1.3 server-class SHBs. The fourteen PCI-X slots support 64-bit/133MHz and 64-bit/100MHz option cards. PCI Express slot PCIe1 is a x16 mechanical slot driven with a x4 electrical link and the PCIe2 slot is a x8 mechanical slot driven by a x4 electrical link delivered to the card slot via an IOB31 module installed on the SHB. The backplane features four PCIe-to-PCI-X bridge chips for reliable and secure data communications between the PCI-X card slots and the PICMG 1.3 SHB. The backplane's available power connector options simplify the system's power wiring.

APPLICATION EXAMPLES:

Communication and data storage systems that need to support a large number of PCI-X cards are the typical applications for the Trenton BPX3/14 backplane. Other applications such as video servers using PCI-X interface cards are ideal applications. Systems that need to grow and adapt to changing communication requirements, without incurring significant system upgrade expense are also ideal applications for this backplane. The backplane's ability to support up to fourteen PCI-X COTS cards and two PCI Express cards enables system designs that offer robust data communications with maximum option card flexibility.

BACKPLANE MODEL: BPX3/14

MODEL#	MODEL NAME	DESCRIPTION
6467-001	BPX3/14-ATX	ATX connectors with three high-current terminal blocks
6467-004	BPX3/14-EPS	EPS connectors with three high-current terminal blocks

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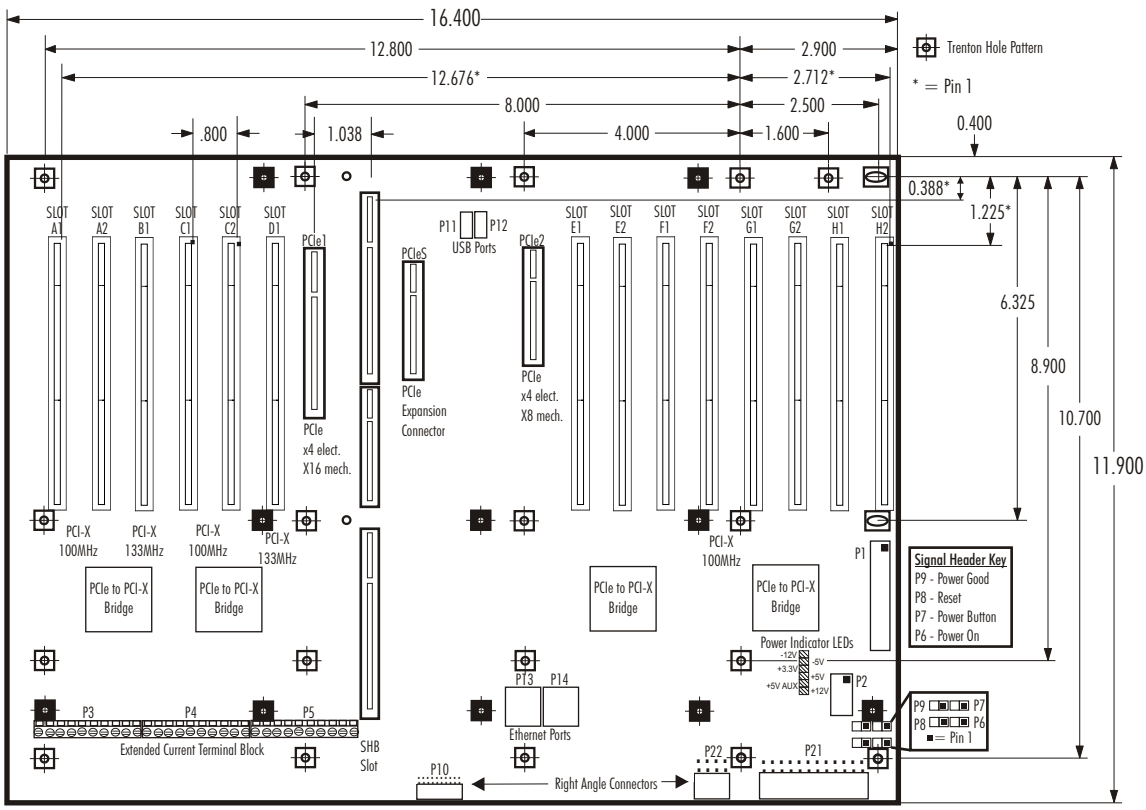
BPX3/14 LAYOUT - TRENTON MOUNTING HOLE PATTERN DIMENSIONS:



*PCIe2 slot functionality requires an IOB31 installed on the SHB

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

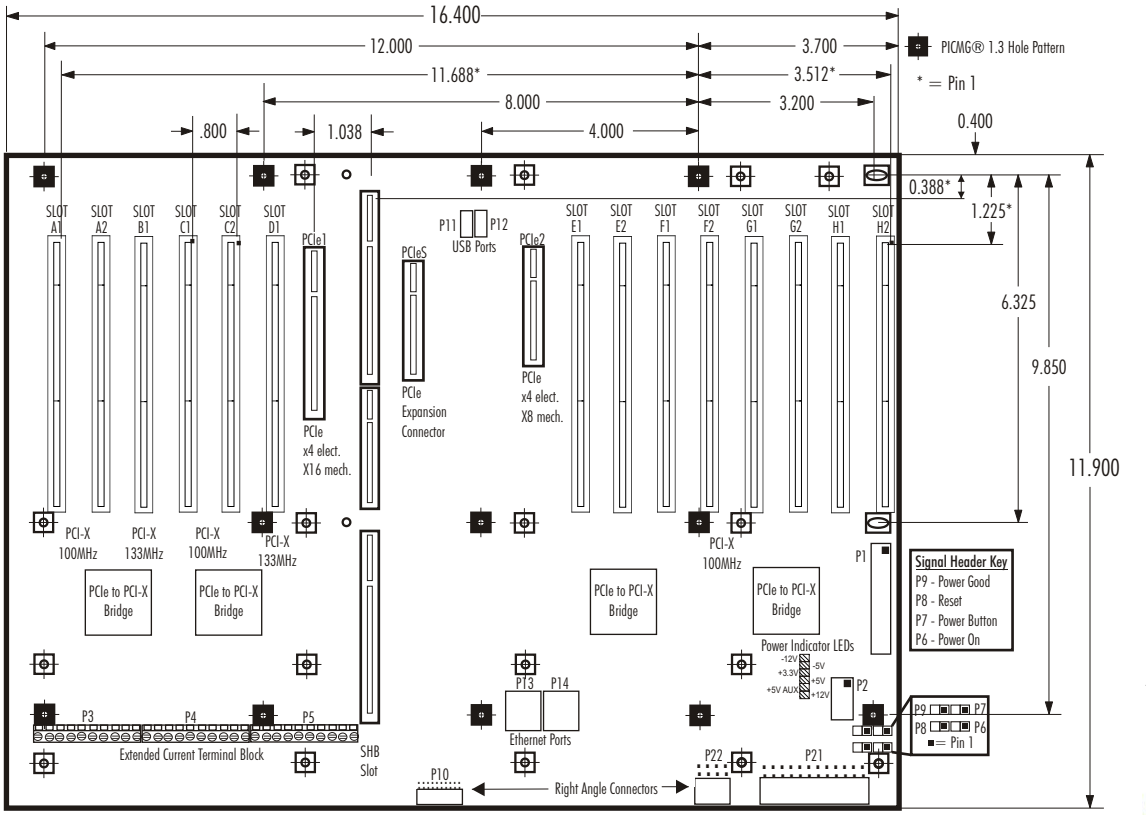
Environmental specifications for system host boards / single board computers are usually lower than those of the backplane. Check with your SHB/SBC vendor.

The Trenton BPX3/14 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 BPX3/14 backplane is designed for UL60950 and CAN/CSA C22.2 No. 60950-00.

BPX3/14 LAYOUT - PICMG 1.3 MOUNTING HOLE PATTERN DIMENSIONS:



*PCIe2 slot functionality requires an IOB31 installed on the SHB

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 BPX3/14 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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