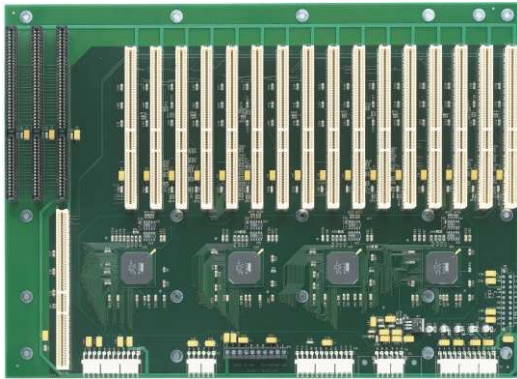


# BP3/16-64

## 64-bit PCI/ISA BACKPLANE

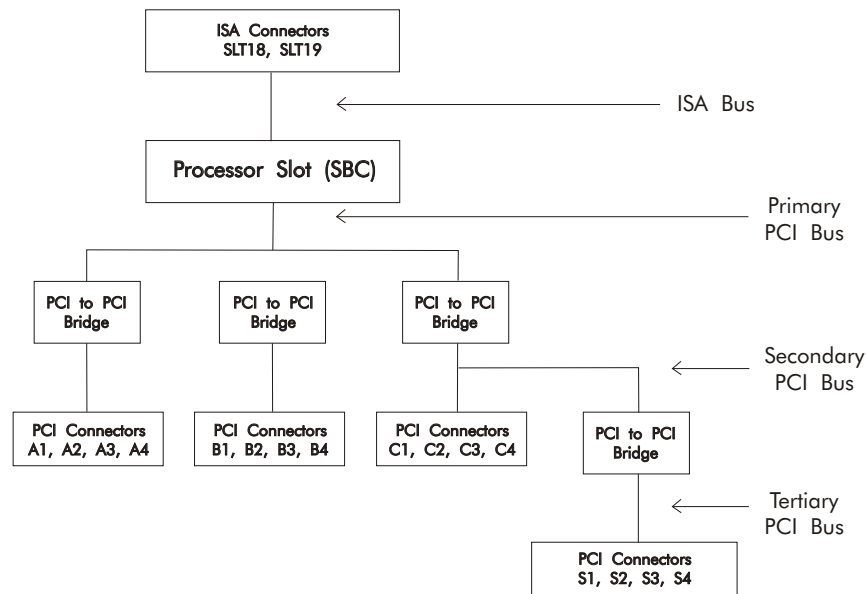


### FEATURES

- 20-slot form factor supports one PICMG® 1.0 single board computer
- Sixteen PCI and two ISA option card slots
- PCI card slot configurations: Sixteen slots support 64-bit/33MHz or 32-bit/33MHz PCI option cards
- Optimized for use with Trenton high-performance PICMG 1.0 single board computers
- PCI-to-PCI bridge architecture ensures independent PCI card operations
- PCI bus mastering available on all 16 PCI option card slots
- Flexible input power connector configuration options
- Two-year factory warranty
- Made in U. S. A.



### BLOCK DIAGRAM:



### PICMG 1.0 BACKPLANE WITH PCI and ISA SLOTS:

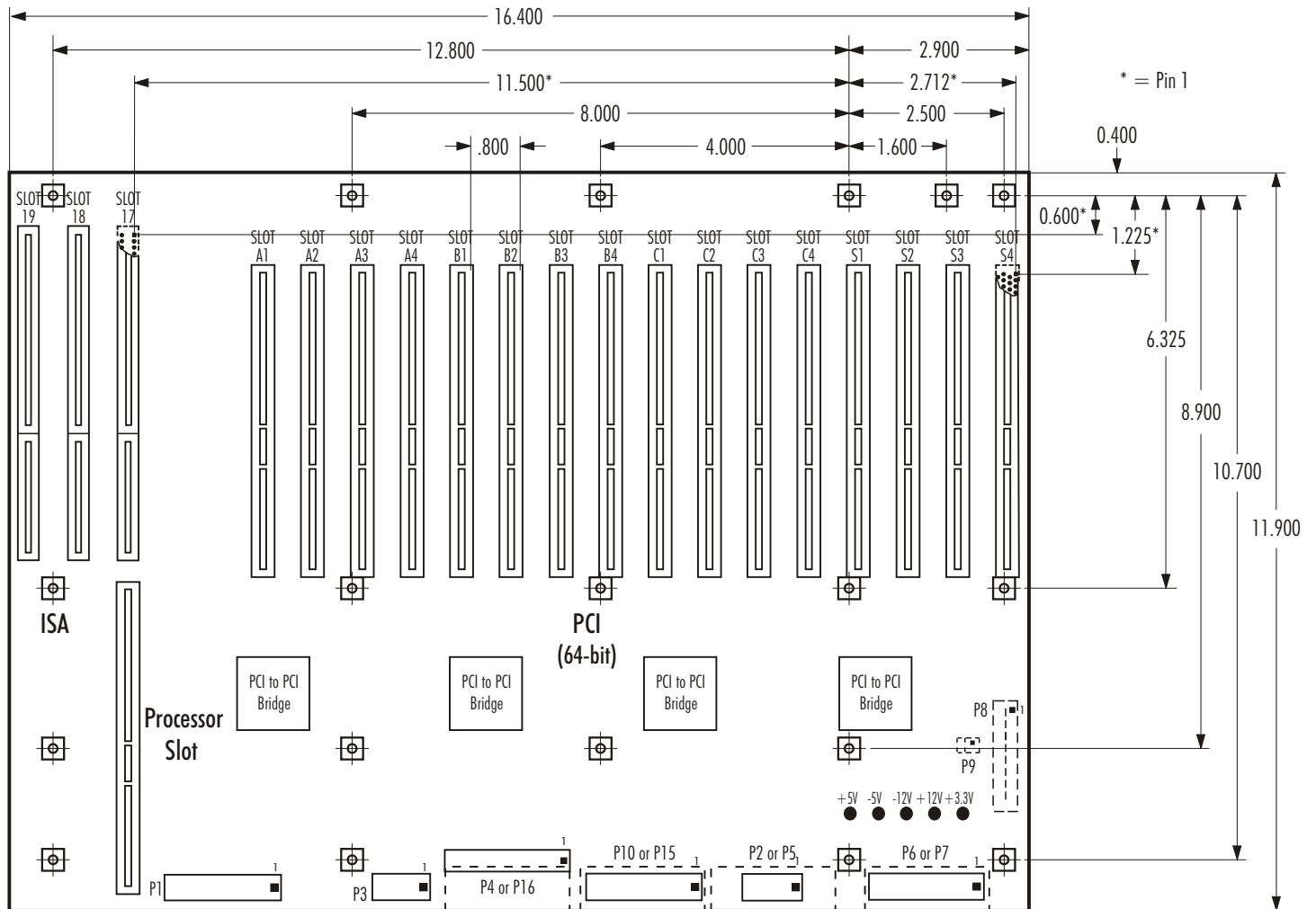
The Trenton BP3/16-64 backplane supports PICMG® 1.0 single board computers (SBCs). PCI-to-PCI bridge chips used on this backplane extend the PCI local bus electrical loading limits while ensuring secure data communications between the PCI option cards and the SBC. The bridge chips operate independently and allow communication within the same bus even if all the other PCI buses on the backplane are busy. This design feature helps to ensure that data packets on a PCI bus are not lost during times of peak data traffic. All sixteen PCI option card slots on the backplane support bus mastering. Two ISA option card slots connect directly to the SBC's ISA card edge fingers when the SBC is installed in the processor slot.

### APPLICATION EXAMPLES:

A system design needing to support a large number of COTS PCI option cards and a few purpose-built ISA cards simultaneously is the ideal application scenario for the BP3/16-64 backplane. In addition to supporting 32-bit/33MHz PCI option cards, all of the backplane's PCI card slots also have built-in support for the 64-bit extension of the PCI bus interface. This means that any PCI card slot on the backplane can support either 32-bit/33MHz or 64-bit/33MHz PCI option cards. The backplane's two ISA card slots support purpose-built ISA cards where the cost of designing out these legacy cards is prohibitive. Example applications include; transportation, telecommunications, industrial automation and military systems.

### BACKPLANE MODEL: BP3/16-64

MODEL#	DESCRIPTION
5696-001	Standard ATX input power connectors
5696-002	Extended Current input power connectors



**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 single board computers are usually lower than those of the backplane. Check with your SBC vendor.

The Trenton BP3/16-64 is available as either a non-RoHS or a lead-free, RoHS compliant backplane.

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

The Trenton BP3/16-64 backplane is designed for UL approval.

**Engineering Notes:**

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

Nominal PCB thickness: 0.062"

Connector spacing: .800" centers

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

Mounting holes: 0.156" diameter

All dimensions are inches.

**Product Photo Note:**

The photo of the 5696 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.

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