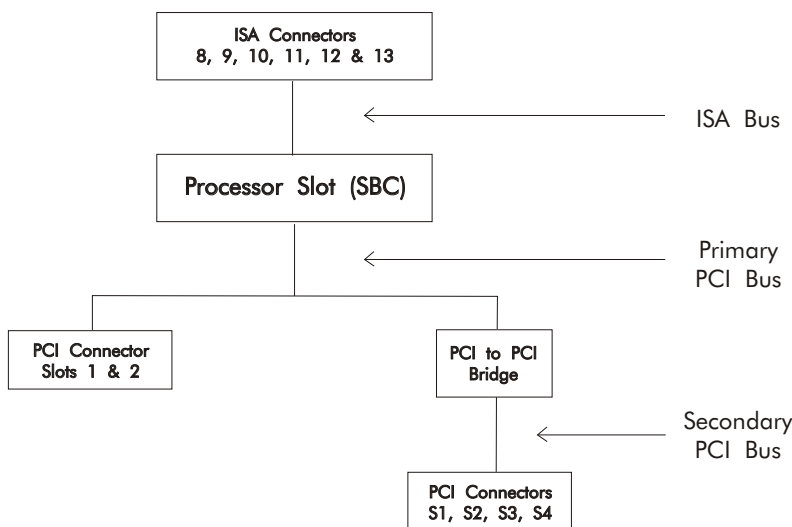


### FEATURES

- 14-slot form factor supports one PICMG® 1.0 single board computer
- Six PCI and six ISA option card slots
- PCI card slot configurations: Six slots support 32-bit/33MHz PCI option cards
- Optimized for use with Trenton high-performance PICMG 1.0 single board computers
- Center SBC slot ensures optimum system cooling
- PCI-to-PCI bridge architecture ensures independent PCI card operations
- 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:

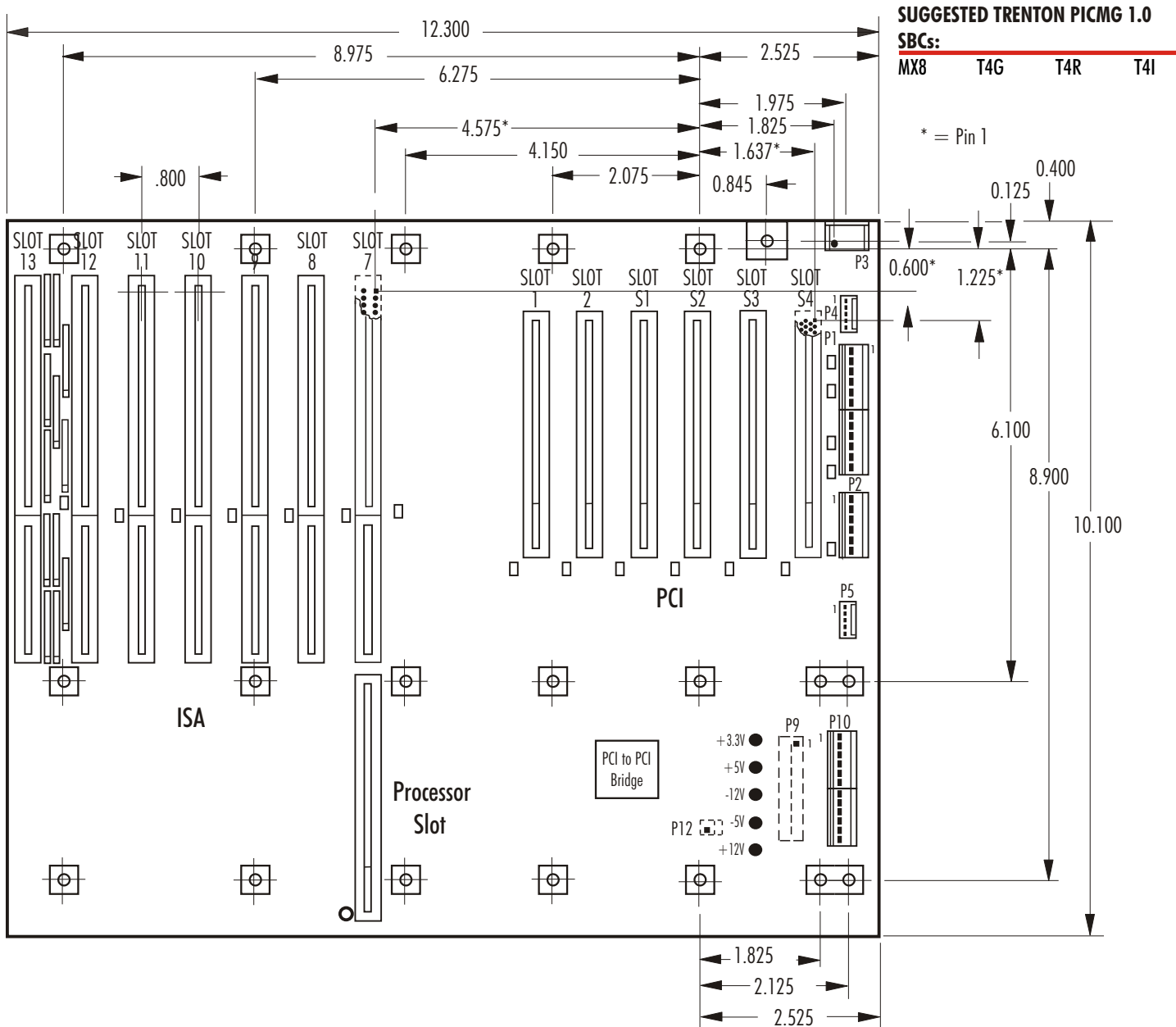
The Trenton BP7/6 backplane supports PICMG® 1.0 single board computers (SBCs). One PCI-to-PCI bridge chip is used on this backplane to extend the PCI local bus electrical loading limits while ensuring secure data communications between the PCI option cards in slots S1, S2, S3 and S4 and the SBC. This design feature helps to ensure that data packets on the bridged PCI bus are not lost during times of peak data traffic. These four PCI option card slots support bus mastering. The six 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 legacy system design needing to support a large number of COTS PCI option cards and multiple purpose-built ISA cards simultaneously is the ideal application scenario for the BP7/6 backplane. The backplane's PCI card slots support 32-bit/33MHz PCI option cards. The backplane's six ISA card slots support purpose-built ISA cards where the cost of designing out these legacy cards is prohibitive. Secure data communications between the ISA/PCI option cards is assured with the backplane design. Example applications include; transportation, telecommunications, industrial automation and military embedded systems.

### BACKPLANE MODEL: BP7/6

MODEL#	DESCRIPTION
5491-000	Standard AT input power connectors
5491-001	Standard ATX 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 BP7/6 is available as a non-RoHS backplane.

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

The Trenton BP7/6backplane 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 5491 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.

PICMG is a registered trademark of the PCI Industrial Computer Manufacturers Group. All other product names are trademarks of their respective owners.

Copyright ©2009 by TRENTON Technology Inc. All rights reserved.

