# PCI EXPRESS/PCI-X/PCI BACKPLANE



## **FEATURES**

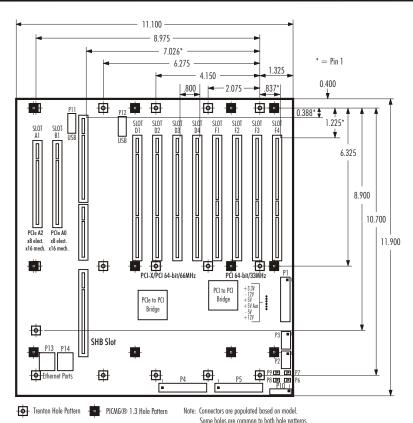
- · One SHB Express (PICMG 1.3) System Host Board Slot
- · One x16 PCI Express Slot (mechanical)
- One x8 PCI Express Slot (mechanical)
- · Four 64-bit/66MHz PCI-X Slots
- · Four 64-bit/33MHz PCI Slots
- · ATX, EPS and Extended-current power connection options
- Supports Trenton 14-slot and PICMG 1.3 13-slot hole patterns
- · Seamless support for PCI Express, PCI-X and PCI option cards







# **Specifications**



PCB thickness .062" Connector spacing .800" centers Mounting holes .156" diameter All dimensions are inches.

# **PCI EXPRESS SERIAL SLOTS**

The two PCI Express slots on the BPX3/8 backplane provide the mechanical connections between PCI Express option cards and a PICMG 1.3 system host board. The x8 slot mechanically supports x8, x4 and x1 PCI Express cards and the electrical interface between the slot and the SHB is a x4 PCI Express link. The x16 slot accepts x16, x8, x4 and x1 PCIe cards and has a x8 PCI Express electrical connection to the SHB. The actual PCI Express electrical configuration between the SHB and option card depends on the SHB's PCI Express link configuration and the autonegotiation/link training features of PCI Express.

#### **PCI-X/PCI BUS SLOTS**

Provides eight PCI Local Bus slots which support PCI Local Bus option cards; four of these PCI slots also support PCI-X option cards, which must be either +3.3V or universal option cards.

## **POWER CONNECTORS**

The backplane is available with an ATX or EPS power connector.

## **AUXILIARY POWER CONNECTOR**

A +12V power connector is also provided for routing auxiliary power to the SHB's edge connectors. This new capability of PICMG 1.3 compliant SHBs and backplanes eliminates the need for auxiliary power connections on the system host board.

## **EXTENDED-CURRENT CONNECTORS**

Optional extended-current connectors provide additional power capacity for power-intensive applications -- up to 80 Amps of +12V, 80 Amps of +3.3V and 40 Amps of +5V.

## **SHB SLOT**

Accepts an SHB Express (PICMG® 1.3) compliant processor. Trenton's NLT and NLI system host boards are examples of processors, SHBs or SBCs that are PCI Express compatible.

#### PCI EXPRESS-TO-DUAL PCI-X BRIDGE

The PCI Express-to-Dual PCI-X bridge eases the transition to PCI Express by supporting the PCI Local Bus as well as enabling 64-bit PCI-X architectures capable of running at speeds up to 66MHz. The bridge chip is fully compliant with the PCI-X Addendum to the PCI Local Bus Specifications Revision 1.0 and the PCI Local Bus Specification 2.2.

#### **PCI-TO-PCI BRIDGE**

The PCI-to-PCI bridge supports the PCI Local Bus Specification 2.2. The BPX3/8 backplane has bus mastering capabilities on the four PCI Local Bus Slots. These slots are +5V tolerant making them ideal for supporting legacy PCI option cards

## **PRINTED CIRCUIT LAYERS**

The backplane is a six-layer, .062" thick board with three separate signal layers: +5V, +3.3V and ground. Multi-layer backplane construction provides excellent noise immunity.

#### **POWER INDICATORS**

The power indicators provide a convenient visual check for +5V, -5V, +5V AUX,+12V, -12V and +3.3V power connections.

## **MODEL NAME: BPX3/8**

 MODEL#
 DESCRIPTION

 6377-001
 ATX

 6377-002
 Extended-current

 6377-004
 EPS

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