## **2U BUTTERFLY PCI EXPRESS BACKPLANE**

# Trenton BPG6741 - Side A





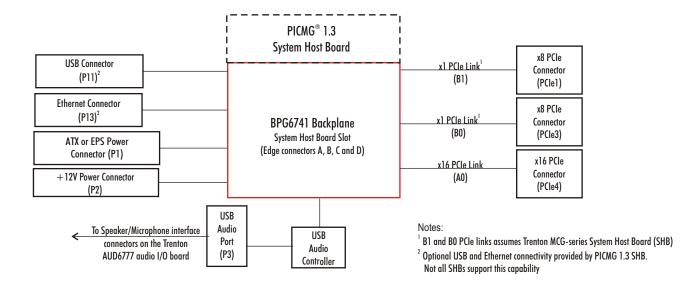
Trenton BPG6741 - Side B

### **FEATURES**

- PICMG® 1.3 Graphics-class backplane
- Butterfly form factor supports PCI-Express<sup>®</sup> option cards
- Supports 2U chassis designs
- One SHB Express™ (PICMG® 1.3) System Host Board slot
- One x16 PCI Express slot (mechanical/electrical)
- Two x8 PCI Express slots (mechanical)
- Audio port for speaker and microphone interface
- Two USB 2.0 backplane I/O connections
- One 10/100/1000Base-T backplane Ethernet port
- Right-angle ATX/EPS and +12V AUX power connectors
- Five-year factory warranty
- Made in U. S. A.



### **BLOCK DIAGRAM:**



### **2U BUTTERFLY PCI EXPRESS BACKPLANE - GRAPHICS CLASS:**

The 2U butterfly backplane (BPG6741) from Trenton Technology features x16 and x8 PCI Express slots to support PCIe option cards. The x16 mechanical slot is driven with a x16 PCIe electrical link making the slot ideal for supporting today's high-end video and graphics cards. The two x8 mechanical slots are driven with x1 PCIe electrical links when using a Trenton MCG-series SHB. Other Trenton PICMG 1.3 system host boards supported on the BPG6741 backplane include the Trenton TQ9, TML and T4L SHBs.

The 2U backplane also features a USB audio controller and a backplane Ethernet interface connection. In addition to reducing the clutter that would otherwise be caused by the presence of cables, the audio controller frees up an option card slot, adding to the flexibility and functionality of the Trenton BPG6741 backplane. The 2U butterfly backplane features two input power connections using standard, right-angle ATX/EPS and  $\pm$  12V AUX power connectors.

### **APPLICATION EXAMPLES:**

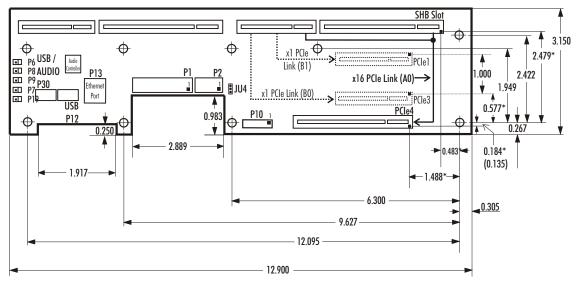
The 2U rackmount systems utilized in Internet Protocol Television (IPTV) applications deploy multiple configurations to meet a wide range of customer needs. Some applications need support for high-end video and graphics cards, while others are used in basic data storage applications. 2U rackmount systems are also employed in a number of applications, including embedded computing systems used by many telecommunication firms and in military and aerospace systems.

When your organization faces space constraints for its computer systems, the design of 2U computer backplane may be warranted. They can be placed efficiently within a 2U rackmount system.

At Trenton Technology, we offer 2U computer backplanes such as the BPG6741 that are made with a butterfly design to maximize space utilization within a 2U computer chassis.

### **BACKPLANE MODEL: BPG6741**

MODEL#MODEL NAMEDESCRIPTION6741-007BPG6741-CRAGraphics-class, Right-angle EPS/ATX and +12V AUX connectors with Ethernet6741-027BPG6741-CRA-NEGraphics-class, Right-angle EPS/ATX and +12V AUX connectors without Ethernet



# SUGGESTED GRAPICS-CLASS TRENTON PICMG 1.3 SHBs:

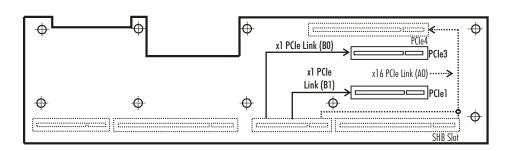
# DUAL PROCESSOR SYSTEM HOST BOARD

MCGT-E

# SINGLE PROCESSOR SYSTEM HOST BOARD

TQ9 TML T4L

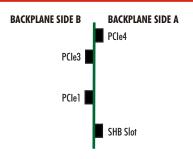
# **BPG6741 LAYOUT - SIDE B CONFIGURATION:**



#### Notes:

Connector spacing: 1.000" centers
The center of PCle4 is noted in parenthesis.
To find the center of the SHB connector add
0.049" from pin 1 location dimension.
To find the center of the PCle3 connector
subtract 0.049" from pin 1 location
dimension on side A.
Mounting holes: 0.156" diameter
Nominal PCB thickness: 0.080"

## TRENTON BPG6741 BACKPLANE - TYPICAL 2U CHASSIS REAR I/O VIEW:



\*NOTE: The photo of the 6741 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.

All dimensions are inches.

## TRENTON BPG6741 BACKPLANE - ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:  $0^{\circ}$  C. to  $60^{\circ}$  C Storage Temperature:  $-40^{\circ}$  C. to  $70^{\circ}$  C

**Humidity:** 5% to 90% non-condensing

The Trenton BPG6741 is a lead-free, RoHS compliant backplane.

This backplane is designed to meet worldwide EMI emissions requirements, CE conformity and immunity characteristics outlined in various international standards. Contact Trenton for the specific standard numbers for this product.

The Trenton BPG6741 backplane is designed for UL60950 and CAN/CSA C22.2 No. 60950-00.

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