

# BPG8032M

## HIGH-DENSITY x16 PCI EXPRESS 2.0 GRAPHICS BACKPLANE



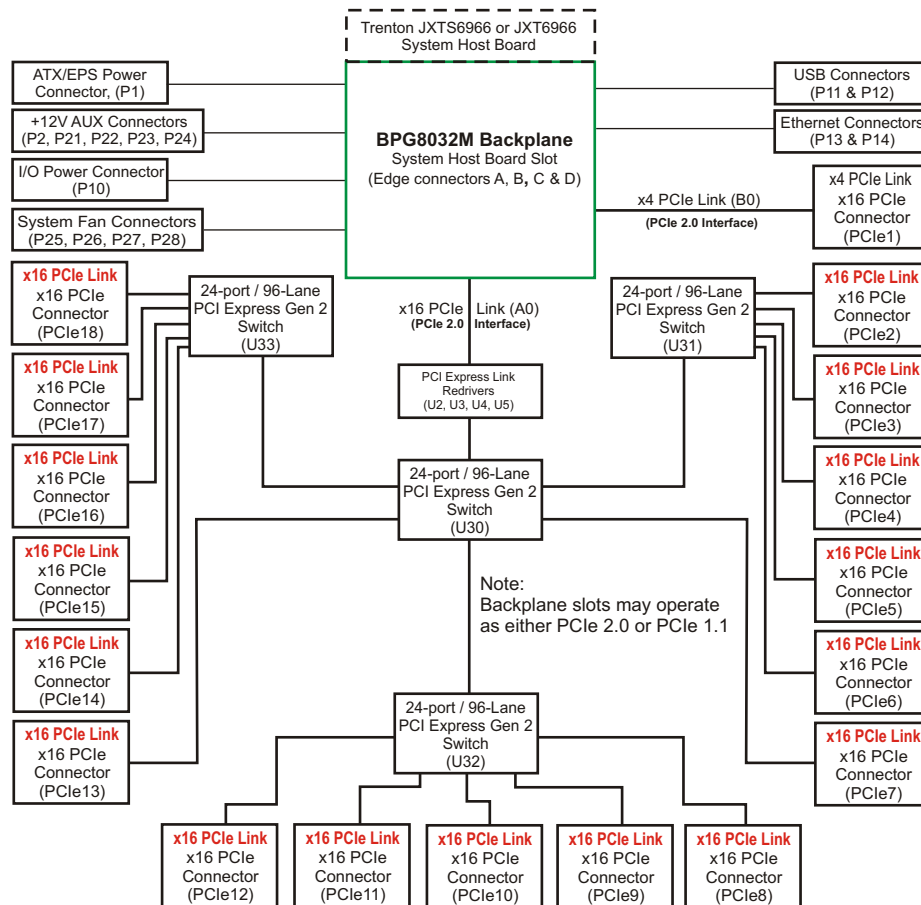
### FEATURES

- Ideal for video display wall controllers and graphics computing applications
- Supports up to sixteen Matrox Mura™ MPX Series boards with high speed and low-latency x16 PCIe 2.0 links
- Provides scalable system designs with built-in expansion and longevity
- PCIe 2.0 x16 link redrivers maximizes high-speed data path signal integrity
- Two 10/100/1000Base-T backplane Ethernet ports
- Four USB 2.0 backplane I/O connections
- Five-year factory warranty
- Made in U. S. A.

**matrox**  
Graphics for Professionals



### BLOCK DIAGRAM:



### EIGHTEEN SLOT PCI EXPRESS BACKPLANE:

The PCI Express® link design of the Trenton BPG8032M backplane supports PICMG® 1.3 graphics-class and combo-class system host boards (SHBs) such as Trenton's single processor JXTS6966 and the dual-processor JXT6966. All backplane slots use PCIe x16 mechanical connectors with seventeen slots driven with x16 links. The remaining slot is driven with a x4 link. The backplane's PCIe link redrivers plus the latest in PCI Express switch technology ensures maximum data throughput speeds with superior communication signal integrity between the SHB and the Matrox Mura™ MPX Universal Output/Input Boards.

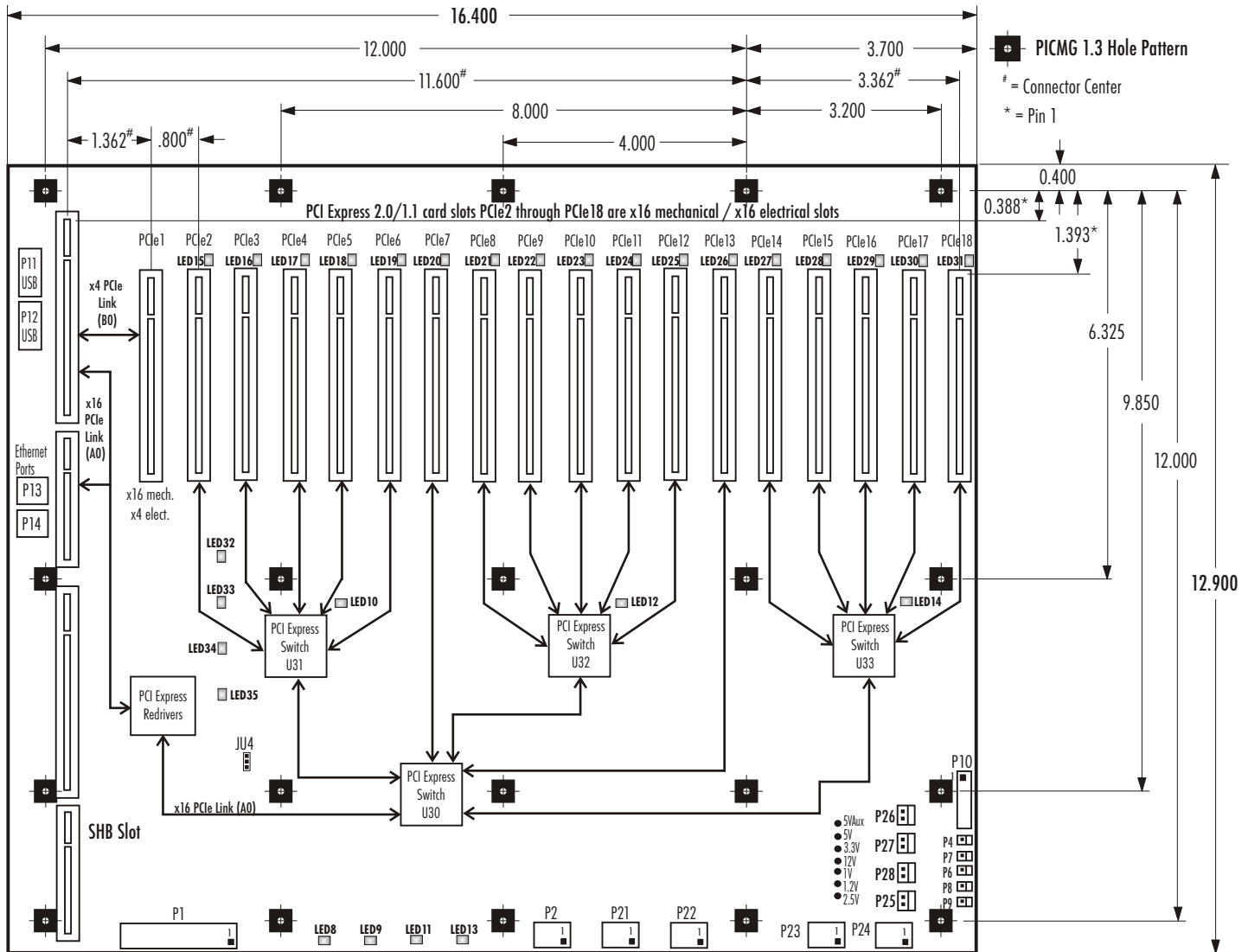
### VIDEO DISPLAY WALL APPLICATION EXAMPLE:

Scalable video wall controllers and graphics processing systems can support a large number of x16 PCI Express 2.0 Matrox Mura™ MPX utilizing the BPG8032M backplane. Up to sixteen Matrox Mura™ MPX Series boards are supported on the BPG8032 backplane when using a Trenton JXTS6966 single board computer. This product combination enables video display wall designs of up to 64 display cubes or LCD monitor screens. The BPG8032M backplane's x16 PCIe card support features coupled with advanced PCIe switches and link routing delivers robust controller performance and video display wall flexibility.

### BACKPLANE MODEL: BPG8032M

MODEL#	MODEL NAME	DESCRIPTION
8032-007	BPG8032M-CRA	ATX/EPS (right-angle connector) and five right-angle 12V Aux power connectors
8032-008	BPG8032M-CST	ATX/EPS (vertical connector) and five vertical 12V Aux power connectors

**BPG8032M LAYOUT - PICMG 1.3 MOUNTING HOLE PATTERN DIMENSIONS:**



**SUGGESTED TRENTON PICMG 1.3 SHBs:**

**DUAL PROCESSOR SYSTEM HOST BOARDS**  
JXT6966

**SINGLE PROCESSOR SYSTEM HOST BOARDS**  
JXT56966

**ENGINEERING NOTES:**

1. All power connectors are shown in the backplane layout drawing. The specific combination of power connectors and the power connector type may be populated based on a specific model number.
2. Mounting holes: 0.156" diameter
3. Nominal PCB thickness: 0.080"
4. All dimensions are inches.
5. USB and Ethernet connectivity is a option that is provided by the PICMG 1.3 System Host Board. Not all SHBs support this optional interface capability. Check with Trenton for details on your specific system host board model.

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

The Trenton BPG8032M 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 BPG8032M backplane is designed for UL60950 and CAN/CSA C22.2 No. 60950-00.

The BPG8032M is designed for CE conformity approval to following electromagnetic emission (EMI) test specifications: EN55022:1998, CLASS A, EN61000-4-2:1995, EN61000-4-3:1997, EN61000-4-4:1995, EN61000-4-5:1995, EN61000-4-6:1996, EN61000-4-11:1994



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