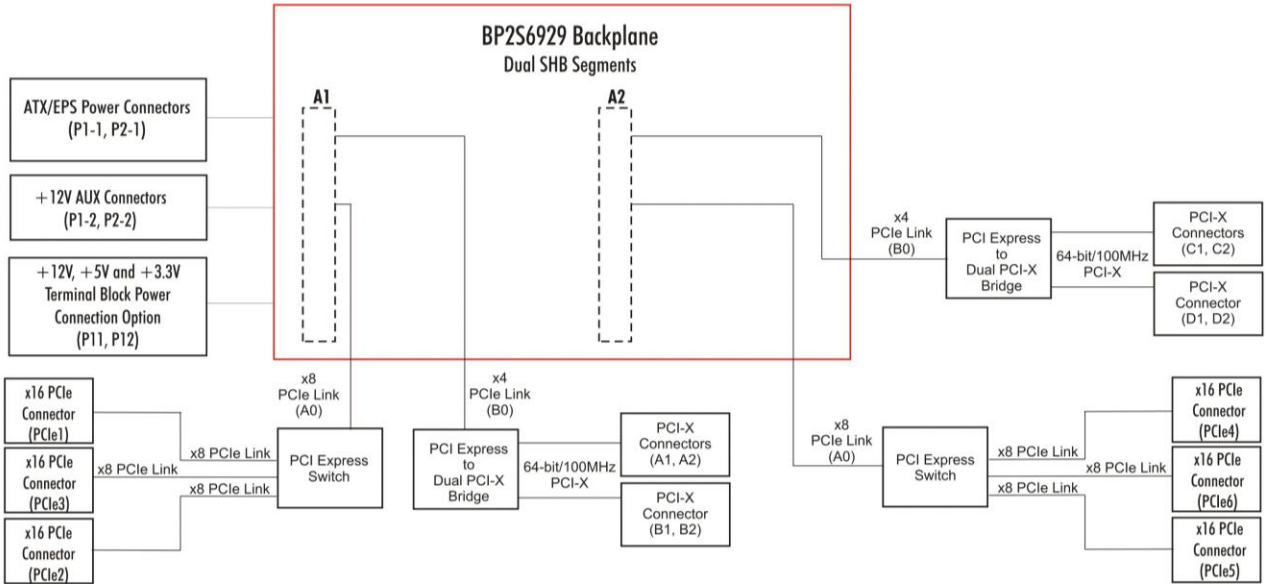
TRENTON Systems, Inc.
2350 Centennial Drive • Gainesville, Georgia 30504
Sales (800) 875-6031 • Phone (770) 287-3100 • Fax (770) 287-3150

Technical Information – Jumpers and Connectors
BP2S6929 (6929) Two-Segment PCI Express / PCI-X Backplane

Block Diagram



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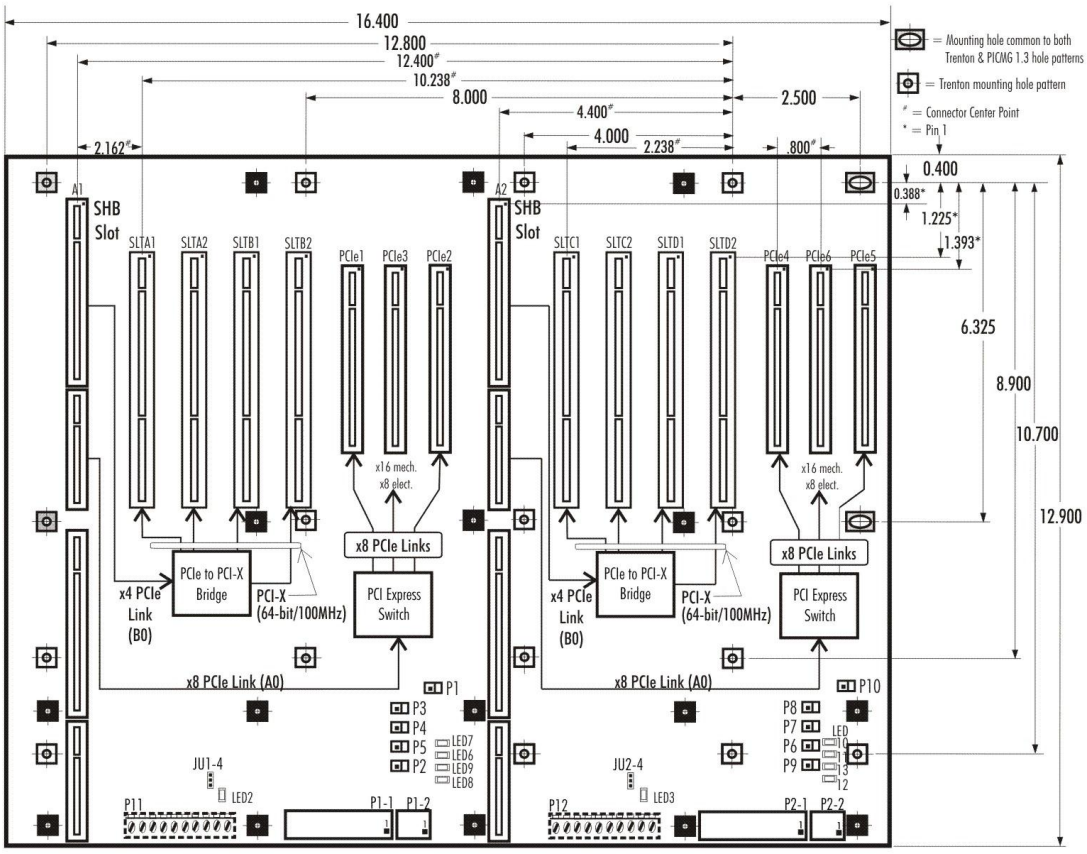
Layout Diagram – 6929 Trenton Hole Pattern Dimensions



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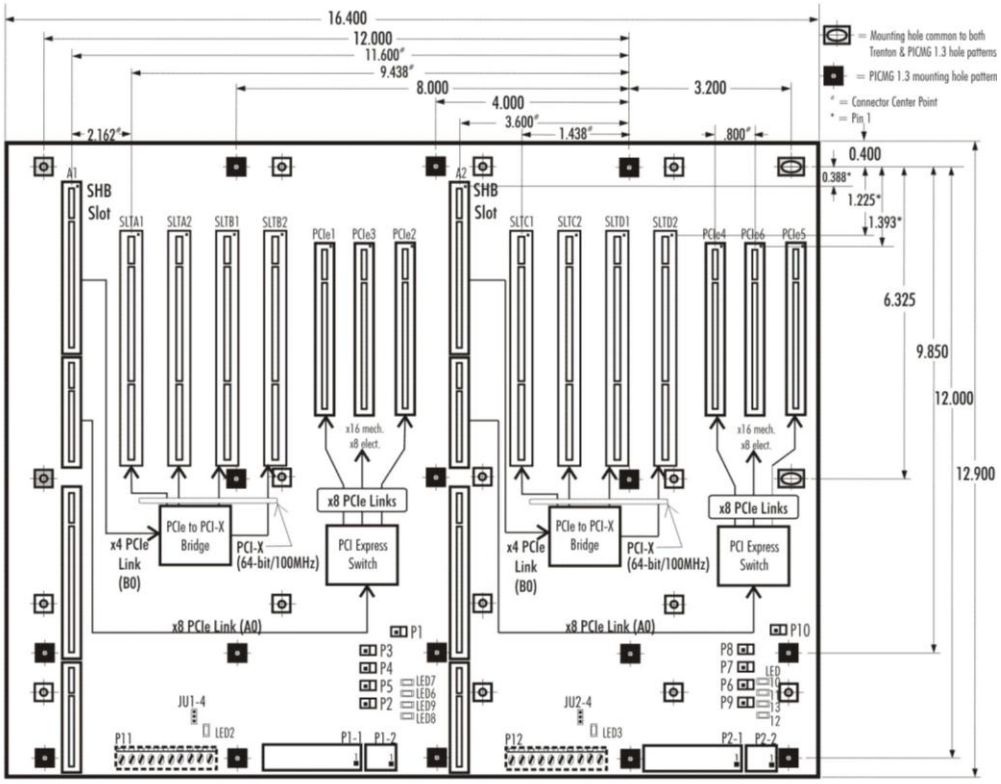
Layout Diagram – 6929 PICMG 1.3 Hole Pattern Dimensions



Notes:

- Dotted lines indicate connectors and other components that are populated based on model name and number.
- Mounting holes have a nominal 0.156" diameter
- Nominal PCB thickness: 0.080"
- All dimensions are inches.
- Suggested Trenton PICMG 1.3 SHBs for use with the BP2S6929 backplane models:
  - Dual-processor SHBs: MCXT, MCXT-E, MCGT, MCGT-E, SLT and NLT
  - Single-processor SHBs: MCXI, MCGI, TQ9, TML, T4L, SLI and NLI
- Power Diagnostic LEDs

  Segment 1 / Segment 2
  - LED2 / LED3 = 5V_AUX
  - LED7 / LED10 = +5V
  - LED6 / LED11 = +3.3V
  - LED9 / LED13 = -12V
  - LED8 / LED12 = +12V
- ACPI Power Headers

  Segment 1 / Segment 2
  - P3 / P8 = PSON
  - P4 / P7 = PWRBTN
  - P5 / P6 = PWRGD
  - P2 / P9 = SHB RESET
  - P1 / P10 = SMBus

BP2S6929 (6890) Configuration Jumpers

The setup of each SHB segment's configuration jumper on the backplane is described below. * indicates the default value of the jumper.

NOTE: For the two-position jumper (3-post) in SHB segments, "TOP" and "BOTTOM" refer to positioning when the backplane is viewed with the SHB's I/O plate(s) at the top end of the backplane.

NOTE: JU1-4 and JU2-4 indicates the JU4 jumper in SHB segments one and two.

Jumper	Description
JU1-4, JU2-4	**+5V Auxiliary Voltage** Install on the TOP if +5V auxiliary voltage is provided by the standard +5V supply. This option is used for systems which do not have either an ATX or EPS standard power input. This mode provides the necessary +5V for the SHB's +5VAUX signal lines. Sleep mode recovery is not supported using non-ATX/EPS power supplies. * Install on the BOTTOM if +5V auxiliary voltage is provided by a separate +5VAUX signal input pin. This enables the necessary SHB power signaling and allows recovery from sleep mode. This option is used for ATX or EPS standard power supplies.

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BP2S6929 (6890) Connectors

NOTE: Pin 1 on the connectors is indicated by the square pad on the PCB.

P1-1, P2-1 **EPS Power Connector**

24 pin right angle dual row, Molex #39-30-1240

Pin	Signal	Pin	Signal
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	Gnd	15	Gnd
4	+5V	16	PSON#
5	Gnd	17	Gnd
6	+5V	18	Gnd
7	Gnd	19	Gnd
8	PWRGD	20	-5V
9	+5VAUX	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	Gnd

P1-2, P2-2 **+12V Power Connector**

8 pin right angle dual row, Molex #39-30-0080

Pin	Signal	Pin	Signal
1	Gnd	5	+12V
2	Gnd	6	+12V
3	Gnd	7	+12V
4	Gnd	8	+12V

P11, P12 **Terminal Block Connector**

10 position terminal block, Phoenix, #19-35-24-2

20 Amps per circuit

Pin	Signal	Pin	Signal
1	+12V	6	Gnd
2	+12V	7	Gnd
3	+5V	8	Gnd
4	+3.3V	9	Gnd
5	+3.3V	10	Gnd

P3, P8 - PSON Signal Connector

2 position header, Amp, #640456-2

Pin	Signal	Pin	Signal
1	Gnd – 1 / Gnd - 2	2	PSON# - 1 / PSON# - 2*

* = Active low signal

P4, P7 - PWRBTN (Power Button) Signal Connector

2 position header, Amp, #640456-2

Pin	Signal	Pin	Signal
1	Gnd – 1 / Gnd - 2	2	PWRBTN# - 1 / PWRBTN# - 2*

* = Active low signal

BP2S6929 (6890) Connectors (continued)

P5, P6 - PWRGD (Power Good) Signal Connector

2 position header, Amp, #640456-2

Pin	Signal	Pin	Signal
1	PWRGD# - 1 / PWRGD# - 2	2	+3.3V – 1 / +3.3V – 2

P2, P9 - SHB RESET Signal Connector

2 position header, Amp, #640456-2

Pin	Signal	Pin	Signal
1	Gnd – 1 / Gnd - 2	2	SHBRST# - 1 / SHBRST# - 2*

* = Active low signal

P1, P10 - SMBus Signal Connector

2 position header, Amp, #640456-2

Pin	Signal	Pin	Signal
1	SMDAT – 1 / SMDAT - 2	2	SMCLK# - 1 / SMCLK# - 2*