TRENTON Technology Inc.
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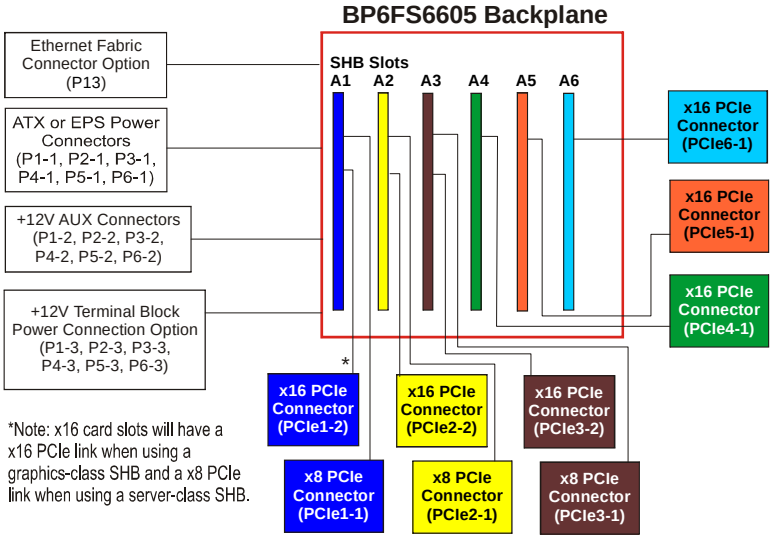
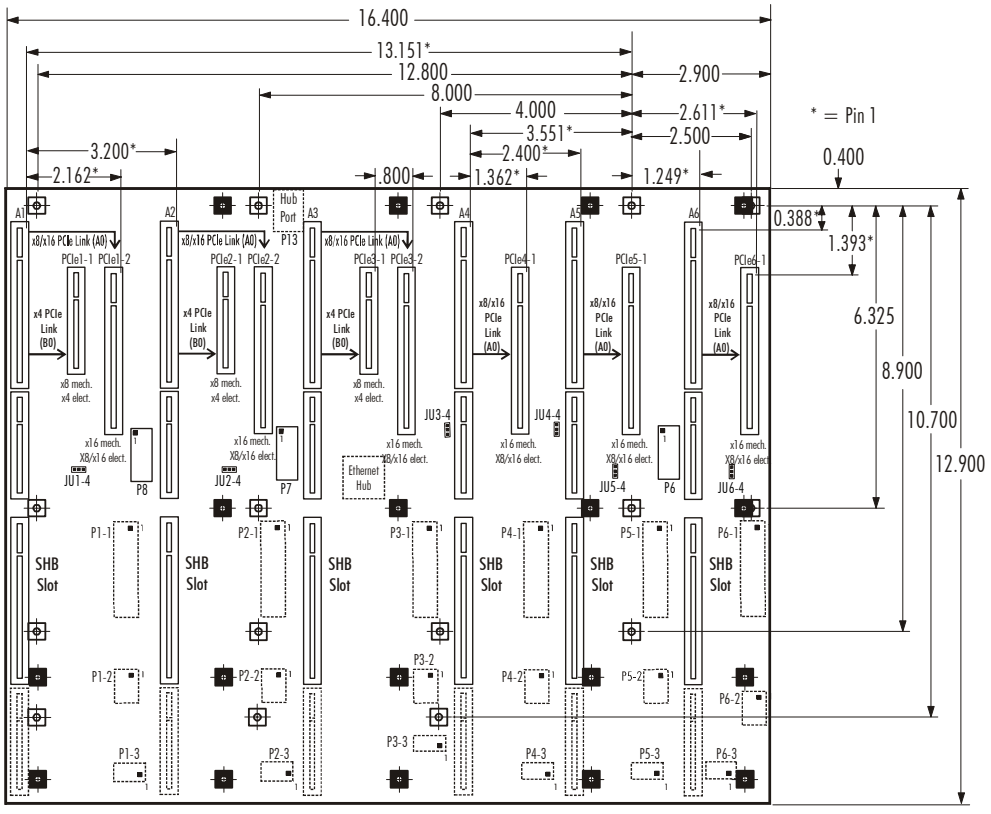
Technical Information – Jumpers and Connectors
BP6FS6605 (6605) Six-Segment PCI Express Backplane

Block Diagram



Layout Diagram – 6605



Trenton Hole Pattern (modified)

PICMG® 1.3 Hole Pattern

Notes:

Some mounting holes are common to both hole patterns

Connectors and components on the layout drawing shown in dotted lines may or may not be populated on your specific model of the BP6FS6605 backplane. Refer to Backplane Configuration Table.

Nominal PCB thickness: .080”

Mounting holes: .156” diameter

All dimensions are inches.

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BP6FS6605 Backplane Configuration Table

The BP6FS6605 six-segment PICMG 1.3 backplane can be factory-configured to operate with either PICMG 1.3 Graphics- or Server-class system host boards (SHBs). The model number column in the table below indicates the backplane's specific configuration. Server-class configurations must be matched to server-class SHBs and graphics-class configurations must be matched with graphics-class SHBs. The backplane should be used with SHBs that have low-profile cooling solutions such as Trenton's SLT, SLI (server-class) or the TML (graphics-class) system host boards.

Model#	Model Name & Type	SHB Connector D	ATX/EPS Connectors P1-1 P2-1 P3-1 P4-1 P5-1 P6-1	+12V Aux Connectors P1-2 P2-2 P3-2 P4-2 P5-2 P6-2	+12V Terminal Blocks P1-3 P2-3 P3-3 P4-3 P5-3 P6-3	Ethernet Hub	Ethernet Hub Port P13
6605-005	BP6FS6605-SCSV, Server-class, Standalone, Vertical ATX/EPS connectors	No	Yes	Yes	No	No	No
6605-016	BP6FS6605-SCST, Server-class, Standalone, Terminal Block connectors	No	No	No	Yes	No	No
6605-025	BP6FS6605-SCEV, Server-class, Ethernet, Vertical ATX/EPS connectors	No	Yes	Yes	No	Yes*	Yes*
6605-036	BP6FS6605-SCET, Server-class, Ethernet, Terminal Block connectors	No	No	No	Yes	Yes*	Yes*
6605-105	BP6FS6605-GCSV, Graphics-class, Standalone, Vertical ATX/EPS connectors	Yes	Yes	Yes	No	No	No
6605-116	BP6FS6605-GCST, Graphics-class, Standalone, Terminal Block connectors	Yes	No	No	Yes	No	No
6605-125	BP6FS6605-GCEV,Graphics-class, Ethernet, Vertical ATX/EPS connectors	Yes	Yes	Yes	No	Yes	Yes
6605-136	BP6FS6605-GCET, Graphics-class, Ethernet, Terminal Block connectors	Yes	No	No	Yes	Yes	Yes

*Trenton SLT/SLI system host boards do not support this function on the backplane

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BP6FS6605 (6605) 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 1 and 2, "RIGHT" and "LEFT" refer to positioning when the backplane is viewed with the SHB's I/O plate(s) at the top end of the backplane.

NOTE: For the two-position jumper (3-post) in SHB segments 3, 4, 5 and 6, "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: JU4, 1-2 indicates the JU4 jumper in SHB segments one and two while JU4, 3-6 means the JU4 jumper in SHB segment three, four, five and six.

Jumper	Description
JU4, 1-2	**+5V Auxiliary Voltage** Install on the LEFT 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 RIGHT 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.
JU4, 3-6	**+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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BP6FS6605 (6605) Connectors

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

P1, 1-6 - EPS Power Connector

24 pin vertical dual row, Molex #44206-0007

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

P2, 1-6 - +12V Power Connector

8 pin vertical dual row, Molex #44206-0005

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

P3, 1-6 - Terminal Block Connector

4 position terminal block, AMP, #796949-4

20 Amps per circuit

Pin	Signal
1	+12V
2	+12V
3	Gnd
4	Gnd

P6 - Power-On Connector

14 pin dual row connector, 3M, #N2514-6002RB

Pin	Signal	Pin	Signal
1	PSON# - 1	2	Gnd - 1
3	PSON# - 2	4	Gnd - 2
5	PSON# - 3	6	Gnd - 3
7	PSON# - 4	8	Gnd - 4
9	PSON# - 5	10	Gnd - 5
11	PSON# - 6	12	Gnd - 6
13	NC	14	NC

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BP6FS6605 (6605) Connectors (continued)

P7 - Power Button Connector

14 pin dual row connector, 3M, #N2514-6002RB

Pin	Signal	Pin	Signal
1	PWRBT# - 1	2	Gnd - 1
3	PWRBT# - 2	4	Gnd - 2
5	PWRBT# - 3	6	Gnd - 3
7	PWRBT# - 4	8	Gnd - 4
9	PWRBT# - 5	10	Gnd - 5
11	PWRBT# - 6	12	Gnd - 6
13	NC	14	NC

P8 - Reset Connector

14 pin dual row connector, 3M, #N2514-6002RB

Pin	Signal	Pin	Signal
1	SHB_RST# - 1	2	Gnd - 1
3	SHB_RST# - 2	4	Gnd - 2
5	SHB_RST# - 3	6	Gnd - 3
7	SHB_RST# - 4	8	Gnd - 4
9	SHB_RST# - 5	10	Gnd - 5
11	SHB_RST# - 6	12	Gnd - 6
13	NC	14	NC

P13 - 10/100 Base-T Ethernet Connector – Backplane Hub Port

8 pin right angle shielded RJ-45 connector, Pulse, #J0035D21BNL

Pin	Signal
1	RXD-
2	RXD+
3	RCI
4	RC
5	TC
6	TCI
7	TXD-
8	TXD+

Trenton SHB Optional Backplane Ethernet Support For the BP6FS6605

TRENTON SHB	ETHERNET BACKPLANE LAN2
SLT	n/a
SLI	n/a
TML	X