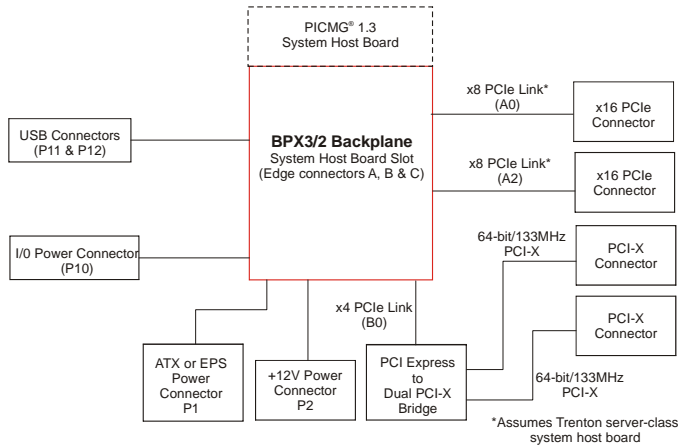




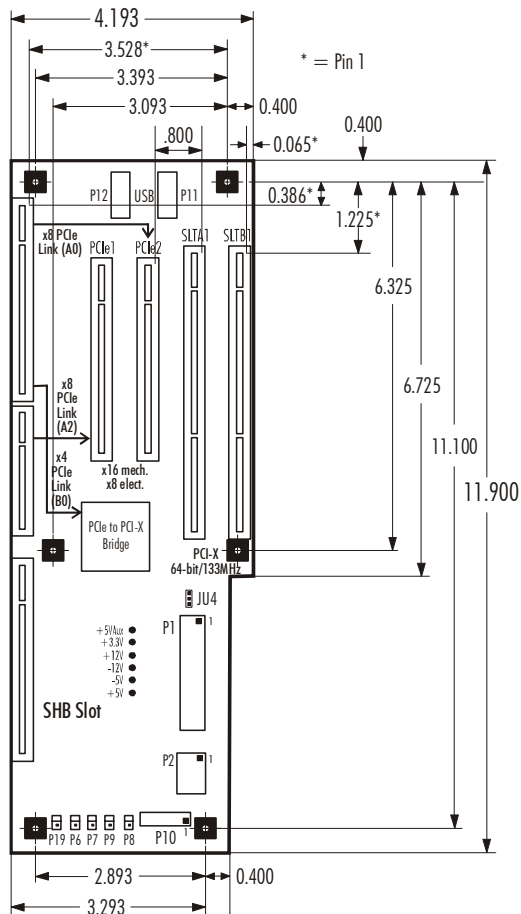
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## Technical Information – Jumpers and Connectors BPX3/2 (6526) Small Form Factor PCI Express Backplane

### Block Diagram



### Layout Diagram – 6526



#### Notes:

\*\*Optional USB connectivity provided by PICMG 1.3 SHB. Not all SHBs support this capability.

Connector spacing: 0.800"

Nominal PCB thickness: .062"

Mounting holes: .156" diameter

All dimensions are inches.



## **BPX3/2 (6526) Configuration Jumper**

The setup of the configuration jumper on the backplane is described below. \* indicates the default value of the jumper.

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**NOTE:** For the two-position jumper (3-post), “TOP” and “BOTTOM” refer to positioning when the backplane is viewed with the slots at the top end of the backplane.

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<u>Jumper</u>	<u>Description</u>
<b>JU4</b>	<p><b>+5V Auxiliary Voltage</b></p> <p>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.</p> <p>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. *</p>

## **BPX3/2 (6526) Connectors**

The connectors available on the BPX3/2 vary depending on the version of the backplane you have. Connectors for the 6526-007 (right angle connectors) and 6526-008 (straight- in/vertical connectors) are defined below.

### **BPX3/2 (6526-007) Connectors**

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

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**P1 - ATX/EPS Power Connector**  
 24 pin right angle dual row header, Amp #794516-1

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	Gnd	15	Gnd
4	+5V	16	PSO#
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



### **BPX3/2 (6526-007) Connectors (continued)**

**P2 - +12V Power Connector**

8 pin right angle mini fit JR, Molex #39-30-0080

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	Gnd	5	+12V
2	Gnd	6	+12V
3	Gnd	7	+12V
4	Gnd	8	+12V

**P6 - Power-On Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	PSO#
2	Gnd

**P7 - Power Button Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	PWRBT#
2	Gnd

**P8 - Reset Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	SHB_RST#
2	Gnd

**P9 - Power Good Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	PWRGD
2	Gnd

**P10 - I/O Power Connector**

20 pin right angle dual row header, Molex #87833-2020

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	Gnd	2	+12V
3	IPMB_DA	4	Gnd
5	IPMB_CL	6	+5V
7	SMDAT	8	+5VAUX
9	SMCLK	10	+3.3V
11	PWRBT#	12	PSO#
13	Gnd	14	SHB_RST#
15	PWRGD	16	+5VAUX
17	Gnd	18	+5VAUX
19	Gnd	20	-12V



### **BPX3/2 (6526-007) Connectors (continued)**

#### **P11 - Universal Serial Bus (USB) Connector**

8 pin dual row header, Molex #702-46-0801  
(+5V fused with self-resetting fuses)

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	+5V-USB0	2	+5V-USB1
3	USB0-	4	USB1-
5	USB0+	6	USB1+
7	Gnd-USB0	8	Gnd-USB1

#### **P12 - Universal Serial Bus (USB) Connector**

8 pin dual row header, Molex #702-46-0801  
(+5V fused with self-resetting fuses)

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	+5V-USB2	2	+5V-USB3
3	USB2-	4	USB3-
5	USB2+	6	USB3+
7	Gnd-USB2	8	Gnd-USB3

#### **P19 - System Management Bus Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	SMB Clock
2	SMB Data

### **BPX3/2 (6526-008) Connectors**

#### **P1 - ATX/EPS Power Connector**

24 pin dual row mini fit JR, Molex #39-29-6248

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
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 - +12V Power Connector**

8 pin mini fit JR, Molex #39-29-3086

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	Gnd	5	+12V
2	Gnd	6	+12V
3	Gnd	7	+12V
4	Gnd	8	+12V



### **BPX3/2 (6526-008) Connectors (continued)**

**P6 - Power-On Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	PSON#
2	Gnd

**P7 - Power Button Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	PWRBT#
2	Gnd

**P8 - Reset Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	SHB_RST#
2	Gnd

**P9 - Power Good Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	PWRGD
2	Gnd

**P10 - I/O Power Connector**

20 pin right angle dual row header, Molex #87833-2020

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	Gnd	2	+12V
3	IPMB_DA	4	Gnd
5	IPMB_CL	6	+5V
7	SMDAT	8	+5VAUX
9	SMCLK	10	+3.3V
11	PWRBT#	12	PSON#
13	Gnd	14	SHB_RST#
15	PWRGD	16	+5VAUX
17	Gnd	18	+5VAUX
19	Gnd	20	-12V

**P11 - Universal Serial Bus (USB) Connector**

8 pin dual row header, Molex #702-46-0801

(+5V fused with self-resetting fuses)

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	+5V-USB0	2	+5V-USB1
3	USB0-	4	USB1-
5	USB0+	6	USB1+
7	Gnd-USB0	8	Gnd-USB1



**BPX3/2 (6526-008) Connectors (continued)**

**P12 - Universal Serial Bus (USB) Connector**

8 pin dual row header, Molex #702-46-0801  
 (+5V fused with self-resetting fuses)

<u>Pin</u>	<u>Signal</u>	<u>Pin</u>	<u>Signal</u>
1	+5V-USB2	2	+5V-USB3
3	USB2-	4	USB3-
5	USB2+	6	USB3+
7	Gnd-USB2	8	Gnd-USB3

**P19 - System Management Bus Connector**

2 pin right angle single row header, Molex #22-05-3021

<u>Pin</u>	<u>Signal</u>
1	SMB Clock
2	SMB Data

**Trenton SHB Optional Backplane I/O Support For the BPX3/2**

TRENTON SHB	ETHERNET*			USB							
	LAN0	LAN1	LAN2	USB0	USB1	USB2	USB3	USB4	USB5	USB6	USB7
NLT/NLI <sup>1</sup>	-	-	n/a	-	-	X	X	n/a	n/a	n/a	n/a
SLT/SLI <sup>1</sup>	-	-	n/a	-	-	X	X	n/a	n/a	n/a	n/a
MCX-series <sup>2</sup>	-	-	X	-	-	-	-	X	X	X	X

\* The BPX3/2 does not support the optional PICMG 1.3 backplane Ethernet interfaces

<sup>1</sup> Requires factory build option

<sup>2</sup> LAN2 is a 10/100/1000BASE-T Ethernet interface when using a MCX-series SHB

Note: The letter X indicates an interface connection routed to SHB edge connector C for use on the backplane

**Connector Configuration Illustrated For The BPX3/2**

MODEL#	MODEL NAME	DESCRIPTION
6526-007	BPX3/2-CRA	ATX/EPS right-angle connectors
6526-008	BPX3/2-CST	ATX/EPS vertical connectors