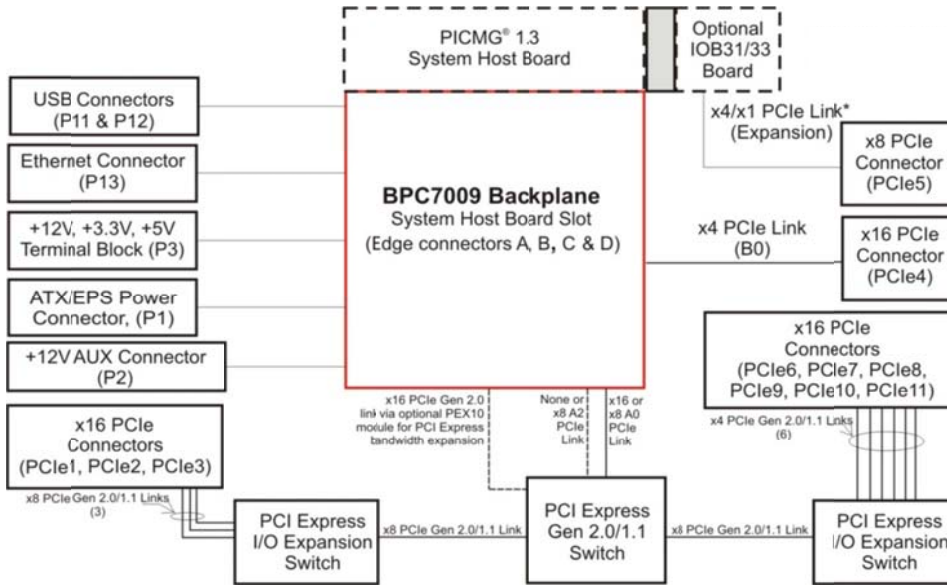


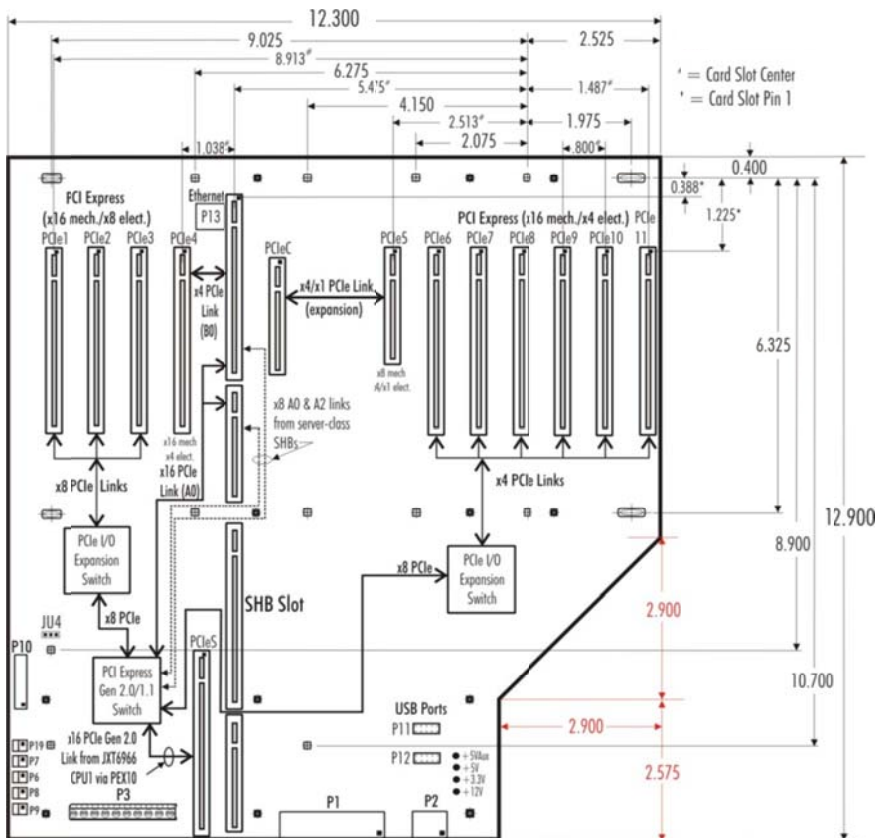


Technical Information – Jumpers and Connectors BPC7009 (S7009) PCI Express Gen 2 Backplane

Block Diagram



Layout Diagram – Chassis Plans Hole Pattern Dimensions





BPC7009 (S7009) Configuration Jumpers

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

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

| <u>Jumper</u> | <u>Description</u> |
|---------------|--|
| JU4 | <p>+5V Auxiliary Voltage Install on the RIGHT 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 LEFT 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> |

BPC7009 (S7009) Connectors

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

| | | | | |
|-------------|---|---------------|------------|---------------|
| P1 - | ATX/EPS Power Connector | | | |
| | 24 pinright angle dual row, Molex #39-30-1240 | | | |
| | <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 |



BPC7009 (S7009) Connectors (continued)

- P2 - +12V Power Connector**
8 pin right angle dual row, 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 |
- P3 - Terminal Block Connector**
10 position terminal block, Amp #1-796949-0
20 Amps per circuit
- | <u>Pin</u> | <u>Signal</u> |
|------------|---------------|
| 1 | +12V |
| 2 | +12V |
| 3 | +5V |
| 4 | +3.3V |
| 5 | +3.3V |
| 6 | Gnd |
| 7 | Gnd |
| 8 | Gnd |
| 9 | Gnd |
| 10 | Gnd |
- P6 - Power-On Connector**
2 pin vertical single row header, Amp #640456-2
- | <u>Pin</u> | <u>Signal</u> |
|------------|---------------|
| 1 | PSON# |
| 2 | Gnd |
- P7 - Power Button Connector**
2 pin vertical single row header, Amp #640456-2
- | <u>Pin</u> | <u>Signal</u> |
|------------|---------------|
| 1 | PWRBT# |
| 2 | Gnd |
- P8 - Reset Connector**
2 pin vertical single row header, Amp #640456-2
- | <u>Pin</u> | <u>Signal</u> |
|------------|---------------|
| 1 | SHB_RST# |
| 2 | Gnd |
- P9 - Power Good Connector**
2 pin vertical single row header, Amp #640456-2
- | <u>Pin</u> | <u>Signal</u> |
|------------|---------------|
| 1 | PWRGD |
| 2 | +5V |



BPC7009 (S7009) Connectors (continued)

P10 - I/O Power Connector

20 pin vertical dual row header, Molex #87831-2020

| <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 |

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 |

P13 - 10/100/1000Base-T Ethernet Connector - LAN 0

8 pin right angle shielded RJ-45 connector, Molex #42878-8410

| <u>Pin</u> | <u>Signal</u> |
|------------|---------------|
| 1 | TRP1+ |
| 2 | TRP1- |
| 3 | TRP2+ |
| 4 | TRP3+ |
| 5 | TRP3- |
| 6 | TRP2- |
| 7 | TRP4+ |
| 8 | TRP4- |

P19 - SMBus Connector

2 pin vertical single row header, Amp #640456-2

| <u>Pin</u> | <u>Signal</u> |
|------------|---------------|
| 1 | SMBus# |
| 2 | Gnd |