PBP-08A7 7 PCI/2 PICMG Active Backplane

THe PBP-08A7 backplane is fully PICMG Rev 2.1 compliant. It is a member of PBP's PCI product family and is intended to support all PICMG compliant boards on the market.

The board's main features include:

Connector

Dual slot PCI/ISA for the CPU board

Three 5V 32bit PCI slots for full-size boards on the Primary bus. These slots are Master/Slave configurable by using Bus Mastering Scheme.

)ur 5V/3.3V 32-bit PCI slots for full-size boards on the Secondary bus.

One AT standard power connector: 12 pins, 5A max. per pin for +5V, -5V, +12V, -12V voltages, Ground, and Power Good Signal.

One ATX standard power connector: 20 pins, 5A max. per pin for +5V, -5V, +12V, -12V, +3.3V voltages, Ground, and Power Good signal.

One ATX control connector to distribute signals coming from the CPU boards onto connector for soft on/off an ATX power supply.

Pairs of header for local connection of a keyboard, fan power, and Power LED.

One Keyboard DIN connector.

PCB

The Printed Circuit Board's (PCB) overall dimensions are 257mm x 217.9mm (101.2"x85.8"), and total thickness is 1.6mm.

Mounting holes are provided and are located to conform to the baby AT form factor. Mounting holes are connected to Signal Ground internally.

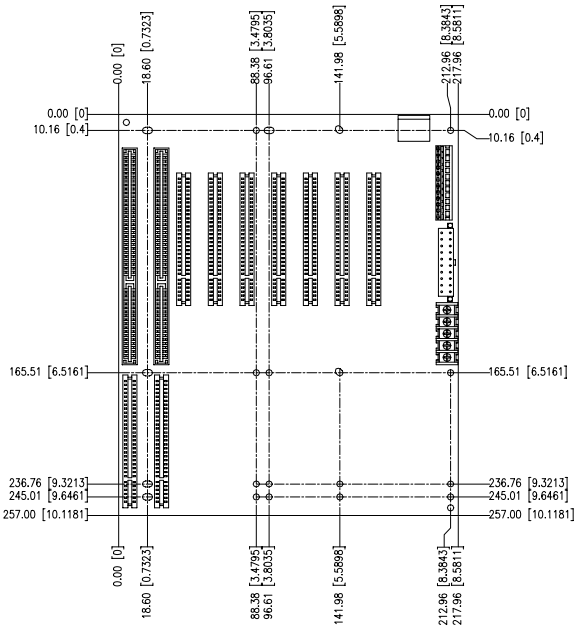
Operating temperature : 0℃ ~ 55℃

Storage temperature : -20℃ ~ 75℃

Standard

PCI- conforms to PICMG rev. 2.1 specification

ISA- conforms to IEEE P996 specification.



1. JUMPERS and CONNECTORS:

JUMPER/ CONNECTOR	DESCRIPTION
PCI A,B/ISA 1,3	PICMG connectors
PPCI1-3	32BIT PCI BUS connectors (primary)
SPCI1-4	32BIT PCI BUS connectors (secondary)
CN1, CN2	Fan connector
CN3,CN4, KB1	keyboard connector
CN5	ATX P/S control connector
CN6	Chassis fan power connector
CN7	P8/P9 power connector
CN8	ATX power connector
CN9	Power extension terminal block

2 PIN ASSIGNMENT

ATX			
PIN	NAME	PIN	NAME
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	GND	13	GND
4	+5V	14	PS-ON
5	GND	15	GND
6	+5V	16	GND
7	GND	17	GND
8	PWR-OK	18	-5V
9	5V STB	19	+5V
10	+12V	20	+5V

CN3, CN4 and KB1	
PIN	NAME
1	CLK
2	DATA
3	NC
4	GND (Via SBC)
5	+5V (Via SBC)

*__Note__: this pin assignment may vary if a non-ROBO SBC is used with the backplane.

P8/P9	
PIN	**NAME**
1	**NC**
2	**+5V**
3	**+12V**
4	**-12V**
5	**GND**
6	**GND**
7	**GND**
8	**GND**
9	**-5V**
10	**+5V**
11	**+5V**
12	**+5V**

CN 1, CN2	
PIN	**NAME**
1	**+12V**
2	**GND**

CN6	
PIN	**NAME**
1	**+12V**
2	**GND**
3	**GND**
4	**+5V**

CN9	
PIN	**NAME**
1	**GND**
2	**+12V @ 5A**
3	**-12V @ 0.5A**
4	**+5V @ 5A**
5	**-5V @ 0.5A**

CN5* (For ATX P/S only)	
PIN	**NAME**
1	**PW-OK**
2	**5VSB**
3	**PS-ON**
4	**GND**

*__Note__: If you are using a non-ATX featured SBC board with ATX power supply, you can turn the ATX power supply into AT type by adding an on-off switch over pin3 and 4. By default, pin 3 and 4 is short to trigger the ATX power supply to ON status.