

PBP-14P4 8ISA/ 4 PCI/2 PICMG Passive Backplane

The PBP-14P4 backplane is fully PICMG 1.0 Rev 2.0 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

Eight ISA slots for full-size ISA boards.

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

One AT standard power connector: 12 pins, 5A max. per pin for +5V, -5V, +12V, -12V 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 317mm (101.2" x 124.8"), 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.

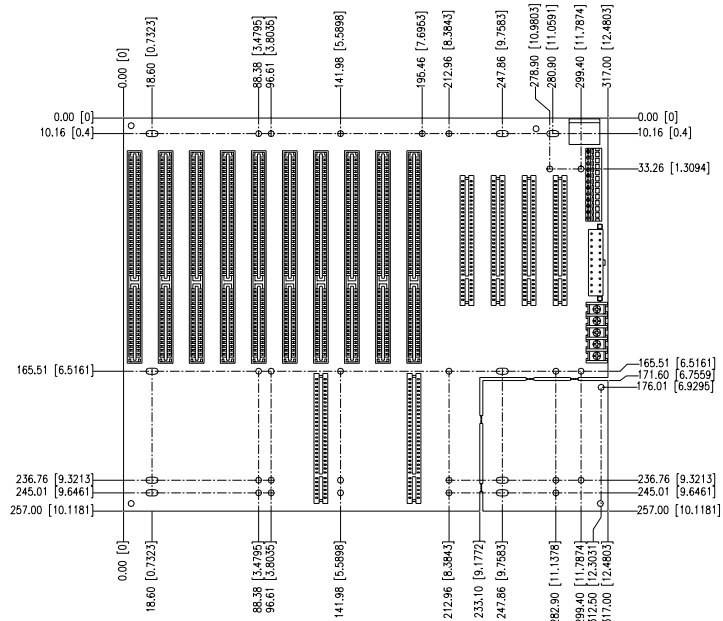
Operating temperature : 0 ~ 55

Storage temperature : -20 ~ 75

Standard

PCI- conforms to PICMG 1.0 rev. 2.0 specification

ISA- conforms to IEEE P996 specification.



1. JUMPERS and CONNECTORS:

JUMPER/ CONNECTOR	DESCRIPTION
PCI A,B/ISA 7,10	PICMG connectors
PPCI1-4	32BIT PCI BUS connectors (primary)
KB1, KB2, KB3	keyboard connector
CN1, CN2	Fan connector
CN3	Power extension pins
CN4	ATX P/S control connector
CN5	P8/P9 power connector
CN6	Power extension terminal block
CN7	ATX Power connector

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

KB1, KB2 and KB3	
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

CN3	
PIN	NAME
1	+12V
2	GND
3	GND
4	+5V

CN6	
PIN	NAME
1	GND
2	+12V @ 5A
3	+5V @ 5A
4	-12V @ 0.5A
5	-5V @ 0.5A

CN4* (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.