

PBP-13R4 7ISA/ 4 PCI/2 PICMG Passive Backplane

The PBP-13R4 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

Seven 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"x124.8"), 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.

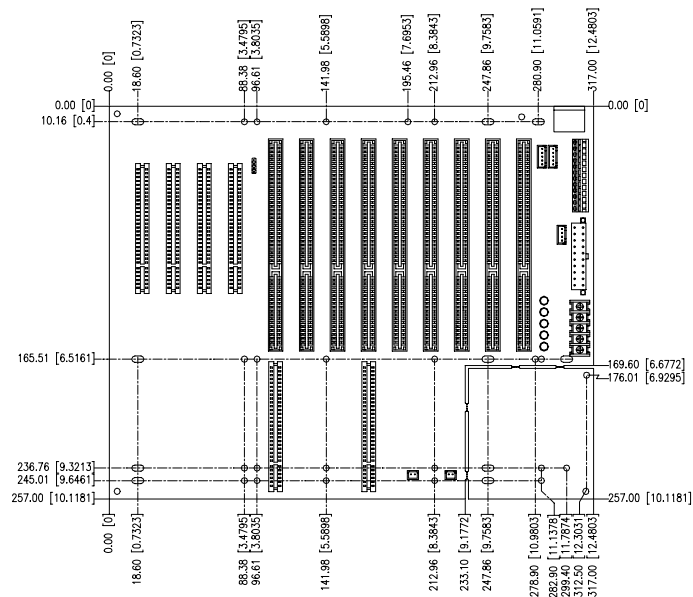
Operating temperature : 0°C ~ 55°C

Storage temperature : -20°C ~ 75°C

Standard

PCI- conforms to PICMG rev. 2.1 specification

ISA- conforms to IEEE P996 specification.



1. JUMPERS and CONNECTORS:

JUMPER/ CONNECTOR	DESCRIPTION
PCI A1,B1 ISA 1, 4	PICMG connectors
PPCI1-4	32BIT PCI BUS connectors (primary)
ISA slot 2, 3, 5~9	16BIT ISA BUS connectors
KB1, KB2, KB3	keyboard connector
CN1	Chassis fan power connector
CN2, CN3	Fan connector
CN4	ATX P/S control connector
CN5	P8/P9 power connector
CN6	Power extension pins
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 2, CN3	
PIN	NAME
1	+12V
2	GND

CN1	
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.