

PBP-19P4 13 ISA/4 PCI/ 2 PICMG Active Backplane

The PBP-19P4 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

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

thirteen ISA slots for full-size ISA boards.

One AT standard power connector and one flush-mount 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 a ATX power supply.

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

PCB

The Printed Circuit Board's (PCB) overall dimensions are 265.2mm x 415.4mm (10.41"x16.354"), 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.

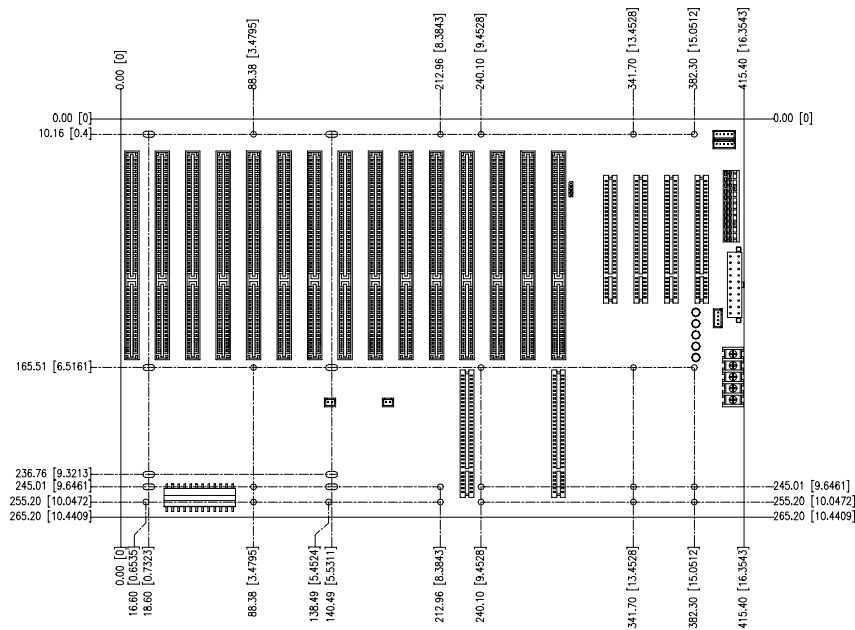
Operating temperature : 0°C ~ 55°C

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
PCIA1, B1 ISA slot12, 15	PICMG connectors
PCI1-4	32BIT PCI BUS connectors (primary)
ISA 1~11, 13, 14	8BIT ISA connector
KB1, KB2	keyboard connector
CN1, CN2	Fan connector
CN3	Chassis fan power connector
CN4	P8/P9 power connector
CN5	ATX power connector
CN6	ATX P/S control connector
CN7	Power extension terminal block
CN8	Horizontal P8/P9 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 SB	19	+5V
10	+12V	20	+5V

KB1 and KB2 *	
PIN	NAME
1	CLK
2	DATA
3	NC
4	GND (Via SBC)
5	+5V (Via SBC)

*Note: this keyboard assignment varies if a non-ROBO SBC is used with the backplane.

CN4, CN8 - 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

CN7	
PIN	NAME
1	GND
2	+12V @ 5A
3	+5V @ 5A
4	-12V @ 0.5A
5	-5V @ 0.5A

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

CN6* (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.

CN1, CN2	
PIN	NAME
1	+12V
2	GND