USER'S
Manual

MIC-3000 Series

MIB-3081A

**6U-8-slot backplane
with CT bus and rear I/O
for CompactPCI™**

Advantech CompactPCI™

Modular Industrial Computer

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2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.

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5.Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

Packing List

Before installation, ensure that the following materials have been received:

* The MIB-3081A backplane

* This user's manual in PDF

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Technical Support and Sales Assistance

If you have any technical questions about the MIB-3081A or any other Advantech products, please visit our support website at:

• **http://www.advantech.com.tw/support**

For more information about Advantech's products and sales information, please visit:

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Introduction

1.1 General Information

The MIB-3081A is a 6U-sized CT backplane that provides eight CompactPCI slots. One slot is assigned to the CPU board and seven slots to the peripheral boards. The MIB-3081A supports front and rear I/O wiring, providing simplified system cabling. The backplane also complies with PICMG 2.5 Computer Telephony Specification, providing H.110 CT bus on the P4 connectors.

The MIB-3081A provides 3-pin connector for connecting up to six cooling fans. A 26-pin connector can be used for connecting an external alarm module (MIC-3924 series) to detect system internal conditions, such as bus voltages and fan speed. In order to provide users with a flexible system configuration, the MIC-3081 includes two standard ATX power connectors to accept up to two ATX power supplies.

The MIB-3081A complies with PICMG 2.1 Hot-Swap Specification, providing full hot-swapping capability. Users can build a hot-swap system using hot-swap plug-in boards and software.

1.2 Features

- Front and rear I/O supports
- H.110 CT bus compliant (PICMG 2.5)
- Eight 32-bit CompactPCI slots (64-bit upon request)
- Complies with PICMG 2.1 Hot-Swap Specification
- Accepts up to two ATX power supplies
- Alarm module interface
- Fan interface

1.3 Specification

· 8 CompactPCI slots (one system slot and 7 peripheral slots)
· Front and rear I/O supports
· Bus width: 32-bit (64-bit upon request)
· 8-layer PCB, 3.0 mm thick
· Separate power and ground planes
· Power connectors: Two ATX power connectors for connecting standard ATX power supplies
· 26-pin connector for MIC-3924 alarm board signals
· Complies with CompactPCI Specification PICMG 2.0, Ver.2.1

· Complies with CompactPCI Hot Swap Specification PICMG 2.1, Ver.1.0

· Complies with Computer Telephony Specification PICMG 2.5, Ver.1.0

· V I/O Voltage: 3.3 V or 5 V, jumper selectable

· Logic Ground and Chassis Ground can be isolated or common

· Dimensions: 183.5 x 262.2 mm

· Operating temperature: -40 ~ 80°C (-40 ~ 176°F)

2

Hardware
Configuration

2.1 Slot Assignments

The CompactPCI specification defines slot numbering seperating for physical and logical slots. Each slot has a physical number and a logical number (refer to the CompactPCI specification version 2.0 R2.1 for further information on slot assignments). The physical numbers are printed on the backplane, enclosed in circles or triangles, below each slot. Slot 8, marked by a triangle, is the system slot and can only be used by a CPU board. The other slots (slot 1~7) are peripheral slots and can be used by peripheral cards.

The logical number of each slot is defined according to the IDSEL signal and the associated address used to select the slot. Table 2-1 shows the system slot and peripheral slot relationships on the MIB-3081A. Physical slot 8 (system slot) has a logical number of 1, physical slot 7 has a logical number of 2, physical slot 6 has a logical number of 3, …, and physical slot 1 has a logical number of 8. The connectors in logical slot 1 are designated as 1-P1, 1-P2, 1-P3, 1-P4, and I-P5, from the bottom up. Nomenclature for connectors in other slots is similar, such as 2-P1, 2-P2, 3-P1, 3-P2, etc. Connector 1-P1 is a keyed connector providing 32-bit CompactPCI bus between the system slot and the peripheral slots (2-P1~8-P1). Connector 1-P2 is an un-keyed connector providing 64-bit CompactPCI bus between the system slot and the peripheral slots (2-P2~ 8-P2). Connector 2-P4 to 8-P4 are un-keyed connectors which provide H.110 CT bus used for TDM signals transmission.

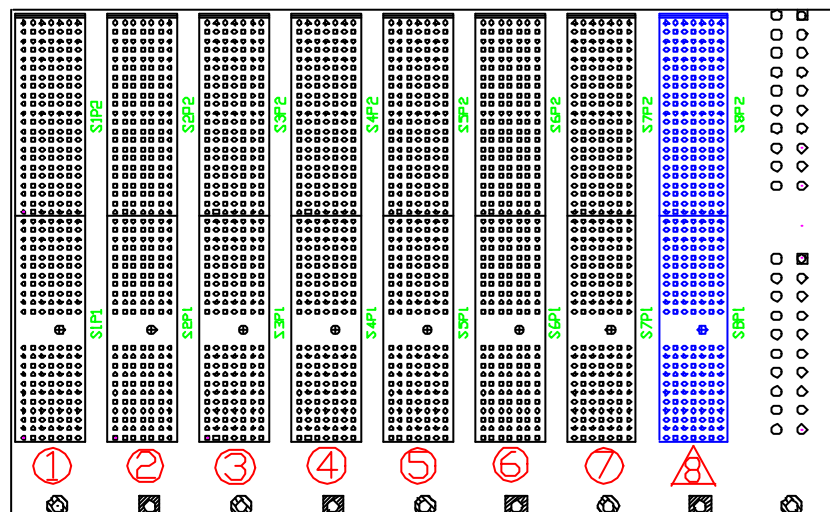Appendix A gives the pin assignment for all the slots on the MIC-3081.

Figure 2-1: Slot numbering of the MIB-3081A

Table 2-1: System to peripheral slot signal assignment

Signal Connector	Pin	Signal Connector	Pin
System Slot 8, (Logical Slot 1):		**Peripheral Slot 7, (Logical slot 2)**	
CLK1	P2:A1	CLK	P1:D6
AD31	P1:E6	IDSEL	P1:B9
REQ0#	P1:A6	REQ#	P1:A6
GNT0#	P1:E5	GNT#	P1:E5
System Slot 8, (Logical Slot 1):		**Peripheral Slot 6, (Logical Slot 3):**	
CLK6	P2:A21	CLK	P1:D6
AD30	P1:A7	IDSEL	P1:B9
REQ1#	P2:C1	REQ#	P1:A6
GNT1#	P2:D1	GNT#	P1:E5
System Slot 8, (Logical Slot 1):		**Peripheral Slot 5, (Logical Slot 4):**	
CLK0	P1:D6	CLK	P1:D6
AD29	P1:B7	IDSEL	P1:B9
REQ2#	P2:E1	REQ#	P1:A6
GNT2#	P2:D2	GNT#	P1:E5
System Slot 8, (Logical Slot 1):		**Peripheral Slot 4, (Logical Slot 5):**	
CLK5	P2:A20	CLK	P1:D6
AD28	P1:C7	IDSEL	P1:B9
REQ3#	P2:E2	REQ#	P1:A6
GNT3#	P2:C3	GNT#	P1:E5
System Slot 8, (Logical Slot 1):		**Peripheral Slot 3, (Logical Slot 6):**	
CLK2	P2:A2	CLK	P1:D6
AD27	P1:E7	IDSEL	P1:B9
REQ4#	P2:D3	REQ#	P1:A6
GNT4#	P2:E3	GNT#	P1:E5
System Slot 8, (Logical Slot 1):		**Peripheral Slot 2, (Logical Slot 7):**	
CLK3	P2:B2	CLK	P1:D6
AD26	P1:A8	IDSEL	P1:B9
REQ5#	P2:D15	REQ#	P1:A6
GNT5#	P2:E15	GNT#	P1:E5
System Slot 8, (Logical Slot 1):		**Peripheral Slot 1, (Logical Slot 8):**	
CLK4	P2:A3	CLK	P1:D6
AD25	P1:D8	IDSEL	P1:B9
REQ6#	P2:D17	REQ#	P1:A6
GNT6#	P2:E17	GNT#	P1:E5

2.2 Connector and Jumper Locations

The MIB-3081A provides connectors and jumpers for users to configure the backplane for specific application. Table 2-2 gives a brief description to each connector on the backplane. Figure 2-2 and Figure 2-3 illustrate the connector locations of the MIB-3081A.

Table 2-2: MIB-3081A Connector and jumper description

Name	Function
T1, T2, T3	V I/O voltage selection jumper
CN4	Power switch connector
ATX1	ATX power connector 1
ATX2	ATX power connector 2
CN8	Alarm board interface connector
FAN#	Fan module connector
CN1	Peripheral power connector 1
CN2	Peripheral power connector 2
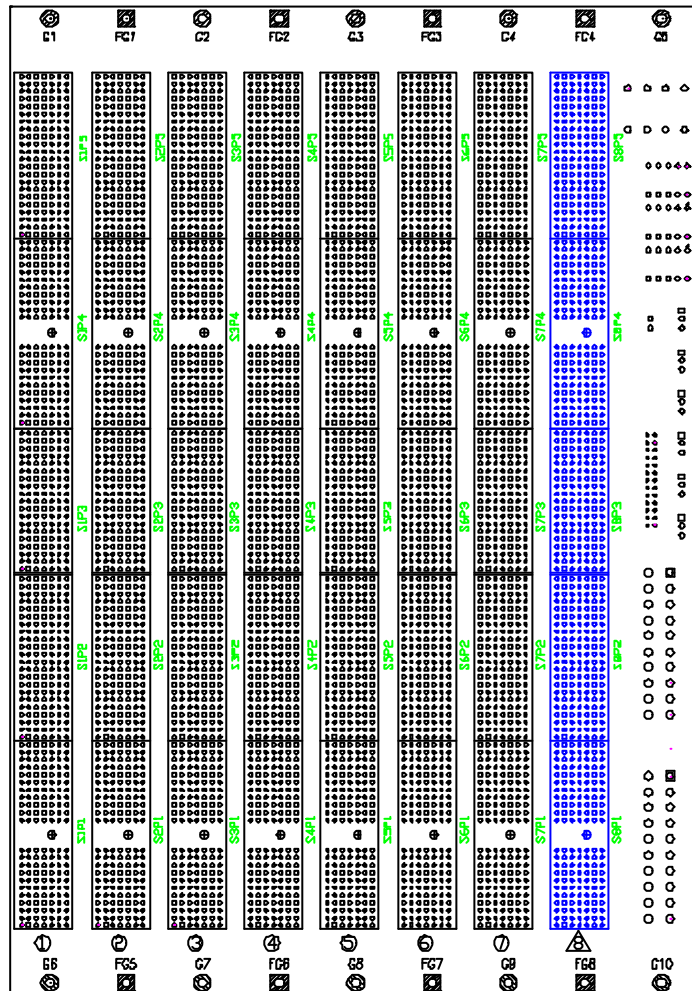
Figure 2-2: The connector and jumper locations on the front side
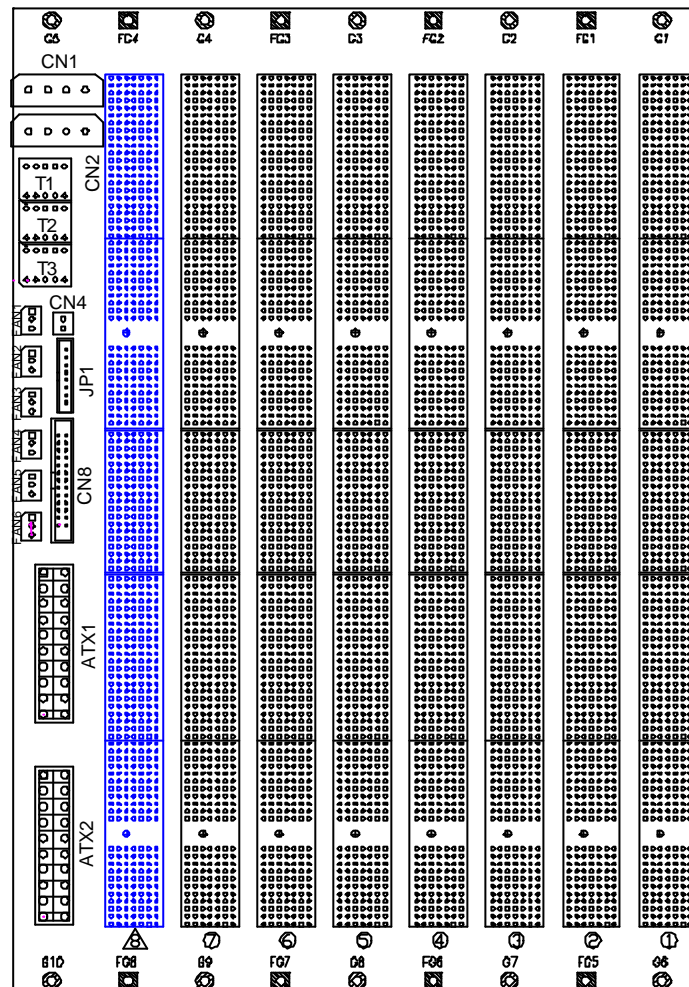
Figure 2-3: The connector and jumper locations on the rear side

2.2.1 Alarm Board Interface (CN8)

The 26-pin connector CN8 is an interface for an external monitoring and alarm module, such as MIC-3924 series, which monitors the conditions of the system. It contains bus voltages 3.3 V, 5 V, 12 V and -12 V, and utilizes six fan tachometer signals

2.2.2 Fan Module Connector (FAN1 ~ FAN6)

The FAN1 ~ FAN6 connector provides +12 V power for fan operation and accepts the tachometer output from the fans. It accepts up to six fan signals.

2.2.3 ATX Power Connector (ATX1 and ATX2)

These connectors accept two standard ATX power supplies.

Note: Do not use ATX power supplies and plug-in power modules at the same time.

2.2.4 Power Connectors for Peripherals (CN1 and CN2)

The CN1 and CN2 connectors provide power to the peripherals, such as hard disk drives or floppy disk drives.

2.2.5 V I/O Voltage Selection (T1 ~ T3)

This jumper is used to select the V I/O voltage. MIB-3081A allows V I/O to be set to either 5 V or 3.3 V. Since the MIB-3081A default is configured for use with 5 V CompactPCI boards (blue keyed connectors), once the jumper is set to 3.3 V, the CompactPCI keys must be changed to 3.3 V at the same time (as yellow keyed connectors).


```
+5V                +5V

VIO                VIO

+3.3V              +3.3V
```

VIO for +5V   VIO for +3.3V
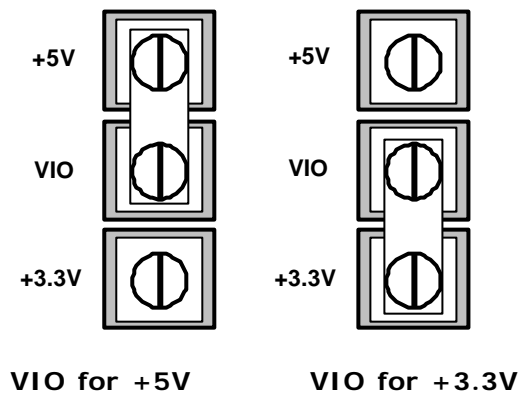
2.2.6 Power Switch (CN4)

This connector provides power on/off control of the ATX power supply or the plug-in power module. If the CompactPCI chassis provides a 2-pin power switch cord, connect this cord to the CN4 connector and users can control the power on/off by the power switch. Or users can directly short this connector by a jumper and control the power on/off by the ATX power supply switch.

2.2.7 LED Status Connector (JP1)

This connector provides digital outputs for the alarm module (MIC-3924) to the chassis front panel notification used. Three alarm LED (red) and one power status LED (green) is included for Fan_fail, Power_fail, and Temp_fail for alert notification.

2.3 Ground Configuration

Along the top and bottom of the MIB-3081A are 18 mounting holes. The holes are arranged in an alternating pattern of chassis (frame) grounded pads and logic grounded pads. The square pad holes are connected to chassis ground, and the round pad holes are connected to logic ground. To isolate chassis and logic grounds, install mounting screws in only square pad mounting holes.

2.4 Computer Telephony Bus

The MIB-3081A provides H.110 CT bus on the P4 connectors, which complies with the PICMG 2.5 Computer Telephony Specification. The CT bus is routed across the P4 connectors on the peripheral slots. Please refer to Appendix A for pin assignment information.

2.5 Clock Routing Configuration

The MIB-3081A is configured to comply with the clock routing specified in the CompactPCI Hot Swap Specification, PICMG 2.1, version 1.0. This Specification requires that each slot be independently clocked. If users would like to reconfigure the backplane to comply with the earlier CompactPCI Specification, PICMG 2.0, version 2.1, which allows the MIB-3081A to be backward compatible with CPUs using shared clocks, please contact Advantech for help.

A

Pin Assignments

APPENDIX

A.1 System Slot P1 Connector

Table A-1: System slot P1 connector

Pin	Z	A	B	C	D	E	F
25	GND	+5V	REQ64#	ENUM#	+3.3V	+5V	GND
24	GND	AD[1]	+5V	V(I/O)	AD[0]	ACK64#	GND
23	GND	+3.3V	AD[4]	AD[3]	+5V	AD[2]	GND
22	GND	AD[7]	GND	+3.3V	AD[6]	AD[5]	GND
21	GND	+3.3V	AD[9]	AD[8]	M66EN	C/BE[0]#	GND
20	GND	AD[12]	GND	V(I/O)	AD[11]	AD[10]	GND
19	GND	+3.3V	AD[15]	AD[14]	GND	AD[13]	GND
18	GND	SERR#	GND	+3.3V	PAR	C/BE[1]#	GND
17	GND	+3.3V	IPMBSCL	IPMBSDA	GND	PERR#	GND
16	GND	DEVSEL#	GND	V(I/O)	STOP#	LOCK#	GND
15	GND	+3.3V	FRAME#	IRDY#	GND	TRDY#	GND
12-14	Key Area						
11	GND	AD[18]	AD[17]	AD[16]	GND	C/BE[2]#	GND
10	GND	AD[21]	GND	+3.3V	AD[20]	AD[19]	GND
9	GND	C/BE[3]#	GND	AD[23]	GND	AD[22]	GND
8	GND	AD[26]	GND	V(I/O)	AD[25]	AD[24]	GND
7	GND	AD[30]	AD[29]	AD[28]	GND	AD[27]	GND
6	GND	REQ0#	GND	+3.3V	CLK	AD[31]	GND
5	GND	BRSVP1A5	RRSVP1B5	RST#	GND	GNT0#	GND
4	GND	IPMBPWR	Healthy#	V(I/O)	INTP	INTS	GND
3	GND	INTA#	INTB#	INTC#	+5V	INTD#	GND
2	GND	TCK	+5V	TMS	TDO	TDI	GND
1	GND	+5V	-12V	TRST#	+12V	+5V	GND

▨ = long pins   ▭ = short pins   ▭ = medium length pins

#: Low active

A.2 System Slot P2 Connector

Table A-2: System slot P2 connector

Pin	Z	A	B	C	D	E	F
22	GND	GA4	GA3	GA2	GA1	GA0	GND
21	GND	CLK6	GND	RSV	RSV	RSV	GND
20	GND	CLK5	GND	RSV	GND	RSV	GND
19	GND	GND	GND	RSV	RSV	RSV	GND
18	GND	BRSVP2A18	BRSVP2B18	BRSVP2C18	BRSVP2D18	BRSVP2E18	GND
17	GND	BRSVP2A17	GND	PRST#	REQ6#	GNT6#	GND
16	GND	BRSVP2A16	BRSVP2B16	DEG#	GND	BRSVP2E16	GND
15	GND	BRSVP2A15	GND	FAL#	REQ5#	GNT5#	GND
14	GND	AD[35]	AD[34]	AD[33]	GND	AD[32]	GND
13	GND	AD[38]	GND	V(I/O)	AD[37]	AD[36]	GND
12	GND	AD[42]	AD[41]	AD[40]	GND	AD[39]	GND
11	GND	AD[45]	GND	V(I/O)	AD[44]	AD[43]	GND
10	GND	AD[49]	AD[48]	AD[47]	GND	AD[46]	GND
9	GND	AD[52]	GND	V(I/O)	AD[51]	AD[50]	GND
8	GND	AD[56]	AD[55]	AD[54]	GND	AD[53]	GND
7	GND	AD[59]	GND	V(I/O)	AD[58]	AD[57]	GND
6	GND	AD[63]	AD[62]	AD[61]	GND	AD[60]	GND
5	GND	C/BE[5]#	GND	V(I/O)	C/BE[4]#	PAR64	GND
4	GND	V(I/O)	BRSVP2B4	C/BE[7]#	GND	C/BE[6]#	GND
3	GND	CLK4	GND	GNT3#	REQ4#	GNT4#	GND
2	GND	CLK2	CLK3	SYSEN#	GNT2#	REQ3#	GND
1	GND	CLK1	GND	REQ1#	GNT1#	REQ2#	GND

#: Low active

Note: GA[4…0] shall be used for geographic addressing on the backplane

A.3 System and Peripheral Slots P3 Connector

Table A-3: System and Peripheral slot P3 connector

Pin	Z	A	B	C	D	E	F
19	GND	N/C	N/C	N/C	N/C	N/C	GND
18	GND	N/C	N/C	N/C	N/C	N/C	GND
17	GND	N/C	N/C	N/C	N/C	N/C	GND
16	GND	N/C	N/C	N/C	N/C	N/C	GND
15	GND	N/C	N/C	N/C	N/C	N/C	GND
14	GND	N/C	N/C	N/C	N/C	N/C	GND
13	GND	N/C	N/C	N/C	N/C	N/C	GND
12	GND	N/C	N/C	N/C	N/C	N/C	GND
11	GND	N/C	N/C	N/C	N/C	N/C	GND
10	GND	N/C	N/C	N/C	N/C	N/C	GND
9	GND	N/C	N/C	N/C	N/C	N/C	GND
8	GND	N/C	N/C	N/C	N/C	N/C	GND
7	GND	N/C	N/C	N/C	N/C	N/C	GND
6	GND	N/C	N/C	N/C	N/C	N/C	GND
5	GND	N/C	N/C	N/C	N/C	N/C	GND
4	GND	N/C	N/C	N/C	N/C	N/C	GND
3	GND	N/C	N/C	N/C	N/C	N/C	GND
2	GND	N/C	N/C	N/C	N/C	N/C	GND
1	GND	N/C	N/C	N/C	N/C	N/C	GND

#: Low active

A.4 System Slot P4 Connector

Table A-4: System slot P4 connector

Pin	Z	A	B	C	D	E	F
25	GND	N/C	N/C	N/C	N/C	N/C	GND
24	GND	N/C	N/C	N/C	N/C	N/C	GND
23	GND	N/C	N/C	N/C	N/C	N/C	GND
22	GND	N/C	N/C	N/C	N/C	N/C	GND
21	GND	N/C	N/C	N/C	N/C	N/C	GND
20	GND	N/C	N/C	N/C	N/C	N/C	GND
19	GND	N/C	N/C	N/C	N/C	N/C	GND
18	GND	N/C	N/C	N/C	N/C	N/C	GND
17	GND	N/C	N/C	N/C	N/C	N/C	GND
16	GND	N/C	N/C	N/C	N/C	N/C	GND
15	GND	N/C	N/C	N/C	N/C	N/C	GND
12-14	Key Area						
11	GND	N/C	N/C	N/C	N/C	N/C	GND
10	GND	N/C	N/C	N/C	N/C	N/C	GND
9	GND	N/C	N/C	N/C	N/C	N/C	GND
8	GND	N/C	N/C	N/C	N/C	N/C	GND
7	GND	N/C	N/C	N/C	N/C	N/C	GND
6	GND	N/C	N/C	N/C	N/C	N/C	GND
5	GND	N/C	N/C	N/C	N/C	N/C	GND
4	GND	N/C	N/C	N/C	N/C	N/C	GND
3	GND	N/C	N/C	N/C	N/C	N/C	GND
2	GND	N/C	N/C	N/C	N/C	N/C	GND
1	GND	N/C	N/C	N/C	N/C	N/C	GND

A.5 System and Peripheral Slot P5 Connector

Table A-5: System and Peripheral slot P5 connector

Pin	Z	A	B	C	D	E	F
19	GND	N/C	N/C	N/C	N/C	N/C	GND
18	GND	N/C	N/C	N/C	N/C	N/C	GND
17	GND	N/C	N/C	N/C	N/C	N/C	GND
16	GND	N/C	N/C	N/C	N/C	N/C	GND
15	GND	N/C	N/C	N/C	N/C	N/C	GND
14	GND	N/C	N/C	N/C	N/C	N/C	GND
13	GND	N/C	N/C	N/C	N/C	N/C	GND
12	GND	N/C	N/C	N/C	N/C	N/C	GND
11	GND	N/C	N/C	N/C	N/C	N/C	GND
10	GND	N/C	N/C	N/C	N/C	N/C	GND
9	GND	N/C	N/C	N/C	N/C	N/C	GND
8	GND	N/C	N/C	N/C	N/C	N/C	GND
7	GND	N/C	N/C	N/C	N/C	N/C	GND
6	GND	N/C	N/C	N/C	N/C	N/C	GND
5	GND	N/C	N/C	N/C	N/C	N/C	GND
4	GND	N/C	N/C	N/C	N/C	N/C	GND
3	GND	N/C	N/C	N/C	N/C	N/C	GND
2	GND	N/C	N/C	N/C	N/C	N/C	GND
1	GND	N/C	N/C	N/C	N/C	N/C	GND

A.6 Peripheral Slot P1 Connector

Table A-6: Peripheral Slot P1 Connector

Pin	Z	A	B	C	D	E	F
25	GND	+5V	REQ64#	ENUM#	+3.3V	+5V	GND
24	GND	AD[1]	+5V	V(I/O)	AD[0]	ACK64#	GND
23	GND	+3.3V	AD[4]	AD[3]	+5V	AD[2]	GND
22	GND	AD[7]	GND	+3.3V	AD[6]	AD[5]	GND
21	GND	+3.3V	AD[9]	AD[8]	M66EN	C/BE[0]#	GND
20	GND	AD[12]	GND	V(I/O)	AD[11]	AD[10]	GND
19	GND	+3.3V	AD[15]	AD[14]	GND	AD[13]	GND
18	GND	SERR#	GND	+3.3V	PAR	C/BE[1]#	GND
17	GND	+3.3V	IPMBSCL	IPMBSDA	GND	PERR#	GND
16	GND	DEVSEL#	GND	V(I/O)	STOP#	LOCK#	GND
15	GND	+3.3V	FRAME#	IRDY#	GND	TRDY#	GND
12-14	Key Area						
11	GND	AD[18]	AD[17]	AD[16]	GND	C/BE[2]#	GND
10	GND	AD[21]	GND	+3.3V	AD[20]	AD[19]	GND
9	GND	C/BE[3]#	IDSEL	AD[23]	GND	AD[22]	GND
8	GND	AD[26]	GND	V(I/O)	AD[25]	AD[24]	GND
7	GND	AD[30]	AD[29]	AD[28]	GND	AD[27]	GND
6	GND	REQ#	GND	+3.3V	CLK	AD[31]	GND
5	GND	BRSVP1A5	RRSVP1B5	RST#	GND	GNT#	GND
4	GND	IPMBPWR	Healthy#	V(I/O)	INTP	INTS	GND
3	GND	INTA#	INTB#	INTC#	+5V	INTD#	GND
2	GND	TCK	+5V	TMS	TDO	TDI	GND
1	GND	+5V	-12V	TRST#	+12V	+5V	GND

▨ = long pins   ▭ = short pins   ▭ = medium length pins

#: Low active

A.7 Peripheral Slot P2 Connector

Table A-7: Peripheral slot P2 connector

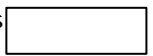| Pin	Z	A	B	C	D	E	F
22	GND	GA4	GA3	GA2	GA1	GA0	GND
21	GND	RSV	RSV	RSV	RSV	RSV	GND
20	GND	RSV	RSV	RSV	GND	RSV	GND
19	GND	RSV	RSV	RSV	RSV	RSV	GND
18	GND	BRSVP2A18	BRSVP2B18	BRSVP2C18	BRSVP2D18	BRSVP2E18	GND
17	GND	BRSVP2A17	GND	RSV	RSV	RSV	GND
16	GND	BRSVP2A16	BRSVP2B16	RSV	GND	BRSVP2E16	GND
15	GND	BRSVP2A15	GND	RSV	RSV	BRSV	GND
14	GND	AD[35]	AD[34]	AD[33]	GND	AD[32]	GND
13	GND	AD[38]	GND	V(I/O)	AD[37]	AD[36]	GND
12	GND	AD[42]	AD[41]	AD[40]	GND	AD[39]	GND
11	GND	AD[45]	GND	V(I/O)	AD[44]	AD[43]	GND
10	GND	AD[49]	AD[48]	AD[47]	GND	AD[46]	GND
9	GND	AD[52]	GND	V(I/O)	AD[51]	AD[50]	GND
8	GND	AD[56]	AD[55]	AD[54]	GND	AD[53]	GND
7	GND	AD[59]	GND	V(I/O)	AD[58]	AD[57]	GND
6	GND	AD[63]	AD[62]	AD[61]	GND	AD[60]	GND
5	GND	C/BE[5]#	GND	V(I/O)	C/BE[4]#	PAR64	GND
4	GND	V(I/O)	BRSVP2B4	C/BE[7]#	GND	C/BE[6]#	GND
3	GND	RSV	GND	RSV	RSV	RSV	GND
2	GND	RSV	RSV	UNC	RSV	RSV	GND
1	GND	RSV	GND	RSV	RSV	RSV	GND

#: Low active

Note: GA[4…0] shall be used for geographic addressing on the backplane

A.8 Peripheral Slot P4 Connector

Table A-8: Peripheral slot P4 connector

Pin	Z	A	B	C	D	E	F
25	N/C	SGA4	SGA3	SGA2	SGA1	SGA0	GND
24	N/C	GA4	GA3	GA2	GA1	GA0	GND
23	N/C	-12V	#CT_RT	#CT_EN	+12V	CT_MC	GND
22	N/C	#PF_S0	RSV	RSV	RSV	RSV	GND
21	N/C	-SEL_Vbat	#PF_S1	RSV	RSV	SELVbatRtn	GND
20	N/C	N/C	N/C	N/C	N/C	N/C	GND
19	N/C	N/C	N/C	N/C	N/C	N/C	GND
18	N/C	VRG	N/C	N/C	N/C	VRGRtn	GND
17	N/C	N/C	N/C	N/C	N/C	N/C	GND
16	N/C	N/C	N/C	N/C	N/C	N/C	GND
15	N/C	-Vbat	N/C	N/C	N/C	VbatRtn	GND
12-14				Key Area			
11	N/C	CT_D29	CT_D30	CT_D31	VIO	#CT_FA	GND
10	N/C	CT_D27	+3.3V	CT_D28	+5V	#CT_FB	GND
9	N/C	CT_D24	CT_D25	CT_D26	GND	#FR_CP	GND
8	N/C	CT_D21	CT_D22	CT_D23	+5V	CT_C8A	GND
7	N/C	CT_D19	+5V	CT_D20	GND	CT_C8B	GND
6	N/C	CT_D16	CT_D17	CT_D18	GND	CT_N1	GND
5	N/C	CT_D13	CT_D14	CT_D15	+3.3V	CT_N2	GND
4	N/C	CT_D11	+5V	CT_D12	+3.3V	SCLK	GND
3	N/C	CT_D8	CT_D9	CT_D10	GND	SCLK	GND
2	N/C	CT_D4	CT_D5	CT_D6	CT_D7	GND	GND
1	N/C	CT_D0	+3.3V	CT_D1	CT_D2	CT_D3	GND

= long pins   = short pins   = medium length pins
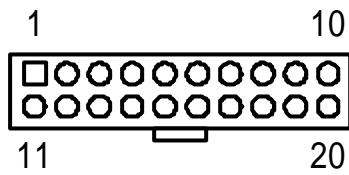
#: Low active

A.9 ATX Power Connector (ATX1 and ATX2)

Table A-9: ATX Power Connector

Pin	Signal	Pin	Signal
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	GND	13	GND
4	+5V	14	PSON#
5	GND	15	GND
6	+5V	16	GND
7	GND	17	GND
8	FAL#	18	N/C
9	N/C	19	+5V
10	+12V	20	+5V

A.10 Fan Module Connector (FAN1 ~ FAN6)
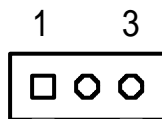
Table A-10: Fan Module Connectors

Pin	Assignment
1	Fan speed
2	+12V
3	GND

A.11 Power Switch Connector (CN4)

Table A-11: Power Switch Connector

Pin	Signal
1	#PS_ON
2	GND

A.12 Power Connector for Peripherals (CN1 and CN2)

Table A-12: Power Connector for Peripherals

Pin	Signal	Pin	Signal
CN1		CN2	
1	+12V	1	+12V
2	VCC	2	VCC
3	VCC	3	VCC
4	+5V	4	+5V

A.13 Alarm board Interface connector (CN8)
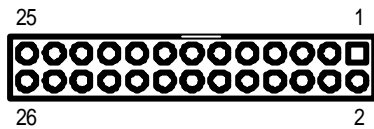
Table A-13: Alarm Board Interface Connector

Pin	Signal	Pin	Signal
1	VCC	14	+12V
2	VCC	15	+5VSB
3	VCC	16	N/C
4	N/C	17	N/C
5	VCC	18	LM75-SDA
6	VCC3	19	WDT-IN
7	TT1	20	LM75-SCL
8	N/C	21	IPMB-SCL
9	TT2	22	PS_ON
10	-12V	23	IPMB-SDA
11	TT3	24	WDT-OUT
12	N/C	25	GND
13	N/C	26	GND