MIC-3302

6U-sized Rear Transition Board for CompactPCI

1. Introduction

The MIC-3302 is a CompactPCI 6U-sized rear transition board. It provides access to the rear panel for the I/O function on Advantech's CompactPCI CPU board. The MIC-3302 has two versions, the MIC-3302 and MIC-3302F.

Optin / Model	COM	USB	External SCSI	On-board HDD	Width
MIC-3302	1	1	-	-	1-slot
MIC-3302F	2	2	Yes	Yes	2-slot

2. Specification

2.1 Standard functions

- **Ethernet:** Two LAN ports with RJ-45 connectors
- **VGA connector:** One DB-15 VGA connector
- **Serial port:** One/Two DB-9 RS-232 ports
- **USB interface:** One/Two USB connectors
- **SCSI interface:** Internal 68-pin SCSI connector and optional external 68-pin SCSI connector

- **EIDE interface:** Handles two on-board IDE channels, connects up to four IDE drives
- **FDD interface:** Supports one on-board floppy connector, connects up to two floppy disk drives
- **CompactFlash™ interface:** Supports one on-board CompactFlash™ socket
- **Keyboard connector:** One 6-pin mini-DIN connector on rear panel
- **Mouse connector:** One 6-pin mini-DIN connector on rear panel

2.2 Mechanical and environmental specifications

- **Board size:** 233.35 x 80 mm (6U), one/two-slot (8TE) wide
- **Max. power requirements:** +5 V (4.75 ~ 5.25 V) @ 1 A
- **Operating temperature:** 0 ~ 60 º C (32 ~ 140 º F)
- **Storage temperature:** -20 ~ 70 º C (-4 ~ 158 º F)
- **Humidity (operating and storage):** 5 ~ 95% (non-condensing)
- **Board weight:** 0.8 Kg
- **Shock:** 20 G (operating); 50 G (storage/transit)
- **Random vibration:** 1.5 Grms

3. Board Layout

The MIC-3302 provides jumpers and connectors for users specific applications.

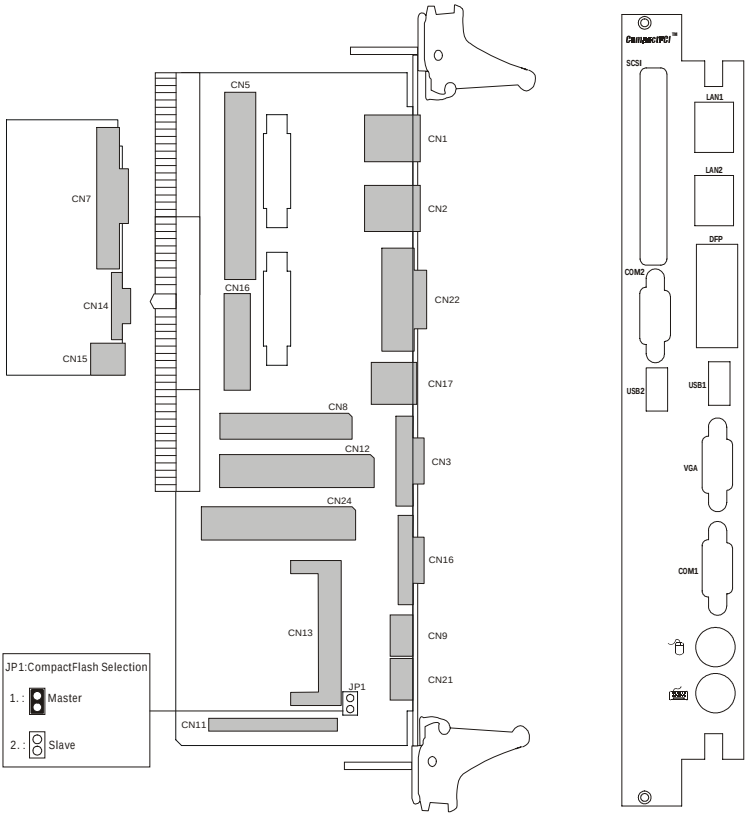

Figure 3-1: MIC-3302 connector and jumper locations

Table 3-1: MIC-3302 connector and jumper descriptions

Number	Function
JP1	CompactFlash™ master/slave selection
CN1	LAN 1 connector
CN2	LAN 2 connector
CN3	VGA connector
CN5	On-board internal SCSI connector
CN7	SCSI connector
CN8	Floppy disk connector
CN9	PS/2 mouse connector
CN10	COM1 port
CN11	44-pin primary IDE connector
CN12	40-pin secondary IDE connector
CN13	CompactFlash™ socket
CN14	COM2 port
CN15	USB 2 connector
CN16	On-board DFP PanelLink connector
CN17	USB 1 connector
CN21	PS/2 keyboard connector
CN22	DFP PanelLink connector
CN24	40-pin primary IDE connector

Note:

The CompactFlash interface (CN13) uses a primary IDE channel. Users need to set it as master or slave via jumper JP1 when another device is connected on the primary IDE channel as well.

4. HDD Installation

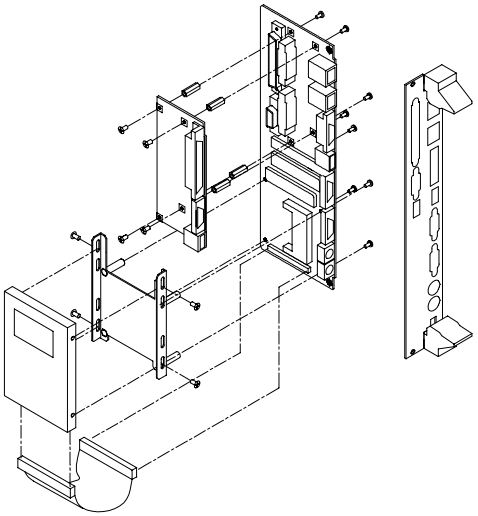

Figure 4-1: Install a 2.5" HDD on MIC-3302

Note:

CN11 and CN24 are all primary IDE channels but in different connector form factors. While connecting IDE drives on both (CN11 and CN24) connectors, please remember to set one as the master and the other one as the slave.

5. Pin Assignment

Table 5-1: MIC-3302 J3 Connector Pin Assignment

Pin	Row A	Row B	Row C	Row D	Row E
19	HDBD3	HDBD6	HDBD2	HDBD10	HDBD14
18	HDBD8	HDBD5	HDBD1	HDBD11	HDBD15
17	HDBD9	HDBD4	HDBD0	HDBD12	HDBD13
16	HDBD7	#ICSOB	#IIORB	#ICS1B	HDRDY8
15	HDBDRQ	#IDACKB	HDBSA2	HDBIRQ	#IIOWB
14	NRTS1	NDSR1	HDBSA1	GND	HDBSA0
13	NRI1	NCTS1	NTX1	NRX1	NRLSD1
12	ID0	ID2	ID4	ID7	NDTR1
11	ID1	ID3	ID8	ID6	ID12
10	ID5	ID9	ID10	ID11	ID13
9	ID15	ID14	#HDRQ	#HCS3	#HIOR
8	HIRQ	#HACK	VCC	HDA2	#HIOW
7	N/A	GND	#HRST1	HRDY	#HCS1
6	N/A	VCC	GND	HDA0	HDA1
5	VCC	N/A	S66DET	N/A	N/A
4	KDAT	KCLK	MDAT	MCLK	P66DET
3	#DSKCHG	#MOA	#STEP	#HEAD	#TRAK0
2	#DSA	#MOB	#RWC	#RDATA	#WP
1	#INDEX	#DSB	#DIR	#WE	#WD

: Low active

Note:

The MIC-3302 supports DMA/66 HDD.

Table 5-2: MIC-3302 J4 Connector Pin Assignment

Pin	Row A	Row B	Row C	Row D	Row E
25	LANTX-2	LANTX-	USBV1	USBV0	UD1+
24	LANTX+2	LANTX+	N/A	UD1-	UD0-
23	GND	GND	N/A	N/A	UD0+
22	LANRX-2	LANRX-	N/A	N/A	COMDTR2
21	LANRX+2	LANRX+	N/A	N/A	COMRTS2
20	GND	GND	N/A	N/A	COMCTS2
19	N/A	N/A	N/A	N/A	COMTX2
18	N/A	N/A	N/A	N/A	COMLSD2
17	N/A	N/A	N/A	N/A	COMDSR2
16	N/A	N/A	N/A	N/A	COMRI2
15	N/A	N/A	N/A	N/A	COMRX2
12-14			Key Area		
11	VCC	N/A	N/A	N/A	N/A
10	VCC	N/A	N/A	N/A	N/A
9	VCC	N/A	N/A	N/A	N/A
8	VCC	N/A	N/A	N/A	N/A
7	N/A	N/A	N/A	N/A	FFVFC
6	N/A	N/A	N/A	PDDCCLK	PDDCDAT
5	N/A	N/A	N/A	DCK	PEDGE
4	N/A	N/A	N/A	VS	TX2+
3	N/A	N/A	HS	DAT	TX2-
2	B	G	R	TX0-	TX0+
1	TX1+	TX1-	GND	TXC+	TXC-

Table 5-3: MIC-3302 J5 Connector Pin Assignment

Pin	Row A	Row B	Row C	Row D	Row E
22	LANRX+	LANRX-	LANTX+	LANTX-	LANRX+2
21	VCC	VCC	LANTX+2	LANTX-2	LANRX-2
20	N/A	N/A	N/A	N/A	VCC
19	N/A	N/A	VCC	N/A	N/A
18	N/A	N/A	N/A	N/A	N/A
17	N/A	N/A	N/A	N/A	N/A
16	N/A	N/A	N/A	N/A	N/A
15	N/A	N/A	N/A	N/A	N/A
14	N/A	N/A	N/A	N/A	N/A
13	N/A	N/A	N/A	N/A	SDP+1
12	SD+12	N/A	SD+14	SD-14	SDP-1
11	SD-12	SD+13	SD-13	SD+15	SD-15
10	DIFS	AUTO	TPWEX	SD+0	SD-0
9	SD-5	SD+5	SD+2	SD-1	SD+1
8	SD+6	SD-6	SD-2	SD+3	SD-3
7	TPWEX	TPWEX	TPWEX	SD-4	SD+4
6	SACK+	SDP+0	SDP-0	SD+7	SD-7
5	SACK-	SBSY+	SBSY-	SATN+	SATN-
4	SD+10	SRST+	SRST-	SMSG+	SMSG-
3	SD-10	SCD-	SCD+	SSEL+	SSEL-
2	SD-11	SD+9	SD-8	SREQ-	SREQ+
1	SD+11	SD-9	SD+8	SIO-	SIO+

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