RIO-3310S

6U CompactPCI™
Rear Transition Card
for MIC-3390

User Manual

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Certifications: CE, FCC Class A

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Product Warranty (2 years)

Advantech warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for two years from the date of purchase.

This warranty does not apply to any products which have been repaired or altered by persons other than repair personnel authorized by Advantech, or which have been subject to misuse, abuse, accident or improper installation. Advantech assumes no liability under the terms of this warranty as a consequence of such events.

Because of Advantech's high quality-control standards and rigorous testing, most of our customers never need to use our repair service. If an Advantech product is defective, it will be repaired or replaced at no charge during the warranty period. For out-of-warranty repairs, you will be billed according to the cost of replacement materials, service time and freight. Please consult your dealer for more details.

If you think you have a defective product, follow these steps:

1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any onscreen messages you get when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.
3. If your product is diagnosed as defective, obtain an RMA (return merchandize authorization) number from your dealer. This allows us to process your return more quickly.
4. Carefully pack the defective product, a fully-completed Repair and Replacement Order Card and a photocopy proof of purchase date (such as your sales receipt) in a shippable container. A product returned without proof of the purchase date is not eligible for warranty service.
5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

Declaration of Conformity

CE

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This kind of cable is available from Advantech. Please contact your local supplier for ordering information.

FCC Class A

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Technical Support and Assistance

Step 1. Visit the Advantech web site at **www.advantech.com/support** where you can find the latest information about the product.

Step 2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:
- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages

Document Feedback

To assist us in making improvements to this manual, we would welcome comments and constructive criticism. Please send all such - in writing to: support@advantech.com

Packing List

Before setting up the system, check that the items listed below are included and in good condition. If any item does not accord with the table, please contact your dealer immediately.

- One RIO-3310S CompactPCI® rear transition board
- Utility and user manual (PDF file) CD-ROM disc x1
- Warranty certificate document x1

Safety Instructions

1. Read these safety instructions carefully.
2. Keep this User's Manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
12. Never pour any liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. If one of the following situations arises, get the equipment checked by service personnel:

a. The power cord or plug is damaged.

b. Liquid has penetrated into the equipment.

c. The equipment has been exposed to moisture.

d. The equipment does not work well, or you cannot get it to work according to the user's manual.

e. The equipment has been dropped and damaged.

f. The equipment has obvious signs of breakage.

15. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE MAY GO BELOW -

20° C (-4° F) OR ABOVE 60° C (140° F). THIS COULD DAMAGE THE EQUIPMENT. THE EQUIPMENT SHOULD BE IN A CONTROLLED ENVIRONMENT.

The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70 dB (A).

DISCLAIMER: This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

Wichtige Sicherheishinweise

1. 1. Bitte lesen sie Sich diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie Keine Flüssig-oder Aerosolreiniger. Am besten dient ein angefeuchtetes Tuch zur Reinigung.
4. Die NetzanschluBsteckdose soll nahe dem Gerät angebracht und leicht zugänglich sein.
5. Das Gerät ist vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Verletzungen hervorrufen.
7. Die Belüftungsöffnungen dienen zur Luftzirkulation die das Gerät vor überhitzung schützt. Sorgen Sie dafür, daB diese Öffnungen nicht abgedeckt werden.
8. Beachten Sie beim. AnschluB an das Stromnetz die AnschluBwerte.
9. Verlegen Sie die NetzanschluBleitung so, daB niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
10. Alle Hinweise und Warnungen die sich am Geräten befinden sind zu beachten.
11. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
12. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. elektrischen Schlag auslösen.

13. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von authorisiertem Servicepersonal geöffnet werden.
14. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:

a - Netzkabel oder Netzstecker sind beschädigt.

b - Flüssigkeit ist in das Gerät eingedrungen.

c - Das Gerät war Feuchtigkeit ausgesetzt.

d - Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.

e - Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.

f - Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.

15. VOSICHT: Explisionsgefahr bei unsachgemaben Austausch der Batterie.Ersatz nur durch densellben order einem vom Hersteller empfohlene-mahnlichen Typ. Entsorgung gebrauchter Batterien navh Angaben des Herstellers.

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 Teil 1000 beträgt 70dB(A) oder weiger.

Haftungsausschluss: Die Bedienungsanleitungen wurden entsprechend der IEC-704-1 erstellt. Advantech lehnt jegliche Verantwortung für die Richtigkeit der in diesem Zusammenhang getätigten Aussagen ab.

Safety Precaution - Static Electricity

Follow these simple precautions to protect yourself from harm and the products from damage:

1. To avoid electrical shock, always disconnect the power from your PC chassis before you work on it. Don't touch any components on the CPU card or other cards while the PC is on.
2. Disconnect power before making any configuration changes. The sudden rush of power as you connect a jumper or install a card may damage sensitive electronic components.

Contents

CHAPTER 1

General Information

Chapter 1 General Information

1.1 Introduction

The RIO-3310S is a CompactPCI 6U-sized rear transition board. It provides access to the rear panel for the I/O function on Advantech CompactPCI CPU board. The RIO-3310S is dedicated for the MIC-3390.

1.2 Specification

1.2.1 SCSI Function

- Controller: Adaptec/AIC-7901X
- Bus: PCI 64-bit/66MHz
- Channel: Single SCSI channel
- Data transfer rate: The data channel DMA engine in the AIC-7901X supports data transfer rates up to 320MB/s of LVD SCSI I/Os.
- Termination: Onboard terminators provided
- Connector: One 68-pin SCSI on the rear panel
- RIO-3310S-A1:one internal 68-pin SCSI connector
- RIO-3310S-A2:one externall 68-pin SCSI connector

1.2.2 Parallel ATA to Serial ATA device bridge chip

- RIO-3310S is optional have second ATA interface. The default of the RIO-3310S does not support a second ATA interface.
- Compliant with ATA specifications
- Selectable transmit drive strength
- Supports ATAPI devices with multiple options for DMA direction
- Supports ATA queued commands
- Supports the Serial ATA Generation 1 transfer rate of 1.5 Gb/s (150 MB/s) on the serial side and is compatible with Ultra 133 on the parallel ATA side.

1.2.3 Standard functions

- Ethernet: Two LAN ports with RJ-45 connectors for 10/100/1000Mbps. One LAN port compacts with COM2 for 10/100Mbps.
- VGA connector: One DB-15 VGA connector.
- Serial port: Two RJ45-COM ports (COM1 & COM2).
- USB interface: One USB connector and one 9-pin header.
- IDE interface: Support two 40-pin headers on board. One is for IDE channel (slave only), and the other is optional for SATA to PATA channel (master only).
- FDD interface: Supports one 34-pin header onboard.
- Keyboard/Mouse connector: One 6-pin mini-DIN connector on rear panel.
- Parallel port connector: One 26-pin header on board.
- CompactPCI connector: rJ1/rJ2/rJ3/rJ5 for RIO-3310S.

1.2.4 Mechanical and environmental specifications

- Board size: 233.35 x 80 mm (6U), one slot (4TE) wide
- Max. power requirements: +5 V (4.75 ~ 5.25 V) @ 1 A
- Operating temperature: 0 ~ 60° C (32 ~ 140° F)
- Storage temperature: -20 ~ 70° C (-4 ~ 158° F)
- Humidity (operating and storage): 5 ~ 95% (non-condensing)
- Board weight: 0.8 Kg
- Shock: 20 G (operating); 50 G (storage/transit)
- Random vibration: 5 ~ 500Hz Operating: 1.5Grms Non-operating: 2Grms

1.2.5 Jumpers & Switches

Table 1 list the jumper and switch functions. Figure 1 illustrates the jumper and switch locations. Read this section carefully before changing the jumper and switch settings on your RIO-3310S board.

Table 1.1: Jumper & Switch Descriptions

Name	Function
JP6	VIO setting
JP8	SATA to PATA Bridge Enable Setting
SW1	COM2 RS232/422/485 Setting
SW2	COM2 RS232/422/485 Setting
JP9 ~ JP17	LAN3/COM2 function selection

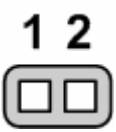
1.2.6 Bias Voltage Regulated for PCI to SCSI Bridge (JP6)

Table 1.2: Bias Voltage Setting for PCI to SCSI Bridge

Function	JP6
If V(I/O) = 5V	
If V(I/O) = 3.3V (Default)	

1.2.7 SATA to PATA Bridge Enable Setting (JP8)

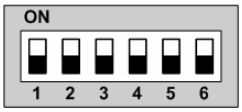
Table 1.3: SATA to PATA Bridge Enable Setting

Function	JP8	Function	JP8
Enable		Disable (Default)	

Note: *If you want to use secondary IDE channel, be sure to take off the jumper.*

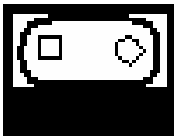
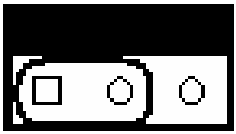
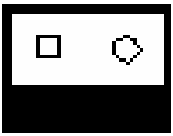
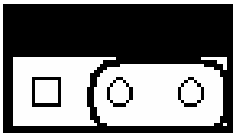
1.2.8 COM2 RS232/422/485 Setting (SW1 & SW2)

Table 1.4: COM2 RS232/422/485 Setting (SW1 & SW2)

Function	SW1	SW2
RS232 (Default)		
RS422		
RS485		
Note: ■ is the key		

1.2.9 10/100 LAN3 / COM2 Function Selector (JP9~JP17)

Table 1.5: 10/100 LAN3 / COM2 Function Seclector

Function	JP17	JP9 ~ JP16
LAN3 (Default)		
COM2		

Note: ■ is the key

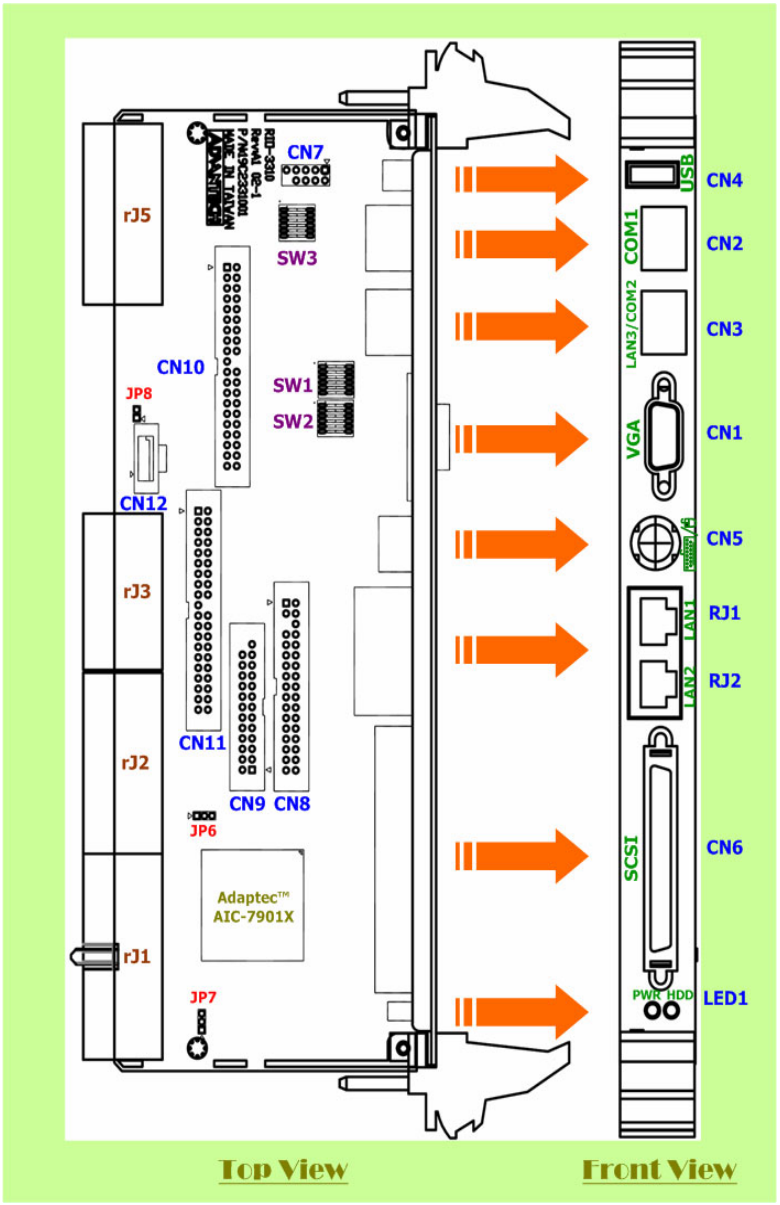


Figure 1.1: RIO-3310S connector and jumper locations

1.2.10 Rear I/O Connector Interfaces

Onboard connectors link to external devices such as hard disk drives, keyboards, or floppy drives, etc. Table 1.6 lists the function of each connector, and Figure 1 illustrates each connector location.

Table 1.6: Connectors Description

Name	Function
CN1	VGA Connector
CN2	COM1 Connector
CN3	LAN3 / COM2 Connector
CN4	USB1 Connector
CN5	PS/2 keyboard and Mouse
CN6	SCSI External Connector
CN7	USB2 Connector (Internal, Header)
CN8	FDD Connector (Internal, Header)
CN9	LPT Connector (Internal, Header)
CN10	SATA to PATA IDE Connector (Internal, Pin Header)
CN11	IDE Connector (Internal, Pin Header)
CN12	SATA Connector (Internal, 7 Pin)
RJ1	LAN1 Connector (Giga-bit)
RJ2	LAN2 Connector (Giga-bit)
LED1	IDE / SCSI Active Status & Power Health (+5V)
Note:	The SATA to PATA IDE Connector (CN10) only set it as Master. The IDE Connector (CN11) only set it as Slave.

CHAPTER 2

2. Hardware & Drivers Installation

Chapter 2 Hardware & Drivers Installation

2.1 Card installation

2.1.1 Card Installation and Removal

The CompactPCI® connectors are firm and rigid, and require careful handling while plugging and unplugging. Improper installation of a card can easily damage the backplane of the chassis.

The system card can be installed only in the system slot. Do not insert the system card into the other slot, or insert a peripheral card into the system slot. The system slot is marked by a triangle enclosing the slot number. ~ Please refer to *Chapter 3*.

***Note**: Another easy way to distinguish the system slot is that the system slot uses red guide rails while the peripheral slots use gray ones.*

The insert/eject handles on CompactPCI® cards help users to install and remove the cards easily and safely. Follow the procedures below to install a card into a chassis.

To install the rear I/O card:

1. Hold the card horizontally. Be sure that the card is oriented correctly. The components of the card should be facing to the upper side.

2. Be sure that the handles of the card are not latched. Release the handles if they are latched.

Note: Handles from different vendors may have different latch designs.

Caution: Keep your fingers away from the latch hinges to prevent your fingers from getting pinched.

3. Insert the card into the chassis by sliding both edges of the card into the card guides.

4. Push the card into the slot gently by sliding the card along the card guide rails until the handles meet the rectangular holes of the handle locker rails.

***Note**: If the card is correctly positioned and has been slid all the way into the chassis, the handles should match the rectangular holes. If not, remove the card from the card guide and repeat step 3 again. Do not try to install a card by forcing it into the chassis.*

5. Left-pull the right handle and right-pull the left handle to insert the card into place.

6. Secure the card by locking the handles into place.

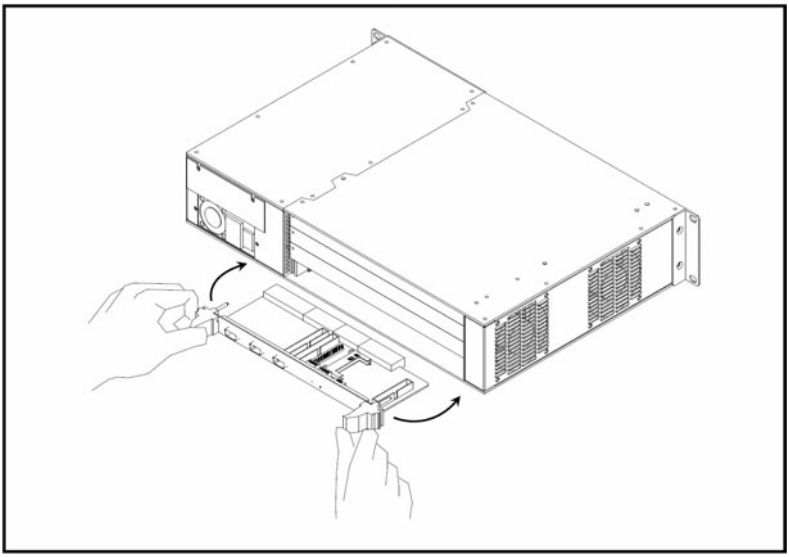


Figure 2.1: Install the rear I/O card into the chassis

To remove the rear I/O card:

1. Release the locking latches on the handles.

2. Push both handles out to release the card from the backplane.

3. Slide the card out.

2.1.2 Driver installation

Device drivers and utilities for DOS, Windows2000/95/98/NT and SCO UNIX are included in the utility CD-ROM disc.

The utility user's guide and installation instructions are provided in the utility CD-ROM disc. The instructions are located in the directory \RIO3310S\SCSI.

APPENDIX A

Rear I/O Connector Pin Assignments

Appendix A Rear I/O Connector Pin Assignments

A.1 VGA Connector (CN1)

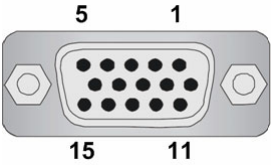


Table A.1: VGA Connector (CN1)

Pin #	Signal Name	Pin #	Signal Name
1	RED	9	+5V
2	GREEN	10	GND
3	BLUE	11	NC
4	NC	12	DDC_DATA3
5	GND	13	HSYNC
6	GND	14	VSYNC
7	GND	15	DDC_CLK3
8	GND		

A.2 COM1 Connector (CN2)

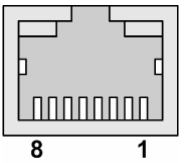


Table A.2: COM1 Connector (CN2)

Pin #	Signal Name	Pin #	Signal Name
1	DCD#	5	GND
2	RX#1_R	6	DSR#1_R
3	TX1	7	RTS#1
4	DTR#1	8	CTS#1_R

A.3 LAN3/COM2 Connector (CN3)

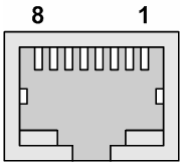


Table A.3: LAN3/COM2 Connector (CN3)			
LAN3			
Pin #	**Signal Name**	**Pin #**	**Signal Name**
1	LAN3_TDP	5	GND
2	LAN3_TDN	6	LAN3_RDN
3	LAN3_RDP	7	GND
4	GND	8	GND
COM2			
Pin #	**Signal Name**	**Pin #**	**Signal Name**
1	COM_DCD#2	5	GND
2	COM_RX#2	6	COM_DSR#2
3	COM_TX2	7	COM_RTS#2
4	COM_DTR#2	8	COM_CTS#2

A.4 USB1 Connector (CN4)

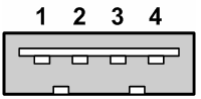


Table A.4: USB1 Connector (CN4)

Pin #	Signal Name	Pin #	Signal Name
1	+5V	3	USBD2+
2	USBD2-	4	GND

A.5 Mouse & Keyboard Connector (CN5)

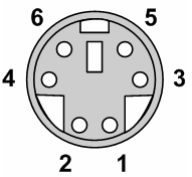


Table A.5: Mouse & Keyboard Connector (CN5)

Pin #	Signal Name	Pin #	Signal Name
1	KBDAT	4	+5V
2	MSDAT	5	KBCLK
3	GND	6	MSCLK

A.6 SCSI External Connector (CN6)

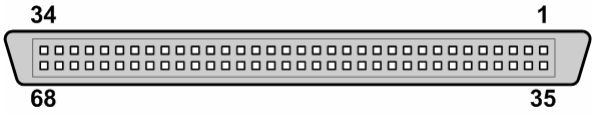


Table A.6: SCSI External Connector (CN6)

Pin #	Signal Name	Pin #	Signal Name
1	SCDP12	35	SCDM12
2	SCDP13	36	SCDM13
3	SCDP14	37	SCDM14
4	SCDP15	38	SCDM15
5	SCDPHP	39	SCDMHP
6	SCDP0	40	SCDM0
7	SCDP1	41	SCDM1
8	SCDP2	42	SCDM2
9	SCDP3	43	SCDM3
10	SCDP4	44	SCDM4
11	SCDP5	45	SCDM5
12	SCDP6	46	SCDM6
13	SCDP7	47	SCDM7
14	SCDPLP	48	SCDPLM
15	GND	49	GND
16	DIFFSENSER	50	GND
17	+5V	51	+5V
18	+5V	52	+5V
19	NC	53	NC
20	GND	54	GND
21	ATNP	55	ATNM
22	GND	56	GND
23	BSYP	57	BSYM
24	ACKP	58	ACKM
25	BSTP	59	BSTM
26	MSGP	60	MSGM
27	SELP	61	SELM
28	CDP	62	CDM
29	REQP	63	REQM
30	IOP	64	IOM
31	SCDP8	65	SCDM8
32	SCDP9	66	SCDM9
33	SCDP10	67	SCDM10
34	SCDP11	68	SCDM11

A.7 USB2 Connector (CN7)

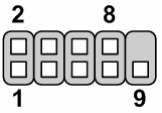


Table A.7: USB2 Connector (CN7)

Pin #	Signal Name	Pin #	Signal Name
1	+5V	2	GND
3	USBD3-	4	GND
5	USBD3+	6	GND
7	GND	8	GND
9	GND		

A.8 FDD Connector (CN8)

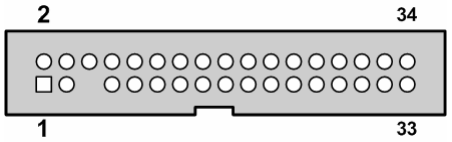


Table A.8: FDD Connector (CN8)

Pin #	Signal Name	Pin #	Signal Name
1	GND	2	DRVEN0
3	GND	4	NC
		6	DRVEN1
7	GND	8	INDEX#
9	GND	10	MTR0#
11	GND	12	NC
13	GND	14	DSA#
15	GND	16	NC
17	GND	18	DIR#
19	GND	20	STEP#
21	GND	22	WD#
23	GND	24	WE#
25	GND	26	TRACK0#
27	GND	28	WP#
29	GND	30	RDATA#
31	GND	32	HEAD#
33	GND	34	DSKCHG#

A.9 1.6 LPT Connector (CN9)

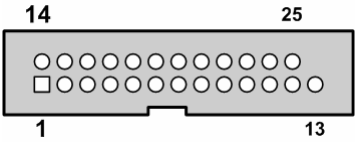


Table A.9: LPT Connector (CN9)

Pin #	Signal Name	Pin #	Signal Name
1	LPT_STB#	14	LPT_AFD#
2	LPT_PD0	15	LPT_ERR#
3	LPT_PD1	16	LPT_INIT#
4	LPT_PD2	17	LPT_SLIN#
5	LPT_PD3	18	GND
6	LPT_PD4	19	GND
7	LPT_PD5	20	GND
8	LPT_PD6	21	GND
9	LPT_PD7	22	GND
10	LPT_ACK#	23	GND
11	LPT_BUSY	24	GND
12	LPT_PE	25	GND
13	LPT_SLCT		

A.10 IDE Connector (CN10, CN11)

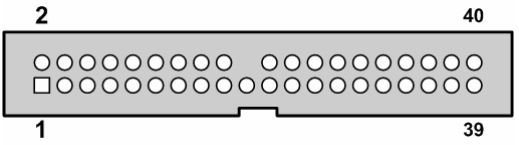


Table A.10: IDE Connector (SATA-PATA & Primary) (CN10, CN11)

Pin #	Signal Name	Pin #	Signal Name
1	IDE_RESET#	2	GND
3	IDE_PDD7	4	IDE_PDD8
5	IDE_PDD6	6	IDE_PDD9
7	IDE_PDD5	8	IDE_PDD10
9	IDE_PDD4	10	IDE_PDD11
11	IDE_PDD3	12	IDE_PDD12
13	IDE_PDD2	14	IDE_PDD13
15	IDE_PDD1	16	IDE_PDD14
17	IDE_PDD0	18	IDE_PDD15
19	GND		
21	IDE_PDDREQ	22	GND
23	IDE_PDIOW#	24	GND
25	IDE_PDIOR#	26	GND
27	IDE_PDIORDY	28	GND
29	IDE_PDDACK#	30	GND
31	IDE_IRQ	32	NC
33	IDE_PDA1	34	IDE_PATADET
35	IDE_PDA0	36	IDE_PDA2
37	IDE_PDCS#1	38	IDE_PDCS#3
39	IDE_LED#	40	GND

A.11 SATA Connector (CN12)

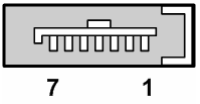


Table A.11: SATA Connector (CN12)

Pin #	Signal Name	Pin #	Signal Name
1	GND	5	SATA_TX0N
2	SATA_RX0P	6	SATA_TX0P
3	SATA_RX0N	7	GND
4	GND		

A.12 IDE/SCSI Active Status & Power Health (LED1)

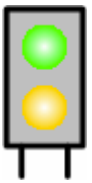


Table A.12: IDE/SCSI Active Status & Power Health (+5V) (LED1)

Color	Indicator	Color	Indicator
Green	Power Health (+5V)	Orange	IDE/SCSI Active Status

A.13 LAN1 & LAN2 Connector (Giga-Bit) (RJ1, RJ2)

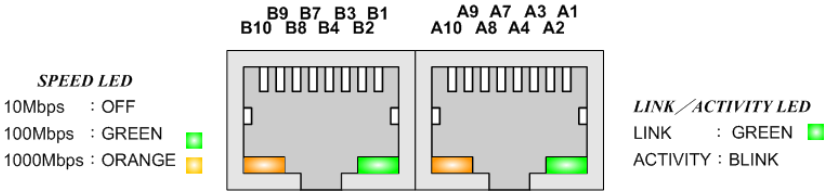


Table A.13: LAN1 & LAN2 Connector (Giga-Bit) (RJ1, RJ2)

Pin #	Signal Name	Pin #	Signal Name
A1	LAN1_MDI0+	B1	LAN2_MDI0+
A2	LAN1_MDI0-	B2	LAN2_MDI0-
A3	LAN1_MDI1+	B3	LAN2_MDI1+
A4	LAN1_MDI1-	B4	LAN2_MDI1-
A5	+2.5V	B5	+2.5V
A6	GND	B6	GND
A7	LAN1_MDI2+	B7	LAN2_MDI2+
A8	LAN1_MDI2-	B8	LAN2_MDI2-
A9	LAN1_MDI3+	B9	LAN2_MDI3+
A10	LAN1_MDI3-	B10	LAN2_MDI3-
A11	LAN1_SPD_1000#	B11	LAN2_SPD_1000#
A12	LAN1_SPD_100#	B12	LAN2_SPD_100#
A13	+3.3V	B13	+3.3V
A14	LAN1_LNK/ACT#	B14	LAN2_LNK/ACT#

A.14 CompactPCI Rear I/O rJ1 Connector

Table A.14: J1 connector

J1 - CompactPCI I/O

Pin	Row A	Row B	Row C	Row D	Row E	Row F
1	+5V	-12V	TRST#	+12V	+5V	GND
2	TCK	+5V	TMS	NC	TDI	GND
3	INTA#	INTB#	INTC#	+5V	INTD#	GND
4	IPMB_PWR	HEALTHY#	V(I/O)	INTP	INTS	GND
5	NC	NC	PCI_RST#	GND	GNT0#	GND
6	REQ0#	PCI_PRESENT#	+3.3V	CLK0	AD31	GND
7	AD30	AD29	AD28	GND	AD27	GND
8	AD26	GND	V(I/O)	AD25	AD24	GND
9	C/BE3#	NC	AD23	GND	AD22	GND
10	AD21	GND	+3.3V	AD20	AD19	GND
11	AD18	AD17	AD16	GND	C/BE2#	GND
12						
13						GND
14						
15	+3.3V	FRAME#	IRDY#	BD_SEL#	TRDY#	GND
16	DEVSEL#	PCIXCAP	V(I/O)	STOP#	LOCK#	GND
17	+3.3V	IPMB_SCL	IPMB_SDA	GND	PERR#	GND
18	SERR#	GND	+3.3V	PAR	C/BE1#	GND
19	+3.3V	AD15	AD14	GND	AD13	GND
20	AD12	GND	V(I/O)	AD11	AD10	GND
21	+3.3V	AD9	AD8	M66EN	C/BE0#	GND
22	AD7	GND	+3.3V	AD6	AD5	GND
23	+3.3V	AD4	AD3	+5V	AD2	GND
24	AD1	+5V	V(I/O)	AD0	ACK64#	GND
25	+5V	REQ64#	ENUM#	+3.3V	+5V	GND

***Note**: NC --> No Connect; # --> Active Low*

A.15 CompactPCI Rear I/O rJ2 Connector

Table A.15: J2 connector - CompactPCI I/O

Pin	Row A	Row B	Row C	Row D	Row E	Row F
1	CLK1	GND	REQ1#	GNT1#	REQ2#	GND
2	CLK2	CLK3	SYSEN#	GNT2#	REQ3#	GND
3	CLK4	GND	GNT3#	REQ4#	GNT4#	GND
4	V(I/O)	NC	C/BE7#	GND	C/BE6#	GND
5	C/BE5#	GND	V(I/O)	C/BE4#	PAR64	GND
6	AD63	AD62	AD61	GND	AD60	GND
7	AD59	GND	V(I/O)	AD58	AD57	GND
8	AD56	AD55	AD54	GND	AD53	GND
9	AD52	GND	V(I/O)	AD51	AD50	GND
10	AD49	AD48	AD47	GND	AD46	GND
11	AD45	GND	V(I/O)	AD44	AD43	GND
12	AD42	AD41	AD40	GND	AD39	GND
13	AD38	GND	V(I/O)	AD37	AD36	GND
14	AD35	AD34	AD33	GND	AD32	GND
15	NC	GND	FAL#	REQ5#	GNT5#	GND
16	NC	NC	DEG#	GND	NC	GND
17	NC	GND	PRST#	REQ6#	GNT6#	GND
18	NC	NC	NC	GND	NC	GND
19	NC	GND	NC	NC	NC	GND
20	CLK5	NC	NC	GND	NC	GND
21	CLK6	GND	NC	NC	NC	GND

***Note**: NC --> No Connect; # --> Active Low*

A.16 CompactPCI Rear I/O rJ3 Connector

Table A.16: J3 - CompactPCI I/O (LPT - FDD - Parallel IDE - 2.16)

Pin	Row A	Row B	Row C	Row D	Row E	Row F
1	LPT_PD0	LPT_PD1	LPT_PD2	LPT_PD3	LPT_PD4	GND
2	LPT_PD5	LPT_PD6	LPT_PD7	LPT_BUSY	FDD_DRVEN1	GND
3	LPT_STB#	LPT_AFD#	FDD_DRVEN0	FDD_INDEX#	FDD_DSKCHG#	GND
4	LPT_ERR#	LPT_ACK#	FDD_RDATA#	FDD_WP#	FDD_TRACK0#	GND
5	LPT_PE	LPT_SLCT	FDD_STEP#	FDD_MTR0#	FDD_WD#	GND
6	LPT_SLIN#	LPT_INIT#	FDD_WE#	FDD_HEAD#	FDD_DSA#	GND
7	FDD_DIR#	PATA_ACK#	PATA_RST#	SDIORDY	PATA_CS#1	GND
8	IRQ15	PATA_DETECT	PATA_DA0	PATA_DA1	PATA_DA2	GND
9	CF_LED#	RIO_CLOCK	PATA_IOW#	PATA_REQ	PATA_CS#3	GND
10	PATA_D15	PATA_D14	PATA_IOR#	PATA_D10	PATA_D11	GND
11	PATA_D5	PATA_D9	PATA_D13	PATA_D6	PATA_D8	GND
12	PATA_D1	PATA_D3	PATA_D12	PATA_D4	PATA_D7	GND
13	PATA_D0	PATA_D2	NC	NC	NC	GND
14	SATA_RX1N	SATA_RX1P	NC	SATA_TX1N	SATA_TX1P	GND
15	2.16_B1+	2.16_B1-	GND	2.16_B3+	2.16_B3-	GND
16	2.16_B0+	2.16_B0-	GND	2.16_B2+	2.16_B2-	GND
17	2.16_A1+	2.16_A1-	GND	2.16_A3+	2.16_A3-	GND
18	2.16_A0+	2.16_A0-	GND	2.16_A2+	2.16_A2-	GND
***Note**: NC --> No Connect; # --> Active Low*						

A.17 CompactPCI Rear I/O rJ5 Connector

Table A.17: J5, CompactPCI I/O (VGA - LAN - COM - USB - PS/2)

Pin	Row A	Row B	Row C	Row D	Row E	Row F
1	GbE1_MD0+	GbE1_MD0-	GND	GbE1_MD1+	GbE1_MD1-	GND
2	GbE1_MD2+	GbE1_MD2-	GND	GbE1_MD3+	GbE1_MD3-	GND
3	GbE2_MD0+	GbE2_MD0-	GND	GbE2_MD1+	GbE2_MD1-	GND
4	GbE2_MD2+	GbE2_MD2-	GND	GbE2_MD3+	GbE2_MD3-	GND
5	GND	GND	+3.3V	GND	GND	GND
6	GbE1_100#	GbE1_LNK#	GbE2_1000#	GbE2_LNK#	+5V	GND
7	GbE1_1000#	NC	GbE2_100#	NC	+5V	GND
8	NC	NC	COM2_TX	COM2_RTS	PS2_KBDAT	GND
9	NC	COM2_RX	COM2_DTR	COM2_CTS	PS2_KBCLK	GND
10	COM2_DCD	NC	COM2_RI	COM2_DSR	PS2_MSDAT	GND
11	COM1_RX	COM1_CTS	NC	NC	PS2_MSCLK	GND

***Note**: NC --> No Connect; # --> Active Low*