

cPCI-R6100

6U CompactPCI[®] Rear Transition Module

User's Manual



Manual Rev.: 1.0

Revision Date: July 3, 2018

Part No: 50-15108-1000

Revision History

Revision	Release Date	Description of Change(s)
1.0	2018/07/03	Initial release

Preface

Copyright 2018 ADLINK Technology, Inc.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

Disclaimer

The information in this document is subject to change without prior notice in order to improve reliability, design, and function and does not represent a commitment on the part of the manufacturer.

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

Environmental Responsibility

ADLINK is committed to fulfill its social responsibility to global environmental preservation through compliance with the European Union's Restriction of Hazardous Substances (RoHS) directive and Waste Electrical and Electronic Equipment (WEEE) directive. Environmental protection is a top priority for ADLINK. We have enforced measures to ensure that our products, manufacturing processes, components, and raw materials have as little impact on the environment as possible. When products are at their end of life, our customers are encouraged to dispose of them in accordance with the product disposal and/or recovery programs prescribed by their nation or company.



Battery Labels (for products with battery)



Li-ion



廢電池請回收

California Proposition 65 Warning



WARNING: This product can expose you to chemicals including acrylamide, arsenic, benzene, cadmium, Tris(1,3-dichloro-2-propyl)phosphate (TDCPP), 1,4-Dioxane, formaldehyde, lead, DEHP, styrene, DINP, BBP, PVC, and vinyl materials, which are known to the State of California to cause cancer, and acrylamide, benzene, cadmium, lead, mercury, phthalates, toluene, DEHP, DIDP, DnHP, DBP, BBP, PVC, and vinyl materials, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Trademarks

Product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective companies.

Conventions

Take note of the following conventions used throughout this manual to make sure that users perform certain tasks and instructions properly.



NOTE:

Additional information, aids, and tips that help users perform tasks.



CAUTION:

Information to prevent **minor** physical injury, component damage, data loss, and/or program corruption when trying to complete a task.



WARNING:

Information to prevent **serious** physical injury, component damage, data loss, and/or program corruption when trying to complete a specific task.

Table of Contents

Revision History	ii
Preface	iii
List of Figures	vii
List of Tables	ix
1 Introduction	1
1.1 Overview.....	1
1.2 Features.....	2
1.3 Package Contents	3
2 Specifications	5
2.1 cPCI-R6100 Series Specifications.....	5
2.2 Block Diagram	7
3 Board Interfaces	9
3.1 cPCI-R6100 Board Layout.....	9
3.2 cPCI-R6110/6120 Board Layout.....	11
3.3 Connector Pin Assignments	13
3.4 Switch Settings	21
4 Getting Started	23
4.1 Installing a 2.5" SATA Drive.....	23
4.2 2nd 2.5" SATA drive on cPCI-R6120.....	25
Important Safety Instructions	27
Getting Service	29

This page intentionally left blank.

List of Figures

Figure 2-1: cPCI-R6100 Functional Block Diagram	7
Figure 3-1: cPCI-R6100 Board Layout - Component Side.....	9
Figure 3-2: cPCI-R6100 SW1/SW2 Locations - Solder Side	10
Figure 3-3: cPCI-R6110/6120 Board Layout.....	11

This page intentionally left blank.

List of Tables

Table 2-1:	cPCI-R6100 Series Specifications.....	6
Table 3-1:	DVI-D Connector Pin Definition	13
Table 3-2:	Front Panel COM Pin Definitions.....	14
Table 3-3:	COM RJ-45 to DB-9 Cable Pin Definitions	14
Table 3-4:	VGA Pin Definition	15
Table 3-5:	DB-6920SAT/DB-6920CF Connector Pin Definition.....	18
Table 3-6:	CompactPCI rJ3 Connector Pin Definition.....	19
Table 3-7:	CompactPCI rJ5 Connector Pin Definition.....	20
Table 3-8:	PICMG 2.16 LAN Switch Settings	21

This page intentionally left blank.

1 Introduction

1.1 Overview

The cPCI-R6100 Series is a 6U CompactPCI® rear transition module (RTM) in single/dual slot (4/8HP) width form factor featuring up to quad Ethernet RJ-45 interfaces provided by an Intel® Ethernet Controller I350-AM2.

The cPCI-R6100 Series provides rich I/O interfaces to maximize the flexibility of the processor blade with up to four Ethernet RJ-45 ports, four USB 2.0, one DVI-D, one VGA, one RJ-45 serial port and one PS/2 keyboard mouse on the rear panel. The cPCI-R6110 and cPCI-R6120 offer VGA, two Ethernet RJ-45 ports, four USB 2.0 ports and one PS/2 keyboard mouse. Onboard storage interfaces for the cPCI-R6100, cPCI-R6110 and cPCI-R6120 include one SD card slot, one CompactFlash slot and two 7-pin SATA ports. The cPCI-R6110 provides space for one onboard 2.5" SATA drive and the cPCI-R6120 (8HP) offers an additional onboard 2.5" SATA drive space.

1.2 Features

- ▶ 6U CompactPCI RTM in 4HP/8HP width form factor
- ▶ Compliant with CompactPCI Specification 2.0, Rev. 3.0
- ▶ Compliant with CompactPCI Packet Switching Backplane Specification PICMG 2.16 Rev. 1.0
- ▶ One DVI-D port, one VGA port
- ▶ One DB-9 RS-232 serial port
- ▶ Four USB 2.0 Type A ports
- ▶ Two Gigabit Ethernet ports from onboard Intel® Ethernet Controller I350-AM2
- ▶ Two Gigabit Ethernet ports from processor blade by PICMG 2.16 (cPCI-R6100 only)
- ▶ One PS/2 keyboard mouse on faceplate
- ▶ Two SATA 7-pin connectors, CF card slot, SD card slot
- ▶ 2.5" drive space on cPCI-R6110, space for additional 2.5" drive on cPCI-R6120

1.3 Package Contents

The cPCI-R6100/cPCI-R6110/cPCI-R6120 is packaged with the following components. If any of the items on the contents list are missing or damaged, retain the shipping carton and packing material and contact the dealer for inspection. Please obtain authorization before returning any product to ADLINK.

Rear Transition Module

cPCI-R6100

- ▶ Y-cable for PS/2 combo port (PN: 30-01016-2000)
- ▶ RJ-45 to DB-9 COM cable (PN: 30-01020-0200)

cPCI-R6110

- ▶ The DB-6920SAT daughter board (PN: 59-37534-0000)
- ▶ HDD screw/standoff pack (PN: 58-00109-0000)
- ▶ Y-cable for PS/2 combo port (PN: 30-01016-2000)

cPCI-R6120

- ▶ The DB-6920SAT daughter board (PN: 59-37534-0000)
- ▶ HDD screw/standoff pack (PN: 58-00109-0000)
- ▶ Y-cable for PS/2 combo port (PN: 30-01016-2000)
- ▶ The 2nd SATA drive HDD kit (PN: 58-00250-0000)

Optional CompactFlash Adapter Kit

- ▶ DB-CF-SA kit for cPCI-R6110/R6120 (PN: 91-37533-0010)
 - ▷ DB-6920CF adapter board
 - ▷ Screw pack
 - ▷ CF card retention bracket



This product must be protected from static discharge and physical shock. Never remove any of the components except at a static-free workstation. Use the anti-static bag shipped with the product when putting the board on a surface. Wear an anti-static wrist strap properly grounded on one of the system's ESD ground jacks when installing or servicing system components.



The contents of non-standard cPCI-R6100 Series configurations may vary depending on the customer requests.

2 Specifications

2.1 cPCI-R6100 Series Specifications

Standards	<ul style="list-style-type: none"> • CompactPCI® Specification 2.0, Rev. 3.0 • CompactPCI® Packet Switching Backplane Specification PICMG 2.16 Rev. 1.0
Form Factor	<ul style="list-style-type: none"> • Standard 6U CompactPCI® Rear Transition Module • Board size: 233.35mm x 80mm • cPCI-R6100, cPCI-R6110: single slot (4HP, 20.32mm) • cPCI-R6120: dual-slot (8HP, 40.64mm) • CompactPCI® connectors rJ3 and rJ5
Onboard Peripherals	<p>cPCI-R6100</p> <ul style="list-style-type: none"> • 2x 7-pin Serial ATA connectors • CompactFlash Type II slot (converted from USB) • SD card slot <p>cPCI-R6110</p> <ul style="list-style-type: none"> • Direct connector for 2.5" SATA drive via DB-6920SAT daughter board* • 2x 7-pin SATA connectors • CompactFlash Type II slot (converted from USB) • SD card slot <p>cPCI-R6120</p> <ul style="list-style-type: none"> • Space for 2x 2.5" SATA drives • Direct connector for 2.5" SATA drive via DB-6920SAT daughter board* • 2x 7-pin SATA connectors • CompactFlash Type II slot (converted from USB) • SD card slot <p>*Can be replaced by optional DB-CF-SA CompactFlash Adapter Kit (PN: 91-37533-0010)</p>
Ethernet	<ul style="list-style-type: none"> • One Intel® Ethernet Controller I350-AM2 on RTM for additional two Gigabit Ethernet ports (GbE a & b) • Two 10/100/1000BASE-T ports switched from PICMG 2.16 (GbE c & d, cPCI-R6100 only)

Faceplate I/O	cPCI-R6100 <ul style="list-style-type: none"> • 4x USB2.0 ports • DVI-D port • DB-15 VGA port • RJ-45 RS-232 serial port • PS/2 Keyboard/Mouse port • 2x 10/100/1000BASE-T Ethernet ports from PICMG 2.16 cPCI-R6110, cPCI-R6120 <ul style="list-style-type: none"> • 4x USB 2.0 ports • 2x 10/100/1000BASE-T Ethernet ports from onboard Intel® Ethernet Controller I350-AM2 • DB-15 VGA port • PS/2 Keyboard/Mouse port
Miscellaneous	<ul style="list-style-type: none"> • Optional Gold Cap for RTC backup power in case there is no battery on the processor blade

Table 2-1: cPCI-R6100 Series Specifications



NOTE:

Windows does not support USB as host boot device. Therefore, a CompactFlash card cannot be used to install a Windows operating system.

2.2 Block Diagram

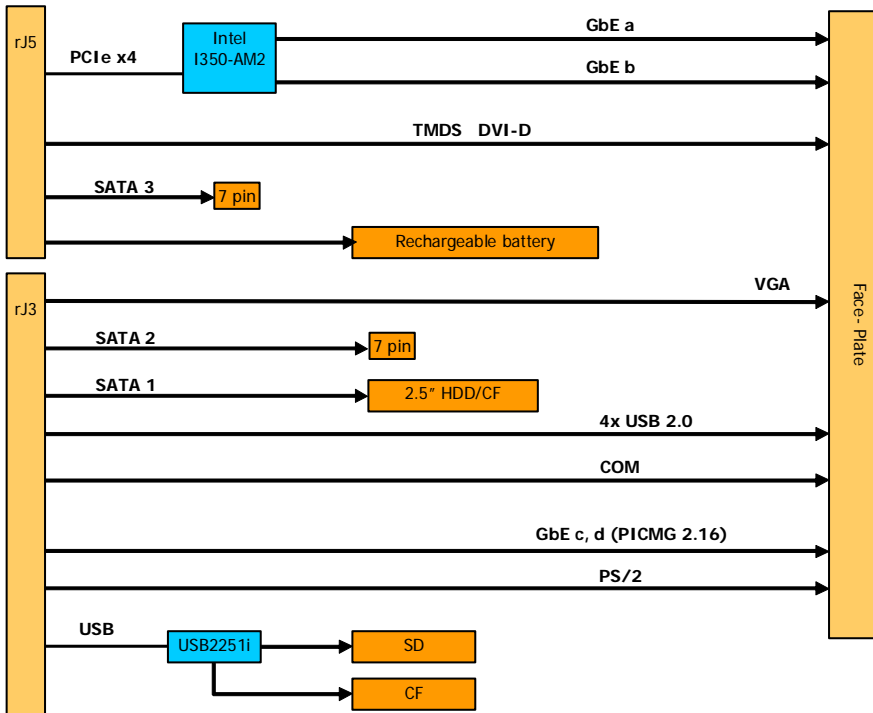


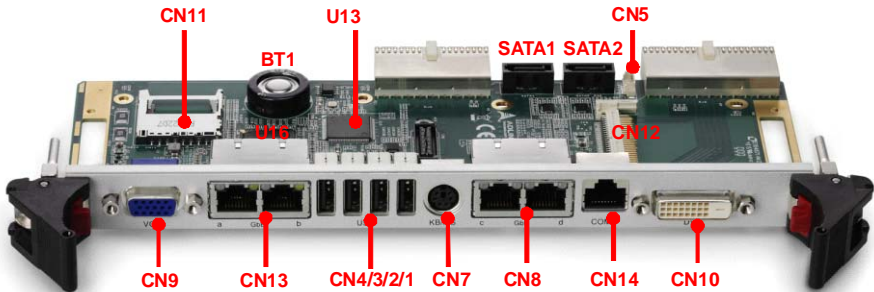
Figure 2-1: cPCI-R6100 Functional Block Diagram

This page intentionally left blank.

3 Board Interfaces

This chapter illustrates the board layout, connector pin assignments, and switch settings to familiarize users with the cPCI-R6100.

3.1 cPCI-R6100 Board Layout



U16	Intel I350-AM2 GbE controller	BT1	Gold Cap battery
U13	USB 2.0 Flash Card Reader Controller	SATA1/ SATA2	7-pin SATA connectors
CN11	SD card slot	CN5	SATA 5-pin power connector
CN12	CompactFlash slot	CN9	DB-15 VGA connector
CN13	2x GbE ports from Intel® I350-AM2 (GbE a/b)	CN8	2x GbE ports from PICMG 2.16 (GbE c/d)
CN1/2/3/4	USB 2.0 ports	CN7	PS/2 keyboard/mouse connector
CN10	DVI-D connector	CN14	RJ-45 serial port

Figure 3-1: cPCI-R6100 Board Layout - Component Side

cPCI-R6100 SW1/SW2 Locations

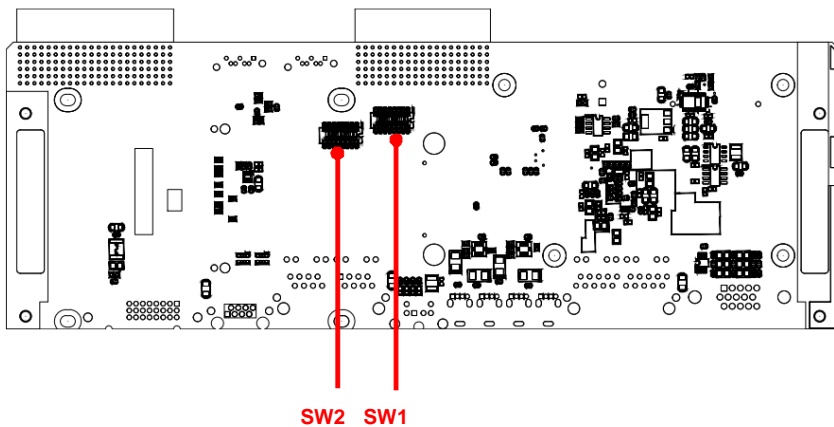
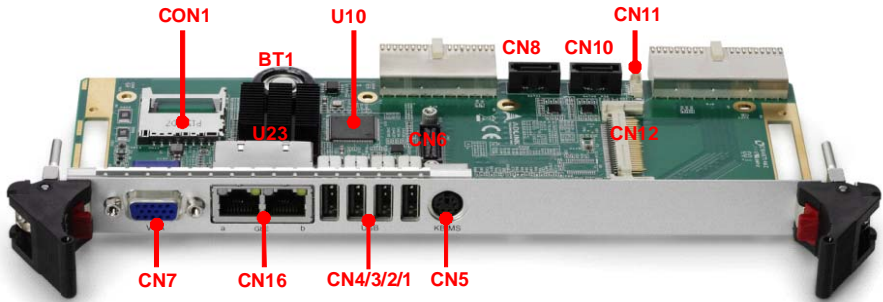


Figure 3-2: cPCI-R6100 SW1/SW2 Locations - Solder Side

3.2 cPCI-R6110/6120 Board Layout

cPCI-R6110 and cPCI-R6120 share the same board layout with the only difference being the 8HP front panel on the cPCI-R6120 to allow space for an additional 2.5" SATA drive.

cPCI-R6110



cPCI-R6120

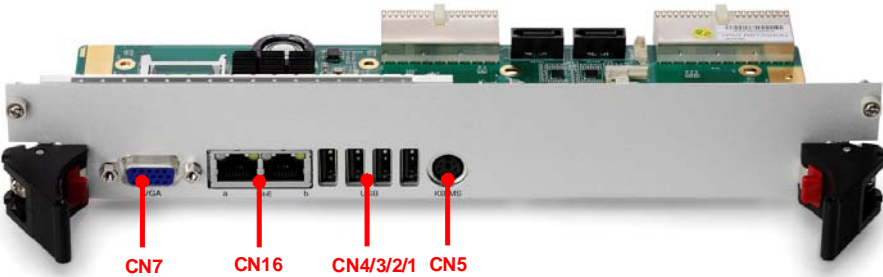


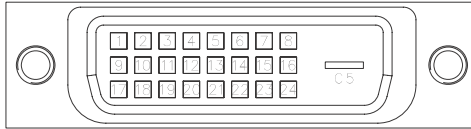
Figure 3-3: cPCI-R6110/6120 Board Layout

U23	Intel I350-AM2 GbE controller	CN6	DB-6920SAT connector
U10	USB 2.0 Flash Card Reader Controller	CN7	DB-15 VGA connector
CON1	SD card holder	CN8/10	SATA ports (7-pin)
BT1	Gold Cap battery (not populated by default)	CN11	SATA 5-pin power connector
CN5	PS/2 keyboard/mouse connector	CN12	CompactFlash socket
CN1/2/3/4	USB ports	CN16	2x GbE ports from Intel I350-AM2

3.3 Connector Pin Assignments

Faceplate Connectors

DVI-D Connector



Pin #	Signal	Pin #	Signal
1	TMDS Data2-	13	TMDS Data3+
2	TMDS Data2+	14	+5 V Power
3	TMDS Data2/4 Shield	15	GND
4	TMDS Data4-	16	Hot Plug Detect
5	TMDS Data4+	17	TMDS Data0-
6	DDC Clock [SCL]	18	TMDSData0+
7	DDC Data [SDA]	19	TMDS Data0/5 Shield
8	Analog vertical sync	20	TMDS Data5-
9	TMDS Data1-	21	TMDS Data5+
10	TMDS Data1+	22	TMDS Clock Shield
11	TMDS Data1/3 Shield	23	TMDS Clock+
12	TMDS Data3-	24	TMDS Clock-

Table 3-1: DVI-D Connector Pin Definition

RJ-45 Serial Port

Pin #	RS-232
1	DCD#
2	RTS#
3	DSR#
4	TXD
5	RXD
6	GND
7	CTS#
8	DTR#L

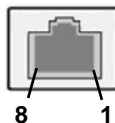


Table 3-2: Front Panel COM Pin Definitions

COM RJ-45 to DB-9 Cable

Pin #	RS-232
1	DCD#
2	RXD
3	TXD
4	DTR#L
5	GND
6	DSR#
7	RTS#
8	CTS#
9	—

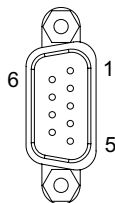
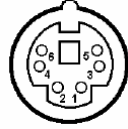


Table 3-3: COM RJ-45 to DB-9 Cable Pin Definitions

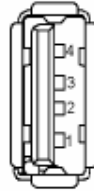
PS/2 Keyboard/Mouse Port

Pin #	Signal	Function
1	KB_DATA	Keyboard Data
2	MS_DATA	Mouse Data
3	GND	Ground
4	KM_VCC	Power
5	KB_CLK	Keyboard Clock
6	MS_CLK	Mouse Clock



USB 2.0 Type A Connectors

Pin #	Signal Name
1	Vcc
2	USB_D-
3	USB_D+
4	GND



DB-15 VGA Connector

Signal Name	Pin #	Pin #	Signal Name
Red	1	2	Green
Blue	3	4	N.C.
GND	5	6	GND
GND	7	8	GND
+5V.	9	10	GND
N.C.	11	12	CRTDATA
HSYNC	13	14	VSYNC
CRTCLK	15		

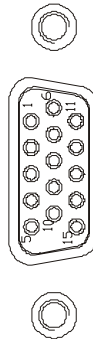
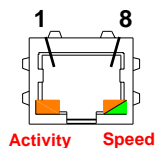


Table 3-4: VGA Pin Definition

GbE Connectors (RJ-45)

Pin #	10BASE-T/ 100BASE-TX	1000BASE-T
1	TX+	LAN_TX0P
2	TX-	LAN_TX0N
3	RX+	LAN_TX1P
4	--	LAN_TX2P
5	--	LAN_TX2N
6	RX-	LAN_TX1N
7	--	LAN_TX3P
8	--	LAN_TX3N

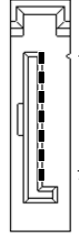


Status		Speed LED (Green/Amber)	Activity LED (Amber)
Network link is not established or system powered off		OFF	OFF
10 Mbps	Link	OFF	ON
	Active	OFF	Blinking
100 Mbps	Link	Green	ON
	Active	Green	Blinking
1000 Mbps	Link	Amber	ON
	Active	Amber	Blinking

Onboard Connectors

SATA Connectors

Pin #	Signal
1	GND
2	TX+
3	TX-
4	GND
5	RX-
6	RX+
7	GND



SATA Power Connector

Pin #	Signal
1	P5V
2	P12V
3	NC
4	GND
5	GND



DB-6920SAT/DB-6920CF Daughter Board Connector

Signal Name	Pin #	Pin #	Signal Name
GND	1	2	GND
GND	3	4	GND
GND	5	6	GND
GND	7	8	GND
GND	9	10	GND
GND	11	12	GND
GND	13	14	GND
GND	15	16	GND
GND	17	18	GND
GND	19	20	GND
GND	21	22	GND
GND	23	24	GND
GND	25	26	GND
GND	27	28	GND
GND	29	30	GND
P3V3	31	32	P5V
P3V3	33	34	P5V
P3V3	35	36	P5V
P3V3	37	38	P5V
P1V8	39	40	NC
P1V8	41	42	NC
P1V8	43	44	NC
GND	45	46	GND
GND	47	48	SATA-TXN0
GND	49	50	SATA-TXP0
SATA-RXN0	51	52	GND
SATA-RXP0	53	54	GND
GND	55	56	RESET#
GND	57	58	GND
GND	59	60	GND

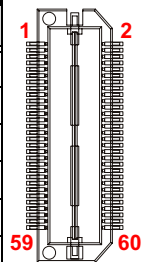


Table 3-5: DB-6920SAT/DB-6920CF Connector Pin Definition

CompactPCI rJ3 Connector

Pin	Z	A	B	C	D	E	F
19	GND	P5V	P5V	P12V	P5V	P5V	GND
18	GND	LANBB_TXDP0	LANBB_TXDN0	GND	LANBB_TXDP2	LANBB_TXDN2	GND
17	GND	LANBB_TXDP1	LANBB_TXDN1	GND	LANBB_TXDP3	LANBB_TXDN3	GND
16	GND	LANBA_TXDP0	LANBA_TXDN0	GND	LANBA_TXDP2	LANBA_TXDN2	GND
15	GND	LANBA_TXDP1	LANBA_TXDN1	GND	LANBA_TXDP3	LANBA_TXDN3	GND
14	GND	USB-OC5-L	USB-OC2-L	USB-OC3-L	USB-OC0-L	USB-OC1-L	GND
13	GND	NC	NC	GND	USB-P	USB-N	GND
12	GND	USB-P2	USB-N2	GND	USB-P3	USB-N3	GND
11	GND	USB-P4	USB-N4	GND	USB-P5	USB-N5	GND
10	GND	USB-OCL-L	DDCCLK	DDCDAT	HSYNC	VSYNC	GND
9	GND	COM1-CTS	COM1-RI	BLUE	RED	GREEN	GND
8	GND	COM1-RX	COM1-TX	COM1-DTR	COM1-DSR	COM1-RTS	GND
7	GND	NC	NC	COM1-DCD	NC	NC	GND
6	GND	SATA-R4P	SATA-R4N	GND	SATA-R1P	SATA-R1N	GND
5	GND	GND	GND	NC	GND	GND	GND
4	GND	SATA-T4P	SATA-T4N	GND	SATA-T1P	SATA-T1N	GND
3	GND	PS2-KBD	PS2-KBC	NC	PS2-MSD	PS2/MSD	GND
2	GND	NC	NC	NC	NC	NC	GND
1	GND	NC	NC	NC	NC	NC	GND

Table 3-6: CompactPCI rJ3 Connector Pin Definition

CompactPCI rJ5 Connector

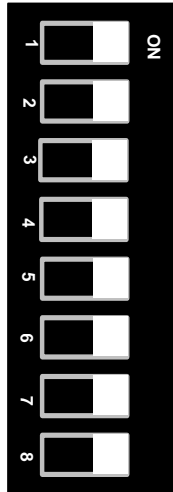
Pin	Z	A	B	C	D	E	F
22	GND	TP5	LANBA_LINK_ ACT-L	P3V3_LAN	LANBB_LINK_ ACT-L	P3V3_LAN	GND
21	GND	NC	NC	GND	NC	NC	GND
20	GND	NC	NC	GND	NC	NC	GND
19	GND	NC	NC	NC	NC	NC	GND
18	GND	NC	NC	NC	NC	NC	GND
17	GND	NC	NC	NC	NC	NC	GND
16	GND	NC	NC	NC	NC	NC	GND
15	GND	NC	NC	NC	SATA-R5P	SATA-R5N	GND
14	GND	NC	NC	GND	SATA-T5P	SATA-T5N	GND
13	GND	LANBA_100-L	LANBB_100-L	NC	LANBB_1G-L	LANBA_1G-L	GND
12	GND	MDVIDATA	MDVICLK	HPDET	NC	NC	GND
11	GND	TDC2-P	TDC2-N	GND	TLC-P	TLC-N	GND
10	GND	TDC0-P	TDC0-N	GND	TDC1-P	TDC1-N	GND
9	GND	GPIO1	GPIO2	NC	NC	NC	GND
8	GND	NC	NC	NC	NC	NC	GND
7	GND	GND	NC	BAT_RTM	GND	GND	GND
6	GND	PCIE-CLKP0	PCIE-CLKN0	GND	PLT_RST	NC	GND
5	GND	GND	GND	GND	GND	GND	GND
4	GND	PCIE-RP3	PCIE-TN3	GND	PCIE-RP3	PCIE-RN3	GND
3	GND	PCIE-TP2	PCIE-TN2	GND	PCIE-RP2	PCIE-RN2	GND
2	GND	PCIE-TP1	PCIE-TN1	GND	PCIE-RP1	PCIE-RN1	GND
1	GND	PCIE-TP0	PCIE-TN0	GND	PCIE-RP0	PCIE-RN0	GND

Table 3-7: CompactPCI rJ5 Connector Pin Definition

3.4 Switch Settings

PICMG 2.16 LAN Switches (SW1, SW2)

The cPCI-R6100 can route LAN signals from the CPU blade to either the PICMG 2.16 backplane or to GbE c and GbE d on the faceplate I/O (but not both simultaneously). The following table shows how to set switches SW1 and SW2 (located on the solder side) to connect GbE c and GbE d to either the PICMG 2.16 backplane or to Rear I/O (set to faceplate RJ-45 connectors by default).



LAN signals routed to	GbE c (SW1)	GbE d (SW2)
PICMG 2.16 Backplane	All OFF	All OFF
Faceplate RJ-45 connectors (default)	All ON	All ON

Table 3-8: PICMG 2.16 LAN Switch Settings

This page intentionally left blank.

4 Getting Started

The cPCI-R6110/cPCI-R6120 provide space onboard to mount a 2.5" storage device.

4.1 Installing a 2.5" SATA Drive

Follow the steps below to install a 2.5" SATA drive on the cPCI-R6110/cPCI-R6120.

1. Find the DB-6920SAT adapter and 2.5" SATA drive kit in the package. Screw the four M3 6.75mm standoffs onto the back of the 2.5" SATA drive.



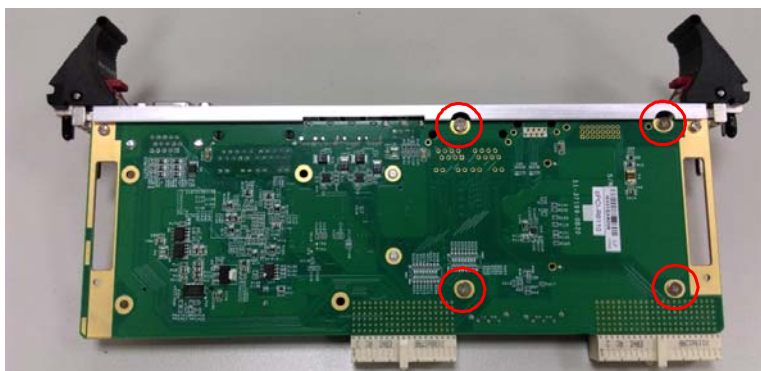
2. Connect the 2.5" SATA drive to the DB-6920SAT adapter board.



3. Align the SATA drive and adapter board on the cPCI-R6110/cPCI-R6120 as shown below and press it onto the board-to-board connector CN6. Fasten the two M2.5 4mm screws as shown.



4. Fasten the four M3 4mm screws from the back side as shown below to secure the SATA drive to the RTM.



4.2 2nd 2.5" SATA drive on cPCI-R6120

The cPCI-R6120 provides space on layer 2 to install one additional 2.5" SATA drive. Follow the instructions below to install the additional 2.5" SATA drive to the cPCI-R6120.

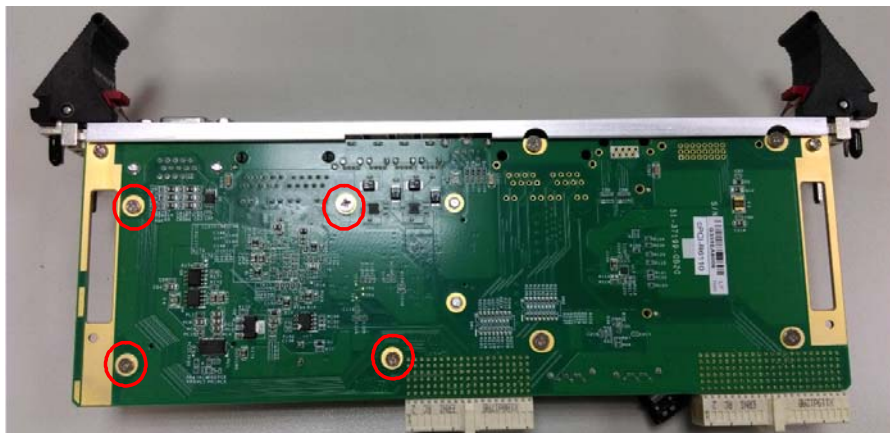
1. Find the SATA bracket, cable and screw kit. Assemble the bracket to the SATA drive, attached the cable to the SATA drive, and fasten the four M2.5 6mm screws as shown below to secure the SATA drive and bracket together.



2. Place the drive assembly onto the cPCI-R6120 as shown below. Insert the SATA connector into CN8.



3. Fasten the four M3 8mm screws from the back side as shown below to secure the drive assembly to the RTM.



Important Safety Instructions

For user safety, please read and follow all **instructions**, **WARNINGS**, **CAUTIONS**, and **NOTES** marked in this manual and on the associated equipment before handling/operating the equipment.

- ▶ Read these safety instructions carefully.
- ▶ Keep this user's manual for future reference.
- ▶ Read the specifications section of this manual for detailed information on the operating environment of this equipment.
- ▶ When installing/mounting or uninstalling/removing equipment:
 - ▷ Turn off power and unplug any power cords/cables.
- ▶ To avoid electrical shock and/or damage to equipment:
 - ▷ Keep equipment away from water or liquid sources;
 - ▷ Keep equipment away from high heat or high humidity;
 - ▷ Keep equipment properly ventilated (do not block or cover ventilation openings);
 - ▷ Make sure to use recommended voltage and power source settings;
 - ▷ Always install and operate equipment near an easily accessible electrical socket-outlet;
 - ▷ Secure the power cord (do not place any object on/over the power cord);
 - ▷ Only install/attach and operate equipment on stable surfaces and/or recommended mountings; and,
 - ▷ If the equipment will not be used for long periods of time, turn off and unplug the equipment from its power source.

- ▶ Never attempt to fix the equipment. Equipment should only be serviced by qualified personnel.

A Lithium-type battery may be provided for uninterrupted, backup or emergency power.



Risk of explosion if battery is replaced with one of an incorrect type. Dispose of used batteries appropriately.

- ▶ Equipment must be serviced by authorized technicians when:
 - ▷ The power cord or plug is damaged;
 - ▷ Liquid has penetrated the equipment;
 - ▷ It has been exposed to high humidity/moisture;
 - ▷ It is not functioning or does not function according to the user's manual;
 - ▷ It has been dropped and/or damaged; and/or,
 - ▷ It has an obvious sign of breakage.

Getting Service

Ask an Expert: <http://askanexpert.adlinktech.com>

ADLINK Technology, Inc.

9F, No.166 Jian Yi Road, Zhonghe District
New Taipei City 235, Taiwan
Tel: +886-2-8226-5877
Fax: +886-2-8226-5717
Email: service@adlinktech.com

Ampro ADLINK Technology, Inc.

5215 Hellyer Avenue, #110
San Jose, CA 95138, USA
Tel: +1-408-360-0200
Toll Free: +1-800-966-5200 (USA only)
Fax: +1-408-360-0222
Email: info@adlinktech.com

ADLINK Technology (China) Co., Ltd.

300 Fang Chun Rd., Zhangjiang Hi-Tech Park
Pudong New Area, Shanghai, 201203 China
Tel: +86-21-5132-8988
Fax: +86-21-5132-3588
Email: market@adlinktech.com

ADLINK Technology GmbH

Hans-Thoma-Strasse 11
D-68163 Mannheim, Germany
Tel: +49-621-43214-0
Fax: +49-621 43214-30
Email: emea@adlinktech.com

Please visit the Contact page at **www.adlinktech.com** for information on how to contact the ADLINK regional office nearest you.