PXIS-2680P

8-Slot 3U PXI
Portable Instrument Chassis with
300W+300W AC Power Supply
User's Manual

Manual Rev. 2.00

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1 Introduction

ADLINK PXIS-2680P is a highly integrated and fully mobile 3U PXI instrument chassis offering 8-slot capacity for modules. Defined as the next generation solution for rugged portables, the PXIS-2680P has many high impact, surpassingly flexible, and exceedingly powerful characteristics. It features one dedicated slot for a system controller and seven general purpose slots for peripheral PXI and CompactPCI modules. The PXIS-2680P also provides connectors for multiple input devices, such as the integrated keyboard and touch pad, and the touch panel LCD. This integrated PXI portable chassis also implements complete PXI functionalities, including PXI trigger bus, star trigger, PXI local bus, and a 10MHz reference clock. Synchronous operation between each module is achievable by applying these PXI designs.

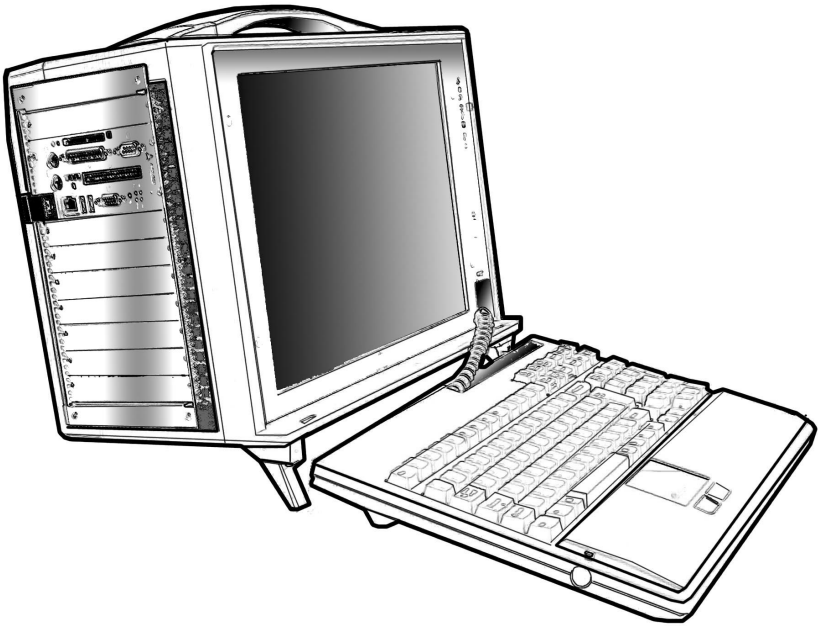


Figure 1-1: PXIS-2680P 3U PXI Portable Instrument Chassis

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The PXIS-2680P includes a 15” SVGA LCD touch screen—an additional monitor is not necessary. No additional LCD, touch panel, or keyboard wiring is required when using either the ADLINK PXD-3710/3710F or the PXI-3800 system controller as all necessary wiring has been integrated through the PXIS-2680P. A built-in DVD combo drive is suitable for high speed recording or backup of valuable data. A 300W+300W redundant power module is included with the chassis, making the PXIS-2680P both ideal and reliable for any critical application. The PXIS-2680P also has two 8cm fans to provide an air flow rate of up to 79 CFM. Located on the panel, there are several LEDs and an alarm speaker to monitor any failure.

Users can develop custom Test and Measurement applications directly on the PXIS-2680P, of which its environment is quite the same as a standard PXI platform. By combining advanced designs, the PXIS-2680P is able to supply a wide range of applications that run in an integrated portable and dependable chassis, such as power industry, military, and telecommunication applications.

1.1 Features

- Designed for portable instrument applications
- Accepts both 3U PXI and CompactPCI modules
- PICMG 2.0 CompactPCI specifications R3.0 compliant
- PXI specification Rev.2.2 compliant
- Provides a PXI trigger bus, 10MHz reference clock, star trigger, and PXI local bus
- One system slot and 7 PXI/CompactPCI peripheral slots
- High brightness 15” TFT LCD display, 1024×768 resolution
- Multiple input devices including 108-key keyboard, touch pad and touch panel
- One built-in slim-type DVD combo drive
- Dual hot swappable 300W ATX mini-redundant power supplies

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1.2 Specifications

Complies with PXI Rev.2.2 specifications and accepts modules compliant with CompactPCI, PICMG 2.0 specifications

Electrical

- AC Power Supply
  - Dual 300W mini redundant, hot-swappable power supply, current sharing for all voltage
  - Input voltage: 115 to 230VAC, auto selectable
  - Input frequency: 47 to 63Hz ± 5%
  - Output:

AC	+3.3V	+5V	-5V	+12V	-12V	+5Vsb
Max. Load	24A	30A	0.5A	15A	0.8A	2.0A
Min. Load	0.3A	3.0A	0.1A	2.0A	0.1A	0.1A

Table 1-1: Electrical Output

Note: Combined power from +5V and +3.3V cannot exceed 150W. Combined power from +5V, +3.3V and +12V cannot exceed 275W. Both -5V and +5Vsb are not used in the system.

Touch LCD Panel

- 15" TFT, 1024×768 resolution
- 250 nits, contrast 350:1, long live 50,000hrs backlight at 25°C

Input Devices

- Keyboard: Mechanical-typed 108-key keyboard with touch pad
- Five keyboard types: Chinese, France, Germany, Russian, USA
- Touch screen: 15" resistive type, connected to COM2 RS-232 interface, MTBF is 100,000hrs at 25°C

Drive Bay

- One slim type drive bay with Combo drive 8X CD-R/RW: 8× DVD-ROM, 24× CD-ROM

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Cooling

- Two 8cm, 12VDC ball bearing fans, 41CFM air flow/each

Physical

- Number of PXI/CompactPCI slots: 8 (1 controller, 7 peripherals)
- Number of controller expansion slots: 3 (total 4-slot)
- Dimensions: 400mm x 291mm x 230mm (W x H x D, without fan frame)
- Net weight: 12kg without system controller and modules

Operating Environment

- Ambient temperature: 0 to 50°C
- Relative humidity: 20 to 90% @ 40°C, noncondensing

Storage Environment Temperature

- Ambient temperature: -20 to 60°C
- Relative humidity: 10 to 95% @ 40°C, noncondensing

Backplane

- Backplane bare-board material: UL 94V-0 rated
- Peripheral slots with star signals: from 3rd to the 8th slot
- PXI trigger bus: all
- PXI local bus: all
- 1 system slot on the left-hand side
- 7 peripheral slots, accept modules compliant with both PXI and CompactPCI specifications

Shock and Vibration

- Shock: 10Gpeak-to-peak, 11ms duration, non-operation
- Random Vibration:
  - Operating: 5 to 500Hz, 1.0GRMS, each axis
  - Non-operating: 5 to 500Hz, 2.0GRMS, each axis

Safety and EMC/EMI Compliance

- Safety: CE/LVD (EN60950)
- EMC/EMI: CE, FCC Class A

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Reliability

- MTBF:
  - Backplane: 800,000hrs
  - Power Supply: 100,000hrs @ full load

1.3 Mechanical Drawing and Outline

Mechanical Drawing

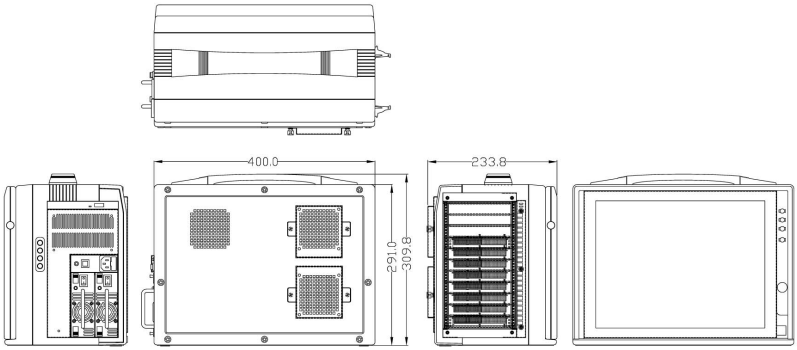


Figure 1-2: PXIS-2680P Mechanical Drawing

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Outline

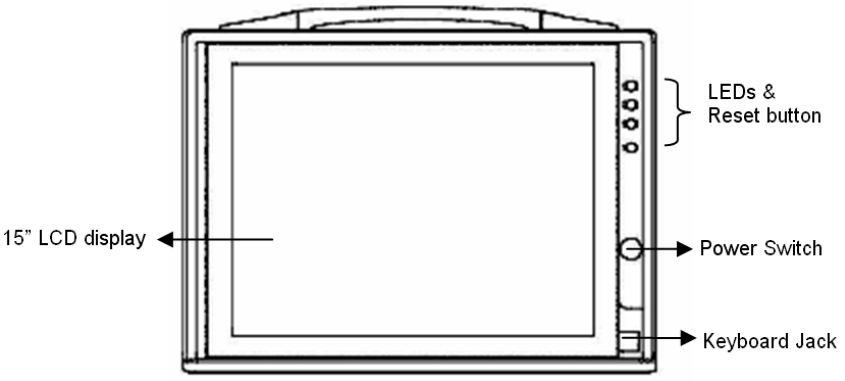


Figure 1-3: PXIS-2680P Front Panel View

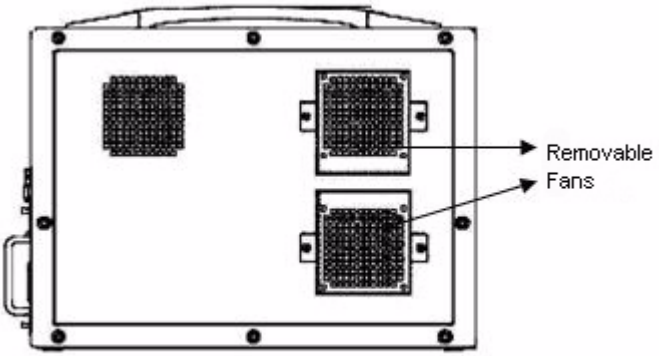


Figure 1-4: PXIS-2680P Rear View

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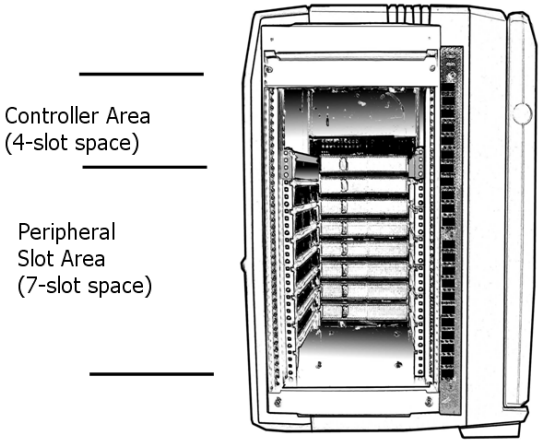


Figure 1-5: PXIS-2680P Left Hand Side View

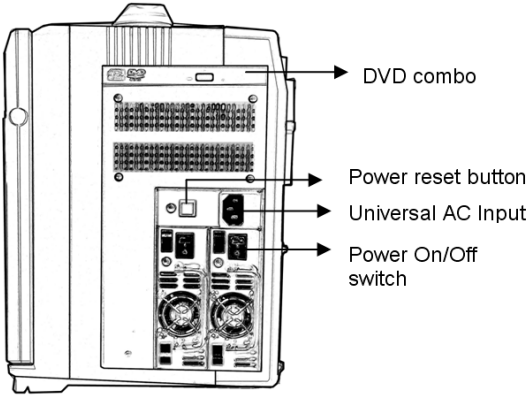


Figure 1-6: PXIS-2680P Right Hand Side View

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2 Getting Started

In this chapter, the unpacking procedure of the sub-system and how to configure a portable PXI system is described.

2.1 Unpacking Checklist

Check the shipping carton for any damage. If the shipping carton or its contents are damaged, please do not hesitate to notify the dealer for a replacement. Retain this shipping carton and packing material for inspection by the dealer. Check for the following items in the package. If any items are missing, contact your dealer.

- PXIS-2680P, 8-slot 3U PXI portable instrument chassis with 300W+300W AC power supply
- This User's Manual
- ADLINK T&M All-in-One CD
- Power cord (110V or 220V)

2.2 System Configuration

Before installing the system controller and peripherals on the PXIS-2680P or doing any hardware installation, please make sure that you completely understand the installation and compatibility of any upgrade. Please be aware that electrostatic damage can occur during handling of sensitive electronic equipments, proper precaution needs to be taken.

System Controller Installation

The PXIS-2680P is a PXI chassis which is compatible with both PXI and CompactPCI system controller. ADLINK's PXD-3710/3710F and PXI-3800 are the best choices for a system controller with their dedicated designs. Please follow the steps listed below to install and uninstall the system controller.

1. Smoothly slide the system controller into the system controller slot. Make sure that the system controller is aimed toward the rails. Never force the system controller into the slot.

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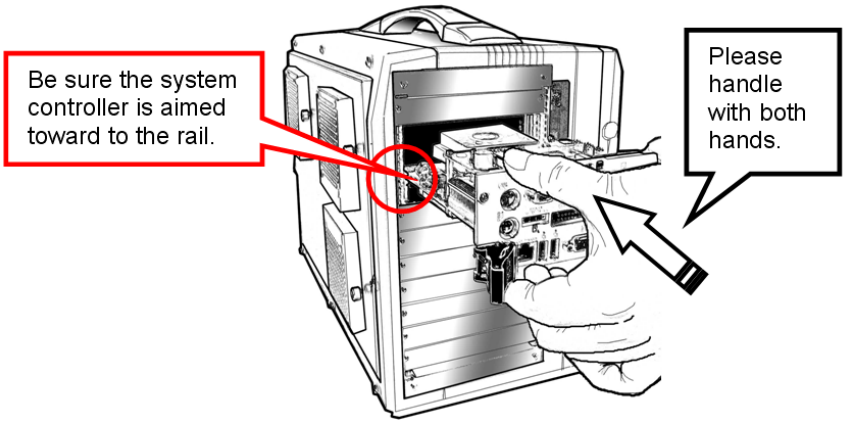


Figure 2-1: System Controller Installation

2. Push the handle until it clips in place. You will hear a click sound when the handle has been pulled up.

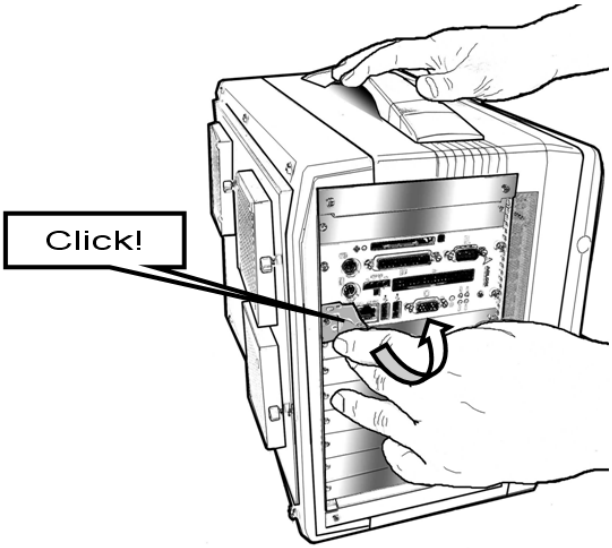


Figure 2-2: Pull the Handle Up

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3. Insert the controller board mounting screws and screw tightly.

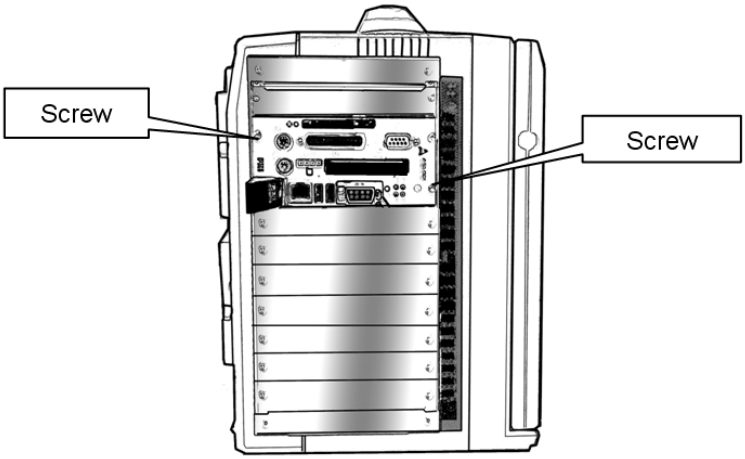


Figure 2-3: Mount the Controller Card with Screws

4. When taking out the controller card, unscrew the mounting screws and push the controller out.

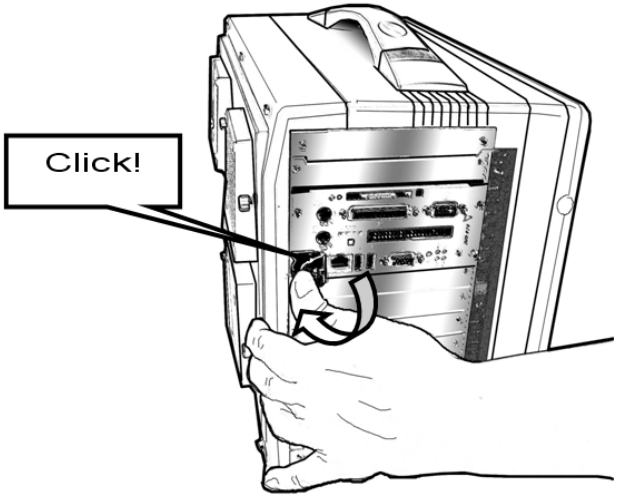


Figure 2-4: Removing the Controller Card

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Peripheral Module Installation

1. Smoothly slide the peripheral module into an available peripheral slot. Make sure that the peripheral module is aimed toward the rails. Never force the peripheral module into the slot.
2. Push the handle until it clips in place. You will hear a click sound when the handle has been pulled up.
3. Insert the mounting screws and screw tightly.
4. When taking out the peripheral module, unscrew the mounting screws and push the switch out.

Power Supply Unit Replacement Procedures

There are two 1U redundant power supplies with full range auto-sensing, auto selection, and 300W output. If one power supply has a problem, the other will take over. An alarm will beep to remind you to change the defective power supply.

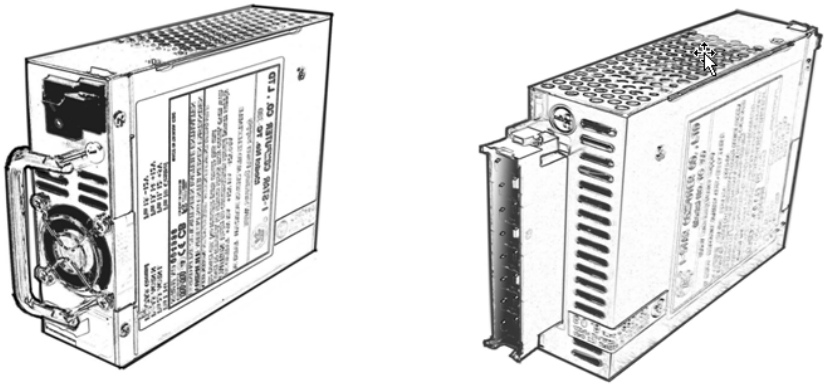


Figure 2-5: Redundant Power Supply (Front & Rear)

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Removing and Installing a Power Supply

1. Unscrew and remove the side panel.

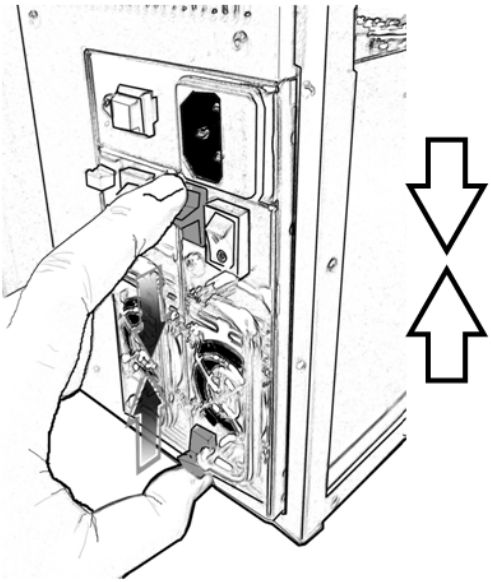


Figure 2-6: Removing the Power Supply (A)

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2. Pull out the power supply while pressing.

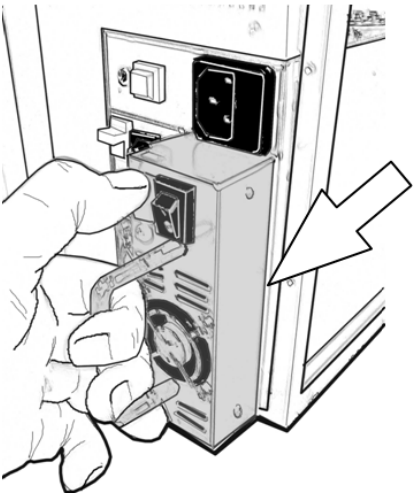


Figure 2-7: Removing the Power Supply (B)

3. To replace, push and slide in the new.

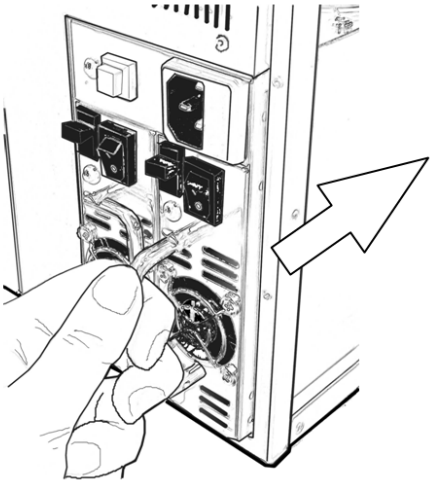


Figure 2-8: Replacing the Power Supply

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2.3 Operation Instructions

How to Release Keyboard and Touch Pad

There are two release buttons located at the top-left and top-right on the backside of the keyboard. After pressing in these two buttons, you can disengage the keyboard from PXIS-2680P. Two mounting feet located beneath the keyboard and are inserted on the portable for stability. The keyboard can now be lifted upward and freely removed for usage.

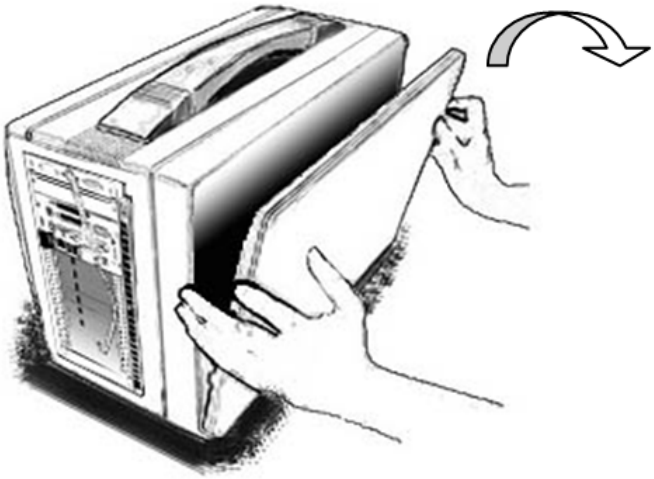


Figure 2-9: Releasing the Keyboard

How to Replace the Keyboard

To replace the keyboard back into the PXIS-2680P, follow the steps above in inverse. Note that the keyboard cable should be put back its proper original lodging on the keyboard. Make sure that all locking mechanisms are properly secured after the keyboard is pushed back. Never forcibly mount the keyboard to avoid damaging the PXIS-2680P.

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How to Setup the Keyboard

The keyboard cable is located on the top portion of the keyboard; it is a coil cable with an RJ-45 connector at the end. The connector needs to be attached to the portable (at the lower right hand corner) for operation.

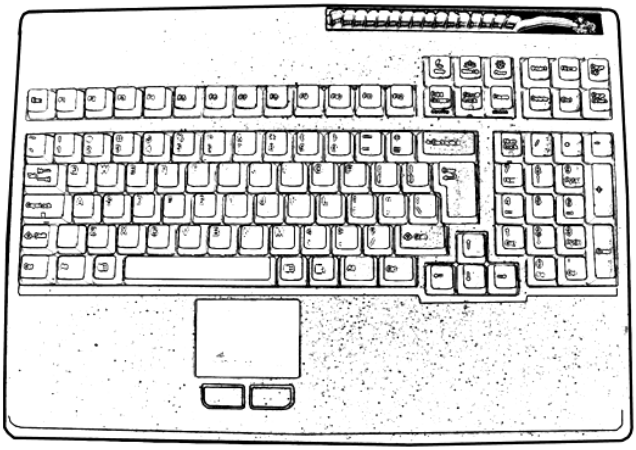


Figure 2-10: PXIS-2680P Keyboard

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Keyboard Positioning

The keyboard angle can be adjusted by tilting the keyboard feet located at the bottom.

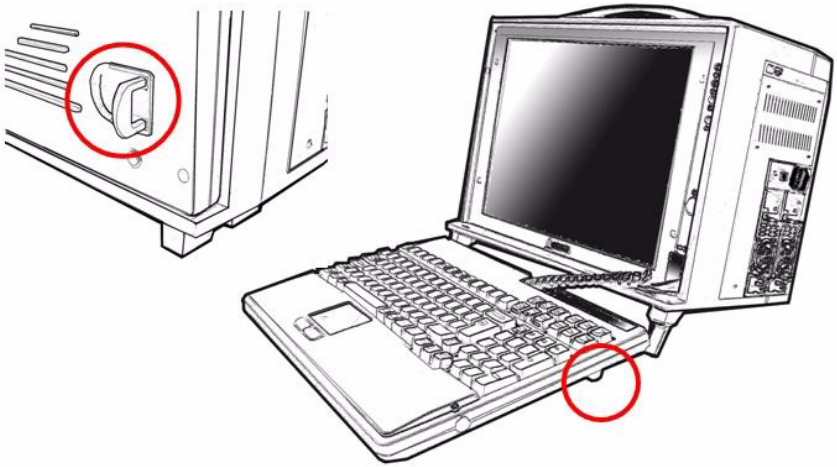


Figure 2-11: Positioning the Keyboard

Touchpad Operation

The touch pad operates similar to a mouse and is used to move the cursor in the graphic user interface (GUI) environment by placing and moving your finger. Two buttons located below the touch pad act as same as the left and right buttons of a mouse. You can also tap on the touch pad to indicate a left click.

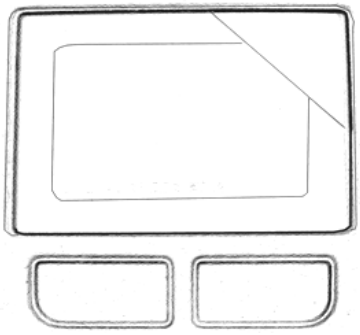


Figure 2-12: PXIS-2680P Touchpad

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LCD Display

The LCD display has a fixed mechanism. You can pull up the pair of feet at the bottom of the case to lift the LCD display upwards. To relock the LCD display, simply enclose the keyboard and push the feet back into its original position.

Before using touch panel functionality, you have to install the touch panel driver according to your operating system. Please refer to section 2.4 for details.

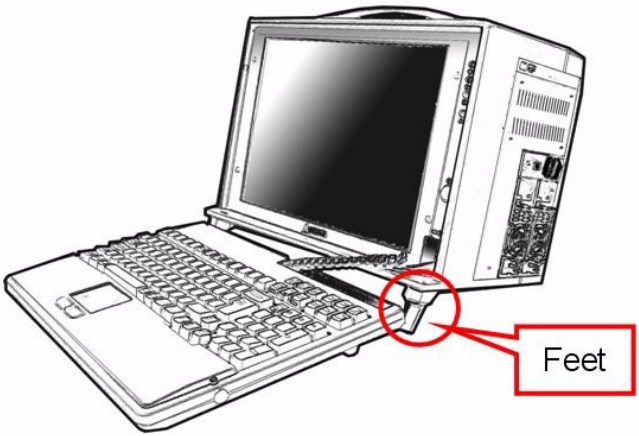


Figure 2-13: Lift the LCD Display Upward

DVD-ROM Drive

A DVD-ROM is located on the right side of the machine near the top. Open the DVD-ROM drive door by pushing the eject button located on the door of the drive. When the door is ejected, you can pull the door out completely and clip in the DVD into the platter securely face up; then push the door in completely. When the DVD-ROM is accessed, the LED on the DVD door will light up

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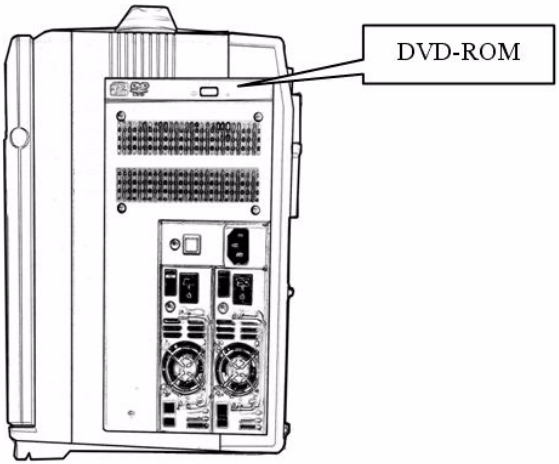


Figure 2-14: PXIS-2680P DVD-ROM

Cooling Fans

The cooling fans are located at the rear of the chassis for easy access. There are two cooling fans running at a total of 79CFM to ensure that the whole unit be within its working temperature. They can be easily exchanged a newer or better one.

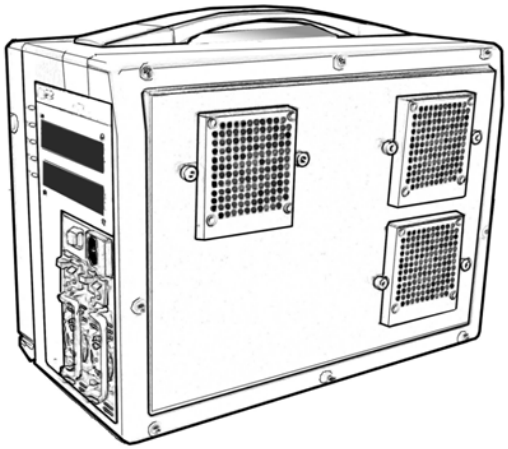


Figure 2-15: PXIS-2680P Cooling Fans

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2.4 Software Installation

To enable the touch panel functionality, users need to first install the driver into the system controller. To install the driver, please insert the ADLINK T&M All-in-One CD shipped with PXIS-2680P into the DVD-ROM. Drivers for different operating systems can be found at:

```
X:\Driver Installation\PXI Platform\PXI chassis\PXIS-2680P\Touch_Panel\Driver
```

Where X:\ is the DVD-ROM.

After installing the proper driver, the touch panel function can be used.

2.5 Powering Up the System

Connect the supplied power cord to the socket on the right side of the chassis. All supplied PSUs are universal and don't require input voltage settings. Inset a system module into the system slot. The power connector is located on the right side of the machine near the bottom. A three-pronged power plug is supplied. The main power switch located next to the power connector. Its position is as follows: O = Off, I = On. To power on the system, first turn on the PSUs and then power on the machine at the front of the portable, labeled Power. To turn off the power, press the power switch again after shutting down the OS.

2.6 System Monitoring

On the right side panel of the LCD, there are two LEDs and two small buttons. The LED marked by a lamp represents the power condition. This LED stays green when the system is on and is dark when the system is off.

The LED marked by "**T°!**" indicates that the temperature inside the PXIS-2680P is above 50°C. Once this occurs, this LED will light red and the internal speaker will beep. When the temperature drops back below 50°C, the alarm will automatically stop. Or, pushing the alarm reset button will also stop the alarm. When one of the fans fails, the alarm will again beep. Press the alarm reset button can remove this alarm as well.

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The LCD On/Off button turns the LCD on or off with each press.

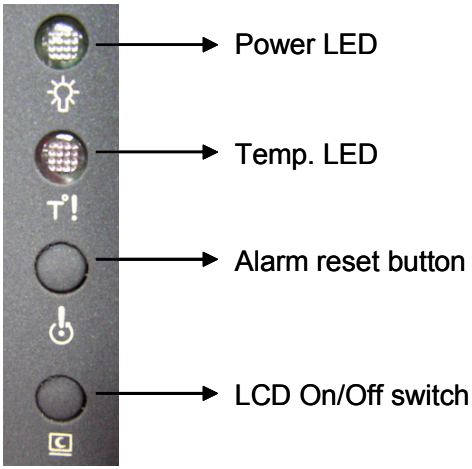


Figure 2-16: System Monitoring Panel

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3 Backplane Overview

The cBX-3008L backplane can accept both PXI compatible products and standard CompactPCI products. The signals on the P1 connector of the backplane meet CompactPCI specifications for both peripheral and system modules.

PXI-specific signals are located on P2. Only reserved signals or signals not used for the CompactPCI 64-bit specification are found on PXI specific signals; therefore, all modules that meet CompactPCI 64-bit specification requirements are capable of operating in the PXIS-2680P.

3.1 Specifications

System Controller Slot

The system controller slot is located at Slot 1 of the chassis as defined by the PXI specification. It has three controller expansion slots (four total), which are used for system controller modules that are wider than one slot. As defined in the PXI specification, these slots allow the controller to expand towards the left to prevent the controller from using up peripheral slots.

Star Trigger Slot

The star trigger (ST) slot is located at slot 2. This slot has dedicated trigger lines between itself and slot 3 to 8, which are intended for modules with ST functionality to provide individual triggers to the peripherals.

Peripheral Slots

There are 7 peripheral slots including the star trigger controller slot.

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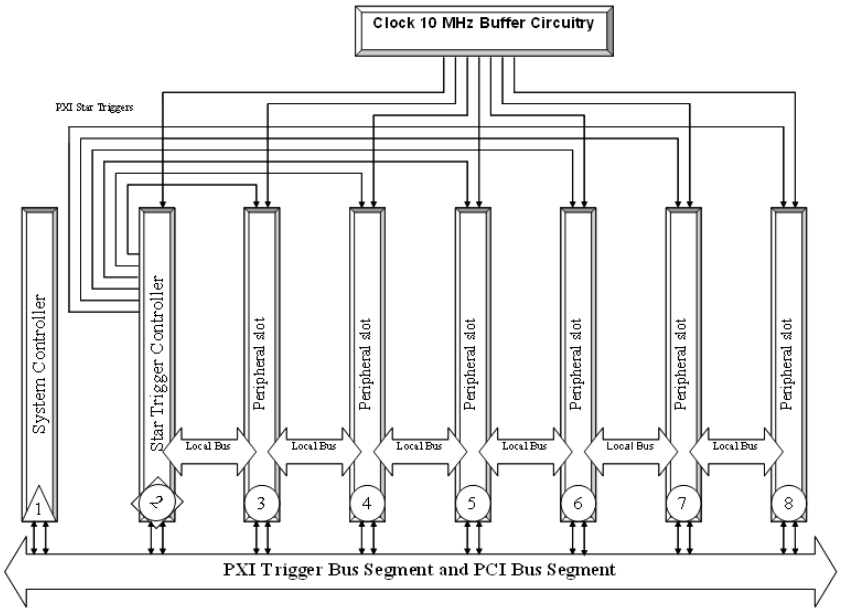


Figure 3-1: PXI Local Bus and Star Trigger Routing

Local Bus

The PXI backplane local bus of the cBX-3008L is a daisy-chained bus that connects each peripheral slot with its adjacent peripheral slots at the left and right. Each local bus is 13 lines wide and can pass analog or digital signals between modules or provide a high-speed side-band communication path that does not affect the PXI bus bandwidth. In accordance with the PXI specification, local bus connections are between all slots except slots 1 and 2.

Trigger Bus

The PXIS-2680P implements a dedicated PXI trigger bus with 8 lines. Users can use these trigger lines to synchronize the operation of several different PXI peripheral modules, or use one module to control carefully timed sequences of operations performed on other modules in the system. Modules can pass triggers to one another through trigger bus, allowing precisely timed responses to

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asynchronous external events the system is monitoring or controlling.

System Reference Clock

The PXIS-2680P supplies the PXI 10MHz system clock signal (PXI_CLK10) independently to every peripheral slot. An independent buffer (having a source impedance matched to the backplane and a skew of less than 1ns between slots) drives the clock signal to each peripheral slot. Users can use this common reference clock signal to synchronize multiple modules in a measurement or control system or drive PXI_CLK10 from an external source through the PXI_CLK10_IN pin on the P2 connector of the star trigger slot. Users can select the internal or external clock by setting the jumper JP2 and JP3 in the back of the backplane.

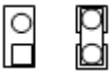
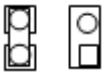
JP2 JP3	Pin 1-2	Description
	Open JP2 Short JP3	External clock through the PXI_CLK10_IN on star trigger slot
	Short JP2 Open JP3 (default)	Internal 10MHz system clock PXI_CLK10

Table 3-1: JP2 and JP3 PXI Reference Clock Control

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3.2 Mechanical Drawing

The following figures show the two parts of the backplanes and mechanical drawing.

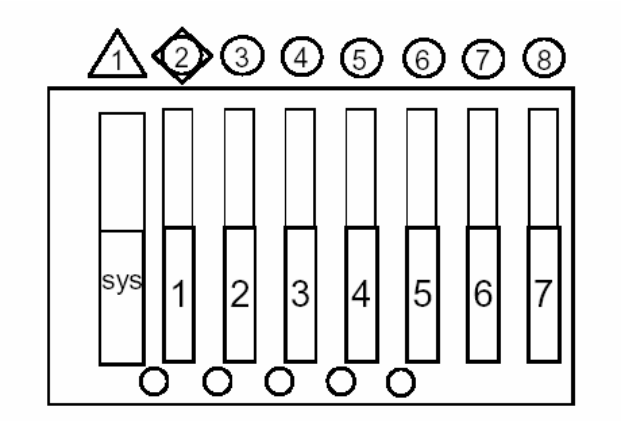


Figure 3-2: cBX-3008L Front View Drawing

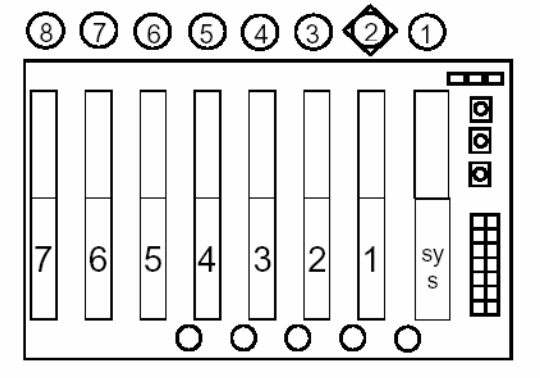


Figure 3-3: cBX-3008L Rear View Drawing

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3.3 Pin Assignment

System Controller

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]	GND	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	IPMB_SCL	IPMB_SDA	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						
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	REQ# (1)	GND	+3.3V	CLK (1)	AD[31]	GND
5	GND	BRSVP1A5	BRSVP1B5	PCIRST#	GND	GNT# (1)	GND
4	GND	IPMB_PWR	GND	V(I/O)	INTP	INTS	GND
3	GND	INTA# (1)	INTB# (1)	INTC# (1)	+5V	INTD# (1)	GND
2	GND	TCK	+5V	TMS	TDO	TDI	GND
1	GND	+5V	-12V	TRST#	+12V	+5V	GND

Table 3-2: System Slot (Slot #1) P1 Pin Assignment

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Pin	Z	A	B	C	D	E	F
22	GND	PXI_BRSVA22	PXI_BRSVB22	PXI_BRSVC22	PXI_BRSVD22	PXI_BRSVE22	GND
21	GND	CLK6	GND	NC	NC	NC	GND
20	GND	CLK5	GND	NC	GND	NC	GND
19	GND	GND	GND	SMBDATA	SMBCLK	SMBALERT-	GND
18	GND	PXI_TRIG3	PXI_TRIG4	PXI_TRIG5	GND	PXI_TRIG6	GND
17	GND	PXI_TRIG2	GND	PRST#	REQ6#	GNT6#	GND
16	GND	PXI_TRIG1	PXI_TRIG0	DEG#	GND	PXI_TRIG7	GND
15	GND	PXI_BRSVA15	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)	PXI_BRSVB4	C/BE[7]#	GND	C/BE[6]#	GND
3	GND	CLK4	GND	GNT3#	REQ4#	GNT4#	GND
2	GND	CLK2	CLK3	GND (SYS#)	GNT2#	REQ3#	GND
1	GND	CLK1	GND	REQ1#	GNT1#	REQ2#	GND

Table 3-3: System Slot (Slot #1) P2 Pin Assignment

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Star Trigger

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	IPMB_SCL	IPMB_SDA	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						
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 (1)	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# (1)	GND	+3.3V	CLK (1)	AD[31]	GND
5	GND	BRSVP1A5	BRSVP1B5	PCIRST#	GND	GNT# (1)	GND
4	GND	IPMB_PWR	GND	V(I/O)	INTP	INTS	GND
3	GND	INTA# (1)	INTB# (1)	INTC# (1)	+5V	INTD# (1)	GND
2	GND	TCK	+5V	TMS	TDO	TDI	GND
1	GND	+5V	-12V	TRST#	+12V	+5V	GND

Table 3-4: Star Trigger Slot (Slot #2) P1 Pin Assignment

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Pin	Z	A	B	C	D	E	F
22	GND	PXI_BRSVA22	PXI_BRSVB22	PXI_BRSVC22	PXI_BRSVD22	PXI_BRSVE22	GND
21	GND	PXI_LBR0	GND	PXI_LBR1	PXI_LBR2	PXI_LBR3	GND
20	GND	PXI_LBR4	PXI_LBR5	PXI_STAR0 (2)	GND	PXI_STAR1 (2)	GND
19	GND	PXI_STAR2 (2)	GND	PXI_STAR3 (2)	PXI_STAR4	PXI_STAR5	GND
18	GND	PXI_TRIG3	PXI_TRIG4	PXI_TRIG5	GND	PXI_TRIG6	GND
17	GND	PXI_TRIG2	GND	N/C	PXI_CLK10_IN	PXI_CLK10	GND
16	GND	PXI_TRIG1	PXI_TRIG0	N/C	GND	PXI_TRIG7	GND
15	GND	PXI_BRSVA15	GND	N/C	PXI_STAR6	PXI_LBR6	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)	PXI_BRSVB4	C/BE[7]#	GND	C/BE[6]#	GND
3	GND	PXI_LBR7	GND	PXI_LBR8	PXI_LBR9	PXI_LBR10	GND
2	GND	PXI_LBR11	PXI_LBR12	N.C (SYS#)	PXI_STAR7	PXI_STAR8	GND
1	GND	PXI_STAR9	GND	PXI_STAR10	PXI_STAR11	PXI_STAR12	GND

Table 3-5: Star Trigger Slot (Slot #2) P2 Pin Assignment

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General Peripheral

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	IPMB_SCL	IPMB_SDA	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						
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 (1)	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# (1)	GND	+3.3V	CLK (1)	AD[31]	GND
5	GND	BRSVP1A5	BRSVP1B5	PCIRST#	GND	GNT# (1)	GND
4	GND	IPMB_PWR	GND	V(I/O)	INTP	INTS	GND
3	GND	INTA# (1)	INTB# (1)	INTC# (1)	+5V	INTD# (1)	GND
2	GND	TCK	+5V	TMS	TDO	TDI	GND
1	GND	+5V	-12V	TRST#	+12V	+5V	GND

Table 3-6: General Peripheral Slot (Slots #3 - #6) P1 Pin Assignment

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Pin	Z	A	B	C	D	E	F
22	GND	PXI_BRSVA22	PXI_BRSVB22	PXI_BRSVC22	PXI_BRSVD22	PXI_BRSVE22	GND
21	GND	PXI_LBR0	GND	PXI_LBR1	PXI_LBR2	PXI_LBR3	GND
20	GND	PXI_LBR4	PXI_LBR5	PXI_LBL0	GND	PXI_LBL1	GND
19	GND	PXI_LBL2	GND	PXI_LBL3	PXI_LBL4	PXI_LBL5	GND
18	GND	PXI_TRIG3	PXI_TRIG4	PXI_TRIG5	GND	PXI_TRIG6	GND
17	GND	PXI_TRIG2	GND	N/C	PXI_STAR (2)	PXI_CLK10	GND
16	GND	PXI_TRIG1	PXI_TRIG0	N/C	GND	PXI_TRIG7	GND
15	GND	PXI_BRSVA15	GND	N/C	PXI_LBL6	PXI_LBR6	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)	PXI_BRSVB4	C/BE[7]#	GND	C/BE[6]#	GND
3	GND	PXI_LBR7	GND	PXI_LBR8	PXI_LBR9	PXI_LBR10	GND
2	GND	PXI_LBR11	PXI_LBR12	N/C (SYS#)	PXI_LBL7	PXI_LBL8	GND
1	GND	PXI_LBL9	GND	PXI_LBL10	PXI_LBL11	PXI_LBL12	GND

Table 3-7: General Peripheral Slot (Slots #3 - #6) P2 Pin Assignment

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Note: Please refer the following table for the routing of the Bus Mastering (REQ/GNT), IDSEL, PCI CLK, and Interrupt signals.

	IDSEL	REQ# GNT#	PCI CLK	PXI P1 Pin A3	PXI P1 Pin B3	PXI P1 Pin C3	PXI P1 Pin E3
Slot 1(SYS)	-	-	-	INTA#	INTB#	INTC#	INTD#
Slot 2	AD31	0	6	INTD#	INTA#	INTB#	INTC#
Slot 3	AD30	1	5	INTC#	INTD#	INTA#	INTB#
Slot 4	AD29	2	1	INTB#	INTC#	INTD#	INTA#
Slot 5	AD28	3	2	INTA#	INTB#	INTC#	INTD#
Slot 6	AD27	4	3	INTD#	INTA#	INTB#	INTC#
Slot 7	AD26	5	4	INTC#	INTD#	INTA#	INTB#
Slot 8	AD25	6	0	INTB#	INTC#	INTB#	INTA#

Table 3-8: Signal Routing

Note Please refer the following table for the routing of the PXI_STAR addressing signals from the trigger slot to peripheral slots

Physical Slot Number	PXI_STAR (P2-D17)
Slot 2 (Star Trigger Slot)	PXI_STAR0 - PXI_STAR5
Slot 3	PXI_STAR0
Slot 4	PXI_STAR1
Slot 5	PXI_STAR2
Slot 6	PXI_STAR3
Slot 7	PXI_STAR4
Slot 8	PXI_STAR5

Table 3-9: PXI_STAR Routing

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4 Troubleshooting and Maintenance

4.1 Troubleshooting

Installation Issues:

1. Failure to power on is typically due to the installation problems.
2. Double check all peripheral modules or items that you have added to the PXIS-2680P.
3. Are all the items seated properly?
4. Are all the cables connected to their correct positions?
5. Are the modules and items you have added compatible?
6. Before checking these, turn off the system and unplug the power cord.
7. Check for 1 through 5 and then re-power the system.
8. Remove all items that were added and retry system.
9. If the system starts now, try inserting 1 new item at a time and try powering up.
10. Repeat this step until you get the desired result.

BIOS Beep Code:

The BIOS beep code indicates error in system initialization. A BIOS beep of the system controller is usually associated with video and memory error. Please check that the video card is properly seated and that memory is installed properly.

System Fails to Power Up:

1. Check you power connection.
2. Check that the main power switch is in the on position (I).
3. Press the power button located in front of the PXIS-2680P.

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No Display (LCD):

1. Check that all the proper power up procedures has been taken.
2. Hook up an external CRT to the VGA port check whether video output is present.
3. If video output is present on an external CRT, check the internal LCD cable connection.
4. Or check your BIOS settings. Make sure that you choose the boot display as "CRT+DVI".
5. If there is no video externally, check your system to make sure everything is seated properly.
6. If everything is seated properly and still no video, call us for further assistance.

Keyboard Failure:

1. Check to see if the keyboard plug is inserted completely into the portable.
2. Check to see if you do not have another keyboard connected to the side I/O PS/2 port.

Touchpad Failure:

1. Check to see if the keyboard plug is inserted completely into the portable.
2. If you have an external PS/2 mouse hooked up on the side I/O PS/2 port, the touchpad will not function.
3. If your operating system requires a mouse driver, make sure you have the proper mouse driver installed and loaded.

DVD-ROM Failure:

1. Make sure the DVD is readable.
2. If the DVD-ROM fails to be recognized during POST, check to ensure that the internal cable is secure.

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4.2 Maintenance

PXIS-2680P

You should always make sure that the keyboard assembly is properly attached onto the PXIS-2680P before transporting it. This ensures that the keyboard will not be lost and protects the LCD screen. You may transport the portable in an additional carrying case, or you can carry the PXIS-2680P on its handle located on top. The handle is securely attached to the strongest part of the machine and distributes the load of the PXIS-2680P evenly as to allow easy carriage and proper balance.

Cables

All cables should be treated with care. Never over extend any cable or it could result in internal breakage. It is essential that the cables and plugs be handled in a proper manner without force.

LCD

Do not use any abrasive materials to wipe the LCD screen, as they can scratch the surface. Do not apply heavy pressure on the surface of the LCD screen to prevent internal damage or cracking.

Power

Always make sure the power cord is in great condition before using with the PXIS-2680P. Make sure your power source is reliable and of proper standard. The PXIS-2680P power supply is capable of handling 115-230V and 47-63Hz. Never use the PXIS-2680P on an already overloaded circuit.

Keyboard

The keyboard is essential in helping protect the LCD during transportation. Never allow liquid drops or small objects to enter the keyboard. Keep the touchpad surface dry and clean for proper use.

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Cleaning the LCD

1. Do not use cleaners that contain alcohol.
2. Do not use a cloth that could be abrasive to the surface of the LCD
3. Always gently wipe the LCD surface when cleaning.

Cleaning the Keyboard

1. Do not spill any liquid on to the keyboard.
2. Do not drop particles into the spaces between keys.
3. Remove dust built-up with a compress air cleaner.

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Important Safety Instructions

Please read and follow all instructions marked on the product and in the documentation before operating the system. Retain all safety and operating instructions for future use.

- Please read these safety instructions carefully.
- Please keep this User's Manual for future reference.
- The equipment should be operated in an ambient temperature between 0 to 50°C.
- The equipment should be operated only from the type of power source indicated on the rating label. Make sure the voltage of the power source is correct when connecting the equipment to the power outlet.
- If the user's equipment has a voltage selector switch, make sure that the switch is set to the proper position for the area. The voltage selector switch is set at the factory to the correct voltage.
- For pluggable equipment, ensure they are installed near a socket-outlet that is easily accessible.
- Secure the power cord to prevent unnecessary accidents. Do not place anything over the power cord.
- If the equipment will not be in use for long periods of time, disconnect the equipment from mains to avoid being damaged by transient overvoltage.
- All cautions and warnings on the equipment should be noted.
- Please keep this equipment away from humidity.
- Do not use this equipment near water or a heat source.
- Place this equipment on a reliable surface when installing. A drop or fall could cause injury.
- Never pour any liquid into the opening, this could cause fire or electrical shock.

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- Openings in the case are provided for ventilation. Do not block or cover these openings. Make sure there is adequate space around the system for ventilation when setting up the work area. Never insert objects of any kind into the ventilation openings.
- To avoid electrical shock, always unplug all power and modem cables from the wall outlets before removing covers.
- Lithium Battery provided (real time clock battery)

  "CAUTION - Risk of explosion if battery is replaced by an incorrect type. Dispose used batteries as instructed in the instructions"
- The equipment should be checked by service personnel if one of the following situation arises:
  - The power cord or plug is damaged.
  - Liquid has penetrated the equipment.
  - The equipment has been exposed to moisture.
  - The equipment is not functioning or does not function according to the user's manual.
  - The equipment has been dropped and damaged.
  - If the equipment has obvious sign of breakage.
- Never open the equipment. For safety reasons, the equipment should only be opened by qualified service personnel.

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Warranty Policy

Thank you for choosing ADLINK. To understand your rights and enjoy all the after-sales services we offer, please read the following carefully.

1. Before using ADLINK's products please read the user manual and follow the instructions exactly. When sending in damaged products for repair, please attach an RMA application form which can be downloaded from: http://rma.adlinktech.com/policy/.
2. All ADLINK products come with a two-year guarantee:
   - The warranty period starts from the product's shipment date from ADLINK's factory.
   - Peripherals and third-party products not manufactured by ADLINK will be covered by the original manufacturers' warranty.
   - For products containing storage devices (hard drives, flash cards, etc.), please back up your data before sending them for repair. ADLINK is not responsible for loss of data.
   - Please ensure the use of properly licensed software with our systems. ADLINK does not condone the use of pirated software and will not service systems using such software. ADLINK will not be held legally responsible for products shipped with unlicensed software installed by the user.
   - For general repairs, please do not include peripheral accessories. If peripherals need to be included, be certain to specify which items you sent on the RMA Request & Confirmation Form. ADLINK is not responsible for items not listed on the RMA Request & Confirmation Form.

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3. Our repair service is not covered by ADLINK's two-year guarantee in the following situations:
   - Damage caused by not following instructions in the user's manual.
   - Damage caused by carelessness on the user's part during product transportation.
   - Damage caused by fire, earthquakes, floods, lightening, pollution, other acts of God, and/or incorrect usage of voltage transformers.
   - Damage caused by unsuitable storage environments (i.e. high temperatures, high humidity, or volatile chemicals).
   - Damage caused by leakage of battery fluid during or after change of batteries by customer/user.
   - Damage from improper repair by unauthorized technicians.
   - Products with altered and/or damaged serial numbers are not entitled to our service.
   - Other categories not protected under our warranty.
4. Customers are responsible for shipping costs to transport damaged products to our company or sales office.
5. To ensure the speed and quality of product repair, please download an RMA application form from our company website: http://rma.adlinktech.com/policy. Damaged products with attached RMA forms receive priority.

If you have any further questions, please email our FAE staff: service@adlinktech.com.

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