PXIS-2690P

14-Slot 3U Integrated Portable PXI Chassis
with 500 W AC Power Supply

User's Manual

Manual Rev. 2.00

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Recycled Paper

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Product Information		
Product Model		
Environment	OS: M/B:	CPU: BIOS:
	Chipset:	

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1 Introduction

The ADLINK PXIS-2690P is world's first highly integrated, 14-slot portable PXI chassis designed for advanced PXI instrumentation applications. The PXIS-2690P comes with a system slot and 13 peripheral slots that conveniently accommodate multiple PXI modules. The PXI chassis incorporates a high-brightness 15" TFT LCD display with touch panel, keyboard/touchpad, and a slim DVD combo drive into a single frame to provide superior portability and maximum performance.

Constructed in high-quality aluminum alloy, the PXIS-2690P delivers a fortified and compact chassis, minus the weight. An industrial-grade 500 W AC power supply comes pre-installed to the chassis and offers reliable and stable power to system components and peripheral modules. With three 120 mm x 120 mm system fans, the PXIS-2690P guarantees superb air flow to maintain a cool and efficient operating temperature. The ADLINK PXIS-2690P is an ideal solution for advanced PXI applications requiring portability, robustness, and easy-deployment.



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1.1 Features

- Ruggedly-designed for portable instrumentation applications
- Supports both 3U PXI and CompactPCI modules
- PXI Specifications Rev. 2.2-compliant
- Equipped with a system slot and 13 PXI/CompactPCI peripheral slots
- 15" high-brightness TFT LCD display with up to 1024x768 resolution
- Multiple input devices, including keyboard, touch pad, and touch panel
- Built-in slim-type DVD combo drive
- 500 W industrial-grade ATX power supply
- Top cover for protecting PXI modules and wiring

1.2 Unpacking Checklist

Before unpacking, check the shipping carton for any damage. If the shipping carton and/or contents are damaged, inform your dealer immediately. Retain the shipping carton and packing materials for inspection. Obtain authorization from your dealer before returning any product to ADLINK.

Check if the following items are included in the package.

- PXIS-2690P Chassis, 3U 14-Slot Portable PXI Chassis with Integrated LCD
- Carrier bag
- User's Manual
- All-in-One CD

NOTE OEM version package may vary depending on customer requests. The assigned controller and/or peripheral modules may be pre-installed and shipped with the chassis. Inquire with your dealer for additional information on these options.

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2 Chassis Overview

This section describes the PXIS-2690P chassis including the location of basic components and control, mechanical dimensions, and the backplane functions and features.

2.1 Front View (closed)



Figure 2-1: PXIS-2690P Front View

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2.2 Front-Right View

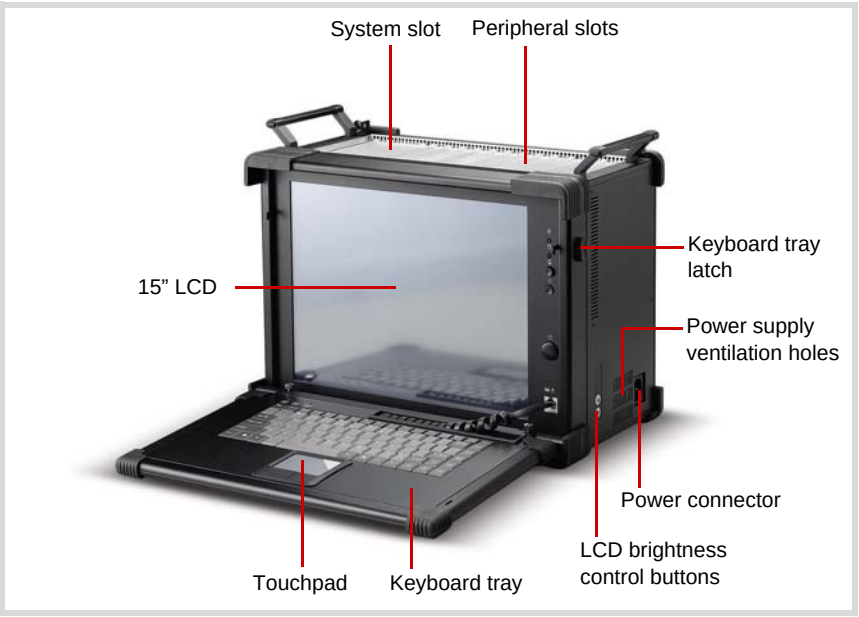


Figure 2-2: PXIS-2690P Front-Right View

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2.3 Front-Left View



Figure 2-3: PXIS-2690P Front-Left View

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2.4 Dimensions and Rear View

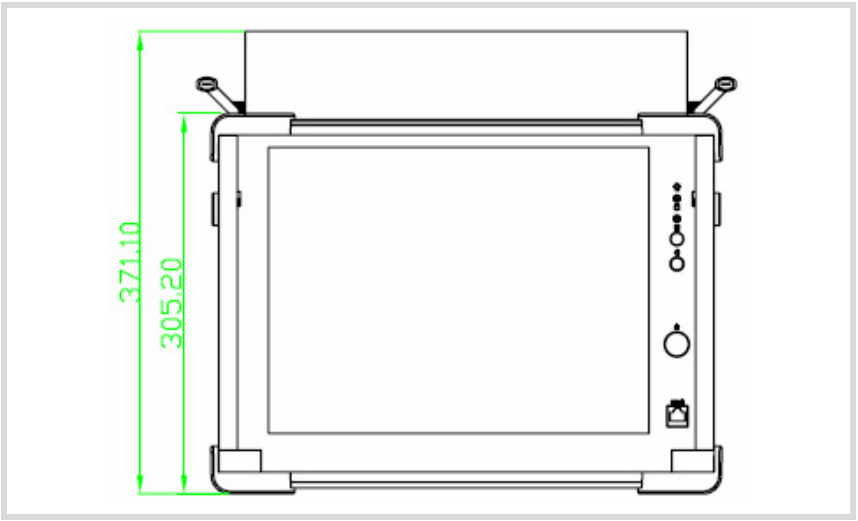


Figure 2-4: PXIS-2690P Dimensions

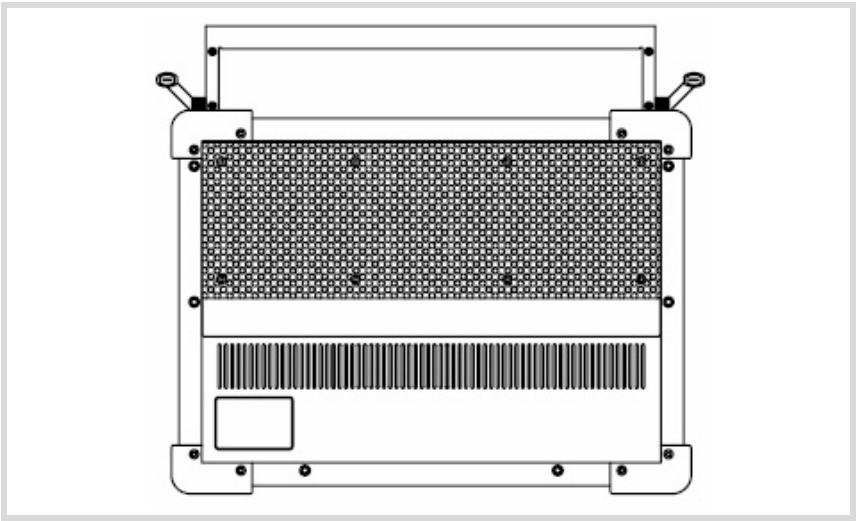


Figure 2-5: PXIS-2690P Rear View

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2.5 Backplane overview

The cBX-3014L backplane supports both PXI modules and standard CompactPCI cards. The backplane's P1 connector signals comply with the requirements of CompactPCI specifications for both peripheral and system modules.

PXI-specific signals are located on P2. Only those signals reserved or not used for the CompactPCI 64-bit specification are found on PXI specific signals, allowing all modules that comply with the former to function in the chassis.

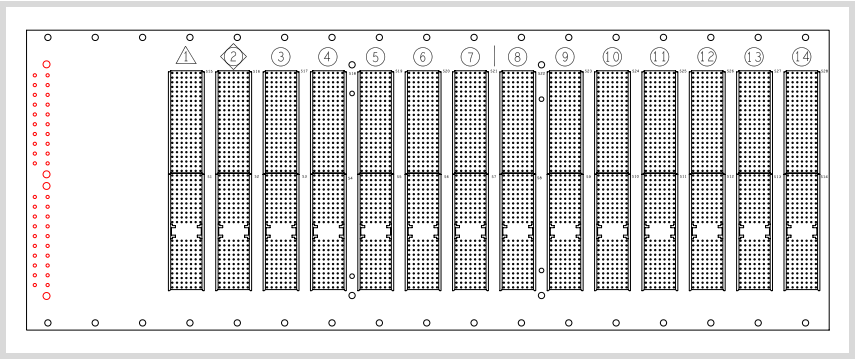


Figure 2-6: cBX-3014L Front View

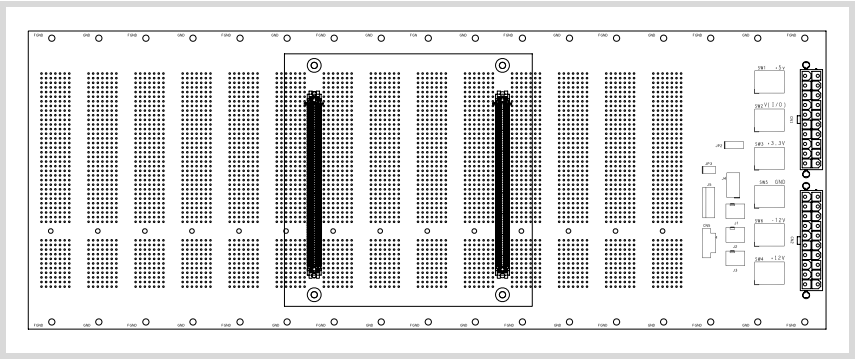


Figure 2-7: cBX-3014L Rear View

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Backplane functions

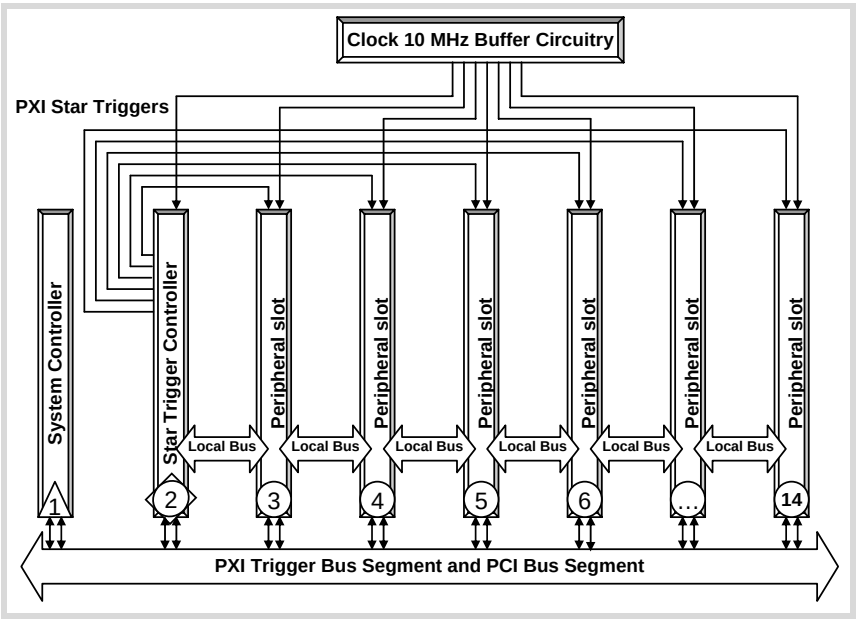


Figure 2-8: Backplane Functions

System Controller Slot

The PXIS-2690P system controller slot is at Slot 1 as defined by PXI specifications. It has three controller expansion slots (total four), 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

Slot 2 is reserved for the star trigger. This slot has dedicated trigger lines to slots 3 to 14. The start trigger slot provides individual triggers to peripherals and is designed for modules with ST functionalities.

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Peripheral Slots

Thirteen slots are available for installation of peripheral modules. This includes the star trigger controller slot.

Local Bus

The cBX-3014L local bus is a daisy-chained bus that connects each peripheral slot with its adjacent (left and right) slot. A local bus is 13 lines wide, transmits analog or digital signals between modules, and/or provides a high-speed sideband communication path without affecting the PXI bus bandwidth.

Per PXI specifications, the local bus connects all slots except slots 1 (system slot) and 2.

Trigger Bus

The PXIS-2690P incorporates a PXI trigger bus to synchronize the operation of several and different PXI peripheral modules, or to use one module to control the timed sequences of operations performed on other modules. Modules can exchange triggers via the trigger bus, allowing precise timed responses to asynchronous external events that the system monitors or controls.

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System Reference Clock

The PXIS-2690P supplies a 10 MHz system reference clock signal (PXI_CLK10) to every peripheral slot independently. An independent buffer (having a source impedance matched to the backplane and a skew of less than 1 ns between slots) drives the clock signal to each peripheral slot. You 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. You can select the internal or external clock by setting jumpers JP2 and JP3 in the backplane rear. Refer to the jumper settings below.

Description	Jumper Settings		
External clock (PXI_CLK10_IN on star trigger slot)	JP2	Open	
	JP3	Short	
Internal clock (10 MHz system clock PXI_CLK10)	JP2	Short	
	JP3	Open	

Table 2-1: Reference Clock Jumper Setting

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3 Installation

The chapter tells you how to install the system controller, peripheral modules, and drivers to the PXIS-2690P chassis. It also provides information on how to remove the keyboard tray, power up, and monitor the system.

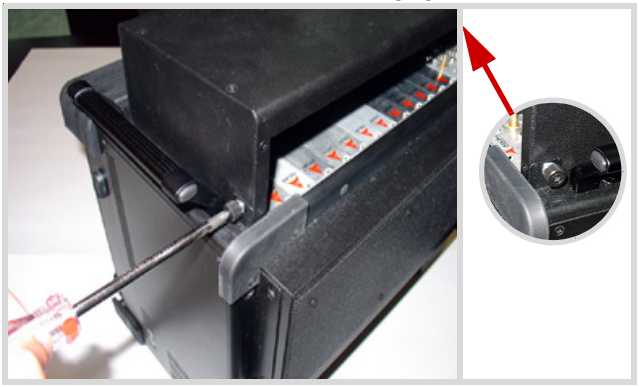
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3.1 Removing the Module Cover

The PXIS-2690P comes with a module cover that protects wirings and connections to the system controller and peripheral modules. You must remove the module cover before installing the system controller and/or peripheral modules.

To remove the module cover:

1. Locate two screws on both sides of the cover, then loosen them until the cover disengages from the chassis.



2. Pull the rear edge of the cover up to a 45º angle, then lift.



3. Set the module cover aside.

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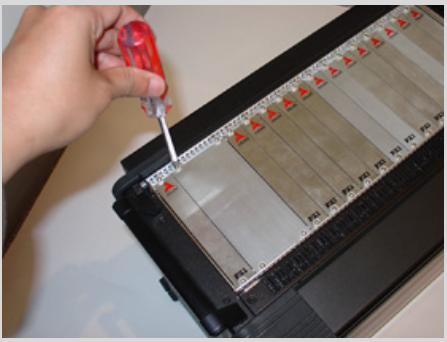
3.2 Installing the System Controller

The PXIS-2690P comes with a system controller slot that supports a PXI or cPCI-based system controller. We recommend the following system controllers for use with PXIS-2690P:

- PXI-3800
- PXI-3800/CM13
- PXI-3800/PM18
- PXI-3800/PM18+

To install the system controller:

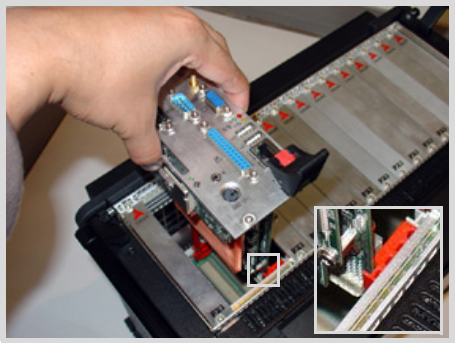
1. Make sure that the CPU, memory module(s), and storage device(s) are properly installed on the system controller module.
2. Locate the system controller slot (Slot 1, widest slot cover) and controller expansion slot (first slot from the left).
3. Depending on the system controller's slot space requirement, remove the system controller slot cover (Slot 1), then the controller expansion slot.



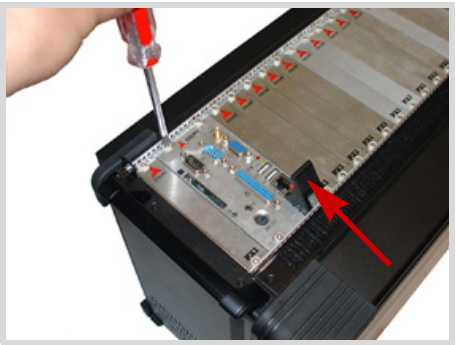
4. Push down (loose) the system controller module's ejector/injector handle(s).

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5. Align the module's top and bottom edges to the card guides, then carefully slide the module into the chassis,



6. Push the ejector/injector handle(s) up to secure the module in place, then fasten the screws on the module front panel.



7. Connect all devices to the system controller, then replace the module cover following the instructions in section 3.4.

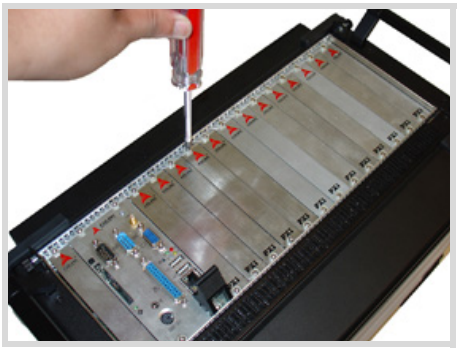
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3.3 Installing Peripheral Modules

The PXIS-2690P supports up to thirteen PXI/cPCI peripheral modules, including a star trigger module.

To install a peripheral module:

1. Select an available slot, then remove the slot cover.



2. Push down (loose) the peripheral module's ejector/injector handle(s), then align the module's top and bottom edges to the card guides.
3. Carefully slide the module into the chassis.

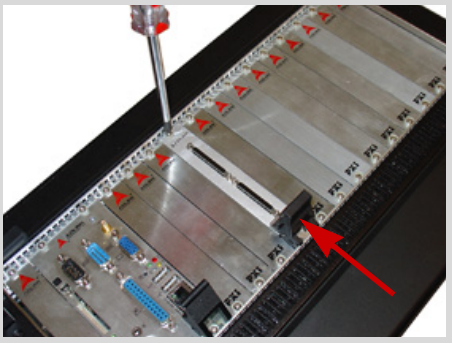


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4. Pull the ejector/injector handle(s) down to connect the module firmly to the chassis backplane,



5. Push the ejector/injector handle(s) up to secure the module, then fasten the screws on the module front panel.



6. Connect all devices to the module, then replace the module cover following the instructions in section 3.4.

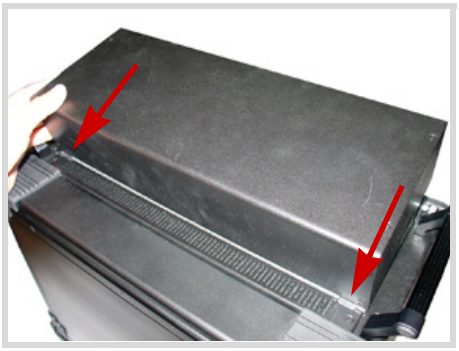
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3.4 Replacing the Module Cover

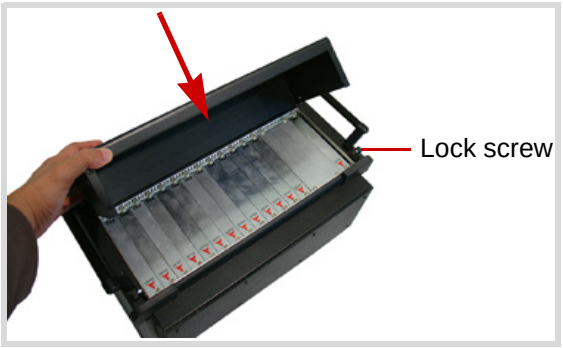
After installing the system controller and peripheral modules, and connecting all necessary devices, replace the module cover to protect module connections/wirings.

To replace the module cover:

1. Insert the module cover tabs to the holes on top of the chassis.



2. Push down the rear edge of the module cover until its screw holes align with the lock screws.



3. Secure the module cover with the lock screws.

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3.5 Using the Keyboard and Touchpad

The PXIS-2690P comes with an integrated 87-key keyboard and touchpad for data input. The keyboard is Windows®-compliant while the touchpad functions as a mouse when moving the cursor in a graphical user interface (GUI). The buttons below the touchpad corresponds to the left and right mouse buttons. Tapping the touchpad corresponds to a left-button click.

NOTE Opening the keyboard tray also shows the LCD and front panel control buttons and LEDs.

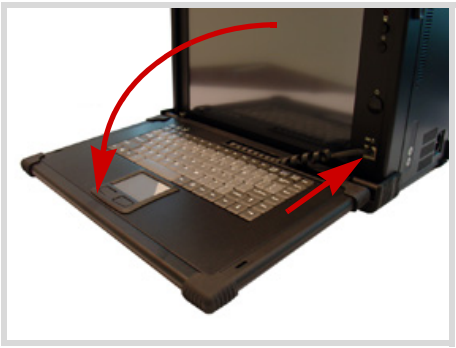
To use the keyboard and touchpad:

1. Locate two keyboard tray latches on both sides of the chassis.
2. With both thumbs restraining the keyboard tray, push the latches up to release.



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3. Place the keyboard tray down, then insert the keyboard/ touchpad connector to the keyboard/touchpad port.



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3.6 Removing and Replacing the Keyboard Tray

For applications that do not require a keyboard and touchpad, you may remove the keyboard tray.

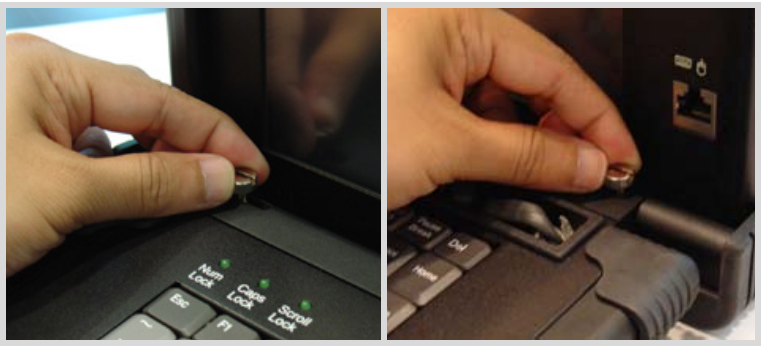
To remove the keyboard tray:

1. Disconnect the keyboard/touchpad connector from the keyboard/touchpad port.



2. Locate two keyboard tray lock screws, then loosen them.

.



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3. With two hands supporting the tray, push the lock screws inward until the tray disengages from the chassis.



4. Set the keyboard tray aside.

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To replace the keyboard tray:

1. Push the keyboard tray lock screws inward until the metal rods retract..



2. Align the metal rods with the lock holes, then release the lock screws until the metal rods click in place..



3. Fasten the lock screws to secure the tray.
4. Connect the keyboard/touchpad connector to the keyboard/touchpad port.

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3.7 Powering up the System

The PXIS-2690P is equipped with a universal power supply unit that does not require input voltage selection.

To turn on the system:

1. Connect one end of the supplied power cable to the power connector located at the right side of the chassis..



2. Plug the other end of the AC power cord to a properly grounded wall socket or power strip. When power is available, the chassis goes to standby power mode (OFF).
3. Press the power button from the front panel to turn the system on. The power LED in the front panel lights up green and the chassis fans start to operate.



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To turn off the system:

1. Shut down the system via the operating system.
2. Press the power button to put the system in standby (OFF) mode. The power button protrudes from the bezel when the system is in standby power mode.

NOTE If the chassis fails to turn on, refer to Chapter 4: Trouble-shooting and Maintenance for details.

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3.8 Using the Touch Panel Feature

The PXIS-2690P LCD is equipped with touch panel functionality for convenient data input and GUI navigation. To enjoy the touch panel function, you must install the touch panel driver.

To install the touch panel driver:

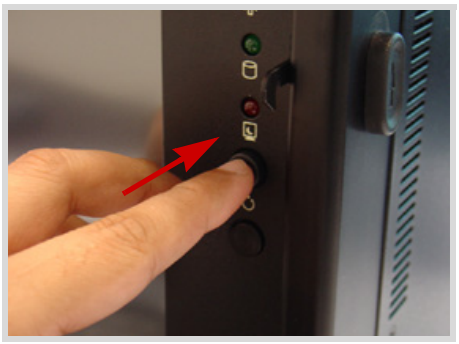
1. Place the ADLINK T&M All-in-One CD in the DVD-ROM located on the left side of the chassis.
2. Explore the contents of the CD and locate the touch panel drivers from the following path:

   ```
   X:\Driver Installation\PXI Platform\PXI chassis\
        PXIS-2690P\Touch_Panel\Driver
   ```

NOTE If the touch panel feature fails, refer to Chapter 4: Troubleshooting and Maintenance for details.

3.9 Turning Off the LCD

When not in use, you may turn off the LCD by pressing the LCD sleep button located in the chassis front panel.



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3.10 Monitoring the System

Light Emitting Diodes (LEDs) on the front panel tell you the power status and hard disk drive data read/write activity. Refer to Table 3-1 for details.

LED	Function	Color	Status	Indication
Power	Power indication	Green	ON	The system is on
			OFF	The system is off or in standby power mode
HDD	Data read/write activity	Red	OFF	The system is off, on standby power, or has no HDD activity
			Flashing	Data is read/written from/to the HDD

Table 3-1: LED Indications

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4 Troubleshooting and Maintenance

4.1 Installation Problems

Failure to start the system usually results from incorrect installation of the system controller, peripheral modules, etc. Go through the following checklist before you start up the system.

- The system controller is properly installed and secured.
- All peripheral modules are properly seated on the slots.
- All cables are properly connected to the system controller/ peripheral modules.
- All peripheral modules installed are compatible for use in the chassis.
- The power cord is properly plugged into the chassis power connector and power outlet/wall socket/power strip.

If the system fails to turn on even after all installation conditions are met, remove all peripheral modules that you installed, then try again. If the system turns on properly, try installing one peripheral module at a time, then test if the system will power-up. You may also try installing the modules into different slots until you get the desired result.

4.2 BIOS Beeps

BIOS beeps indicate errors in system initialization. These beeps are usually associated with video and memory errors. If the system beeps during start up, check if the display is properly connected to the system controller or if the integrated LCD drivers are properly installed. You may also check if the memory modules are properly installed in the system controller.

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4.3 Basic Troubleshooting

Problem	What to Do
System fails to power up	▶ Check if the power cord is properly plugged into the chassis power connector and wall socket/power strip. ▶ Check if the wall socket/power strip is live. ▶ Press the power button at the chassis front panel.
There is no LCD display	▶ Make sure the system is turned on. ▶ Connect an external display to the system controller's VGA port, then check if there is video output. ▶ If video output is present on the external display, adjust your display settings and enable LCD video. ▶ If video output is not present on the external display, check if the system controller is properly installed. ▶ If there is no video output even when the system controller is properly installed, contact ADLINK for further assistance.
There is no video output in the external display	▶ Redirect the video output to the integrated LCD. ▶ Check if your external display is functional. ▶ Check your display settings and make sure you enable external video.
The keyboard doesn't work	▶ Check if the keyboard plug is properly inserted to the keyboard port. ▶ Disconnect an external PS/2 or USB keyboard cable from the system controller, if any.

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Problem	What to Do
The touchpad doesn't work	▶ Disconnect an external PS/2 or USB mouse cable from the system controller, if any. ▶ Install the mouse/touchpad drivers if the operating system requires manual installation.
The DVD-ROM cannot read a disc	▶ Make sure you place only compatible discs to the DVD-ROM. ▶ Make sure the system detects the DVD-ROM drive during POST. If it fails to detect the drive, call ADLINK for further assistance.

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4.4 Maintenance

Handling the chassis

Make sure that the keyboard tray is closed before transporting/ moving the chassis. The keyboard tray serves as the LCD protection. It is recommended that you transport the chassis in the carrying case provided, or carry it using the handles. The handles are designed to carry the weight of the chassis for superior portability and balance.

Taking care of the keyboard/touchpad

The integrated keyboard allows you to input data faster in any application. It also protects the LCD when transporting the system. Avoid dropping liquids or small objects on the keyboard. You may use a compress air cleaner to remove dusts and dirt that build up under the keys.

Keep the touch pad surface dry and clean for better performance.

Cleaning the LCD

Clean the LCD periodically with a moist cloth for better display. Observe the following precautions when cleaning the LCD.

- Do not use any abrasive material to wipe the LCD screen to avoid scratching the LCD surface.
- Do not apply too much pressure on the surface when wiping the LCD screen.
- Do not use a cleaner that contains alcohol.
- Do not use a rough cloth that could scratch the LCD screen surface.
- Clean the LCD screen with gentle wipes in one direction.

Handling cables

Treat all cables with care. Do not over extend any cable to prevent internal breaking. All cables and plugs must be handled or connected properly.

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Power requirements

Make sure that the power cord is in good condition before plugging it into the system. You also need to check the reliability of the power source. The PXIS-2690P power supply is capable of handling 100 V to 240 V AC within the 50 Hz to 60 Hz range. Do not connect the PXIS-2690P on an already overloaded circuit.

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A Specifications

A.1 General

Complies with PICMG 2.2 specifications.

A.2 Power Supply

- AC input: 100 to 240 VAC, 47 to 63 Hz
- DC output: 500W

VDC	Minimum	Maximum
+5 V	3.0 A	50.0 A
+3.3 V	0.3 A	28.0 A
+12 V	2.0 A	35.0 A
-12 V	0.1 A	0.8 A

NOTE Total combined power from +5 V and +3.3 V should not exceed 250 W.

A.3 Integrated Display, Input Devices, and Cooling

Display: 15" TFT LCD, up to 1024 x 768 resolution

Input Devices:

- 87-keys keyboard with touchpad
- Built-in 15" touch screen

Drive Bay: Slim-type DVD-ROM drive

Cooling: Three 120mm x 120mm ball-bearing fans; 53.2 CFM each

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A.4 Physical

Dimension: 400 mm x 291 mm x 223.3 mm (WxHxD, no fan frame)

Weight: 12.5 kg

A.5 Operating Environment

Operating environment

- Ambient temperature: 0°C to 50°C
- Relative humidity: 10% to 90%, non-condensing

Storage environment

- Ambient temperature: -20°C to 70°C
- Relative humidity: 5% to 95%, non-condensing

Shock: 10 $G_{peak\text{-}to\text{-}peak}$, 11ms duration

Random Vibration

- Operating: 5 Hz to 500 Hz, 0.31 GRMS each axis
- Non-operating: 5 Hz to 500 Hz, 2.46 GRMS each axis

A.6 Backplane

Backplane bare-board material: UL 94V-0 rated

Peripheral slots with star signals: from third to 14th slot

PXI trigger bus: all

PXI local bus: all

Slots:

- One system slot on the left-hand side
- 13 peripheral slots supporting both PXI and CompactPCI modules

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A.7 Safety and EMC/EMI Compliance

EMC/EMI: CE, FCC Class A

A.8 Reliability and Serviceability

MTBF:

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

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B Backplane Drawing and Pin Assignments

B.1 Backplane Layout

The following figures show the front and rear view of the PXIS-2690P backplane.

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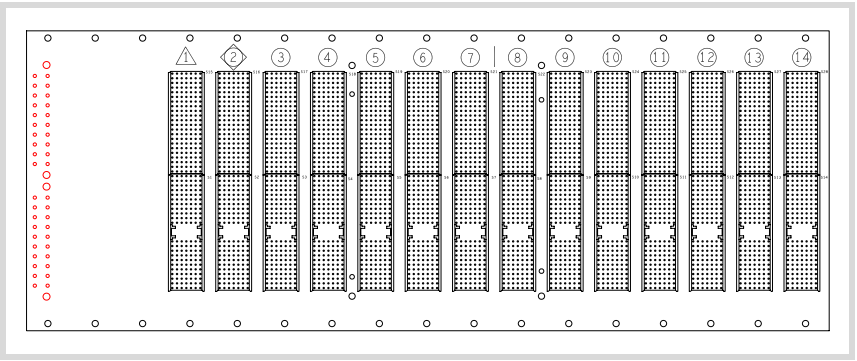


Figure B-1: cBX-3014L Front View

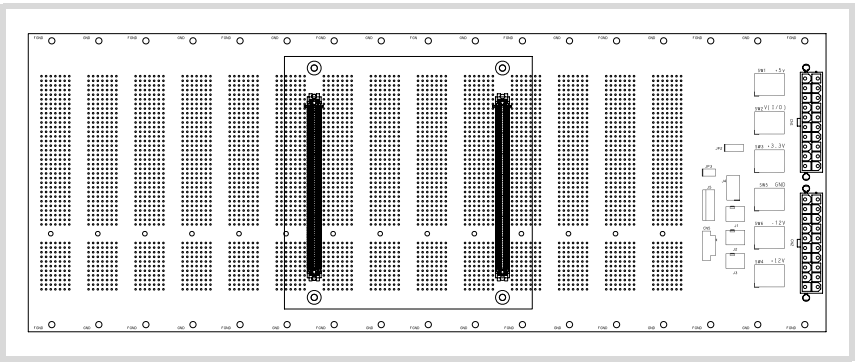


Figure B-2: cBX-3014L Rear View

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B.2 Backplane cBX-3014L Connectors Pin Assignments

PXI Connectors Pin Assignments

System Slot (Slot #1) P1 Pin Assignment

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
Pin	Z	A	B	C	D	E	F

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System Slot (Slot #1) P2 Pin Assignment

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
Pin	Z	A	B	C	D	E	F

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Star Trigger Slot (Slot #2) P1 Pin Assignment

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
Pin	Z	A	B	C	D	E	F

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Star Trigger Slot (Slot #2) P2 Pin Assignment

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
Pin	Z	A	B	C	D	E	F

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General Peripheral Slot (Slot #3~#14) P1 Pin Assignment

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
Pin	Z	A	B	C	D	E	F

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General Peripheral Slot (Slot #3~#14) P2 Pin Assignment

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
Pin	Z	A	B	C	D	E	F

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B.3 Bus Segments and Interrupt Routings

Refer the table for the routing of Bus Mastering (REQ/GNT), IDSEL, PCI CLK, and interrupt signals.

Slot	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	AD30	1	5	INTC#	INTD#	INTA#	INTB#
Slot 3	AD29	2	1	INTB#	INTC#	INTD#	INTA#
Slot 4	AD28	3	3	INTA#	INTB#	INTC#	INTD#
Slot 5	AD27	4	4	INTD#	INTA#	INTB#	INTC#
Slot 6	AD26	5	0	INTC#	INTD#	INTA#	INTB#
Slot 7	AD25	6	6	INTB#	INTC#	INTD#	INTA#
Slot 8	S1_AD31	S1_0	0	INTC#	INTD#	INTA#	INTB#
Slot 9	S1_AD30	S1_1	1	INTB#	INTC#	INTD#	INTA#
Slot 10	S1_AD29	S1_2	2	INTA#	INTB#	INTC#	INTD#
Slot 11	S1_AD28	S1_3	3	INTD#	INTA#	INTB#	INTC#
Slot 12	S1_AD27	S1_4	4	INTC#	INTD#	INTA#	INTB#
Slot 13	S1_AD26	S1_5	5	INTB#	INTC#	INTD#	INTA#
Slot 14	S1_AD25	S1_6	6	INTA#	INTB#	INTC#	INTD#

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B.4 Bus Segments and Interrupt Routings

Refer to the table for the routing of 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_STAR11
Slot 3	PXI_STAR0
Slot 4	PXI_STAR1
Slot 5	PXI_STAR2
Slot 6	PXI_STAR3
Slot 7	PXI_STAR4
Slot 8	PXI_STAR5
Slot 9	PXI_STAR6
Slot 10	PXI_STAR7
Slot 11	PXI_STAR8
Slot 12	PXI_STAR9
Slot 13	PXI_STAR10
Slot 14	PXI_STAR11

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Important Safety Instructions

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.

- Read these safety instructions carefully.
- Keep this user's manual for future reference.
- The equipment should be operated in an ambient temperature between 0°C 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 the power outlet to avoid being damaged by transient over voltage.
- All cautions and warnings on the equipment must be noted.
- Keep this equipment away from humidity.
- Do not use this equipment near water or a heat source.
- Place this equipment on a stable surface when installing to prevent injury.
- Never pour any liquid into the product to prevent fire or electrical shock.

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- Openings in the chassis 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 holes.
- To avoid electrical shock, always unplug all power and modem cables from wall outlets before removing the system covers.
- A Lithium-type battery is provided for the real time clock.

  CAUTION - Risk of explosion if battery is replaced by an incorrect type. Dispose used batteries as instructed.

- The 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 moisture.
  - It is not functioning or does not function according to the user's manual.
  - It has been dropped and damaged.
  - It has an obvious sign of breakage.
- Never attempt to fix the equipment. For safety reasons, the equipment should only be serviced by qualified 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 limited two-year warranty, one year for products bought in China:
   - The warranty period starts on the day the product is shipped 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 any 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 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 ADLINK technicians.
   - Products with altered and/or damaged serial numbers are not entitled to our service.
   - This warranty is not transferable or extendible.
   - 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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