PXIS-2506

3U 6-Slot PXI Chassis and Accessories

User Manual

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Table of Contents

Chapter1 Introduction 1

1.1 Unpacking Checklist 2
1.2 Features 2
1.3 OEM options 3
1.3.1 Backplane 3
1.3.2 Power Supply Unit 3
1.3.3 Chassis Color and Logo 3

Chapter2 Installation 5

2.1 Power Budget Consideration 5
2.2 Step for Installation 5
2.3 Chassis Mounting 6
2.4 Mounting Mechanism 6
2.4.1 Wall Mount on the Bottom 7
2.4.2 Wall Mount on the Top 8
2.4.3 Wall Mount on the System Side 9
2.4.4 Wall Mount on the Rear Side 10
2.5 Grounding on the Mounting Holes 11

Chapter3 Backplane Overview 13

3.1 Interoperability with CompactPCI 13
3.2 System Controller Slot 13
3.3 Star Trigger Slot 13
3.4 Peripheral Slots 14
3.5 Local Bus 14
3.6 Trigger Bus 15
3.7 System Reference Clock 15

Chapter4 Troubleshooting and Preventative Maintenance 17

4.1 Troubleshooting the PXIS-2506 17
4.2 Cleaning 17
4.2.1 Interior Cleaning 18
4.2.2 Exterior Cleaning 18

Appendix A Specifications 19

A.1 General 19
A.2 cPS-325 series PSU Specifications 21

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Appendix B Backplane Drawing and Pin Assignments 23
B.1 Backplane Mechanical Drawing 23
B.2 Backplane xBP-3006L Connectors Pin Assignments 25
B.2.1 PXI Connectors Pin Assignments 25
B.2.2 Miscellaneous Connectors Pin Assignments 28
B.3 Backplane cBP-3061 PSU Connectors Pin Assignments . 30
Warranty Policy 33
Safety Instructions 36

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1

Introduction

ADLINK PXIS-2506 is a 3U 6-slot portable PXI chassis that provides one slot for system controller and 5 slots for PXI/CompactPCI peripherals. Both PXI and CompactPCI modules can be plug into this chassis and functional. The internal 10MHz reference clock is available on all of the 5 peripheral slots, as well as the star trigger functions, PXI trigger bus, and PXI local bus.

The standard PXIS-2506 chassis is equipped with an industrial-grade 250W CompactPCI power supply, cPS-H325/AC, to provide reliable power to the whole system. Once a failure is detected, the failure fans can be removed from the front panel and are hot swappable, which effectively reduces MTTR (Mean-Time-To-Repair). DC-input power modules are available too. With DC-input power supply, the PXIS-2506 is suitable for in-vehicle data acquisition and control applications. Please contact an ADLINK sales representative for available power configurations.

ADLINK PXI system controller PXI-3710 (3-slot version, without floppy disk drive) is strongly recommended for PXIS-2506 chassis. Wall mount or panel mount kits are included in the standard package. The PXIS-2506 is an ideal chassis for high performance portable applications.

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1.1 Unpacking Checklist

Check the shipping carton for any visible damage. If the shipping carton and contents are damaged, notify the dealer for a replacement. Retain the shipping carton and packing materials for inspection by the dealer. Remember to obtain authorization before returning any products to ADLINK.

Check for the following in the package. If there are any missing items, contact your dealer:

PXIS-2506: 6-slot 3U PXI/CompactPCI instrument chassis with cPS-H325/AC power supply unit

- This User Manual
- Power Cord
- Wall mount/Panel mount kit

Note: The package of the PXIS-2506 OEM version (non-standard configuration, functionality, or package) may vary according to custom requests. The assigned controller or peripheral modules may be pre-installed and shipped with the chassis. Please check with the dealer for more options.

1.2 Features

- Accepts both 3U PXI and CompactPCI modules
- One system slot and 5 PXI/CompactPCI peripheral slots
- PXI specifications Rev. 2.0 compliant
- Filtered, forced-air cooling
- Side handles and stand feet for portability
- Modular AC or DC 250W power supply
- IEEE 1101.10 mechanical packaging compliant
- Wall mount/Panel mount kit included

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1.3 OEM options

The standard PXIS-2506 chassis includes two backplanes and a power supply unit in addition to the enclosure metal parts. The following sections depict the standard parts used in the PXIS-2506.

1.3.1 Backplane

PXIS-2506 has the following backplanes inside:

- xBP-3006L: 6-slot PXI backplane
- cBP-3061: Backplane for one 47-pin 3U CompactPCI modular power supply unit

Please refer to the Appendix for detail specifications.

ADLINK provides customized design and manufacturing service. Please contact an ADLINK sales representative for available backplane configurations.

1.3.2 Power Supply Unit

PXIS-2506 equips cPS-H325/AC, a 250W modular power supply unit that is complaint with PICMG 2.11, the 3U 47-pin Power Supply Specifications. Please refer to Appendix for detailed specifications.

The power module can be removed from the front panel. Various models that accommodate different AC or DC input are available. This makes PXIS-2506 suitable for wide variety of applications such as telecom signal analysis and transportation computer, which require 24V/48V DC input power supply. Please contact an ADLINK sales representative for available power supply configurations.

1.3.3 Chassis Color and Logo

The standard color of PXI-2506 is beige. ADLINK provides customized chassis color or paints specific logo for OEM, with minimum order requirement. Please contact ADLINK for more details.

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2

Installation

The chapter describes the procedure of installation PXIS-2506 chassis.

2.1 Power Budget Consideration

Prior to installing any modules into the PXIS-2506 chassis, please calculate the total system power requirement. The power budget for every DC power sources shall also be checked, including +5V, +3.3V, +12V, and -12V supply rail. Please refer to Appendix A for the maximum usable power.

2.2 Step for Installation

Follow the steps to power on the chassis.

1. For wall mount applications, users can remove the foot-stands those are reserved for plane workstation and then mount the chassis on the wall or panel. For desktop applications, please reserve sufficient space under the chassis for ventilation and make sure the flat to be firm.
2. Ensure the power switch is in the Standby (Off) position. There are two power switches on the PXIS-2506 chassis. The switch in the rear is for turning ON or OFF the power cord input to the PSU (Power Supply Unit). The switch in the front is for turning ON or OFF the PSU DC power output to the PXI system. Note the imprinted ADLINK logo indicates the front panel of the chassis.
3. Plug in the AC power cord.
4. Make sure the CPU, RAM, and storage device are secured on the system controller module.
5. Install the controller. Please check the ejector/injector handle is pushed down. Align the controller edge to the “RED” card guide, sliding in to the rear of the chassis. Push up on the ejector/injector handle to fully inject the module into the chassis.

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Secure the screws on the module's front panel.

6. Install peripheral modules, if necessary.
7. Turn on the rear switch for inputting the AC power to the PSU. The amber LED will light.
8. Turn on the front switch to power on the chassis. The amber LED will go off and the green LED will light.
9. Check if the system power starts, the fans under the chassis should become operational as well.

Note: If the chassis does not power on at all, see Chapter 4, Troubleshooting and Preventative Maintenance.

2.3 Chassis Mounting

The mounting procedure of the PXIS-2506 chassis is as following:

1. Screw two L-shape wall-mount kits on to the chassis
2. Drill the wall-mount holes on wall or panel based on the mechanical drawing in the following Section.
3. Installed the chassis and screw it on the wall or panel.

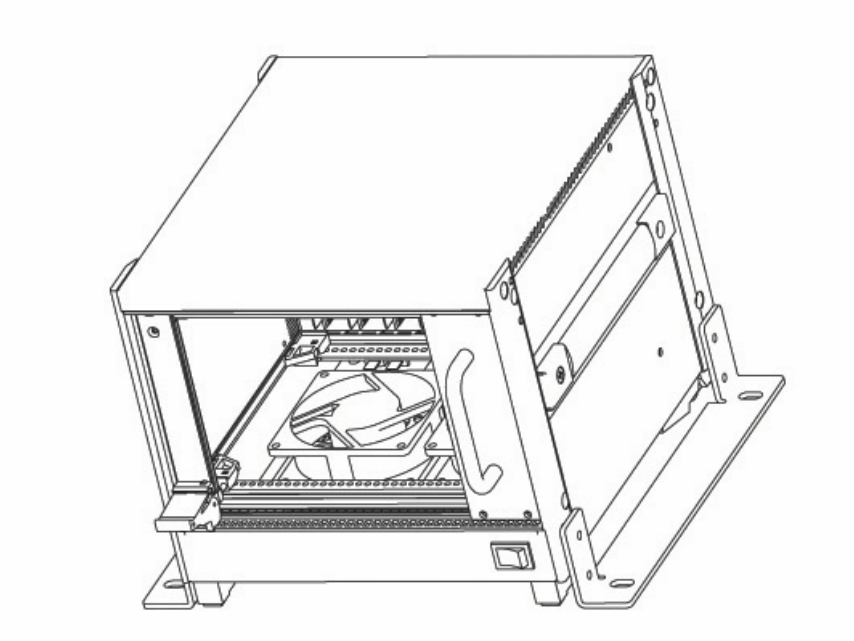
2.4 Mounting Mechanism

There are four mounting methods for PXIS-2506 chassis:

- Wall mount on the bottom
- Wall mount on the top
- Wall mount on the system side
- Wall mount on the rear side

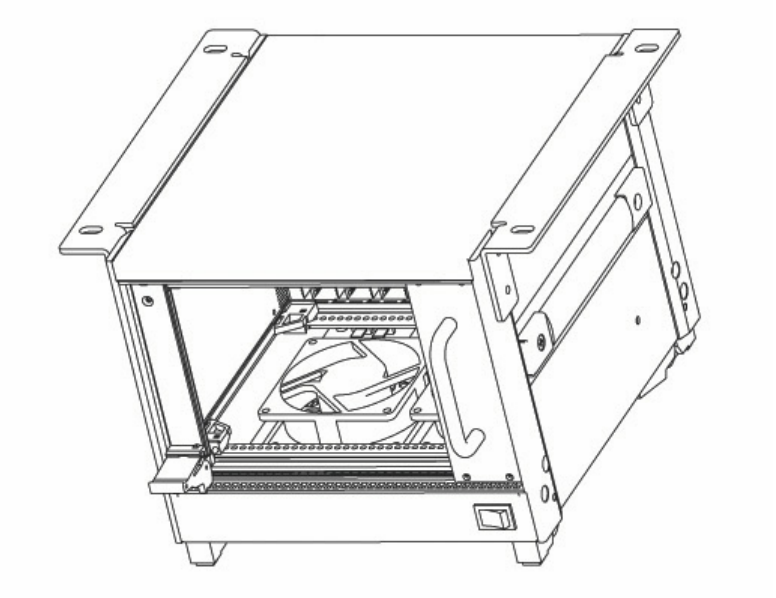
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2.4.1 Wall Mount on the Bottom



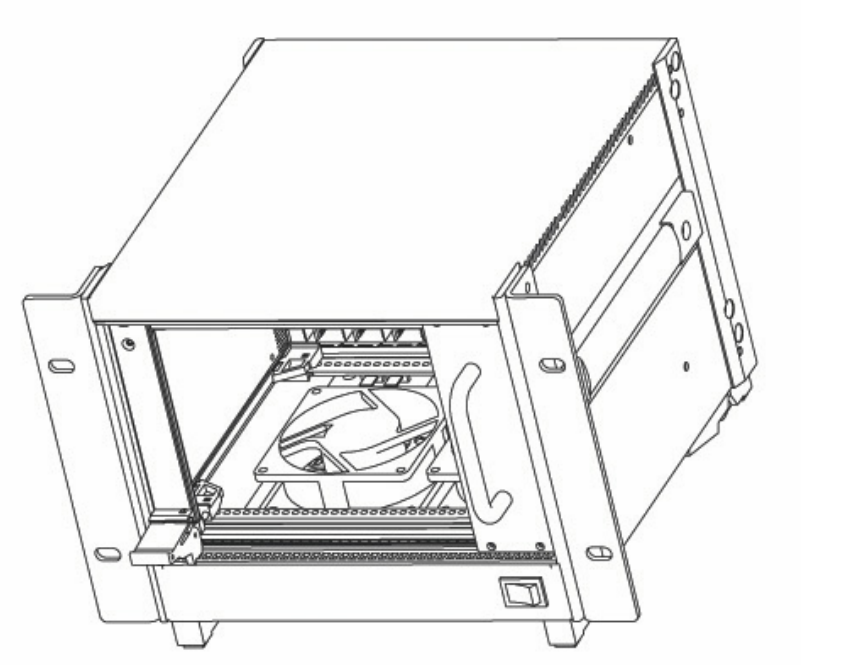
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2.4.2 Wall Mount on the Top



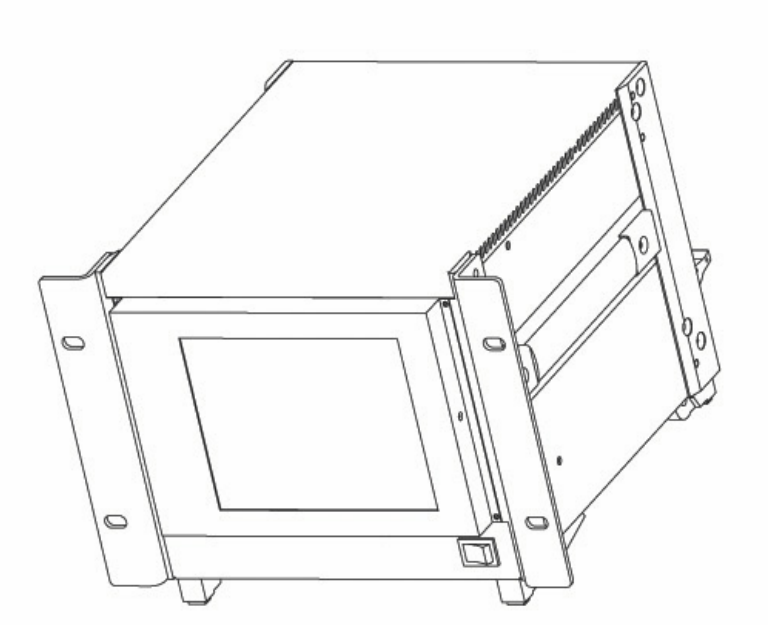
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2.4.3 Wall Mount on the System Side



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2.4.4 Wall Mount on the Rear Side



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2.5 Grounding on the Mounting Holes

There are two kinds of grounding for the mounting holes of the backplane. The mounting holes labeled as “GND” with “circle soldering mask” are connected to the logic ground plane of the backplane. The mounting holes labeled as “FGND” with “square soldering mask” are not connected to the ground plane, therefore it provides the isolation between the logic ground and the chassis ground.

The backplane is mounted on the PXIS-2506 through all mounting holes by default, therefore the chassis ground is short to the logic ground. For applications that require isolation between the logic ground and the chassis ground, users can remove the screws on the GND mounting holes.

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3

Backplane Overview

3.1 Interoperability with CompactPCI

The PXIS-2506 backplane xBP-3006L is interoperable with PXI-compatible and standard CompactPCI products.

The signals on the P1 connector of the backplane meet the requirements of the CompactPCI specification for both the peripheral and system modules.

The PXI-specific signals are located on P2. Only the signals those are reserved or not used in the CompactPCI 64-bit specification are found on PXI-specific signals. Therefore, all modules that meet the requirements of the CompactPCI 64-bit specification will function in the PXIS-2506.

3.2 System Controller Slot

The System Controller slot is located at Slot 1 of the chassis as defined by the PXI specification. It has two controller expansion slots, which are used for system controller modules that occupy 3 slots. As defined in the PXI specification, these slots allow the controller to expand to the left to prevent the controller from using up peripheral slots.

3.3 Star Trigger Slot

The Star Trigger (ST) slot is spotted at Slot 2. This slot has a dedicated trigger line, linking itself through Slot 3, 4, 5, and 6. It is intended for modules with ST functionality that can provide individual triggers to synchronize or trigger the peripherals easily.

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3.4 Peripheral Slots

There are 5 peripheral slots shown in the following diagram, inclusive of the Star Trigger controller slot.

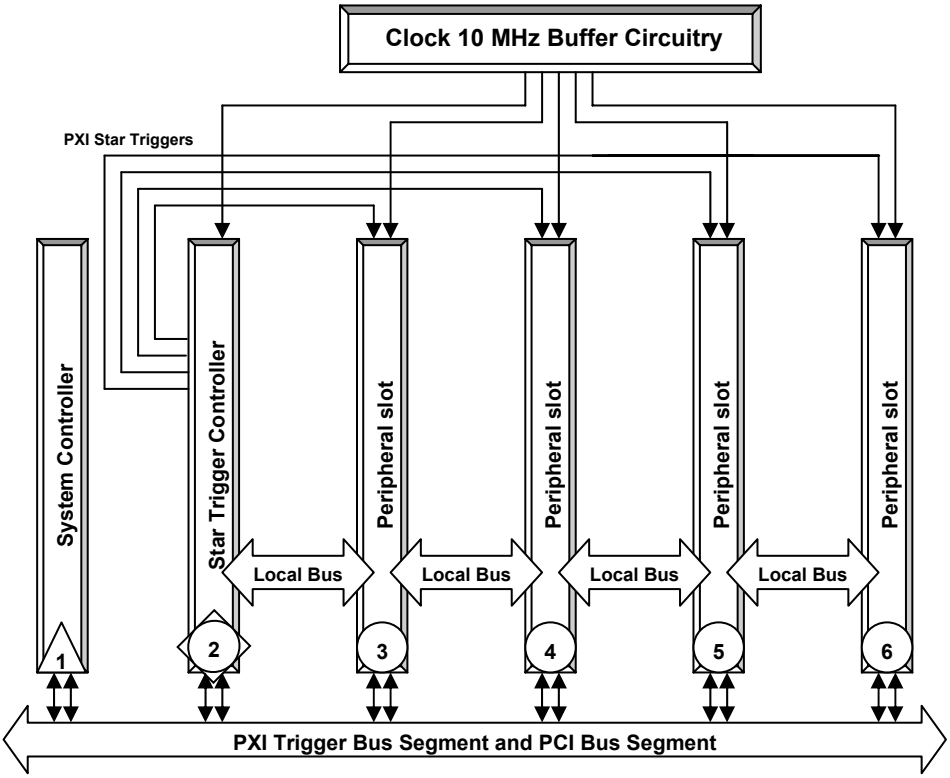


Figure 3.1 PXI Local Bus and Star Trigger Routing

3.5 Local Bus

The local bus of PXI backplane xBP-3006L is a daisy-chained bus that connects each peripheral slot to adjacent peripheral slots at the left and right. Each local bus has 13 lines wide and can pass analog or digital signals between modules, or provides a high-speed side-band communication path that does not occupy the PXI bandwidth.

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In accordance with the PXI specification, the local bus connections between all slots except the line between Slot 1 and 2.

3.6 Trigger Bus

ADLINK PXIS-2506 implements the 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 asynchronous external events the system is monitoring or controlling.

3.7 System Reference Clock

PXIS-2506 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 1 ns between slots) drives the clock signal to each peripheral slot. Users can use this common reference clock signal to exactly 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: PXI Reference Clock Control

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

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4

Troubleshooting and Preventative Maintenance

4.1 Troubleshooting the PXIS-2506

Please refer to Table 4.1 to troubleshoot the PXIS-2506 chassis. The table lists most possible causes for power failure and recommends ways to correct the problem.

Table 4.1 troubleshooting

Possible Cause	What to Do
PXIS-2506 is not connected to power source.	Make sure that the PXIS-2506 is connected to a live electrical outlet. Try operating another piece of equipment from this outlet.
Power switch is not switched on.	Make sure that both power switches are set to the ON position.
Power supply has failed.	Contact ADLINK
Cool fan has failed	Contact ADLINK

4.2 Cleaning

Cleaning procedures consist of two parts: interior and exterior cleaning of the chassis. Please refer to the relative user documentation of peripheral modules for cleaning the individual CompactPCI or PXI modules.

Note: Always power-off the chassis and disconnect the power cord before cleaning of servicing the chassis.

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4.2.1 Interior Cleaning

Use a dry, low-velocity stream of air to clean the interior of the chassis. Clean around components with a soft-bristle brush. If you must use a liquid for minor interior cleaning, use a 75% isopropyl alcohol solution and rinse with deionized water.

4.2.2 Exterior Cleaning

Use a dry lint-free cloth or a soft-bristle brush to clean the exterior surfaces of the chassis. If any dirt remains, moisten a cloth to wipe the exterior surfaces of the chassis in a mild soap solution. Wiping with a cloth moistened with clear water to remove any soap residue. Do not use abrasive compounds on any part of the chassis.

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A

Specifications

A.1 General

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

Electrical

- AC Power Supply (Please refer to A.3 for the detail specifications)
- PICMG standards: PICMG 2.11 compliant
- Input voltage: 100 to 240 ± 10% V_{AC}
- Input frequency: 50 to 60 ± 5% Hz
- Output:

Maximum usable power: 300W

VDC	Typical	Maximum
+5V	25.0A	33.0A
+3.3V	18.0A	33.0A
+12V	5.0A	5.5A
-12V	0.5A	1A

Power LED

- LED display: ON for normal condition

Cooling

Fans

- Two 41.4 CFM fans at the bottom of the chassis
- Fan speed: 3100 ± 250 RPM
- Noise: 35 dB(A)
- Power: 12 V_{DC} @ 0.20 A each fan
- Air filter: removable

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Physical

- Number of PXI/CompactPCI slots: 6 (1 controller, 5 peripherals)
- Number of controller expansion slots: 2 (to the left of controller slot)

Dimensions

- PXIS-2506: 237 x 221.4 x 177mm
  (L x W x H, without wall mount kit, card handles, or stand feet)

Weight

- 4.5 KG

Operating Environment

Ambient temperature range

Model	Temperature
PXIS-2506	0 to 50°C

Relative humidity: 10 to 90%, noncondensing

Storage Environment Temperature

Ambient temperature range

Model	Temperature
PXIS-2506	-20 to 70°C

Relative humidity: 5 to 95%, noncondensing

Backplane

- Backplane bare-board material: UL 94V-0 rated
- Backplane connectors: Conforms to IEC-917 and IEC 1076-4-101,UL 94V-0 rated
- Number of PXI/CompactPCI slots: 6 (1 controller, 5 peripherals)

Shock and Vibration

- Shock : 15 G peak-to-peak, 11 ms duration, non-operation

Random Vibration

- Operating: 5 to 500Hz, $0.5G_{RMS}$, each axis
- Nonoperating: 5 to 500Hz, $1.88G_{RMS}$, each axis

Safety and EMC/EMI Compliance

EMC/EMI: CE, FCC Class A

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A.2 cPS-325 series PSU Specifications

Note: PXIS-2506 chassis uses cPS-H325/AC for standard.

Model Name	cPS-H325/AC	cPS-H325/48	cPS-H325/24
PICMG Standards	PICMG 2.11 CompactPCI Power Interface Compliant		
Form Factor	3U cPCI (100x160mm), 2 slots (8HP) wide		
Input Voltage	100-240 ± 10% VAC	36-72 VDC	18-36 VDC
Input Frequency	50-60 ± 5% Hz	DC	DC
Input Current	2.5A@115VAC / 1.4A@230VAC	7A@48VDC	14A@24VDC
Inrush Current	< 30A@230VAC	N/A	N/A
Power Factor Correction (PFC, only for AC input)	Typical 0.95-0.97 Meet Harmonic Correction IEC1000-3-2		
Output Voltage/Current	5V: Typ. 25.0A, Max. 33.0A 3.3V: Typ. 18.0A, Max. 33.0A +12V: Typ. 5.0A, Max. 5.5A -12V: Typ. 0.5A, Max 1A Max. load is the continuous operating load of each rail. But the max. load of each rail can not be drawn from all outputs at the same time		
Output Voltage Minimum Load	0.5A@+5V		
Output Wattage	Typical 250W continuous, maximum 300W peak output		
Line Regulation	Typical 0.1%		
Load Regulation	Typical ± 1-2%		
Ripple	50mV @+5V and 3.3V outputs 120mV @+12V and –12V outputs		
Hold-up Time	5mS after power fail signal		
Efficiency	Typical 78-79%		
Output voltage sense and current sharing	Available at 5V, 3.3V and +12V outputs		
Remote ON/OFF	Available at [INH#] & [EN#]		
Protections	Over Temperature Protection (OTP): 70°C Over Current Protection (OCP): Installed at each rail Over Load Protection (OLP): Typical 120% max. load , fully protected against output overload or short circuit. Over Voltage Protection (OVP): Built-in at all outputs		
Status LED	<Green LED> [POWER] means valid input voltage <Amber LED> [FAULT] means a critical fault		
Earth Leakage	<0.5mA @230VAC		
Operating Temp.	0 to 70°C (0 to +50°C at full load with specified air flow. Derates linearly to 50% at +70°C)		
Storage Temp.	-40 to +85°C		
Humidity	5% to 95% non-condensed	5% to 95% non-condensed	5% to 95% non-condensed
Shock	15G peak-to-peak, 11ms duration, non-operation		
Vibration	Operation: 1.88Grms, 5-500Hz, each axis		
Cooling Requirement	Min. 20 CFM is required for typical full rating power		
Certificate or Safety	IEC950, EN 55022, FCC Class A, IEC60950 Class I		

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B

Backplane Drawing and Pin Assignments

B.1 Backplane Drawing

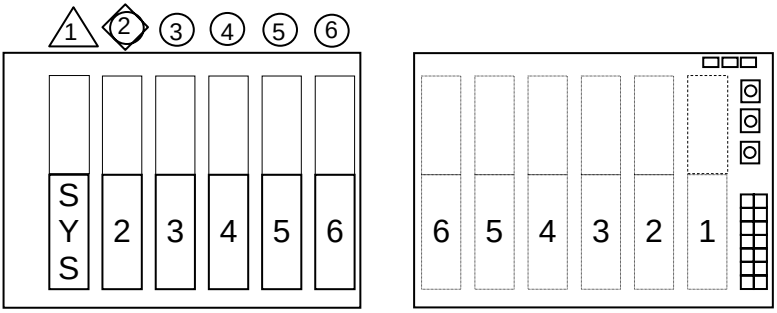
PXIS-2506 has the following two part backplanes inside:

xBP-3006L: 6-slot PXI backplane

cBP-3061: Backplane for one 47-pin 3U CompactPCI modular power supply unit

The following figures show the two parts of the backplanes.

Figure B.1 xBP-3006L Drawing

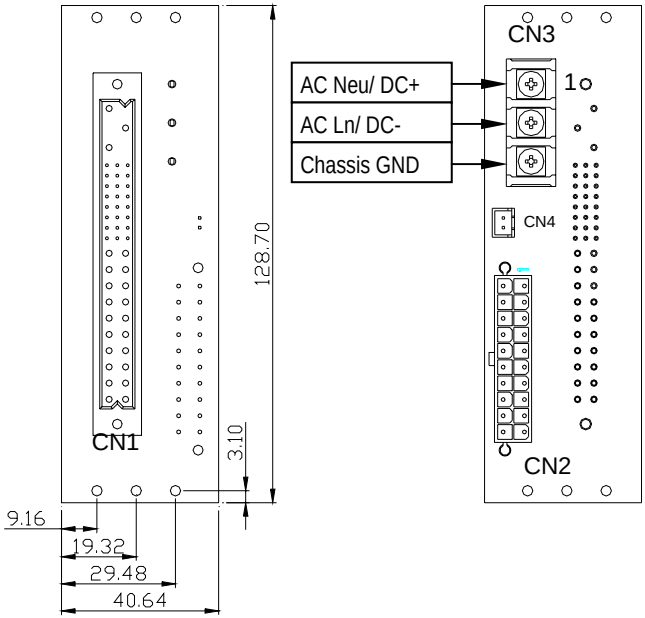


Front view

Rear view

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Figure B.2 cBP-3061 Mechanical Drawing



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B.2 Backplane xBP-3006L Connectors Pin Assignments

B.2.1 PXI Connectors Pin Assignment

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**

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

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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**

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**

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

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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**

General Peripheral Slot (Slot #3-#6) 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**

General Peripheral Slot (Slot #3-#6) 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

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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**

Note 1: 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	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#

Note 2: 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_STAR3
Slot 3	PXI_STAR0
Slot 4	PXI_STAR1
Slot 5	PXI_STAR2
Slot 6	PXI_STAR3

B.2.2 Miscellaneous Connectors Pin Assignments

CN3: ATX-like DC Power input connectors

Signal Name	**Pin #**	**Pin #**	**Signal Name**
V2SENSE	1	11	V2 (+3.3V)
V2 (+3.3V)	2	12	V4 (-12V)
GND	3	13	GND
V1 (+5V)	4	14	INH#
GND	5	15	GND
V1 (+5V)	6	16	SRTN
GND	7	17	GND
FAL#1	8*	18*	V3SENSE
DEG#1	9*	19	V1SENSE
V3 (+12V)	10	20	V1 (+5V)

Note 1: Pin #8, #9, and #18 are not standard ATX power definition.

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General Purpose screw terminals



Position	Signal Name
J4	+3.3V
J6	V(I/O)
J7	+5V

Note that the V(I/O) must be shorted to either +3.3V or +5V. The default factory setting is to short V(I/O) to +5V.

J3 INH#: DC power inhibit signal

J3



Pin #	Signal Name
1	INH#
2	GND

J2 PRST#: System reset signal

J2



Pin #	Signal Name
1	RST#
2	GND

J1 FAL#: Power supply fail input

J1



Pin #	Signal Name
1	FAL#
2	GND

J8: Connector for LED power status

J5



Name	Pin #	Pin #	Name
GND	8	7	+3.3V
GND	6	5	+5V
GND	4	3	-12V
GND	2	1	+12V

J5: SMB (system managing bus) connector

J5



Pin #	Name
1	SMCLK
2	GND
3	SMDATA
4	V(I/O)
5	ALERT

The SMB is connected to the P2 of the system slot.

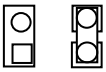
JP1: PXI Bus Speed Control

	Pin 1-2	Description

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	Short	Short M66EN to ground to force PCI bus run 33M Hz
	Open (Default)	PCI bus speed defined by M66EN on the PXI bus

JP2 JP3: PXI Reference Clock Control

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 10 MHz system clock PXI_CLK10

B.3 Backplane cBP-3061 PSU Connectors Pin Assignments

CN1: Standard 47-pin 3U CompactPCI power supply socket, compliant with PICMG 2.11 specifications

CN2: ATX-like power output connectors

Signal	Pin No.	Pin No.	Signal
V2SENSE	1	11	V2 (+3.3V)
V2 (+3.3V)	2	12	V4 (-12V)
GND	3	13	GND
V1 (+5V)	4	14	INH#
GND	5	15	GND
V1 (+5V)	6	16	SRTN
GND	7	17	GND
FAL#1	8*	18*	V3SENSE
DEG#1	9*	19	V1SENSE
V3 (+12V)	10	20	V1 (+5V)

Note 1: Pin #8, #9, and #18 are not standard ATX power definition.

CN3: Screw terminals for external AC/DC input power lines

Pin #	AC Input	DC Input
1	AC Neutral	DC +
2	AC Line	DC -
3	Chassis GND	Chassis GND

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CN4 INH#: DC power output inhibit signal. It is for inhibiting the DC power supply. This connector can be used for a power-on switch.



Pin #	Signal Name
1	INH#
2	GND

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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.
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 inappropriate storage environments such as with 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 all fees necessary to transport damaged products to ADLINK.

For further questions, please e-mail our FAE staff: service@adlinktech.com

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RMA Request & Confirmation Form

Dear Customer, **Page 1 of 2**

Please fill out and fax back this form to obtain the RMA number for your returned or repaired product. Thank you very much!

Your Company Name :				
Your Name :				
Invoice No. :				
Part No.	**Qty.**	**Serial No.**	**The reason of defect**	**Received Qty. by ADLINK**
ADLINK RMA #:				

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Note:

1. Please give specific details of the defect. Do not give general reasons like, “not working, error, dead, etc. “

2. Please ship prepaid by Speed post (EMS) (If items are shipped via freight forwarder, we will not cover the extra handing charges)

3. Please show a value of US$10 for each item and include the RMA number. Also, be sure to write on shipping invoice, “for repair, no commercial value” for customs. (Please note that the amount must be under US$200 for customs purposes only)

4. Enclose this form (page 1 & 2) in the package for fast identification.

5. Please sign this form (page 1 & 2) and fax it back to us for confirmation within three days. Otherwise, we will process your request according the stated on the RMA Request Form.

6. We will charge for items no longer under warranty.

Please let us know your preferred shipping method for returning reworked items to you.

☐ Ship with your next shipment
☐ Ship separately by air parcel
(Note: we do not accept liability for items shipped by air parcel)

☐ Other _____

ADLINK Technology Inc.		Accepted & Confirmed by

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SAFETY INSTRUCTIONS

1. Please read these safety instructions carefully.
2. Please keep this User‘s Manual for later reference.
3. Two AC Inlets provided and service as Disconnect Devices, disconnect the equipment from both AC outlets use these AC Inlets before servicing or clearing. Use moisture sheet or cloth for cleaning.
4. For pluggable equipment, that the socket-outlet shall be installed near the equipment and shall be easily accessible.
5. Please keep this equipment from humidity.
6. Lay this equipment on a reliable surface when install. A drop or fall could cause injury.
7. Make sure the voltage of the power source when connect the equipment to the power outlet.
8. Place the power cord such a way that people can not step on it. Do not place anything over the power cord.
9. All cautions and warnings on the equipment should be noted.
10. If the equipment is not used for long time, disconnect the equipment from to avoid being damaged by transient overvoltage.
11. Never pour any liquid into opening, this could cause fire or electrical shock.
12. Never open the equipment. For safety reason, the equipment should only be opened by qualified service personnel.
13. If one of the following situations arises, get the equipment checked by a service personnel:
    a. The Power cord or plug is damaged.
    b. Liquid has penetrated into the equipment.
    c. The equipment has been exposed to moisture.
    d. The equipment has not work well or you can not get it work according to user‘s manual.
    e. The equipment has dropped and damaged.
    f. If the equipment has obvious sign of breakage.

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1. The equipment can be operated at an ambient temperature of **40**ºC.
2. Lithium Battery provided (real time clock battery), contact ADLINK for replacement.

CAUTION – Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

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