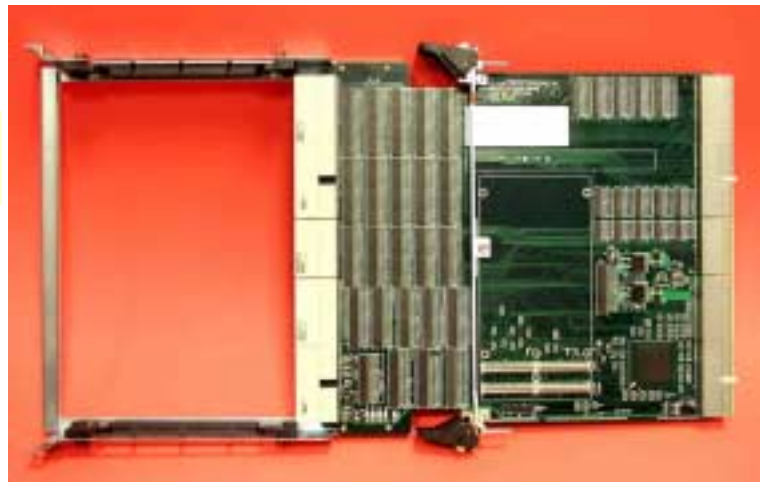


ZPCI.2400

6U Active Extender

cPCI/PMC test fixture provides access to both sides of your CompactPCI board and all PMC slot signals while meeting all PICMG 2.0 R3.0 specifications

- On-board bridge maintains cPCI signal integrity
- On-board PMC slot for PCI logic analyzer/exerciser
- All cPCI and user I/O signals are individually isolatable
- Supports PMC user I/O on J3-J5
- Ideal for both cPCI and PMC board testing
- Test points for all cPCI signals
- Test points for all user I/O pins
- Power test points simplify current measurements
- Short circuit protection for +3.3V, +5V, +12V and -12V supplies
- Individual indicator LEDs show board power status at a glance
- Rigid frame mates and locks with injectors on test board
- 32-bit and 64-bit configurations available



The **ZPCI.2400** Active Extender board from Zephyr Engineering, Inc is the last word in cPCI extender design. It not only gets your board out in the clear for easy access, it also provides an on-board PMC slot for a PCI bus analyzer or PMC board debug.

On-board Bridge Keeps You Legal

The **ZPCI.2400** uses a transparent PCI-to-PCI Bridge to extend cPCI bus signals without violating stub length restrictions, providing easy access to bus signal test points, user I/O test points and both sides of your board under test.

PMC Slot Gives You cPCI Bus Visibility

Plug in a PMC bus analyzer card and you have full access to your test board's cPCI bus. If you are developing a PMC card, you can use the slot for it instead, and have access to all of your PMC card's signals.

Easy to Use

Clearly marked test points show all cPCI bus signal names. User I/O test points are marked with connector and pin numbers.



Every Pin is Isolatable

Every cPCI and user I/O pin can be opened by removal of a 0-ohm resistor. Restoring the connection is easy; just plug on a 2mm shunt! Each header has an adjacent pin for logic analyzer ground.

Superior Mechanical Integrity

The **ZPCI.2400's** mechanical bracketry provides your test board with a one-slot virtual card cage; use your injectors just like normal. The **ZPCI.2400** locks into the card cage with its own injectors.

Short Proof

Foldback current limiting on test board's +3.3V, +5V, +12V and -12V supply rails prevents damage in case of short circuits.



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ZEPHYR ENGINEERING, INC. 1620 WEST FOUNTAINHEAD PKWY, SUITE 320, TEMPE, AZ 85282-1876 (480)736-8714

CompactPCI®



ZPCI.2400 CompactPCI Active Extender

The ZPCI.2400 implements a single CompactPCI I/O slot and a single IEEE1386.1 PMC slot, using an Intel 21154 PCI-to-PCI transparent bridge and power regulator circuitry.

Compliance

CompactPCI Specification, PICMG 2.0 R3.0
PMC on CompactPCI, PICMG 2.3 R1.0
IEEE P1386.1 PMC Draft Specification
PCI Local Bus Specification, R2.1

Specifications

cPCI Interface (ZPCI.2400-64)

CompactPCI bus: connectors J1/J2
User I/O: connectors J3/J4/J5
Bus width: *32/64 bits auto detect

cPCI Interface (ZPCI.2400-32)

CompactPCI bus: connector J1
User I/O: connectors J2/J3/J4/J5
Bus width: 32 bits

cPCI Interface (ZPCI.2400-64 and ZPCI.2400-32)

PCI Clock: 33 MHz
PCI controller: Intel 21154 PCI-to-PCI transparent bridge
Signaling levels: 3.3V or 5V compliant
Interface type: I/O slot ONLY (not for use in system slot)

IEEE P1386.1 PMC Interface

Bus Width: **64/32 bits
PCI clock: 33 MHz
Signaling levels: 3.3V or 5V compliant
Slot power: 7.5W maximum

Input Power Requirements (typical no load, 33MHz)

+3.3V:	650 mA
+5.0V:	10 mA
+12V:	30 mA
-12V:	10 mA

Maximum User I/O pass-through current

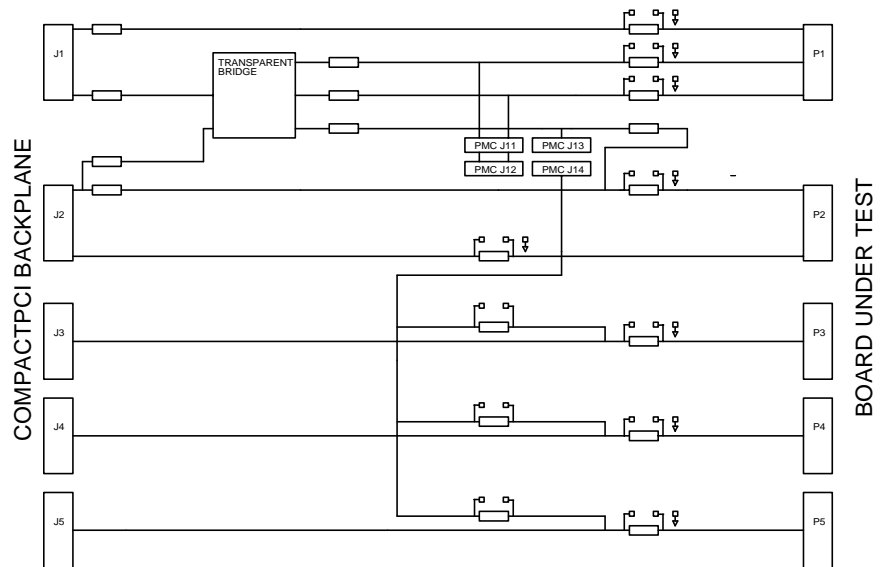
J2/P2 power pins:	2.5A aggregate
User I/O pins:	0.5 A per pin

Maximum Output Current (PMC and cPCI combined)

+3.3V	10.6 A (short-circuit foldback to 1.5 A)
+5.0	10.6 A (short-circuit foldback to 1.5 A)
+12V	850 mA (short-circuit foldback to 250 mA)
-12V	450 mA (short-circuit foldback to 160 mA)

Indicators

Green LEDs for +3.3V, +5V, +12V, -12V and power_good



ZPCI.2400 Active Extender Block Diagram

Mechanical Dimensions

Standard 6U cPCI height:	10.3 inches (262 mm) overall
Depth (including card cage):	18.2 inches (462 mm) overall

On-board Connectors

+3.3V current measurement test point: 5mV per Amp
+5.0V current measurement test point: 5mV per Amp
Voltage test points for: +3.3V, +5V, +12V, -12V
Remote power off header
Test point for secondary cPCI bus clock
8 pin JTAG port
Single IEEE P1386.1 PMC slot
Single 6U cPCI I/O slot

User-configurable Strapping options

J3/P3, J4/P4, J5/P5 cPCI pins individually isolatable/connectible
J2/P2 pins individually isolatable/connectible (ZPCI.2400-32 only)
P2 secondary bus (cPCI/PMC) signals isolatable/connectible (ZPCI.2400-64 only)
P1 secondary bus (cPCI/PMC) signals isolatable/connectible
PMC user I/O signals connectible to either J4 or J5

Warranty

Three year limited warranty.

Ordering Information

Order number	
ZPCI.2400-32	6U, 32-bit cPCI/PMC Active Extender
ZPCI.2400-64	6U, 64-bit cPCI/PMC Active Extender

* Automatic 32/64-bit detection of Primary cPCI bus width (ZPCI.2400-64 only) per PICMG specification R2.0 V3.0

** 32-bit on ZPCI.2400-32 and 64-bit on ZPCI.2400-64



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