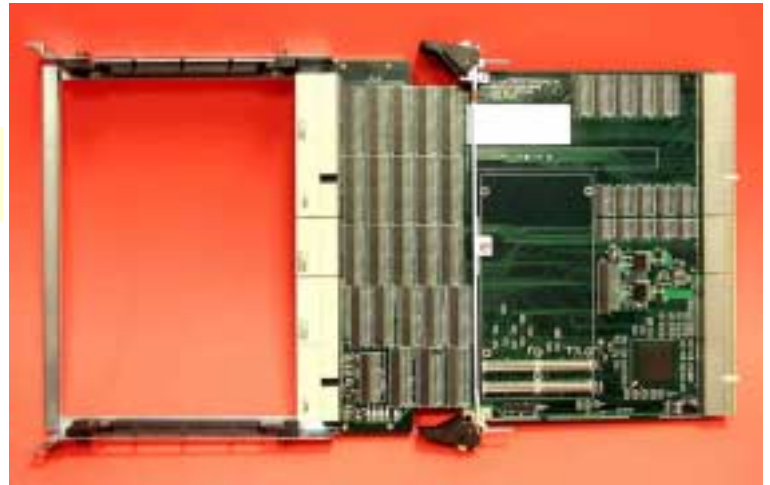


# ZPCI.2466

## 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 at 66 MHz



The **ZPCI.2466** 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. The **ZPCI.2466** is a 66 MHz version of the versatile **ZPCI.2400**, with all of the same valuable features you have come to rely on.

### On-board Bridge Keeps You Legal

The **ZPCI.2466** 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.2466**'s mechanical bracketry provides your test board with a one-slot virtual card cage; use your injectors just like normal. The **ZPCI.2466** 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.



Visit us at [WWW.ZPCI.COM](http://WWW.ZPCI.COM)

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CompactPCI®



## ZPCI.2466 CompactPCI Active Extender

The ZPCI.2466 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.2466-64)

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

#### cPCI Interface (ZPCI.2466-32)

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

#### cPCI Interface (ZPCI.2466-64 and ZPCI.2466-32)

PCI Clock: 33/66 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: 33/66 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

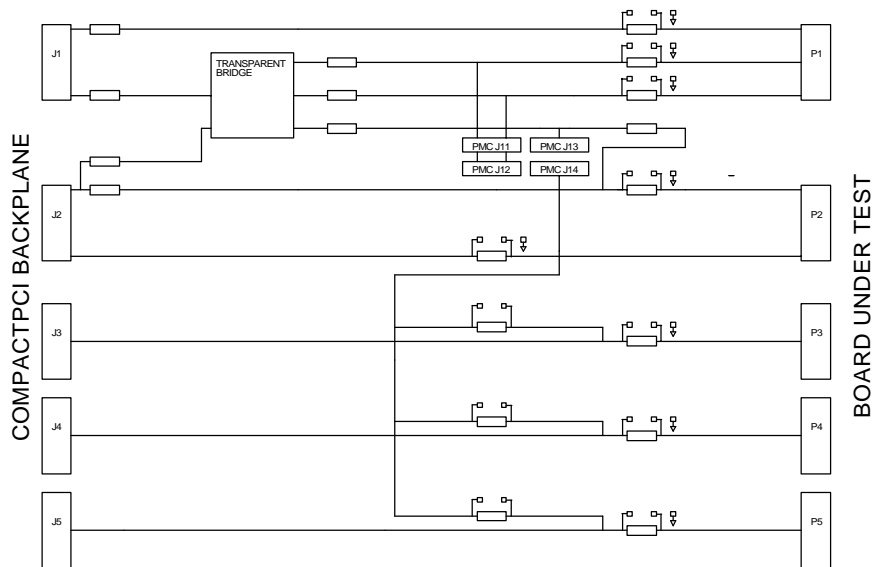
J2/P2 power pins: 2.5A aggregate  
User I/O pins: 0.5 A per pin

#### 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.2466 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.2466-32 only)  
P2 secondary bus (cPCI/PMC) signals isolatable/connectible (ZPCI.2466-64 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.2466-32 6U, 32-bit, 66 MHz cPCI/PMC Active Extender  
ZPCI.2466-64 6U, 64-bit, 66 MHz cPCI/PMC Active Extender

\* Automatic 32/64-bit detection of Primary cPCI bus width (ZPCI.2466-64 only) per PICMG specification R2.0 V3.0

\*\* 32-bit on ZPCI.2466-32 and 64-bit on ZPCI.2466-64



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