ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

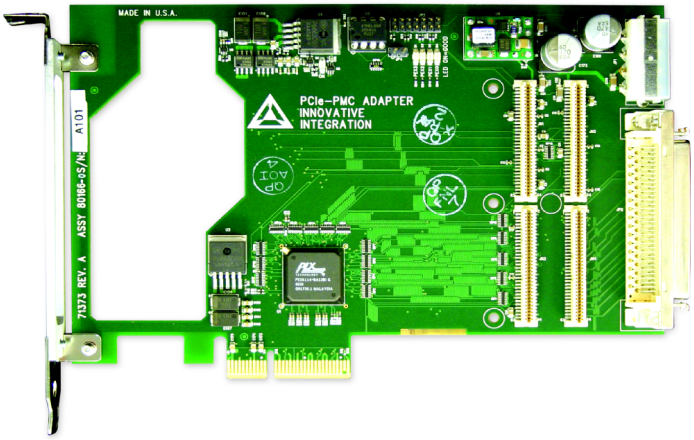
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Molex / Innovative Integration PCIe-PMC* at our website: *Click HERE*

PMC to PCI Express Adapter with JN4 Connector Breakout

FEATURES

- Adapt one PMC to a PCI Express slot
- 4 lane PCI Express Host Interface
- PCI 64 bit, 66 MHz PMC Interface
- J4 connector breakout to MDR68
- IEEE 1384 PMC mechanicals
- Robust end bracket
- Large opening under PMC improves forced air cooling.
- 4 lane good indicators
- ½ size PCI Express card

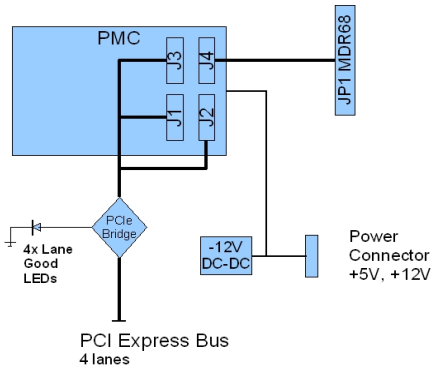


APPLICATIONS

- Add PMCs to standard PCI Express systems
- Custom interfaces to PMC J4

SOFTWARE

- Uses standard PCI bridge driver



DESCRIPTION

The PCI Express to PMC adapter allows a standard IEEE1384 PMC module to be used in a PCI Express slot. The J4 connector breakout provides convenient access to all J4 signals through an MDR connector.

The adapter has a bridge device with a 4 lane PCI Express host interface and a back-end PCI interface supporting 64-bit, 66MHz PCI. Sustained data rates to 220 MB/s are typically achieved. The PCI interface is 3.3V signaling to the PMC module. Four LED "lane good" indicators are provided.

Power from the PCI Express slot is augmented a standard disk drive power connector that provides the 5V and +12V supplies to the PMC. The power connector is compatible with standard disk drive power connectors in PC systems and is required for operation. All standard PMC voltages are supplied: 5V, 3.3V, +12V and -12V.

The PCIe-PMC adapter software driver is provided. The adapter enumerates as a standard bridge device that is supported in most operating systems.

The PMC mounts securely to the adapter using standoffs and with the end bracket. The bracket mates to standard PMC end brackets and supports an EMI gasket. All connectors from the PMC end bracket are fully accessible.

Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Innovative Integration products and disclaimers thereto appears at the end of this data sheet.

All trademarks are the property of their respective owners.

PRODUCTION DATA information is current as of publication date.
Products conform to specifications per the terms of the Innovative Integration standard warranty. Production processing does not necessarily include testing of all parameters.

Copyright © 2007, Innovative Integration

This electronics assembly can be damaged by ESD. Innovative Integration recommends that all electronic assemblies and components circuits be handled with appropriate precautions. Failure to observe proper handling and installation procedures can cause damage.

ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.

ORDERING INFORMATION

Product	Part Number	Description
PCIe-PMC Adapter	80166-0	PCIe-PMC Adapter
Breakout and Cable	80116-1	Screw terminal assembly and 36 inch (0.91 m) pleated foil flat ribbon MDR68 cable
MDR68 cable	65057	MDR68 male to male cable assembly, pleated foil shielded flat ribbon, 36 inches (0.91 m)

Specifications	
Power Consumption	3.3V @ 1A (adapter only)

Physicals	
Form Factor	PCI Express half card
Size	4.20 in x 6.49 in
Weight	100g

Power Capability Delivered to the PMC	
Volts	**Amps**
3.3V	10A max
5V	5A max
+12V	1A max
-12V	1A max

** PMC cooling may be required

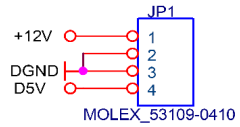
JP1 Power Connector

JP1 is required to provide the +5V and +12V PMC supplies.

Pin	Power
1	+12V
2, 3	Ground
4	+5V

Caution: incorrect connections may cause damage!

Mating connector is Molex 70156 or equivalent



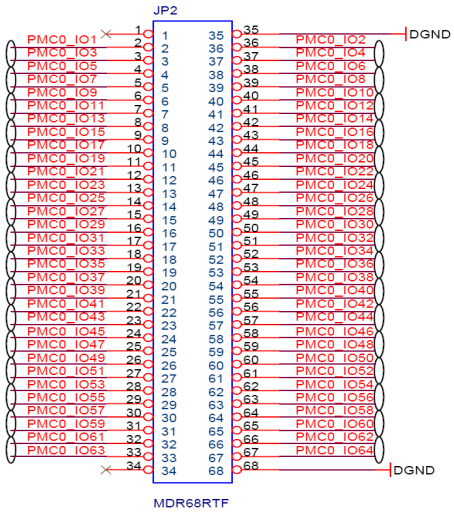
JP2 - Breakout Connector for PMC JN4

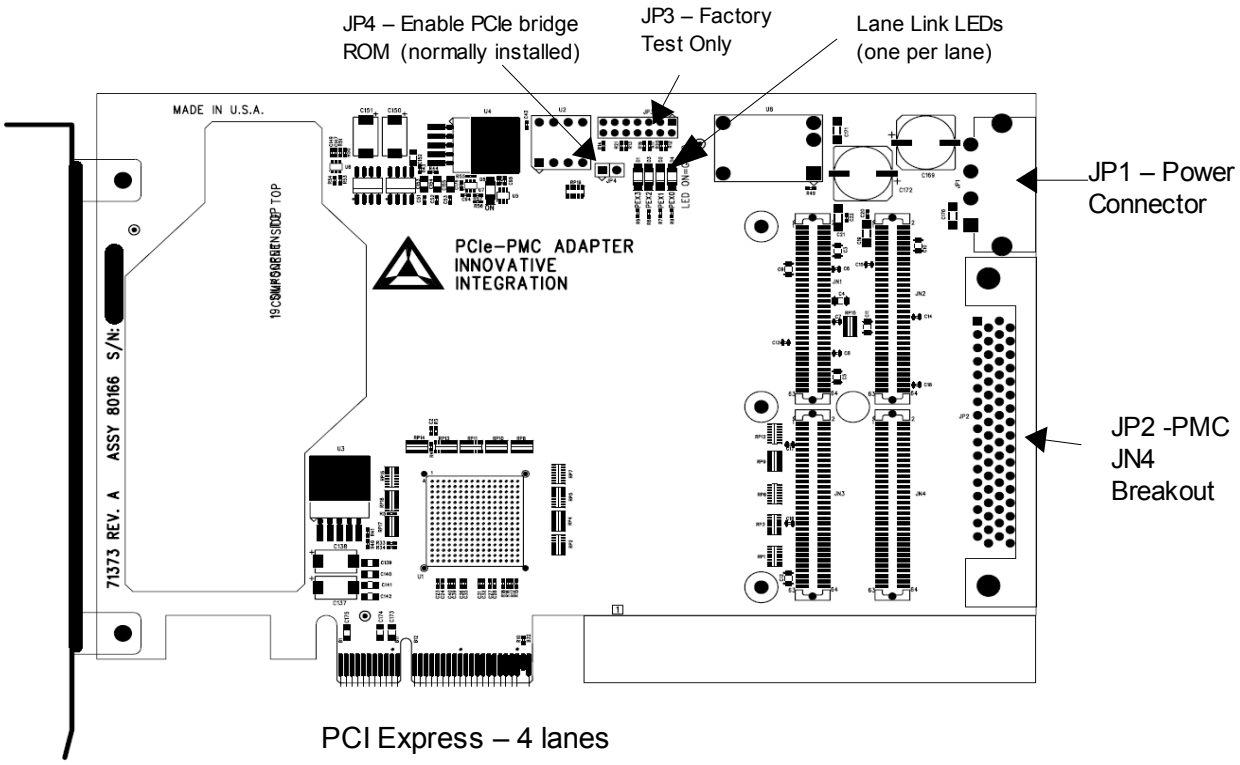
JP2 provides connection to the PMC JN4 connector. Signals are routed as 32 differential pairs (100 ohm), 64 signals total.

The JN4 pin number is denoted by the signal name PMC0_IOx, where x= JN4 pin number.

Signal pairs are denoted by the circled wires.

Connector is 3M 10268-55H3VC or equivalent





Applications Information

Transfer Rates

Maximum sustained transfer rates between the PMC and host computer are approximately 220 MB/s in each direction. The PCIe bridge is the limiting device due to its internal data buffering and processing limitations.

Power to the PMC

The PMC module site provides +3.3V, +5V, +12V and -12V to the module. Many PCIe slots may not have sufficient power capability so a disk drive power connector is used to deliver power to the adapter card for the +5V and +12V. The power must be connected for proper PMC operation.

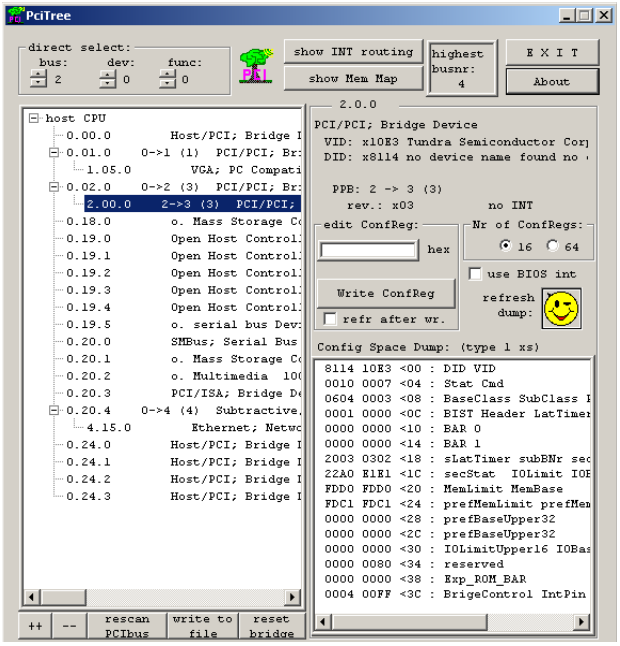
DO NOT HOT PLUG THE CONNECTOR! Damage may occur.

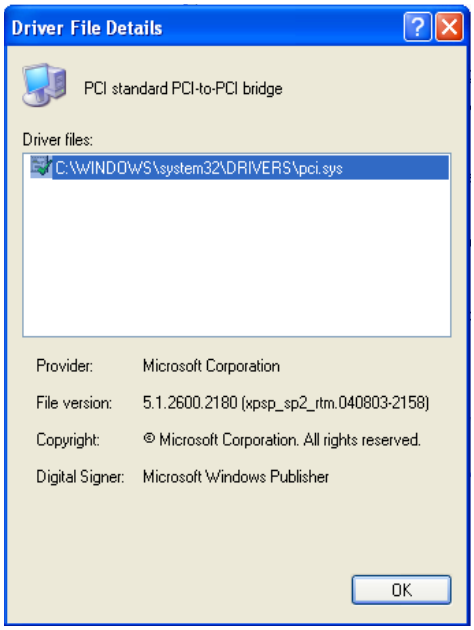
Software Driver

The adapter card uses a PCI Express to PCI bridge device that is recognized during system plug-n-play that is in addition to any driver the PMC may use. The bridge device identifies as a standard PCI bridge and uses the driver supplied with Windows or Linux. Drivers for the PMC installed on the adapter must still be installed.

Enumeration

The adapter enumerates in the system as a standard PCI bridge, typically as a branch from the 0th bus. The bridge device is Tundra TSI384.





Cables

The JN4 breakout uses a pleated foil ribbon cable assembly mating to the JP2 connector. Innovative offers a cable assembly (P/N 65057) and screw terminal assembly for convenience (P/N 80116-1).

The cable assembly generally offers performance up to >50 MHz when differential signaling such as LVDS is used. Single ended signals are limited to about 10 MHz.

IMPORTANT NOTICES

Innovative Integration Incorporated reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to Innovative's terms and conditions of sale supplied at the time of order acknowledgment.

Innovative Integration warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with Innovative's standard warranty. Testing and other quality control techniques are used to the extent Innovative deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Innovative Integration assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using Innovative products. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

Innovative Integration does not warrant or represent that any license, either express or implied, is granted under any Innovative patent right, copyright, mask work right, or other Innovative intellectual property right relating to any combination, machine, or process in which Innovative products or services are used. Information published by Innovative regarding third-party products or services does not constitute a license from Innovative to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from Innovative under the patents or other intellectual property of Innovative.

Reproduction of information in Innovative Integration data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. Innovative is not responsible or liable for such altered documentation.

Resale of Innovative products or services with statements different from or beyond the parameters stated by Innovative for that product or service voids all express and any implied warranties for the associated Innovative product or service and is an unfair and deceptive business practice. Innovative is not responsible or liable for any such statements.

For further information on Innovative Integration products and support see our web site:
www.innovative-dsp.com

Mailing Address: Innovative Integration, Inc.
2390A Ward Avenue, Simi Valley, California 93065

Copyright © 2007-2009, Innovative Integration,

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP