

# **General Standards Corporation**

**High Performance Bus Interface Solutions**

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## **PCIe104x1 to PMC Adapter**



### **Features:**

- Supports 32 bit PCI Bus
- Supports both 3.3v & 5v PCI Signaling (optional)
- Supports 33/66Mhz PCI Bus
- Supports Rear I/O
- Adapts a single-width PMC form factor to a 1 lane PCI Express (x1 link)
- The PCI Express interface supports 1 lane operating at 2.5 Gbps
- Extended temperature range (-40 to +85 degrees Celsius)
- Compatible with Conduction-Cooled PMC modules
- Stackable configuration (Stack-UP or Stack-DOWN)

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## PCIe & PCI Compatibility:

- PCI Local Bus Specification, Revision 3.0
- PCIe104 Specification, Revision 1.1
- PCI Express to PCI Bridge Specification, Revision 1.0

## Electrical Characteristics:

The adapter supplies power to the PMC module from the PCIe bus connector:

Supplied to the PMC Module:		(Indicator, LED)
+3.3vdc	– direct connection to PCIe104 bus;	(LED D6)
+5vdc	– direct connection to PCIe104 bus;	(LED D7)
+12vdc	– direct connection to PCIe104 bus;	(LED D9)
-12vdc	– 400mA, max; (regulated)	(LED D8)

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## LEDS (misc.)

D5– Indicates PMC (PCI) bus clock rate is 66Mhz .

D11– Only on, when a PCIe reset occurs.

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## Mechanical Characteristics:

Height: 0.600”(stand-off).

Depth: 5.675”.

Width: 3.775”.

## Environmental Specifications:

Ambient Temperature Range:	Operating: -40 to +85 Degrees Celsius
	Storage: -65 to +150 Degrees Celsius
Relative Humidity:	Operating: 0 to 80%, non-condensing
	Storage: 0 to 95%, non-condensing

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## Ordering Information:

Specify the basic product model number followed by an option suffix "-x", as indicated below. For example, model number "PCIe104x1-to-PMC Adapter-5" describes a board, which VIO is set to +5v. Cables are available for the RIO feature. Contact the factory for more details.

Optional Parameter	Value	Specify Option As:
VIO (PCI signal level)	+3.3v	3 (default)
	+5v	5

This spec sheet comprises/provides the entire documentation needed for supporting this product.

General Standards Corporation assumes no responsibility for the use of any circuits in this product. No circuit patent licenses are implied. Information included herein supersedes previously published specifications on this product and is subject to change without notice.

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## I/O Connector:

Table 1. The Rear I/O Connector

P5 Row A		P5 Row B	
P5 - PIN	P4 - PIN	P5 - PIN	P4 - PIN
A34	I/O - 1	B34	I/O - 2
A33	I/O - 3	B33	I/O - 4
A32	I/O - 5	B32	I/O - 6
A31	I/O - 7	B31	I/O - 8
A30	I/O - 9	B30	I/O - 10
A29	I/O - 11	B29	I/O - 12
A28	I/O - 13	B28	I/O - 14
A27	I/O - 15	B27	I/O - 16
A26	I/O - 17	B26	I/O - 18
A25	I/O - 19	B25	I/O - 20
A24	I/O - 21	B24	I/O - 22
A23	I/O - 23	B23	I/O - 24
A22	I/O - 25	B22	I/O - 26
A21	I/O - 27	B21	I/O - 28
A20	I/O - 29	B20	I/O - 30
A19	I/O - 31	B19	I/O - 32
A18	I/O - 33	B18	I/O - 34
A17	I/O - 35	B17	I/O - 36
A16	I/O - 37	B16	I/O - 38
A15	I/O - 39	B15	I/O - 40
A14	I/O - 41	B14	I/O - 42
A13	I/O - 43	B13	I/O - 44
A12	I/O - 45	B12	I/O - 46
A11	I/O - 47	B11	I/O - 48
A10	I/O - 49	B10	I/O - 50
A9	I/O - 51	B9	I/O - 52
A8	I/O - 53	B8	I/O - 54
A7	I/O - 55	B7	I/O - 56
A6	I/O - 57	B6	I/O - 58
A5	I/O - 59	B5	I/O - 60
A4	I/O - 61	B4	I/O - 62
A3	I/O - 63	B3	I/O - 64
A2	GND	B2	GND
A1	GND	B1	GND

### System Mating Connector:

68-Pin 2-row 0.050" dual-ribbon cable  
 socket connector: Robinson Nugent  
 #P50E-068-S-TG, or equivalent.

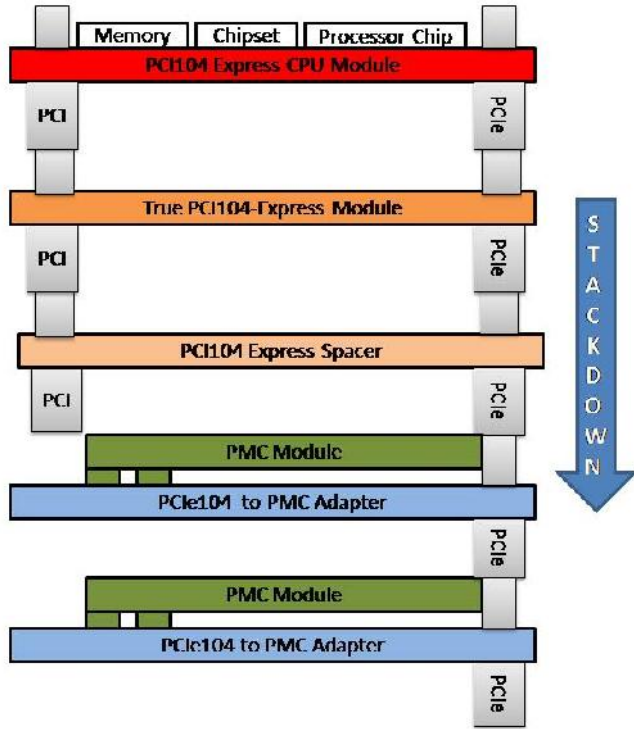
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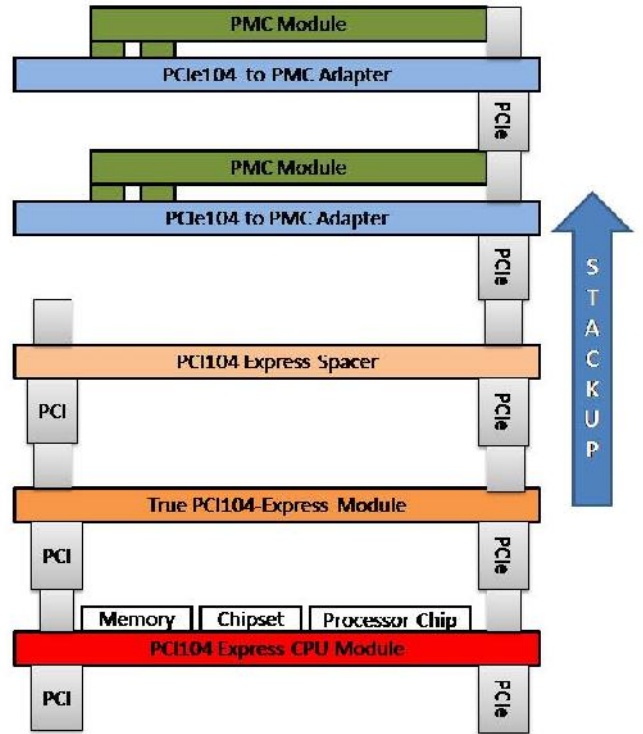
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# Module Stacking Considerations:

**Stack-DOWN Configuration Example**



**Stack-UP Configuration Example**



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## Module Stacking Considerations:

The system below illustrates a processor board before modules are installed.



The same system with the PCIe104x1 to PMC Adapter installed. Notice a spacer is needed to allow the adapter to clear the large heatsink.



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