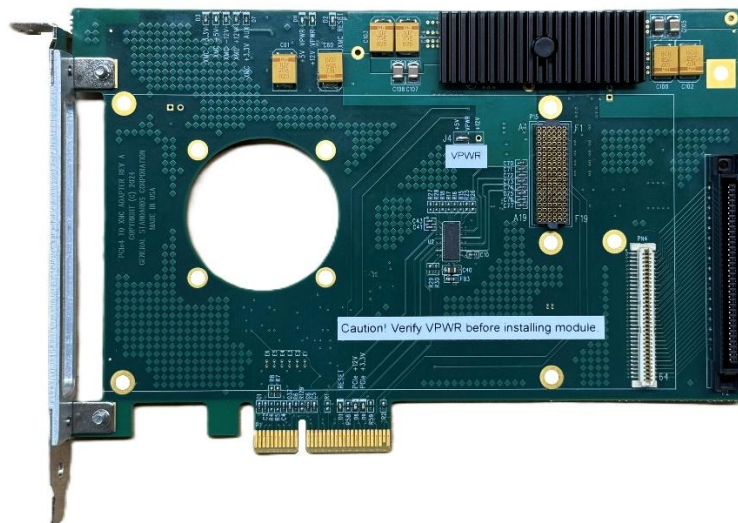


# PCIe4 to XMC Adapter

## DATA SHEET



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## 1. OVERVIEW

The PCIe4 to PMC Adapter (Figure 1.1) allows a single width XMC module to be installed on a standard height PCI Express board. The PCI Express x4 link from the host board is connected to the XMC module via a PCIe redriver. Other options include RIO, external fan, and a selectable VPWR.

This Adapter requires +12V and +3.3V from the PCIe bus connector. The +12V from the PCIe bus connector is used to generate the supplies for the XMC card providing up to 25W(all supplies combined). The +3.3V from the PCIe bus connector is used for the redriver device.

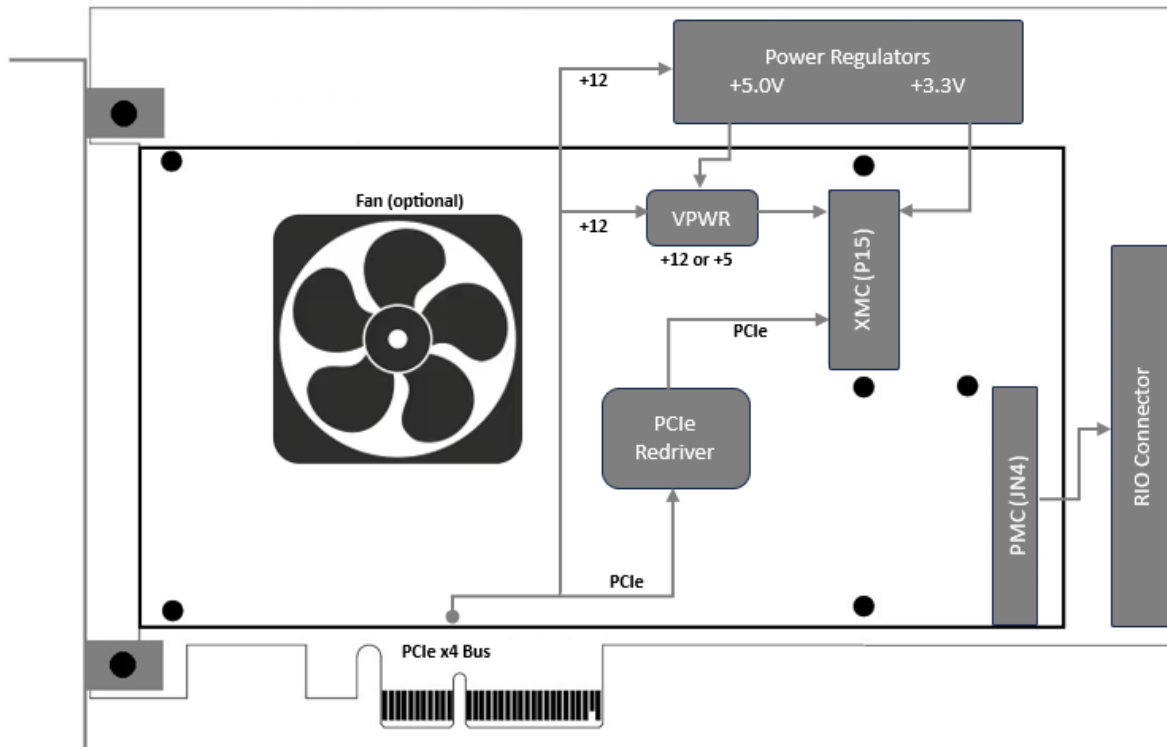


Figure 1.1 PCIe4 to PMC Adapter; Functional Organization

RIO connections are made through a single 68-pin I/O connector. Power requirements consist of +3.3 VDC and +12V, in compliance with the PCIe specification, and operation over the specified temperature range is achieved with conventional convection cooling.

## 2. TECHNICAL INFORMATION

### 2.1 MECHANICAL AND ELECTRICAL INTERFACES

| PCI Express                                         |
|-----------------------------------------------------|
| PCI Express x4, Revision 3.0                        |
| Standard Height and Length (1/2 length PCIe board). |

| XMC Site                                       |
|------------------------------------------------|
| ANSI/VITA 42 (ANSI/VITA 61 optional)           |
| Single-Width                                   |
| Connect Access via Front Panel I/O or Rear I/O |

## 3. POWER, MECHANICAL, AND ENVIRONMENTAL SPECIFICATIONS

### 3.1 POWER REQUIREMENTS

| PCIe Power           |
|----------------------|
| +3.3VDC $\pm$ 0.2VDC |
| +12VDC $\pm$ 0.4VDC  |

| XMC Power |           |
|-----------|-----------|
| +3.3V     | 3.0A max  |
| +5.0V     | 3.0A max  |
| +12V      | 1.25A max |
| +3.3Vaux  | 0.5A max  |
| -12V      | 0.5A max  |

### 3.2 MECHANICAL CHARACTERISTICS

| Height             | Depth               | Width               |
|--------------------|---------------------|---------------------|
| ~15.0 mm (0.59 in) | ~167.6 mm (6.60 in) | ~106.7 mm (4.20 in) |

### 3.3 ENVIRONMENTAL REQUIREMENTS

| Ambient Temperature Range |                 |
|---------------------------|-----------------|
| Operating                 | -40°C to +85°C  |
| Storage                   | -65°C to +150°C |

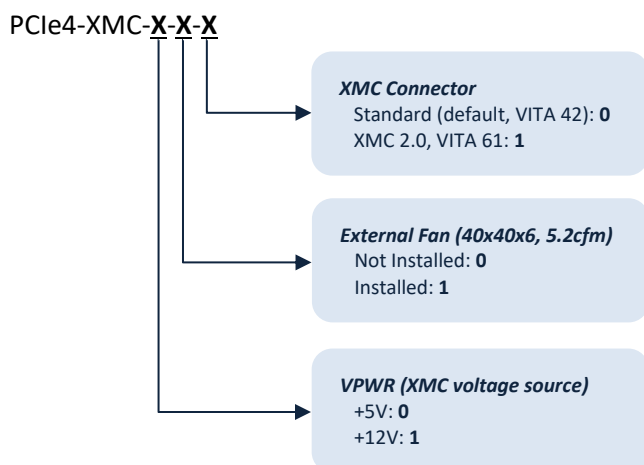
| Relative Humidity |                           |
|-------------------|---------------------------|
| Operating         | 0% to 80%, non-condensing |
| Storage           | 0% to 95%, non-condensing |

| Altitude              | Cooling                            |
|-----------------------|------------------------------------|
| Operation to 10,000ft | Conventional air cooling, 150 LFPM |

## 4. ORDERING INFORMATION

### 4.1 PRODUCT OPTIONS

Specify the basic product model number followed by an option suffix “-X-X-X”, as indicated below. Contact the Sales Department for more information.



## 5. REAR IO CONNECTOR: (P2)

Rear I/O Connector Pin Assignment  
(AMP 787170-7, 68 Position D-Type Receptacle)  
(Original pin list shown below)

|        |       |        |
|--------|-------|--------|
|        |       |        |
| I/O-2  | B3 A3 | I/O-1  |
| I/O-4  | B3 A3 | I/O-3  |
| I/O-6  | B3 A3 | I/O-5  |
| I/O-8  | B3 A3 | I/O-7  |
| I/O-10 | B3 A3 | I/O-9  |
| I/O-12 | B2 A2 | I/O-11 |
| I/O-14 | B2 A2 | I/O-13 |
| I/O-16 | B2 A2 | I/O-15 |
| I/O-18 | B2 A2 | I/O-17 |
| I/O-20 | B2 A2 | I/O-19 |
| I/O-22 | B2 A2 | I/O-21 |
| I/O-24 | B2 A2 | I/O-23 |
| I/O-26 | B2 A2 | I/O-25 |
| I/O-28 | B2 A2 | I/O-27 |
| I/O-30 | B2 A2 | I/O-29 |
| I/O-32 | B1 A1 | I/O-31 |
| I/O-34 | B1 A1 | I/O-33 |
| I/O-36 | B1 A1 | I/O-35 |
| I/O-38 | B1 A1 | I/O-37 |
| I/O-40 | B1 A1 | I/O-39 |
| I/O-42 | B1 A1 | I/O-41 |
| I/O-44 | B1 A1 | I/O-43 |
| I/O-46 | B1 A1 | I/O-45 |
| I/O-48 | B1 A1 | I/O-47 |
| I/O-50 | B1 A1 | I/O-49 |
| I/O-52 | B9 A9 | I/O-51 |
| I/O-54 | B8 A8 | I/O-53 |
| I/O-56 | B7 A7 | I/O-55 |
| I/O-58 | B6 A6 | I/O-57 |
| I/O-60 | B5 A5 | I/O-59 |
| I/O-62 | B4 A4 | I/O-61 |
| I/O-64 | B3 A3 | I/O-63 |
| GND    | B2 A2 | GND    |
| GND    | B1 A1 | GND    |
|        |       |        |

Table 5.1 Rear I/O Original Pin Assignment

|        |       |        |
|--------|-------|--------|
|        |       |        |
| I/O-2  | 68 34 | I/O-1  |
| I/O-4  | 67 33 | I/O-3  |
| I/O-6  | 66 32 | I/O-5  |
| I/O-8  | 65 31 | I/O-7  |
| I/O-10 | 64 30 | I/O-9  |
| I/O-12 | 63 29 | I/O-11 |
| I/O-14 | 62 28 | I/O-13 |
| I/O-16 | 61 27 | I/O-15 |
| I/O-18 | 60 26 | I/O-17 |
| I/O-20 | 59 25 | I/O-19 |
| I/O-22 | 58 24 | I/O-21 |
| I/O-24 | 57 23 | I/O-23 |
| I/O-26 | 56 22 | I/O-25 |
| I/O-28 | 55 21 | I/O-27 |
| I/O-30 | 54 20 | I/O-29 |
| I/O-32 | 53 19 | I/O-31 |
| I/O-34 | 52 18 | I/O-33 |
| I/O-36 | 51 17 | I/O-35 |
| I/O-38 | 50 16 | I/O-37 |
| I/O-40 | 49 15 | I/O-39 |
| I/O-42 | 48 14 | I/O-41 |
| I/O-44 | 47 13 | I/O-43 |
| I/O-46 | 46 12 | I/O-45 |
| I/O-48 | 45 11 | I/O-47 |
| I/O-50 | 44 10 | I/O-49 |
| I/O-52 | 43 9  | I/O-51 |
| I/O-54 | 42 8  | I/O-53 |
| I/O-56 | 41 7  | I/O-55 |
| I/O-58 | 40 6  | I/O-57 |
| I/O-60 | 39 5  | I/O-59 |
| I/O-62 | 38 4  | I/O-61 |
| I/O-64 | 37 3  | I/O-63 |
| GND    | 36 2  | GND    |
| GND    | 35 1  | GND    |
|        |       |        |

Table 5.2 Rear I/O Alternate Pin Assignment

System Cable Mating Connector:  
68-pin 0.050" Subminiature connector: with metal shield: AMP #749621-7 or equivalent.

## 6. REVISION HISTORY:

| Revision | Date          | Description |
|----------|---------------|-------------|
| 1.0      | July 29, 2026 | Origination |

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