## GE Intelligent Platforms



# SPR418A

## PCI Express PMC/XMC Carrier Card

### **Features**

- Adapts one PMC or XMC card to x8 PCI Express
- Supports Gen2 PCI Express
- PMC site supports PCI-X 133 MHz
- Optional connectors provide J4 and J16 connectivity as well as stand-alone operation
- Integrated fan
- Delivers up to 25W to mezzanine site

The SPR418A is a short form factor PCI Express carrier for either PMC or XMC modules which allows for use of these modules in traditional PC's with slots supporting 8 or 16 lane PCI Express (Gen 1 or 2). The PCI Express interface to the HOST allows for unimpeded data transfers at the full rate supported by the mezzanine card.

The SPR418A can be ordered to host either a PMC module supporting up to PCI-X transfer speeds, or an XMC module supporting up to 8 lane PCI Express. The PMC site is connected to the host PCI Express bus through a bridge which supports only 3.3V signaling levels and is compatible with 32bit/33MHz devices.

The SPR418A was designed with the requirements of today's high end PMC and

XMC modules in mind, supporting up to 25 W of required power. An integrated fan supplies additional cooling directly to the mezzanine card.

One of the highlights of the SPR418A is the ability to order the card with connectors which provide additional I/O and usage modes. J4 connectivity is provided to an optional 80-pin KEL connector (similar to the connector used for FPDP VITA 17). J16 can be connected to two SFF connectors providing for up to 4 lanes of high speed serial connectivity each via readily available cables. Finally, an standard PC power connector can be fitted for standalone operation for mezzanines that do not require interaction with a HOST.



## SPR418A - PCI Express PMC/XMC Carrier Card

## **Specifications**

#### General

- Short form factor PCI Express carrier for single PMC or XMC module or hybrid (both XMC and PMC)
- PCIe 8 lane interface compatible with x8 and x16 slots
- Optional connectors for high speed serial, LVDS, and power (for standalone operation)

### I/O Resources

- PCI 2.3 (PCI-X) PMC site, backwards compatible with PCI2.2, 3.3V signaling only
- Eight-lane PCI Express
- LVDS data path supported via PMC J4 connection to 80-pin KEL connector (commonly associated with FPDP)
- High speed serial links supported via XMC J16 connection to two SFF connectors (commonly associated with SATA)

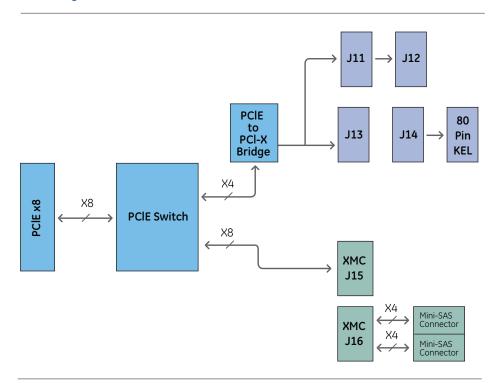
#### Power

• Up to 25W is available for the PMC or XMC module

### Environmental

- 0°C to + 55°C Operating temperature
- · 95 percent, non-condensing humidity

## **Block Diagram**



### **Ordering Information**

| SPR418A-100 | PCI Express Hybrid XMC/PMC Carrier with fan. Short form factor PCIe, x8 PCI Express interface, PCI-X 133 MHz at PMC site                        |
|-------------|---|
| SPR418A-101 | PCI Express XMC Carrier with fan. Short form factor PCIe, x8 PCI Express interface  |
| SPR418A-102 | PCI Express PMC Carrier with fan.<br>Short form factor PCIe, x8 PCI Express interface, PCI-X 133 MHz at PMC site                                |
| SPR418A-108 | PCI Express XMC Carrier with 2 fans (Note: 2nd fan may interfere with some mezzanine modules). Short form factor PCIe, x8 PCI Express interface |

## **About GE Intelligent Platforms**

GE Intelligent Platforms is a division of GE that offers software, control systems, services, and expertise in automation and embedded computing. We offer a unique foundation of agile and reliable technology providing customers a sustainable competitive advantage in the industries they serve, including energy, water, consumer packaged goods, oil and gas, government and defense, and telecommunications. GE Intelligent Platforms is headquartered in Charlottesville, VA. For more information, visit www.ge-ip.com.

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