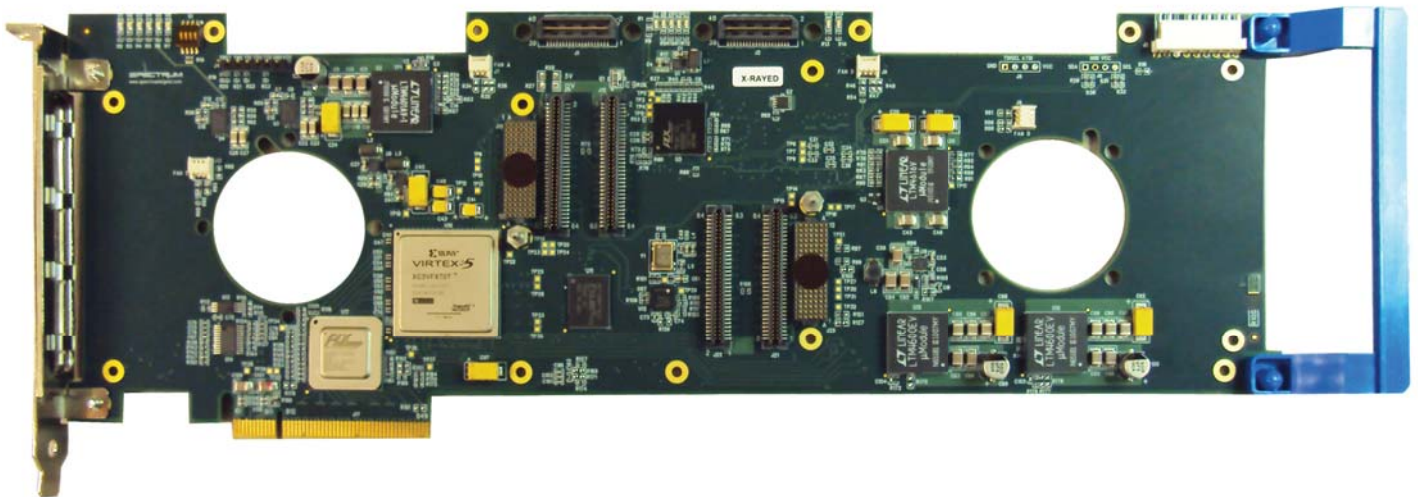


Description

The PRO-2910 is a PCIe-based carrier card with dual XMC sites. This unique carrier card can be used within a PC-based system to interface to Spectrum FPGA, DSP, and I/O processing engines. The PRO-2910 provides a flexible data routing architecture, allowing numerous combinations of FPGA, DSP and GPP signal processing devices to support a wide range of software-defined radio (SDR) applications.



Benefits

- Provides a low cost software-defined radio (SDR) solution as part of the *flexComm*™ software-reconfigurable platforms
- Supports applications requiring high-speed, low latency, deterministic data paths
- Modular architecture supports multiple combinations of processing and I/O mezzanine cards
- Suitable for use in a Linux or Windows®* desktop environment
- Scalable for future system expansion

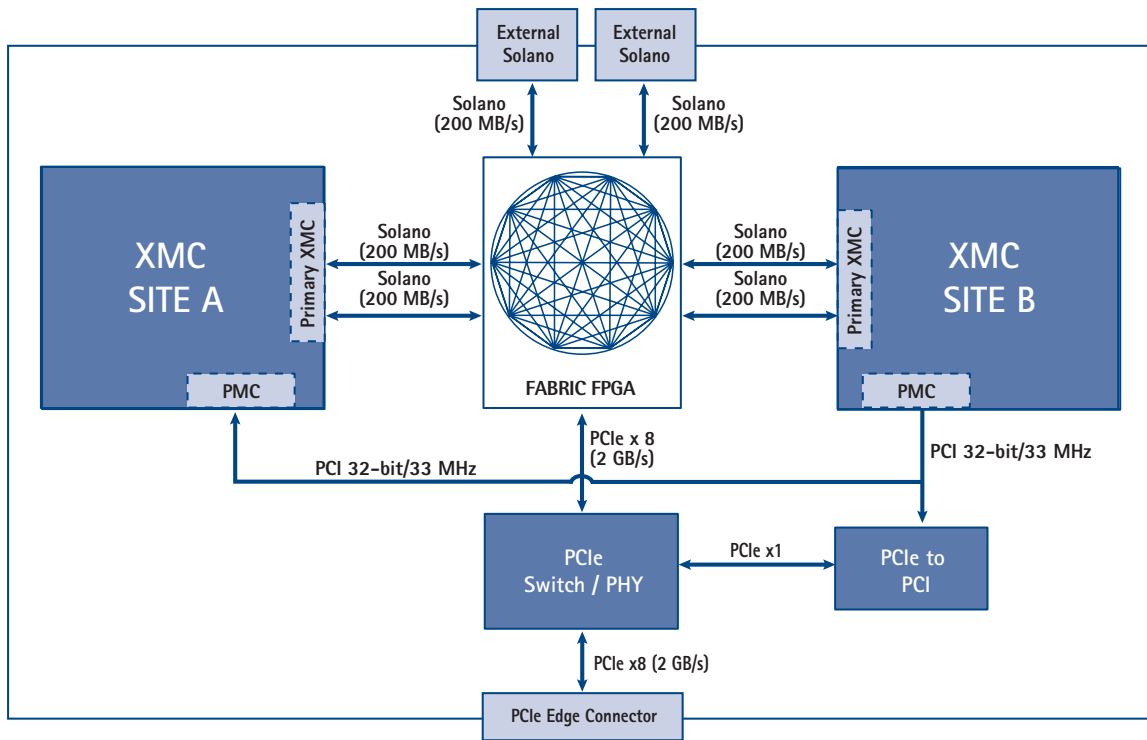
Applications

- Military Satellite Communications (MILSATCOM)
 - Satellite earth stations
 - Land and mobile systems
- Electronic Warfare (EW)
- Signals Intelligence (COMINT & ELINT)
 - Wideband Spectral Analysis
 - Multi-channel Direction Finding
 - Channelized Receiver

Features

- 8-lane PCIe Gen1 interface to the PC motherboard
- Two XMC sites that support:
 - Spectrum Solano-based XMC modules
 - Third-party PMC modules via a PCIe-to-PCI bridge
- Two Solano links from each XMC site provide a data rate of up to 400 MB/s between the PRO-2910 and an XMC module
- Two Solano links via external connectors provide a data rate of up to 400 MB/s between two PRO-2910 boards in a system
- High-speed communications fabric FPGA allows data routing between XMC Solano links, external Solano links, and the external PCIe bus

* See future options section of this datasheet.



PRO-2910 Block Diagram

Specifications

[general]	Form Factor	Full-length 8-lane PCIe card
[local buses]	XMC Solano Interface	2 Solano interfaces between each primary XMC connector and the fabric FPGA (200 MB/s each)
	Fabric FPGA PCIe Interface	8-lane PCIe Gen1 between the fabric FPGA and the PCIe switch (up to 2.0 GB/s each)
	Module Control Bus	Local PCIe bus (32-bit/33MHz) via PCIe-to-PCI bridge
[external interfaces]	Motherboard Interface	8-lane PCIe Gen1 (up to 2.0 GB/s)
	Inter-board Solano Interface	2 Solano interfaces between external connectors and the fabric FPGA (200 MB/s each)
[mezzanine]	XMC	Dual XMC
[host requirements]	Operating System	Linux (RedHat 5.3)
[mechanical]	Size	Full-length 8-lane PCIe card
[environmental]	Temperature	Operating temperature range of 10 to 35 degrees C Storage temperature to be announced
	RoHS	5 of 6 compliant (Pb in solder exemption). For RoHS ordering information, other RoHS compliance options or certificates of compliance, please contact Spectrum Sales
[custom configurations]		Contact Spectrum Sales
[additional options]	XMC-1131	Analog-to-digital converter module
	XMC-2131	Digital-to-analog converter module
	XMC-3321	Dual transceiver module and external clock module
	XMC-3311	High-speed transceiver module
	XMC-8131	FPGA processing engine XMC module
	ePMC-8311	TI DSP-based multiprocessing engine
[future options]	Operating System	Windows 7