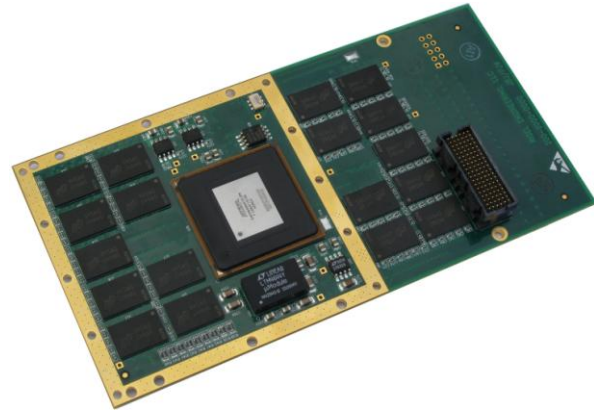




*Custom solutions with off-the-shelf pricing*



## XC9000

### High-speed sRIO Buffer Memory Module for XMC

#### Features:

- ★ Up to 32Gbytes (2x Banks of 16Gbytes) 400MHz DDR3L-800
- ★ Each bank is 72-bits wide, 64-bit data and ECC
- ★ 6.4Gbytes/sec DDR3L burst rate
- ★ Up to two x4 Serial Rapid IO lanes on XMC J15
- ★ sRIO 3.125GHz speed
- ★ Vita 42.0, 42.2 and IEEE 1386 Compliant
- ★ Data transfers via memory Map or full function DMA Engine
- ★ Sustained read/write throughput > 6 Gbps per sRIO interface
- ★ Commercial and extended operating temperatures available
- ★ Air-Cooled and Rugged, Conduction-Cooled versions available
- ★ Rigel's Standard 3 Year Warranty

#### Applications:

- ★ Airborne Image Processing/Buffering
- ★ RADAR Signal Processing
- ★ Signal Intelligence
- ★ Data Buffering
- ★ Snapshot Recording
- ★ High-Speed Temporary Storage

Rigel Engineering's XC9000 is a high-performance XMC buffer memory card that supports up to two x4 Serial Rapid IO (sRIO) interfaces. Each interface is dedicated to an 8 or 16Gbyte bank of high-speed DDR3L memory with ECC. The throughput of each x4 sRIO interface can support sustained 6Gbps read and 6Gbps write cycles. The card may also be configured as a single sRIO interface with 8 or 16GB of memory.

The XC9000's flexibility and state of the art design make it ideal for high-speed systems that require more memory than is typically available on the system's base card. Applications include DSP processing systems that require temporary fast storage and expanded memory capability.

The XC9000 conforms to Vita 42.0, 42.2 and IEEE1386 (CMC) standards. The card also is available in air or rugged conduction-cooled models at temperature ranges of 0-70C or -40 to 85C.

Contact our experienced engineering team to learn more about the XC9000.

## Hardware Specifications

### sRIO Host Interface

- ★ Single or Dual x4 Serial Rapid IO interface
- ★ 3.125GHz sRIO speed
- ★ 6Gbps sustained data rate per interface (read and write)
- ★ Memory mapped or DMA transfers
- ★ Conforms to Vita 42.2 standard

### Memory

- ★ Configured for 16GB or 32GB DDR3L
- ★ 16GB per bank/sRIO interface
- ★ 400MHz DDR3L-800
- ★ Supports ECC
- ★ 2 Kbit Serial I2C EEPROM for product data

### Miscellaneous

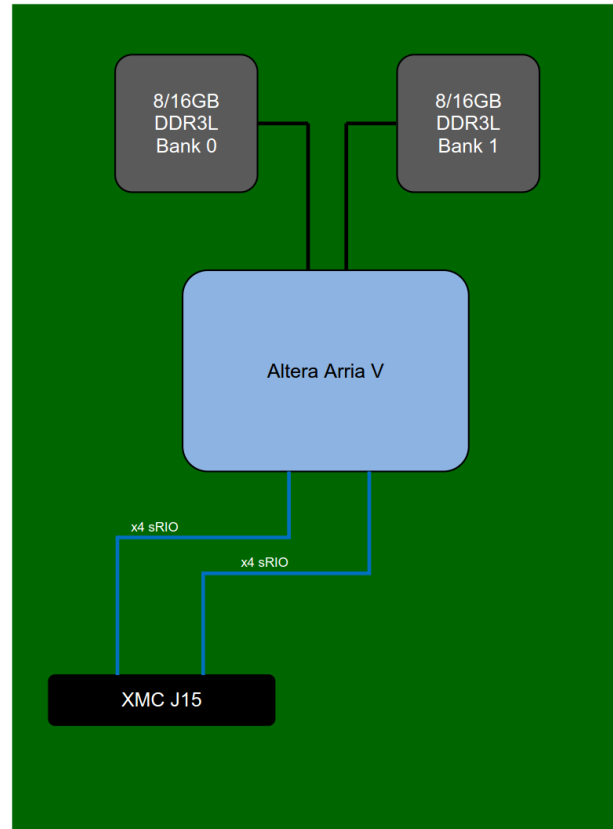
- ★ All power good LED
- ★ Fail LED
- ★ LEDs for sRIO interface status

### Physical / Electrical / Environmental

- ★ Standard XMC single-slot form factor (Vita 42.0)
- ★ 2.5 oz / 71 grams (conduction-cooled, no heat sink)
- ★ Maximum/typical power : 10W/8W
- ★ XMC VPWR (+5V) Maximum/typical power : 2.0A/1.6A
- ★ XMC VPWR (+12V) Maximum/typical power : 0.83A/0.66A

(VPWR may range from +5V to +12V depending on the host card)

- ★ Temperature:
  - Operating (standard) : 0°C to +70°C
  - Operating (extended) : -40°C to +85°C
  - Storage : -55°C to +125°C
- ★ Relative Humidity:
  - Operating: 5% to 95%, non-condensing
  - Storage: 5% to 95%, non-condensing



### Ordering Information

<b>Base Model</b>	_____	XC9000-xxx0
<b>Operating Temperature &amp; Cooling Options</b>	_____	
0 = 0°C to +70°C, Air Cooled 1 = -40°C to +85°C, Air Cooled 2 = -40°C to +85°C, Conduction Cooled Z = Customer specific board configuration		
<b>Serial Rapid IO Options</b>	_____	
0 = Single x4 sRIO interface 1 = Dual x4 sRIO interface		
<b>Memory Bank Size</b>	_____	
0 = 16GB DDR3L per bank 1 = 8GB DDR3L per bank		
<b>Reserved</b>	_____	

At Rigel Engineering, we are dedicated to working directly with your Engineers and System Designers to provide the best possible solution that meets or exceeds your requirements.

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