



# V Rose Microsystems, Inc.

www.vrosemicrosystems.com

**VRM-R4M-100**

## Product Data Sheet

### Overview:

The VRM-R4M-100 Processor Card is a high-performance network processor AdvancedMC™ (PrAMC) card designed for use in ATCA or MicroTCA systems. The R4M-100 is compliant with PICMG AMC.0 Revision 2.0 Mid-Size or Full-Size form factor standards. Featuring the latest RMI XLS416 quad core processor with up to a 1.2GHz clock rate, the R4M-100 can be delivered with up to 8GB of 72-bit wide DDR2 ECC memory running up to 800 MHz. The RMI XLS416 is a multi-core, multi-threaded MIPS64® processor with a rich set of Integrated I/O. The RMI XLS416 also provides up to 2.5 Gbps of bulk encryption plus RSA and 2.5 Gbps Compression/Decompression via integrated security acceleration and compression/decompression engines available on the XLS416. The VRM-R4M-100 is ideal for security applications in wireless and wireline access points, switches and routers, radio network controllers, media gateways and video processing applications.



### Features:

#### Central Processing Units (CPUs)

- RMI XLS 416 Processor Family featuring four 64 bit Processing Cores
- Up to 1.2 GHz with 1MB L2 cache
- Up to 8GB of DDR2 Memory w/ECC on x72 bus
- Autonomous Security Acceleration Engine (SAE) at 2.5 GBps
- Network Hardware Acceleration with IEEE1588 compliant PTP Controller

#### I/O Capabilities

- AMC.2 Dual 1000Base-BX Ports configured as Type E2 (Lanes 0,1)
- AMC.2 Dual 1000Base-BX Ports configured as Type 2 (Lanes 8,9)
- Quad (4) Dual 10/100/1000Base-T Ports on Front Panel (RJ45) or Quad(4) 1000-Base-BX Ports to lanes 17-20 on AMC connector for Rear RTM I/O Support
- AMC.1 PCIe Type 4 (Lanes 4-7) or Type 1 (Lane 4) or a build option for AMC.4 SRIO (Lanes 4-7) or Type 1 (Lane 4)

#### Mass Storage

- Dual Redundant Soldered 256MB NANDFlash

#### Boot Support

- NANDFlash, Network (GigE), Serial Console

#### Clocks

- PCIe Clock Input on AMC Connector, CLK3/FCLKA
- Telco Clock Input on AMC Connector, TCLKA differential pair input converted to single ended connection to XLS416

#### Mechanical

- Standard AMC Full-Size or Mid-Size Form Factor

#### LEDs

- Blue hot swap, green card status, and red out of service per AMC specification

#### Environmental

- Operating Temperature: 0 to 55C
- Humidity: 0 to 95% non-condensing
- Typical Power: 38W (Worse Case: 44W)

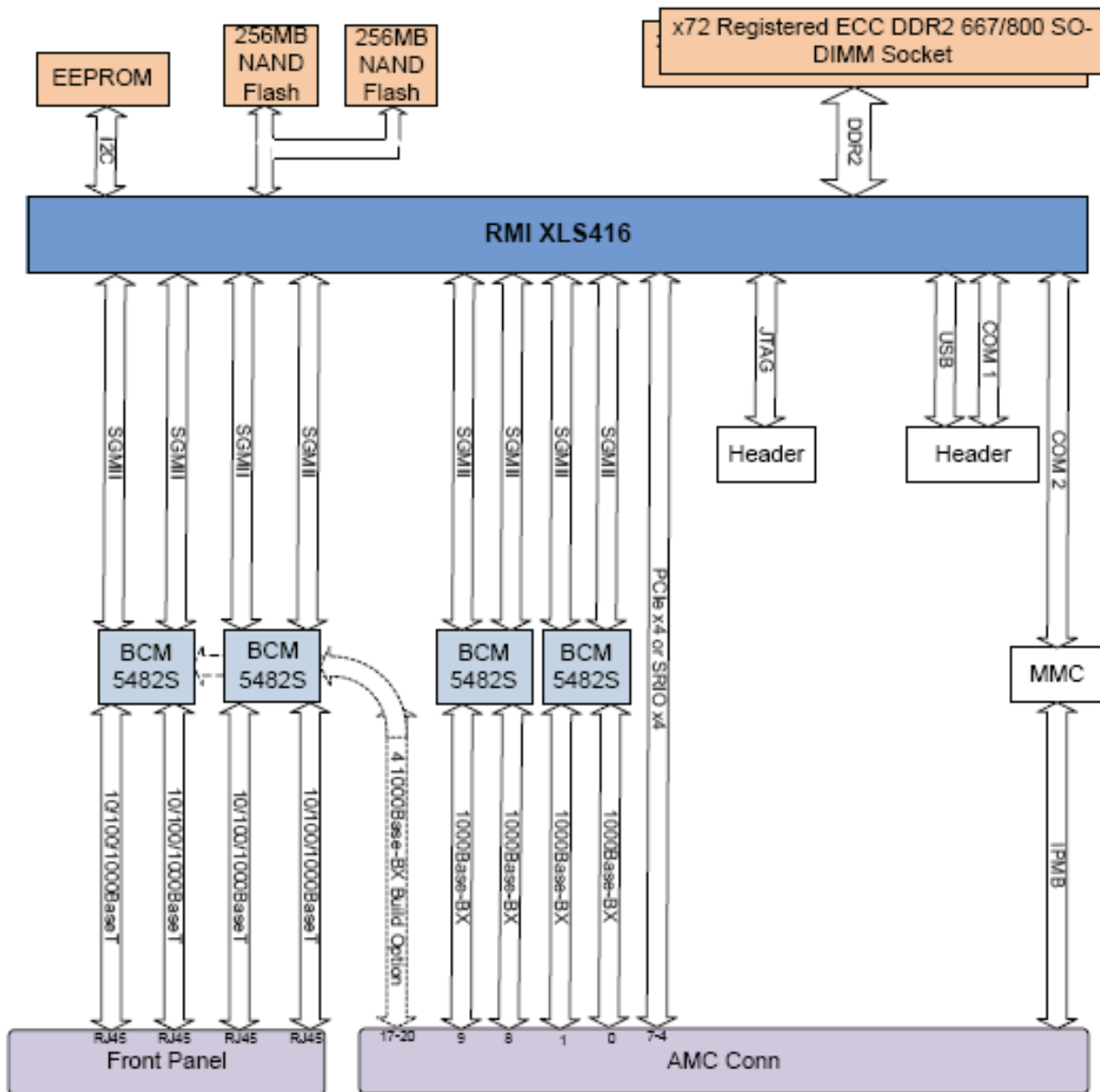


# V Rose Microsystems, Inc.

www.vrosemicrosystems.com

**VRM-R4M-100**

## Product Data Sheet



### Ordering:

**VRM-R4M-100:** High performance network processor AdvancedMC (PrAMC) card with RMI XLS416 quad core processor.