



V Rose Microsystems, Inc.

www.vrosemicrosystems.com

VRM-CCL

Product Data Sheet

Overview:

The VRM-CCL is a powerful Ethernet networking interface, with up to four independent low power Gigabit Ethernet controllers. Each GbE port can be individually routed either to a front panel jack, or the rear I/O connector, by software controlled switches (BIOS setup). The additional FireWire™ port is suitable e.g. for vision systems, with demand for quality-of-service (isochronous applications).

Furthermore the VRM-CCL is provided with several legacy I/O ports, e.g. RS-232. A secondary Firmware Hub can be configured as alternate- or backup-BIOS. An option available is the Trusted Platform Module for safety critical applications. The additional PCIe based SATA/PATA controllers are useful for attachment of mass storage devices, either on-board, or externally. The VRM-CCL is available with a mezzanine module, which accommodates either one or two 2.5-inch SATA drives (SSD or HDD, RAID option).



Features:

Form Factor

Single size Eurocard (160x100mm²), needs 4HP (20.3mm) mounting space in addition to CPU carrier board, typically delivered as a ready to use assembly unit (including the CCGRUMBA or successor CPU card), provided with a common 8HP front panel shared with the CPU board, mounting position right (on top of CPU board)

PCIe Packet Switch

- PCIe packet switch 12 ports, 12 lanes
- 4 Lanes (configured as 1 link x 4 lanes) to host (carrier board ICH)
- 4 Lanes individually assigned to 4 Gigabit Ethernet NICs
- 1 Lane dedicated to 1394a FireWire Controller
- 1 Lane dedicated to SATA/PATA controller

Gigabit Ethernet Networking Interface Controller

- 4 ports, each equipped with the Intel 82574L (Hartwell), 82574IT on request
- (extended temperature range), low power integrated MAC+PHY
- Copper standard IEEE 802.3 Ethernet interface for 1000BASE-T, 100BASE-TX, and
- 10BASE-T applications (802.3, 802.3u, and 802.3ab)
- PCI Express 2.5GHz
- Supports 9018-byte jumbo packets

SATA/PATA

- JMB363 PCIe to 2 x SATA II / 1 x PATA controller
- JMB362 PCIe to 2 x SATA II controller
- RAID level 0/1 capable, drivers RAID or non-RAID
- Three options of SATA usage: C20-SATA mezzanine module (P-SATA1), rear I/O
- (J1), or standard SATA connectors (P-SATA2 & P-SATA3)

Front Panel Connectors

- 4 x RJ45 Ethernet (10/100/1G) jacks with integrated status LEDs
- 1 x IEEE 1394a FireWire receptacle

Environmental/Thermal Conditions

- Operating temperature: 0°C ... +70°C
- Storage temperature: -40°C ... +85°C, max. gradient 5° C/min
- Humidity 5% ... 95% RH non condensing
- Altitude -300m ... +3000m
- Shock 15g 0.33ms, 6g 6ms
- Vibration 1g 5-2000Hz

On Board Functions

- Speaker, LEDs, SMBus EEPROM, temperature sensors

EC Regulations

- EN55022, EN55024, EN60950-1 (UL60950-1/IEC60950-1), 2002/95/EC (RoHS)

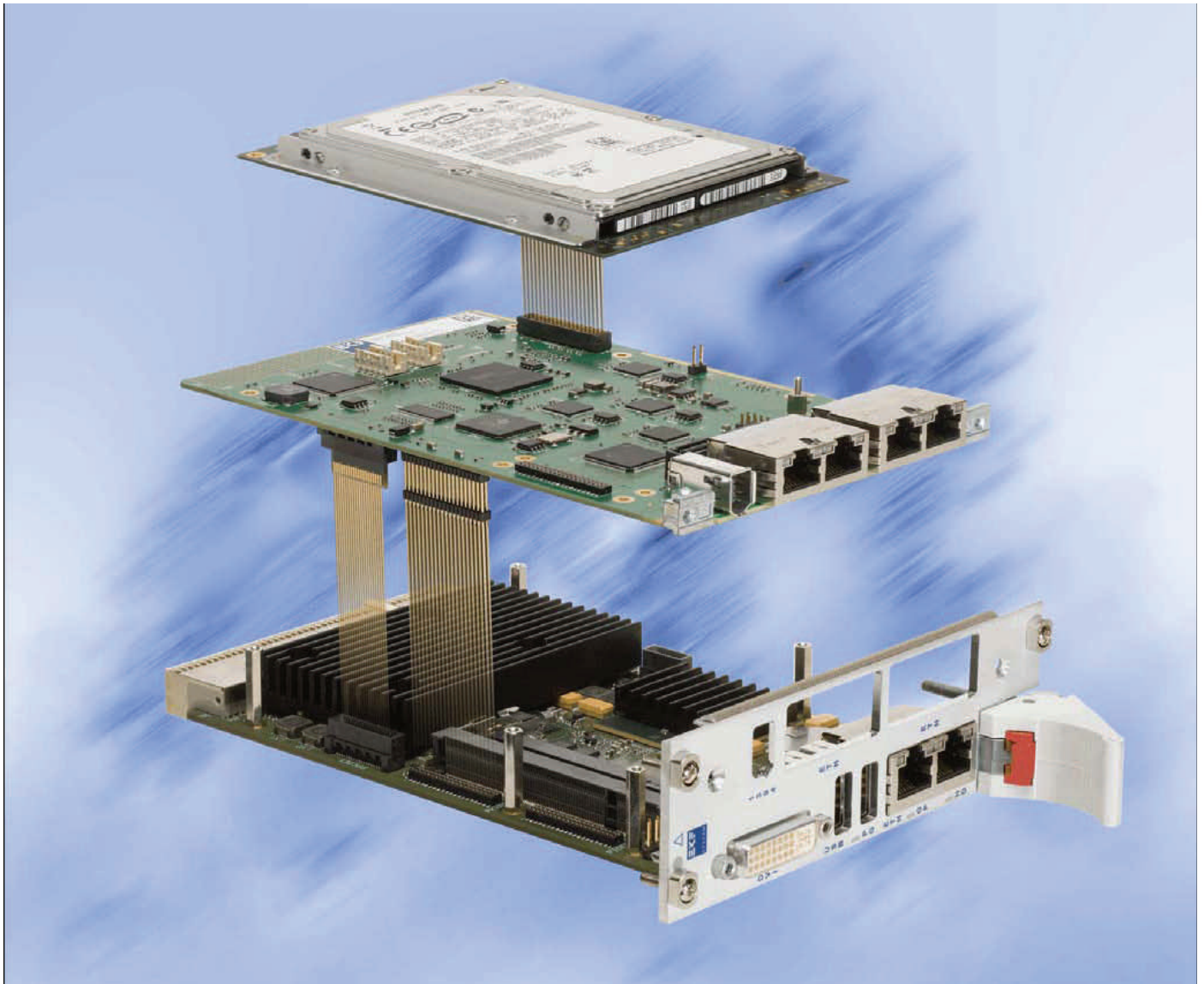


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Ordering:

VRM-CCL: CompactPCI Mezzanine I/O Card (Quad Gigabit Ethernet Controller & 1394)