



V Rose Microsystems, Inc.

www.vrosemicrosystems.com

VRM-cPCI-6920

Product Data Sheet

Overview:

The VRM-cPCI-6920 is a 6U CompactPCI dual Quad-Core Intel Xeon Processor Blade.

- 2x Quad-Core/Dual-Core Intel® Xeon® LV Processors
- Four SO-RDIMMs for up to 16GB REG/ECC memory
- Four PCI-Express Gigabit Ethernet ports
- 64bit/66MHz PMC/PCI-Express x8 XMC
- Onboard SATA HDD, CompactFlash and USB NAND flash storage

Features:

Processor & System

CPU	FC-LGA771 Quad-Core Intel® Xeon Processor 2.13GHz(L5408), 12MB L2 cache, 1066MHz FSB FC-LGA771 Dual-Core Intel® Xeon Processor LV 2.13GHz (5138), 4MB L2 cache, 1066MHz FSB Passive heatsink Single processor in 4HP cPCI-6920 Dual processors in 8HP cPCI-6920D
Chipset	Intel® 5100 MCH and ICH9R I/O Controller Hub
RAM	Dual channel DDR2-667 registered memory with ECC, up to 16GB 4HP: Two 200-pin SO-RDIMM sockets 8HP: Four 200-pin SO-RDIMM sockets
BIOS	AMI Workstation BIOS, SPI flash memory
CompactPCI	64bit/66MHz CompactPCI Bus, V(I/O) 3.3V only Supports operation in system slot as system master or in peripheral slot as stand-alone server blade without connectivity to CompactPCI bus
PICMG	sPICMG® 2.0 CompactPCI R3.0 PICMG® 2.1 Hot Swap R2.0 PICMG® 2.9 System Management v.1.5 R1.0 PICMG® 2.16 Packet Switch Backplane R1.0
Connectivity	
PMC/XMC	PCI 64bit/66MHz PMC or PCI-Express x8 XMC site, 3.3V PCI signaling (8HP version only)
Ethernet	Two PCI-Express Intel 82571EB dual port Gigabit Ethernet controllers Two 10/100/1000BASE-T front panel egress ports Two 10/100/1000BASE-T PICMG 2.16 ports



Graphics

AMD ATI ES1000 on PCI 32bit/33MHz bus
DDR2-533 64MB Graphics Memory Analog RGB up to 32bit
1600x1200@60Hz refresh rate
DB-15 VGA port on front panel and rear panel, mirror display

USB

Maximum up to four USB 2.0 ports on front panel

Six USB 2.0 ports routed to rear

PS/2

One PS/2 Keyboard/Mouse Combo port on front panel or rear panel (8HP version only)

Serial Port

One DB-9 16C550 compatible RS-232 port on front panel (8HP version only) Two serial ports are routed to rear

Storage

SBC

Built-in 4GB USB NAND flash onboard Removable CompactFlash slot onboard Optional SATA port for 2.5" HDD direct mounting

RTM

Two onboard 7-pin connectors for external SATA hard drives One SATA port for 2.5" onboard SATA HDD (8HP version only) One internal and one external 68-pin SCSI connector by LSI53C1020 SCSI Ultra320 single channel controller



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Features:

Miscellaneous

LED Power, WDT, Hot Swap, Hard Disk
Battery Coin cell Lithium Battery onboard for RTC
 CMOS RAM for BIOS configuration
WatchDog System Reset and NMI, with Programmable Interval, 1-255 sec or 1-255 min
Monitor Monitoring CPU temperature, system temperature, Vcore and DC voltages

Mechanical & Environmental

Form Factor 6U 4HP/ 8HP CompactPCI
 233.33mm x 160mm (LxW)
Operating Storage 0 to 55°C with forced air flow
 -40 to 85°C
RH Humidity 90%@60°C (non-condensing)
Shock 15 G peak to peak, 11ms duration, non-operating
Vibration 1.88 Grms, 5-500 Hz, X,Y, Z axis

Function	cPCI-6920 (4HP)		cPCI-6920D (8HP)		cPCI-R6000-920 (4HP)		cPCI-R6000-920D (8HP)	
	Face-plate	Onboard	Face-plate	Onboard	Face-plate	Onboard	Face-plate	Onboard
Gigabit Ethernet	Y x 2		Y x 2		Y x 2 (2.16)		Y x 2 (2.16)	
COM 1			Y (DB-9)					
COM 2					Y (DB-9)		Y (DB-9)	
COM 3						Y (10-pin)		Y (10-pin)
USB 2.0	Y x 2		Y x 4		Y x 2	Y (10-pin)	Yx4	Y (10-pin)
PMC/XMC			Y					
VGA	Y		Y		Y		Y	
Serial ATA		Optional ^{III}		Optional ^{IV}		Y x 2 (7-pin)		Y x 3 ^V
Compact Flash		Y		Y				Optional ^{VI}
PS/2 KB/MS			Y				Y	
USB Flash		Y		Y				
SCSI					Y	Y	Y	Y
GP LED	Y x 4		Y x 4					
Reset Button	Y		Y					

Ordering:

VRM-cPCI-6920: Single slot width (4HP) 6U Quad-Core/Dual-Core Xeon processors SBC (without CPU & memory).

VRM-cPCI-6920D: Dual slot width (8 HP) 6U Quad-Core/Dual-Core Xeon processors SBS (without CPU & memory).

VRM-cPCI-6920/S408/M2G: 4HP cPCI-6920 with 1 x Quad-Core Xeon 2.13 GHz (L5408), 2GB SO-RDIMM

VRM-cPCI-6920/S408/M4G: 4HP cPCI-6920 with 1 x Quad-Core LV Xeon 2.13 GHz (L5408), 2 x 2GB SO-RDIMM

VRM-cPCI-6920D/S408/M4G: 8HP cPCI-6920D with 1 x Quad-Core Xeon 2.13 GHz (L5408), 2 x 2GB SO-RDIMM

VRM-cPCI-6920D/D408/M8G: 8HP cPCI-6920D with 2 x Quad-Core Xeon 2.13 GHz (L5408), 4 x 2GB SO-RDIMM

VRM-cPCI-6920D/D138/M2G: 8HP cPCI-6920D with 2 x Dual-Core Xeon 2.13 GHz (LV138), 2GB SO-RDIMM

VRM-cPCI-6920D/S408/M4G/S80G: 8HP cPCI-6920D with 1 x Quad-Core Xeon 2.13 GHz (L5408), 2 x 2GB SO-RDIMM, 80 GB SATA HDD (without CF slot)