



**Product Brief
PRC-100 CPCI
Processor Blade
Rev. 0.4**

Summary:

The JumpGen Systems PRC-100 CPCI Processor Card is a high-performance PICMG® 2.16 CPU card designed for use in CompactPCI® systems. The PRC-100 is compliant with the PICMG® 2.0 Revision 3.0 form-factor standard. Featuring the latest 45nm Intel® Core™ 2 Duo processor with 1.8GHz clock rate and Intel 3100, the PRM-100 can be delivered with up to 8GB of 72-bit wide DDR2 ECC memory running at 400 MHz and 1-8 GB of onboard bootable SSD.

Features:

Central Processing Units (CPUs)	Intel® Core™ 2 Duo or Celeron® M processors <ul style="list-style-type: none"> • Up to 1.8 GHz w/ up to 6MB L2 cache and 800 MHz FSB • Up to 8GB of DDR2 memory w/ ECC running up to 400MHz • Bus width of x72
I/O Capabilities	Five 1GigE Connections, configured as: <ul style="list-style-type: none"> • Two 1000BaseT to PICMG 2.16 backplane ports • Two 1000BaseT to J3 for RTM • One 1000BaseT to RJ-45 on Front Panel PCI System/Non-System Slot <ul style="list-style-type: none"> • Supports 64-bits @ 66MHz on the backplane Serial Protocols <ul style="list-style-type: none"> • RS-232 on Front Panel (RJ-11) and J5 • USB 2.0 on Front Panel
Expansion Option	PCIe x4 to J5 for RTM PMC Site (64-bit @ 133MHz PCI-X capable) 2.5" SATA HDD mounting site (in lieu of PMC option)
Management	Complies to PICMG 2.9 R1.0 System Management Specification
Mass Storage	4-8 GB Solid State Drive (SSD) 2.5" SATA HDD mounting site (in lieu of PMC option)
BIOS Support	PXE boot <ul style="list-style-type: none"> • iSCSI boot also available SATA boot SSD boot USB boot (off-board devices) Serial Console redirection
Mechanical	Standard cPCI single-slot form factor <ul style="list-style-type: none"> • Multiple RTM options available

Environmental	Operating temperature range: 0 to 55 °C Humidity: 0 to 95% (non-condensing) Typical power consumption: 30-50W Worst-case power consumption: 45-65W
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PRC-100 Intel® Processor Options:

Processor Number	# of Cores	Core (GHz)	L2 Cache (MB)	FSB (MHz)	TDP (Watt)	Process
Core™ 2 Duo SL9380	2	1.8	6	800	17	45nm
Core™ 2 Duo SU9300	2	1.2	3	800	10.5	45nm
Celeron M 722	1	1.2	1	800	5.5	45nm

Block Diagram:

