



Product Brief
PRM-121 Processor Card

Rev 0.5

Summary:

The JumpGen Systems PRM-121 Processor Card is a high-performance processor AdvancedMC™ (PrAMC) card designed for use in ATCA or MicroTCA systems. The PRM-121 is compliant with PICMG AMC.0 Revision 2.0 Mid-Size or Full-Size form factor standards. Featuring the latest 32nm Intel® Core® i7 processor and Intel Ibex Peak PCH, the PRM-121 can be delivered with up to 8GB of 72-bit wide DDR3 ECC memory running at 1066 MHz and 1-8 GB of onboard bootable SSD.

Features:

Central Processing Units (CPUs)	Intel® Core® i7 32nm CPU <ul style="list-style-type: none"> • Up to 8GB of DDR3 memory w/ ECC running up to 1066MHz • Dual channel, x72 bus width
I/O Capabilities	AMC.3 Dual SATA channels (Lanes 2, 3) AMC.1 Type 4, PCIe x4 (Lanes 4-7) <ul style="list-style-type: none"> • AMC.1 R1.0 and R2.0 compatible • Non-PCIe configuration (no FCLKA) available AMC.2 Dual 1000Base-BX Ports configured as Type E2 (Lanes 0, 1) Dual 10/100/1000Base-T Port on Front Panel Serial Protocols <ul style="list-style-type: none"> • USB on Front Panel • RS-232 on Front Panel
Mass Storage	1-8 GB Solid State Drive (SSD)
BIOS support	PXE boot (GigE ports) SATA boot (off-board devices) SSD boot USB boot (off-board devices)
Mechanical	Standard AMC Full-Size or Mid-Size form factor
Environmental	Operating temperature range: 0 to 55 °C Humidity: 0 to 95% (non-condensing) Typical power consumption: 25-45W Worst-case power consumption: 32-50W

PRM-121 Intel® Processor Options:

Processor Number	# of Cores	Core (GHz)	L2 Cache (KB)	L3 Cache (MB)	TDP (Watt)	Process
i7-620LE	2	2.0	512	4	25	32nm
i7-620UE	2	1.067	512	4	18	32nm
i5-520UE	2	1.067	512	3	18	32nm

Other CPU options are available. Contact sales@jumpgen.com for more options.

Block Diagram:

