



Red Storm Capabilities

Theoretical Peak (TF)	41.47
MP-Linpack Performance (TF)	36.19
Architecture	Distributed Memory MIMD
# of Compute Node Processors	10,368
Processor	AMD Opteron @2.0Ghz
Total Memory	30.95 TB (up to 80 TB)
System Memory B/W	55 TB/s
Disk Storage	240 TB
Parallel File System B/W	50.0 GB/s each color
External Network B/W	25 GB/s each color
Interconnect Topology	3-D Mesh (x,y,z) 27 x 16 x 24
Interconnect Performance	
MPI Latency	5.0 μ s 1hop, 8 μ s max
Bi-Directional Link B/W	6.0 GB/s
Minimum Bi-section B/W	2.3 TB/s
Full System RAS	
RAS Network	100 Mbit Ethernet
RAS Processors	1 for each 4 CPUs
Operating System	
Compute Nodes	Catamount (Cougar)
Service and I/O Nodes	LINUX
RAS Nodes	LINUX
Red Black Switching Switches	2688-4992-2688 4
System Foot Print	~3000 sq ft
Power Requirement	1.8 MW