

“Medium” Performance Computing

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For comparison: My notebook

Number of nodes	1
CPU-Manufacturer	Intel
CPU-Type	Core2 Duo P8600 @ 2.4GHz
L2-Cache	3MB per core
Number of CPU's	1
Number of cores	2
Main memory	4GB (non-ECC)
Minimum memory per core	2 GB
Graphics	ATI Mobility Radeon HD 3470
Networking	Gigabit Ethernet
Scalar performance	+++
Parallel performance	+
GPU-Performance	+
Availability	+++++

Heidelberg

Number of nodes	1
CPU-Manufacturer	AMD
CPU-Type	Opteron 285 @ 2.6GHz
L2-Cache	1MB per core
Number of CPU's	2
Number of cores	4
Main memory	8GB (ECC)
Minimum memory per core	2 GB
Graphics	whatever
Networking	Gigabit Ethernet
Scalar performance	++++
Parallel performance	++
GPU-Performance	-
Availability	+++

Number of nodes	8
CPU-Manufacturer	AMD
CPU-Type	Opteron 280 @ 2.4GHz
L2-Cache	1MB per core
Number of CPU's	16
Number of cores	24
Main memory	64GB (ECC)
Minimum memory per core	2 GB
Graphics	whatever
Networking	Infiniband(int) and Gigabit Ethernet(ext)
Scalar performance	+++
Parallel performance	+++++
GPU-Performance	-
Availability	+++++

Bologna

Number of nodes	16
CPU-Manufacturer	AMD
CPU-Type	Athlon 64 X2 3800+
L2-Cache	512kB per core
Number of CPU's	16
Number of cores	32
Main memory	64GB (non-ECC)
Minimum memory per core	2 GB
Graphics	whatever
Networking	Gigabit Ethernet(i+e)
Scalar performance	++
Parallel performance	++++(+)
GPU-Performance	-
Availability	+++

Number of nodes	1
CPU-Manufacturer	Intel
CPU-Type	XEON E5420 @ 2.5GHz
L2-Cache	3MB per core
Number of CPU's	2
Number of cores	8
Main memory	8GB (ECC)
Minimum memory per core	1 GB
Graphics	NVIDIA Tesla C1060
Networking	Gigabit Ethernet
Scalar performance	+++++
Parallel performance	+++
GPU-Performance	++++++
Availability	++++

Again for comparion: bwGRiD Heidelberg

Number of nodes	140
CPU-Manufacturer	Intel
CPU-Type	XEON E5440 @ 2.83GHz
L2-Cache	3MB per core
Number of CPU's	280
Number of cores	1120
Main memory	2.24TB (ECC)
Minimum memory per core	2 GB
Graphics	whatever
Networking	Infiniband(int) and Gigabit Ethernet(ext)
Scalar performance	+++++
Parallel performance	+++++++
GPU-Performance	-
Availability	+

Jaguar - Cray XT5-HE, Oak Ridge National Lab

Number of nodes	18688
CPU-Manufacturer	AMD
CPU-Type	Opteron 2435 @ 2.6GHz
L2-Cache	1MB per core
Number of CPU's	37376
Number of cores	224256
Main memory	299.008TB (ECC)
Minimum memory per core	1.33 GB
Graphics	none at all
Networking	optical Infiniband(i+e)
Scalar performance	++++
Parallel performance	hmm
GPU-Performance	-
Availability	at least its main purpose is science