OMPL2001 Result

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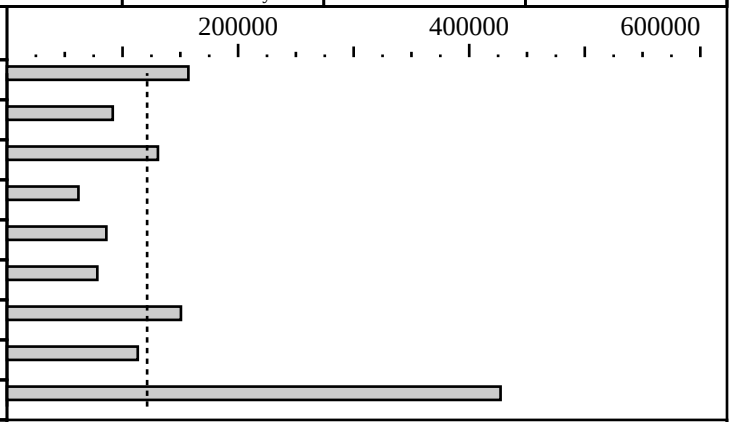
Supermicro Corporation
Supermicro H8QM8

SPECompLpeak2001 = --

SPECompLbase2001 = 121270

SPEC license #HPG0017 | Tested by: Advanced Micro Devices | Test site: Austin TX | Test date: May-2008 | Hardware Avail: Jun-2008 | Software Avail: Nov-2007

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
311.wupwise_l	9200	938	156972		
313.swim_l	12500	2185	91517		
315.mgrid_l	13500	1654	130617		
317.applu_l	13500	3494	61827		
321.equake_l	13000	2419	85985		
325.apsi_l	10500	2149	78166		
327.gafort_l	11000	1169	150521		
329.fma3d_l	23500	3323	113158		
331.art_l	25000	936	427123		



Hardware

CPU:	Quad-Core AMD Opteron(tm) Processor 8347 HE
CPU MHz:	1900
FPU:	Integrated
CPU(s) enabled:	16 cores, 4 chips, 4 cores/chip
CPU(s) orderable:	1-4
Primary Cache:	64 KB I + 64 KB D on chip per core
Secondary Cache:	512 KB I+D on chip per core
L3 Cache:	2 MB I+D on chip per chip
Other Cache:	None
Memory:	32GB (16x2GB, PC2-5300, CL5 dual-rank)
Disk Subsystem:	120GB 7200 RPM SATA
Other Hardware:	None

Software

OpenMP Threads:	16
Parallel:	OpenMP
Operating System:	SUSE Linux Enterprise Server 10 (x86_64) SP1 2.6.16.46-0.12-smp
Compiler:	PathScale Compiler Suite ver. 3.1
File System:	Linux/Ext3
System State:	Multi-User

Notes/Tuning Information

```
Extra art Base Flags
  331.art_l (extra): -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8

Alternate Sources:
  315.mgrid_l: intel

Base tuning:
  C       : pathcc  -gnu3 -mp -Ofast -mcpu=barcelona -mcmodel=medium
  Fortran : pathf90 -mp -Ofast -mcpu=barcelona -OPT:early_mp=on -CG:movnti=2500 -mcmodel=medium
  ONESTEP=yes

Base and Peak User Environment (bash):
  export OMP_NUM_THREADS=16
  export OMP_DYNAMIC=FALSE
  export PSC_OMP_AFFINITY=TRUE
  export PSC_OMP_STATIC_FAIR=TRUE
  export PSC_OMP_THREAD_SPIN=1000000000
  ulimit -s unlimited

For flag descriptions, see file AMD-Jul2008-psc31_flags.txt
Default BIOS settings used, except PowerNow! disabled in Bios and OS set to "linux"
```