OMPL2001 Result

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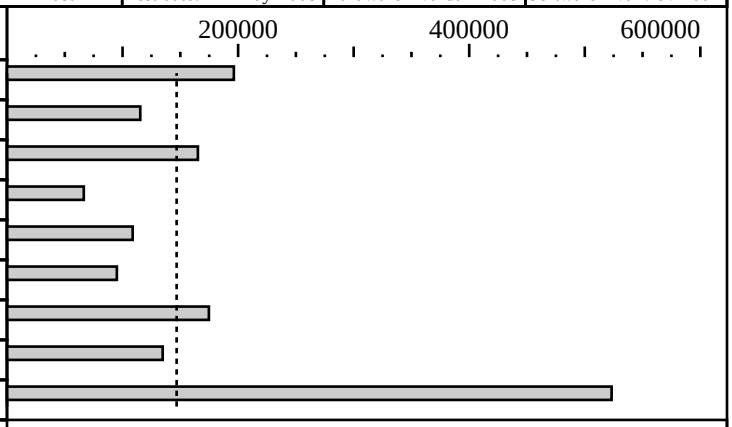
Tyan Computer Corporation
Tyan Thunder n425QE (S4985E)

SPECompLpeak2001 = --

SPECompLbase2001 = 146796

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	750	196319		
313.swim_l	12500	1734	115338		
315.mgrid_l	13500	1307	165205		
317.applu_l	13500	3250	66453		
321.equake_l	13000	1913	108746		
325.apsi_l	10500	1767	95082		
327.gafort_l	11000	1007	174707		
329.fma3d_l	23500	2791	134728		
331.art_l	25000	764	523219		



Hardware

CPU:	Quad-Core AMD Opteron(tm) Processor 8360 SE
CPU MHz:	2500
FPU:	Integrated
CPU(s) enabled:	16 cores, 4 chips, 4 cores/chip
CPU(s) orderable:	1,2,3,4
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:	250GB 7200 RPM SATA
Other Hardware:	None

Software

OpenMP Threads:	16
Parallel:	OpenMP
Operating System:	SLES10 SP1 64bit
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

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

 Alternate Sources:
  315.mgrid_l: intel

  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-Jun2008-psc31_flags.txt
Default BIOS settings used, except OS set to "linux"
```