OMPM2001 Result

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SGI

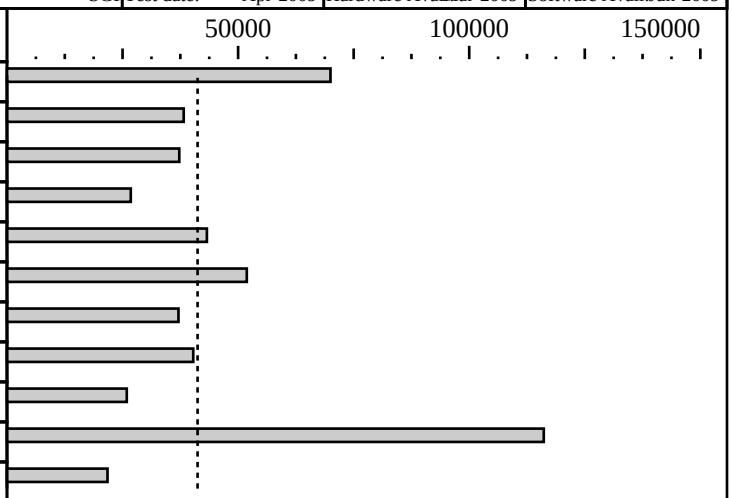
SGI Altix XE 270 (Intel Xeon X5570, 2.93 GHz, DDR3-1333)

SPECompMpeak2001 = --

SPECompMbase2001 = 41234

SPEC license #:HPG0014 | Tested by: SGI | Test site: SGI | Test date: Apr-2009 | Hardware Avail: Mar-2009 | Software Avail: Jun-2009

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	85.7	69984		
312.swim_m	6000	157	38229		
314.mgrid_m	7300	196	37271		
316.applu_m	4000	149	26776		
318.galgel_m	5100	118	43247		
320.equake_m	2600	50.1	51878		
324.apsi_m	3400	91.7	37096		
326.gafort_m	8700	216	40293		
328.fma3d_m	4600	178	25913		
330.art_m	6400	55.1	116129		
332.ammp_m	7000	322	21744		



Hardware

CPU:	Intel Xeon X5570
CPU MHz:	2934
FPU:	Integrated
CPU(s) enabled:	8 cores, 2 chips, 4 cores/chip (HT on)
CPU(s) orderable:	1-2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	256 KB I+D on chip per core
L3 Cache:	8 MB I+D on chip per chip
Other Cache:	None
Memory:	24 GB (6*4GB DDR3-1333 CL9 RDIMMs)
Disk Subsystem:	3 TB RAID 0 6 x 500 GB SATA (Seagate Barracuda 7200 rpm)
Other Hardware:	None

Software

OpenMP Threads:	8
Parallel:	OpenMP
Operating System:	SUSE Linux Enterprise Server 10 (x86_64) SP2 Kernel 2.6.16.60-0.30-smp
Compiler:	Intel C/C++ Compiler 11.0.083 Intel Fortran Compiler 11.0.083
File System:	xfs
System State:	Multi-user, run level 3

Notes/Tuning Information

```
Portability Flags:
    318.galgel_m: -FI -132
Extra Flags:
    330.art_m: -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8

Baseline optimization flags:
    COPTIMIZE = -O3 -xSSE4.2 -ipo -openmp -ansi_alias (ONESTEP)
    FOPTIMIZE = -O3 -xSSE4.2 -ipo -openmp (ONESTEP)
Software Environment:
    setenv KMP_AFFINITY disabled
    setenv KMP_STACKSIZE 31M
    setenv KMP_SCHEDULE static,balanced
    setenv KMP_LIBRARY turnaround
    setenv OMP_DYNAMIC FALSE
    setenv OMP_NUM_THREADS 8
    limit stacksize unlimited

BIOS settings:
  AMI BIOS version 8.15
  Adjacent cacheline prefetch enabled
  Hyper-Threading Technology enabled (default)
  Intel Turbo Boost Technology enabled (default)
```

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Notes/Tuning Information (Continued)

```
    Intel Turbo Boost Technology activated in the OS via
      /etc/init.d/acpid start
      /etc/init.d/powersaved start
      powersave -f

  For a description of SGI's compiler flags, portability flags,
  and system parameters used to generate this result, please
  refer to the SGI-20090327-Linux-Intel11.0-intel64.html file in the
  flags directory.
```