



# OMPM2001 Result

Copyright 1999-2008, Standard Performance Evaluation Corporation

## SGI

SGI Altix ICE 8200EX (Intel Xeon X5570, 2.93 GHz, DDR3-1066)

SPECompMpeak2001 = --

SPECompMbase2001 = 39373

SPEC license #HPG0014 Tested by: SGI Test site: SGI Test date: Feb-2009 Hardware Avail: Mar-2009 Software Avail: Jan-2009

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	88.4	67886		
312.swim_m	6000	178	33640		
314.mgrid_m	7300	215	33979		
316.applu_m	4000	163	24563		
318.galgel_m	5100	124	41248		
320.quake_m	2600	53.2	48885		
324.apsi_m	3400	90.6	37533		
326.gafort_m	8700	222	39111		
328.fma3d_m	4600	182	25245		
330.art_m	6400	55.7	114849		
332.ampm_m	7000	325	21553		

### 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: 48 GB (12\*4GB DDR3-1066 CL7 RDIMMs)  
 Disk Subsystem: 7 TB RAID 5  
 48 x 147 GB SAS (Seagate Cheetah 15000 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 11.0.074  
 Intel Fortran Compiler 11.0.074  
 File System: NFSv3 IPoIB  
 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  
 Hyper-Threading Technology enabled (default)  
 Intel Turbo Boost Technology enabled (default)  
 Intel Turbo Boost Technology activated in the OS via



# OMPM2001 Result

Copyright 1999-2008, Standard Performance Evaluation Corporation

**SGI**

SGI Altix ICE 8200EX (Intel Xeon X5570, 2.93 GHz, DDR3-1066)

SPECompMpeak2001 = --

SPECompMbase2001 = 39373

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

## Notes/Tuning Information (Continued)

```
/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.