OMPM2001 Result

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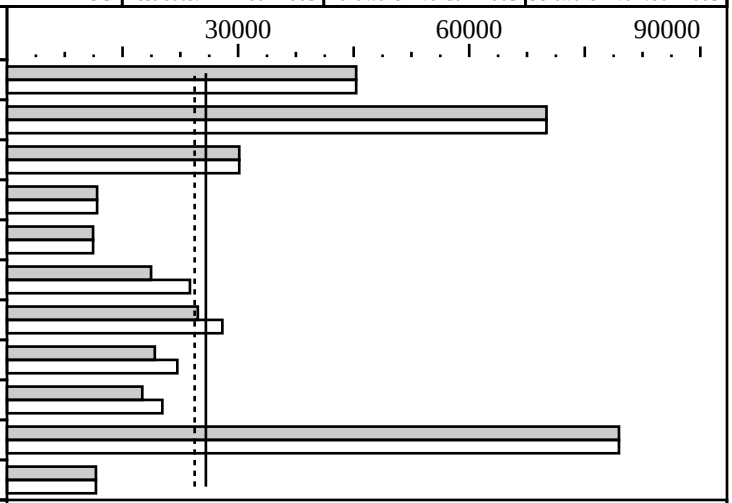
SGI
SGI Altix 3000 (1500MHz, Itanium 2)

SPECompMpeak2001 = 25817

SPECompMbase2001 = 24358

SPEC license #HPG0014 | Tested by: SGI | Test site: SGI | Test date: Jul-2003 | Hardware Avail: Jun-2003 | Software Avail: Jul-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	132	45326	132	45326
312.swim_m	6000	85.7	70029	85.7	70029
314.mgrid_m	7300	242	30149	242	30149
316.applu_m	4000	342	11697	342	11697
318.galgel_m	5100	456	11175	456	11175
320.equake_m	2600	139	18702	109	23748
324.apsi_m	3400	137	24771	122	27957
326.gafort_m	8700	453	19188	394	22109
328.fma3d_m	4600	262	17563	228	20164
330.art_m	6400	80.6	79439	80.6	79439
332.ammp_m	7000	606	11544	606	11544



Hardware

CPU:	Intel Itanium 2
CPU MHz:	1500
FPU:	Integrated
CPU(s) enabled:	32
CPU(s) orderable:	4-64
Primary Cache:	16KBI + 16KBD (on chip) per CPU
Secondary Cache:	256KB (on chip) per CPU
L3 Cache:	6.0MB (on chip) per CPU
Other Cache:	N/A
Memory:	64 GB (16*512MB DIMMS per 4cpu module)
Disk Subsystem:	1 x 36 GB SCSI (Seagate Cheetah 15k rpm)
Other Hardware:	None

Software

OpenMP Threads:	32
Parallel:	OpenMP
Operating System:	SGI ProPack(TM) v2.2
Compiler:	Intel(R) Fortran Compiler for Linux 7.1 (Build 20030701) Intel(R) C++ Compiler for Linux 7.1 (Build 20030701)
File System:	xfs
System State:	Single-user

Notes/Tuning Information

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Baseline optimization flags:
  C programs:       -openmp -O3 -ipo -ansi -ansi_alias (ONESTEP)
  Fortran programs: -openmp -O3 -ipo -stack_temps (ONESTEP)

Portability Flags:
  318.galgel_m: -FI -132

Extra Flags:
  330.art_m: -DINTS_PER_CACHELINE=32 -DDBLS_PER_CACHELINE=16

Baseline user environment:
  OMP_NUM_THREADS=32
  limit stacksize 64000
  KMP_STACKSIZE 31M
  KMP_LIBRARY TURNAROUND

Peak optimization flags:
   310.wupwise_m: basepeak=true
   312.swim_m: basepeak=true
   314.mgrid_m: basepeak=true
   316.applu_m: basepeak=true
   318.galgel_m: basepeak=true
   320.equake_m: -openmp -O3 -ipo -ansi -ansi_alias (ONESTEP)
```

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Notes/Tuning Information (Continued)

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    324.apsi_m: -openmp -O3 -ipo -stack_temps (ONESTEP)
    326.gafort_m: -openmp -O3 -ipo -stack_temps (ONESTEP)
    328.fma3d_m: -openmp -O3 -ipo -stack_temps (ONESTEP)
    330.art_m: basepeak=true
    332.ammp_m: basepeak=true

Alternate sources:

ISO C and C++ compatible sources
Available as SPEC OMPM2001 source: ompm2001-isoc-20020619.tar.gz
Used for base: 320.equake_m, 330.art_m, 332.ammp_m
and peak: 330.art_m, 332.ammp_m

Peak sources:

SPEC OMPL2001 source for 64bit systems modified for SPEC OMPM2001.
Available as SPEC OMPM2001 Source: ompm2001-srcl64bit-20020807.tar.gz.
Used for 320.equake_m, 324.apsi_m, 326.gafort_m, and 328.fma3d_m.

Processes were bound to CPUs using dplace.
```