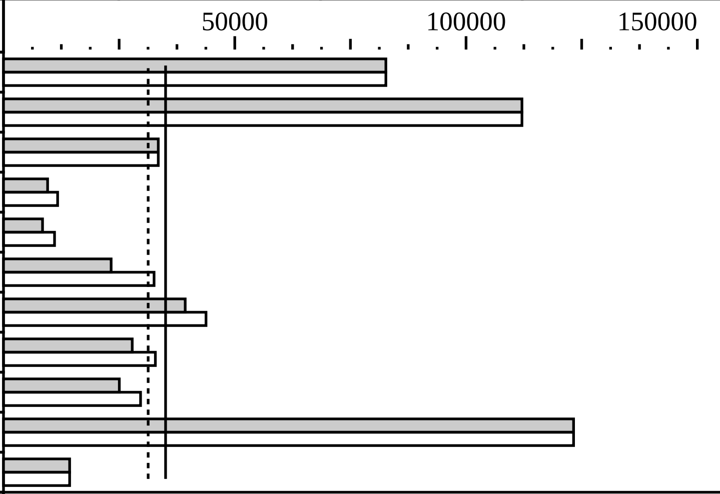
OMPM2001 Result

SGI
SGI Altix 3000 (1500MHz, Itanium 2)

SPECompMpeak2001 = 35042
SPECompMbase2001 = 31276

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	72.6	82666	72.6	82666
312.swim_m	6000	53.5	112087	53.5	112087
314.mgrid_m	7300	218	33462	218	33462
316.applu_m	4000	420	9535	342	11701
318.galgel_m	5100	604	8440	462	11035
320.equake_m	2600	112	23270	79.9	32552
324.apsi_m	3400	86.5	39284	77.7	43782
326.gafort_m	8700	313	27831	265	32834
328.fma3d_m	4600	184	25039	155	29631
330.art_m	6400	51.9	123248	51.9	123248
332.ammp_m	7000	490	14299	490	14299



Hardware

CPU:	Intel Itanium 2
CPU MHz:	1500
FPU:	Integrated
CPU(s) enabled:	64
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:	128 GB (16*512MB DIMMS per 4cpu module)
Disk Subsystem:	1 x 36 GB SCSI (Seagate Cheetah 15k rpm)
Other Hardware:	None

Software

OpenMP Threads:	64
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

```
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=64
  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: -openmp -O3 -ipo -stack_temps (ONESTEP)
                OMP_NUM_THREADS=32
   318.galgel_m: -openmp -O3 -ipo -stack_temps (ONESTEP)
```

Notes/Tuning Information (Continued)

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                            OMP_NUM_THREADS=32
          320.equake_m: -openmp -O3 -ipo -ansi -ansi_alias (ONESTEP)
          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.

      For all benchmarks threads were bound to CPUs using the following submit command:
      dplace -e -c0,x,x,1-NTM1 $command,
      where NTM1 is the number of threads minus 1.
```