OMPM2001 Result

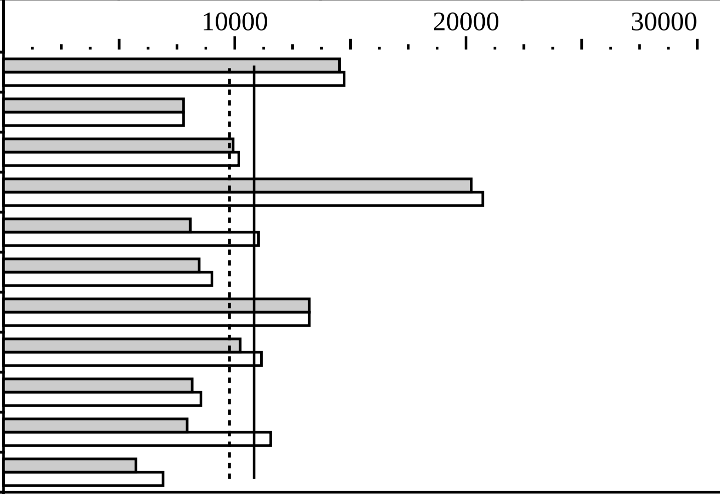
Sun Microsystems
Sun Fire 6800

SPECompMpeak2001 = 10833

SPECompMbase2001 = 9774

SPEC license #:	Tested by:	Test site:	Test date:	Hardware Avail:	Software Avail:
HPG0010	Sun Microsystems, Palo Alto	Beaverton	Dec-2001	Nov-2001	Feb-2002

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	413	14532	407	14727
312.swim_m	6000	771	7786	771	7786
314.mgrid_m	7300	735	9926	717	10175
316.applu_m	4000	198	20225	193	20727
318.galgel_m	5100	632	8075	462	11029
320.equake_m	2600	307	8458	288	9012
324.apsi_m	3400	257	13219	257	13219
326.gafort_m	8700	850	10231	780	11154
328.fma3d_m	4600	564	8156	539	8536
330.art_m	6400	806	7938	554	11555
332.ammp_m	7000	1223	5724	1015	6897



Hardware

CPU:	UltraSPARC III Cu
CPU MHz:	900
FPU:	Integrated
CPU(s) enabled:	24
CPU(s) orderable:	2-24
Primary Cache:	32KBI+64KBD on chip
Secondary Cache:	8MB(I+D) off chip
L3 Cache:	None
Other Cache:	None
Memory:	48GB
Disk Subsystem:	1X18GB (SCSI, internal) 550GB (4 9X18GB Sun StorEdge T3 arrays, external)
Other Hardware:	--

Software

OpenMP Threads:	24
Parallel:	--
Operating System:	Solaris 8 2/02 ptmalloc: publically available malloc implementation
Compiler:	Forte Developer 7 EA2 (Early Access 2)
File System:	UFS
System State:	Multi User

Notes/Tuning Information

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Other Software:
  ptmalloc: publically available malloc implementation
  Available as SPEC OMP2001 Source: omp2001-ptmalloc-20020206.tar.gz
  or at www.malloc.de/en/index.html (as of Dec 2001)
  Based on GNU C library, ptmalloc

Base flags:
  Base C flags: -fast -xopenmp -xalias_level=std -xipo
             -xprefetch_level=3 -xprofile -lmtmalloc
  Base f90 flags: -fast -autopar -openmp -xipo
             -xprefetch_level=3 -xprofile

Portablility and Extra flags:
  Extra Base C flags: -Xc
  318.galgel_m portability flags: -e -fixed
  330.art_m extra flags: -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8

Peak flags:
  310.wupwise: -fast -openmp -Qoption iropt -Ainline:call_in_pragma
             -Qoption iropt -Athr -xipo
```

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SPEC license #: HPG0010	Tested by: Sun Microsystems, Palo Alto	Test site: Beaverton	Test date: Dec-2001	Hardware Avail: Nov-2001	Software Avail: Feb-2002

Notes/Tuning Information (Continued)

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  312.swim: basepeak = yes
  314.mgrid: -fast -xarch=v9b -openmp -xprefetch_level=3
             -Qoption iropt -Apf:const,-Apf:largedim -xprofile
  316.applu: -fast -openmp -xipo -xprefetch_level=3
  318.galgel: -fast -Qoption iropt -whole,-Apf:const -openmp
             -autopar -xipo -xlic_lib=sunperf -xprofile
             RM_SOURCES=lapak.f90;srcalt=eigQR
  320.equake: -fast -xrestrict -xalias_level=strong
             -xopenmp -W2,-Ainline:call_in_pragma -xprofile
             -xprefetch_level=3 -xprofile -lmtmalloc -lmopt -lm
  324.apsi: basepeak=yes
  326.gafort: -fast -openmp -Qoption iropt -Ainline:call_in_pragma
             -xprofile
  328.fma3d: -fast -openmp -Qoption iropt -Athr -xipo
             -xprofile -lmtmalloc
  330.art: -fast -xopenmp -xalias_level=strong
           -xprefetch_level=2 -xarch=v9b -xprofile -lmopt -lm -lptmalloc64
  332.ammp: -fast -xopenmp -xrestrict -xalias_level=strong
             -xprefetch_level=3 -lmopt -lm -lmtmalloc

Peak sources:
  318.galgel: eigQR.f90 (for portability to lapack version 3)
    Available as SPEC OMP2001 Source: omp2001-galgel-20020117.tar.gz

The following user environment was used for base runs:
  unlimit stacksize   (in /bin/csh)
  setenv STACKSIZE 2048
  setenv OMP_DYNAMIC FALSE
  setenv MT_BIND_PROCESSOR TRUE

The user environment for peak runs was same as for base:
  exceptions/additions noted below:
  318.galgel: STACKSIZE=4096
  330.art: limit stacksize 8m (in /bin/csh)

Kernel Paramters (/etc/system):
  set autoup=900
  set tune_t_fsflushr=1
  set shmsys:shminfo_shmmax=0xffffffffffffffff
  set shmsys:shminfo_shmseg=512
  set shmsys:shminfo_shmmni=4096

ONESTEP=yes for all benchmarks in base and peak

Forte Developer 7 (final) will ship May, 2002

System configuration details located (as of Dec 2001) at
http://www.sun.com/servers/midrange/sunfire6800
```