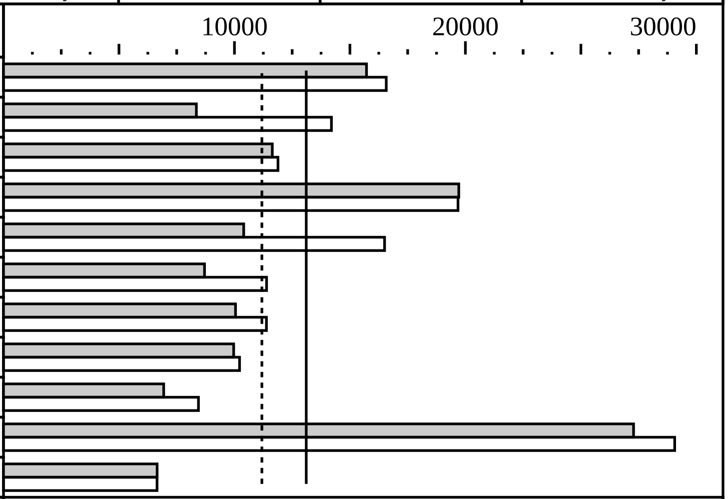
OMPM2001 Result

Sun Microsystems
Sun Fire 6800

SPECompMpeak2001 =	13108
SPECompMbase2001 =	11188

SPEC license #:	HPG0010	Tested by:	Sun Microsystems, Palo Alto	Test site:	Sun Microsystems	Test date:	Mar-2003	Hardware Avail:	Mar-2003	Software Avail:	May-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	382	15718	362	16573
312.swim_m	6000	718	8351	423	14199
314.mgrid_m	7300	627	11639	614	11885
316.applu_m	4000	203	19714	203	19679
318.galgel_m	5100	490	10401	309	16500
320.equake_m	2600	299	8704	228	11391
324.apsi_m	3400	338	10047	299	11385
326.gafort_m	8700	873	9967	851	10221
328.fma3d_m	4600	663	6937	545	8441
330.art_m	6400	235	27282	220	29062
332.ammp_m	7000	1052	6652	1053	6649



Hardware

CPU:	UltraSPARC III Cu
CPU MHz:	1200
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 16-way interleaved
Disk Subsystem:	1X36GB 550GB (4 9X18GB Sun StorEdge T3 arrays)
Other Hardware:	--

Software

OpenMP Threads:	16
Parallel:	OpenMP
Operating System:	Solaris 9 12/02
Compiler:	Sun ONE Studio 8 (pre-FCS build 3/9) Sun Performance Library 8 (pre-FCS build 3/9)
File System:	ufs with ufs logging
System State:	Multi-User

Notes/Tuning Information

```
Base Flags:
  ONESTEP=yes for all benchmarks

  C:   -fast -xopenmp -xalias_level=std -xipo=2 -xprefetch_level=3
       -Xc -xprofile -lmtmalloc
  f90: -fast -autopar -openmp -xipo=2 -xprefetch_level=3 -xprofile

Extra art Base Flags:
  330.art_m:     -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8

Portablility Flags:
  318.galgel_m:  -e -fixed

Peak Flags:
  ONESTEP=yes for all benchmarks

  310.wupwise_m: -fast -openmp -autopar -xipo=2 -Qoption iropt
                 -Athr,-Ainline:inc=800:cp=1 -xprefetch_level=3
                 -xpagesize=512k
  312.swim_m:    -fast -xautopar -xreduction -Qoption iropt
                 -Ainline:cs=700,-Atile:skewp:b256 -xpad=common:3022
```

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SPEC license #: HPG0010	Tested by: Sun Microsystems, Palo Alto	Test site: Sun Microsystems	Test date: Mar-2003	Hardware Avail: Mar-2003	Software Avail: May-2003

Notes/Tuning Information (Continued)

```
                   -xprefetch=latx:1.6
    314.mgrid_m:   -fast -autopar -openmp -xipo=2 -xprefetch_level=3
                   -xpagesize=64k
    316.applu_m:   -fast -openmp -xipo=2 -Qoption iropt -Aujam:inner=g
    318.galgel_m:  -fast -xipo=2 -openmp -autopar -xarch=v8plusb
                   -xlic_lib=sunperf
    320.equake_m:  -fast -xopenmp -xrestrict -xalias_level=strong
                   -W2,-Ainline:call_in_pragma -xpagesize=64k
                   -xprefetch_level=3 -xprofile -lmtmalloc -lmopt -lm
    324.apsi_m:    -fast -autopar -openmp -xipo=2 -xprofile
    326.gafort_m:  -fast -openmp -xprofile
    328.fma3d_m:   -fast -openmp -Qoption iropt -Athr,-Apf:pdl=1
                   -xipo=2 -xprofile -lmtmalloc
    330.art_m:     -fast -xopenmp -xalias_level=std -xipo=2
                   -xprefetch_level=3 -W2,-Apf:outer=0 -xprofile
                   -lmtmalloc
    332.ammp_m:    -fast -xopenmp -xalias_level=strong
                   -xprefetch_level=3 -lmopt -lm -lmtmalloc

  Alternate Source for Base:
    ISO C and C++ compatible sources
      Available as SPEC OMP Source: ompm2001-isoc-20020619.tar.gz
      320.equake_m, 330.art_m, 332.ammp_m

  Alternate Source for Peak:
    Compatibility with LAPACK version 3, RM_SOURCES=lapak.f90
      Available as SPEC OMP Source:  ompm2001-galgel-20020117.tar.gz
      318.galgel_m

    SPEC OMPL2001 compatible source for 64-bit systems
      Available as SPEC OMP Source:  ompm2001-ompl64-20020925.tar.gz
      320.equake_m, 324.apsi_m, 326.gafort_m

    ISO C and C++ compatible sources
      Available as SPEC OMP Source: ompm2001-isoc-20020619.tar.gz
      330.art_m

  Feedback is done as follows, unless otherwise noted:
    fdo_pre0:  rm -rf ./feedback.profile ./SunWS_cache
    PASS1:     -xprofile=collect:./feedback
    PASS2:     -xprofile=use:./feedback

  Base User Environment:
    unlimit stacksize   (in /bin/csh)
    setenv STACKSIZE 2048
    setenv OMP_DYNAMIC FALSE
    setenv MT_BIND_PROCESSOR TRUE
    setenv MPSSSTACK 4M
    setenv MPSSHEAP 4M
    setenv LD_PRELOAD mpss.so.1

  Peak User Environment:
    Same as base with the following exception
    318.galgel: STACKSIZE=16384

  Kernel Paramters (/etc/system):
```

OMPM2001 Result

Sun Microsystems Sun Fire 6800	SPECompMpeak2001 = 13108 SPECompMbase2001 = 11188

SPEC license #: HPG0010	Tested by: Sun Microsystems, Palo Alto	Test site: Sun Microsystems	Test date: Mar-2003	Hardware Avail: Mar-2003	Software Avail: May-2003

Notes/Tuning Information (Continued)

```
    set autoup=900
    set tune_t_fsflushr=1
    set shmsys:shminfo_shmmax=0xffffffffffffffff
    set shmsys:shminfo_shmseg=512
    set shmsys:shminfo_shmmni=4096

  Sun ONE Studio 8 (FCS) will ship May 2003

  System configuration details located (as of Mar 2003) at
    http://www.sun.com/servers/midrange/sunfire6800
```