





# OMPM2001 Result

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Sun Microsystems  
Sun Fire X4200

SPECompMpeak2001 = 10076

SPECompMbase2001 = 9643

SPEC license #HPG0010 Tested by: Sun Microsystems, Santa Clara Test site: Menlo Park Test date: Nov-2005 Hardware Avail Oct-2005 Software Avail Nov-2005

## Notes/Tuning Information (Continued)

Peak tuning:

ONESTEP=yes for all peak tests.

```

310.wupwise_m      : basepeak=yes
312.swim_m         : -fast -xipo=2 -xarch=amd64 -xprefetch_level=3 -xvector=simd -xopenmp
314.mgrid_m       : basepeak=yes
316.applu_m       : basepeak=yes
318.galgel_m      : -fast -xipo=2 -xprefetch_level=3 -xvector=simd
                  -xarch=amd64 -xopenmp -xpagesize=2m -xlic_lib=sunperf +FDO
                  RM_SOURCES=lapak.f90
320.equake_m      : -fast -xipo=2 -xalias_level=strong -xarch=amd64 -xopenmp
324.apsi_m        : basepeak=yes
326.gafort_m      : -fast -xipo=2 -xarch=amd64 -xprefetch_level=3 -xvector=simd
                  -xopenmp -xpagesize=2m
328.fma3d_m       : -fast -xipo=2 -xprefetch_level=3 -xarch=amd64 -xopenmp -xpagesize=2m +FDO
330.art_m         : -fast -xcrossfile -xarch=amd64 -xalias_level=std -xopenmp
                  -xpagesize=2m -lmtmalloc -lm
332.ammp_m        : -fast -xipo=2 -xarch=amd64 -xalias_level=std -xopenmp -xpagesize=2m -lmopt -lm

```

Portability flags:

```

318.galgel_m      : -e -fixed
330.art_m         : Extra Flag: -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8

```

Alternate Source:

```

330.art_m         : Required srcalt purduel used for base and peak
312.swim_m       : Approved srcalt ompl.32 used for peak
320.equake_m     : Approved srcalt ompl.32 used for peak

```

Base and Peak User Environment:

```

export OMP_NUM_THREADS=4
export SUNW_MP_PROCBIND=TRUE
export SUNW_MP_THR_IDLE=SPIN
export OMP_NESTED=FALSE
export STACKSIZE=16384
export OMP_DYNAMIC=TRUE
ulimit -s unlimited

```

For a description of Sun Studio 11 Compiler flags, portability flags and system parameters used to generate this result, please refer to SUN-20051207-Studio-Solaris-opteron.txt file in the flags directory.

Default BIOS settings used.

This result was measured on Sun Fire X4200;  
Sun Fire X4100 with AMD Opteron (TM) 275 and Sun Fire X4200 with  
AMD Opteron (TM) 275 are electronically equivalent.