OMPM2001 Result

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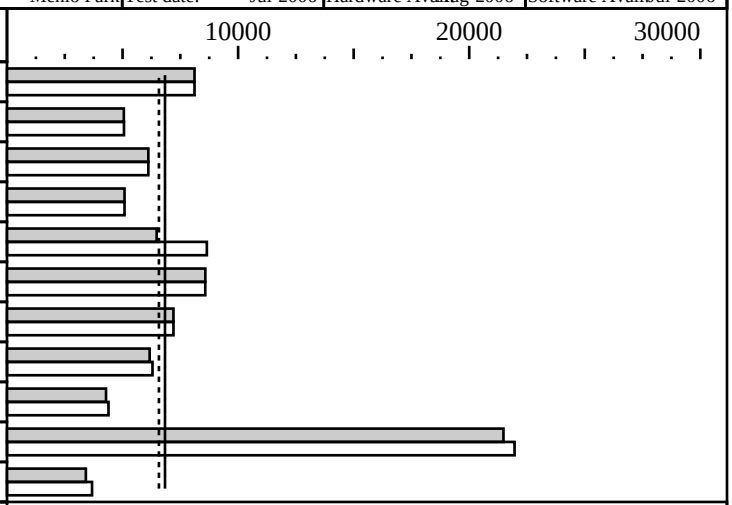
Sun Microsystems
Sun Fire X2100 M2

SPECompMpeak2001 = 6837

SPECompMbase2001 = 6573

SPEC license #: HPG0010 | Tested by: Sun Microsystems, Santa Clara | Test site: Menlo Park | Test date: Jul-2006 | Hardware Avail: Aug-2006 | Software Avail: Jul-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	739	8114	739	8114
312.swim_m	6000	1187	5056	1185	5062
314.mgrid_m	7300	1194	6116	1194	6116
316.applu_m	4000	787	5085	787	5085
318.galgel_m	5100	788	6475	590	8647
320.equake_m	2600	303	8582	303	8578
324.apsi_m	3400	472	7203	472	7203
326.gafort_m	8700	1409	6173	1382	6296
328.fma3d_m	4600	1073	4285	1047	4392
330.art_m	6400	298	21481	291	21962
332.ammp_m	7000	2051	3412	1902	3680



Hardware

CPU:	AMD Opteron (TM) 1218
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/chip
CPU(s) orderable:	1
Primary Cache:	64KBI + 64KBD (on chip) per core
Secondary Cache:	1024KB (I+D) (on chip) per core
L3 Cache:	None
Other Cache:	None
Memory:	4GB (4x1GB, DDR2-667 CL5 ECC)
Disk Subsystem:	SATA,500GB,7200RPM
Other Hardware:	None

Software

OpenMP Threads:	2
Parallel:	OpenMP
Operating System:	Solaris 10 6/06
Compiler:	Sun Studio 11 with Patches
File System:	ufs
System State:	Multi-User

Notes/Tuning Information

```
*****************************************************************
*vvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv*
     This config uses the -xalias_level=strong flag for "base"
     and is in violation of run rule 2.2.4.  It is unacceptable
     as a base flag for future submissions.  This submission was
     accepted prior to this rule clarification and it has been
     established that any variation in performance due to this
     flag was within the range of tolerance for reproducibility.
*^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^*
*****************************************************************
 Compiler Invocation:
   C   : cc
   F90 : f90
   F77 : f90

 Base tuning:
   Fortran : -fast -xipo=2 -xarch=amd64 -xprefetch_level=3 -xvector=simd -xopenmp
   C       : -fast -xipo=2 -xalias_level=strong -xarch=amd64 -xopenmp
   ONESTEP=yes

 +FDO:  PASS1= -xprofile=collect:./feedback PASS2= -xprofile=use:./feedback

 Peak tuning:
```

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Notes/Tuning Information (Continued)

```
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 -xpagesize=2m -xipo=2 -qoption iropt -xprefetch_level=3 -xvector=simd
                  -xarch=amd64 -xopenmp -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 -xpagesize=2m -xipo=2 -xarch=amd64 -xprefetch_level=3 -xvector=simd
                  :  -xopenmp
328.fma3d_m     : -fast -xpagesize=2m -xipo=2 -xprefetch_level=3 -xarch=amd64 -xopenmp +FDO
330.art_m       : -fast -xpagesize=2m -xipo=2 -xarch=amd64 -xalias_level=std -xopenmp
                  -lmtmalloc -lm
332.ammp_m      : -fast -xpagesize=2m -xipo=2 -xarch=amd64 -xalias_level=std -xopenmp -lmopt -lm

Portablility flags:
      318.galgel_m      : -e -fixed

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

Base and Peak User Environment:
  export OMP_NUM_THREADS=2
  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

The following patches were applied to Sun Studio 11 compiler:
120759-07 : x86/x64
121016-03 : x86 C
121020-03 : x86 F90
121018-03 : x86 C++

For a description of Sun Studio 10 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.
```