



OMPM2001 Result

Copyright ©1999-2002, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire V40z

SPECompMpeak2001 = 6486

SPECompMbase2001 = 6344

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio	
310.wupwise_m	6000	809	7412	803	7475	
312.swim_m	6000	796	7535	761	7889	
314.mgrid_m	7300	1124	6494	1124	6494	
316.applu_m	4000	837	4777	722	5540	
318.galgel_m	5100	735	6941	731	6973	
320.quake_m	2600	350	7422	350	7422	
324.apsi_m	3400	556	6116	537	6336	
326.gafort_m	8700	1593	5462	1593	5462	
328.fma3d_m	4600	1119	4111	1119	4111	
330.art_m	6400	337	18984	337	18984	
332.ammp_m	7000	2430	2881	2430	2881	

Hardware

CPU: AMD Opteron (TM) 852
 CPU MHz: 2600
 FPU: Integrated
 CPU(s) enabled: 2 cores, 2 chips, 1 core/chip
 CPU(s) orderable: 1,2,4
 Primary Cache: 64KBI + 64KBD on chip
 Secondary Cache: 1024KB (I+D) on chip
 L3 Cache: None
 Other Cache: None
 Memory: 8GB (4x2GB, PC3200 CL3 DDR SDRAM ECC Registered)
 Disk Subsystem: SCSI, 73GB, 10K RPM
 Other Hardware: None

Software

OpenMP Threads: 2
 Parallel: OpenMP
 Operating System: SUSE LINUX Enterprise Server 9
 Compiler: PathScale EKOPath Compiler Suite, Release 2.1
 File System: ufs
 System State: Multi-User

Notes/Tuning Information

Baseline Optimization Flags:

```
Fortran : -Ofast -OPT:early_mp=on -mcmmodel=medium -mp
C       : -Ofast -mp
```

Peak Optimization Flags:

```
310.wupwise_m : -mp -Ofast -mcmmodel=medium -LNO:prefetch Ahead=5:prefetch=3 -TENV:X=4
               -OPT:unroll_times_max=8:unroll_size=128:IEEE_NaN_Inf=off:ro=3
312.swim_m    : -mp -O3 -OPT:Ofast -m3dnow -mcmmodel=medium -LNO:simd=0
314.mgrid_m   : basepeak=yes
316.applu_m   : -mp -Ofast -mcmmodel=medium -CG:local_fwd_sched=on
               -LNO:fusion=2:fission=2:full_unroll_size=10000:prefetch=3 -TENV:X=3
318.galgel_m  : -Ofast -mp -OPT:early_mp=on
320.quake_m   : basepeak=yes
324.apsi_m    : -mp -O3 -OPT:Ofast -TENV:x=4 -LNO:fusion=2:prefetch=0
326.gafort_m  : basepeak=yes
328.fma3d_m   : basepeak=yes
330.art_m     : basepeak=yes
332.ammp_m    : basepeak=yes
```

Alternate Source:

```
330.art_m : required srcalt purdue1 used for base and peak
316.applu_m: approved srcalt ompl.32 used for peak
324.apsi_m : approved srcalt ompl.32 used for peak
```



OMPM2001 Result

Copyright ©1999-2002, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire V40z

SPECompMpeak2001 = 6486

SPECompMbase2001 = 6344

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

Notes/Tuning Information (Continued)

Portability Flags:

```
318.galgel_m      : -fixedform -extend_source
330.art_m         : Extra Flag: -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8
```

Base and Peak User Environment:

```
export OMP_NUM_THREADS=2
export OMP_GUIDED_CHUNK_MAX=300
ulimit -s unlimited
```

Default BIOS settings used; Only 2 CPUs were present on the system.

For a description of PathScale EKOPath Compiler Suite, Release 2.1 flags, portability flags and system parameters used to generate this result, please refer to SUN-20050302-PathScale2.1-SuSE-opteron.txt file in the flags directory.