



OMPM2001 Result

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Colfax International Supermicro X7QC3

SPECompMpeak2001 = --
SPECompMbase2001 = 18337

SPEC license #HPG0017 | Tested by: Advanced Micro Devices | Test site: Austin, TX | Test date: Mar-2008 | Hardware Avail: Nov-2007 | Software Avail: Nov-2007

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	264	22718		
312.swim_m	6000	577	10401		
314.mgrid_m	7300	715	10214		
316.applu_m	4000	261	15322		
318.galgel_m	5100	310	16432		
320.earthquake_m	2600	185	14032		
324.apsi_m	3400	95.8	35509		
326.gafort_m	8700	441	19721		
328.fma3d_m	4600	266	17270		
330.art_m	6400	160	40033		
332.ammp_m	7000	367	19093		

Hardware

CPU: Intel(R) Xeon(R) X7350
 CPU MHz: 2930
 FPU: Integrated
 CPU(s) enabled: 16 cores, 4 chips, 4 cores/chip
 CPU(s) orderable: 1-4
 Primary Cache: 32 KB I + 32 KB D per core on chip
 Secondary Cache: 8 MB I+D on chip per chip, 4 MB shared / 2 cores
 L3 Cache: None
 Other Cache: N/A
 Memory: 32GB (16 x 2GB PC2-5300 FBDIMM, CL5)
 Disk Subsystem: 120GB 7200 RPM SATA
 Other Hardware:

Software

OpenMP Threads: 16
 Parallel: OpenMP
 Operating System: SLES10 SP1 (64bit)
 Compiler: Intel FORTRAN Compiler 10.1.008 for Linux
 Intel C++ Compiler 10.1.008 for Linux
 GNU C Compiler (4.1.0 (SUSE Linux))
 File System: Linux ext3
 System State: Default

Notes/Tuning Information

Baseline optimization flags:

```
COPTIMIZE = -fast -openmp -openmp-lib compat
FOPTIMIZE = -fast -openmp -openmp-lib compat
export KMP_LIBRARY=turnaround
export KMP_STACKSIZE=31M
```

```
export OMP_DYNAMIC=FALSE
export KMP_BLOCKTIME=infinite
ONESTEP=yes
ulimit -s unlimited
Default "optimized" bios settings used.
```

Base Tuning:

```
export KMP_AFFINITY=none
```

New alternate sources

```
mgrid standard conformance to OpenMP 2.5; src.alt/intel
For flag descriptions, see file AMD-ic10.1-intel64-linux-flags-file-20080409.html
BIOS version 8.00.15. Default BIOS settings used.
```