



# OMP2001 Result

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Unisys  
ES7000/1

SPECompMpeak2001 = --  
SPECompMbase2001 = 11458

SPEC license #PG0013A | Tested by: Intel Corporation | Test site: -- | Test date: Oct-2007 | Hardware Avail: Nov-2006 | Software Avail: Nov-2007

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio	
310.wupwise_m	6000	312	19229			
312.swim_m	6000	602	9966			
314.mgrid_m	7300	912	8006			
316.applu_m	4000	128	31146			
318.galgel_m	5100	3137	1626			
320.earthquake_m	2600	229	11351			
324.apsi_m	3400	381	8921			
326.gafort_m	8700	590	14751			
328.fma3d_m	4600	373	12320			
330.art_m	6400	273	23477			
332.ammp_m	7000	526	13310			

### Hardware

CPU: Dual-Core Intel(R) Xeon(R) Processor 7140M  
 CPU MHz: 3400  
 FPU: Integrated  
 CPU(s) enabled: 64 cores, 32 chips, 2 cores/chip  
 CPU(s) orderable: 1-32 chips  
 Primary Cache: 32KB(I)+32KB(D)/core on chip  
 Secondary Cache: 4096KB/chip (I+D) on chip  
 L3 Cache: 16MB/chip  
 Other Cache: N/A  
 Memory: 128 GB  
 Disk Subsystem: SCSI  
 Other Hardware:

### Software

OpenMP Threads: 32  
 Parallel: OpenMP  
 Operating System: SUSE Linux Enterprise Server 10 (x86\_64)  
 Compiler: GCC 4.1.0  
 File System: Linux ext3  
 System State: Default

## Notes/Tuning Information

Baseline optimization flags:

```
COPTIMIZE = -O3 --fopenmp -ansi -fwhole-program -combine
FOPTIMIZE = -O3 -fopenmp
```

```
export GOMP_STACKSIZE=32768
```

```
export OMP_DYNAMIC=FALSE
```

```
ONESTEP=yes
```

```
ulimit -s 1048576
```

Portability Flags:

```
318.galgel_m: -ffixed-form -ffixed-line-length-132
```

Extra Flags:

```
330.art_m: -DINTS_PER_CACHELINE=32 -DDBLS_PER_CACHELINE=16
```

New alternate sources

```
mgrid standard conformance to OpenMP 2.5; src.alt/intel
```

Flags file: Intel-ic10.1-intel64-linux-flags-file-20071211.html