



OMPL2001 Result

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Cisco Systems
B200 M2

SPECompLpeak2001 = 291398

SPECompLbase2001 = 282771

SPEC license #HPG9019 Tested by: Cisco Systems Test site: -- Test date: Feb-2011 Hardware AvailMar-2011 Software AvailFeb-2011

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
311.wupwise_l	9200	379	388783	379	388783
313.swim_l	12500	1258	158957	1092	183146
315.mgrid_l	13500	1066	202713	1055	204705
317.applu_l	13500	1717	125829	1718	125706
321.quake_l	13000	848	245147	813	255748
325.apsi_l	10500	494	339753	496	338519
327.gafort_l	11000	520	338774	491	358215
329.fma3d_l	23500	1309	287154	1275	294857
331.art_l	25000	442	905015	442	904164

Hardware	Software
CPU: Intel(R) Xeon(R) Processor X5690 CPU MHz: 3459 FPU: Integrated CPU(s) enabled: 12 cores, 2 chips, 6 cores/chip, 1 thread/core CPU(s) orderable: 1,2 Primary Cache: 32KB(I)+32KB(D)/core on chip Secondary Cache: 256KB/core (I+D) on chip L3 Cache: 12288KB (I+D) on chip Other Cache: N/A Memory: 48 GB (RDIMM 12x4-GB 1333 MHz) Disk Subsystem: Seagate 300 GB ST9300603SS Other Hardware:	OpenMP Threads: 24 Parallel: OpenMP Operating System: Suse Enterprise Linux 11.0 Compiler: Intel C/C++ Compiler 11.1.059 for Linux Intel FORTRAN Compiler 11.1.059 for Linux GNU C Compiler 4.3.2 File System: Linux ext3 System State: Default

Notes/Tuning Information

BIOS settings notes:

Intel Hyper-Threading Technology (SMT): Enabled (default is Enabled)

Intel Turbo Boost Technology (Turbo) : Enabled (default is Enabled, Max 3.73GHz)

Extra Flags:

331.art_l: -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8

all: -gcc-name=/usr/bin/gcc

General Notes and Environment variables

export KMP_LIBRARY=turnaround

export KMP_STACKSIZE=31M

export KMP_BLOCKTIME=infinite

export OMP_DYNAMIC=FALSE

ONESTEP=yes

ulimit -s 64000

SMT Enabled, Turbo Enabled

For compiler/openmp flags description please refer:

Intel-ic11.1-intel64-linux-flags-file.html

Base optimization flags and environment variables:

Large:

OPTIMIZE = -O3 -xSSE4.2 -ipo1 -openmp

COPTIMIZE = -ansi_alias

PORTABILITY = -mcmmodel=medium -shared-intel

export KMP_AFFINITY=compact,1

Peak optimization flags and environment variables:

Large:

OPTIMIZE = -O3 -xSSE4.2 -ipo1 -openmp

COPTIMIZE = -ansi_alias

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Notes/Tuning Information (Continued)

```
export KMP_AFFINITY=compact,1
```

Peak per-benchmark optimization flags and environment variables:

```
311.wupwise_1  
basepeak=yes
```

```
315.mgrid_1  
OPTIMIZE=-O3 -xSSE4.2 -ipo1 -openmp -opt-streaming-stores never -align -rcd  
export KMP_AFFINITY=proclist=[0,2,4,6,8,10,1,3,5,7,9,11],explicit  
export OMP_NUM_THREADS=12
```

```
317.applu_1
```

```
321.equake_1  
export KMP_AFFINITY=proclist=[0,2,4,6,8,10,1,3,5,7,9,11],explicit  
export OMP_NUM_THREADS=12
```

```
325.appsi_1  
EXTRA_LIBS=-L$(SPECLIB) -lhoard
```

```
327.gafort_1  
PORTABILITY = -mcmmodel=medium -shared-intel  
export KMP_AFFINITY=scatter,0
```

```
329.fma3d_1  
FOPTIMIZE=-no-prec-sqrt -fp-model fast=2  
EXTRA_LIBS=-L$(SPECLIB) -lhoard
```

```
331.art_1
```