OMPL2001 Result

Copyright 1999-2008, Standard Performance Evaluation Corporation

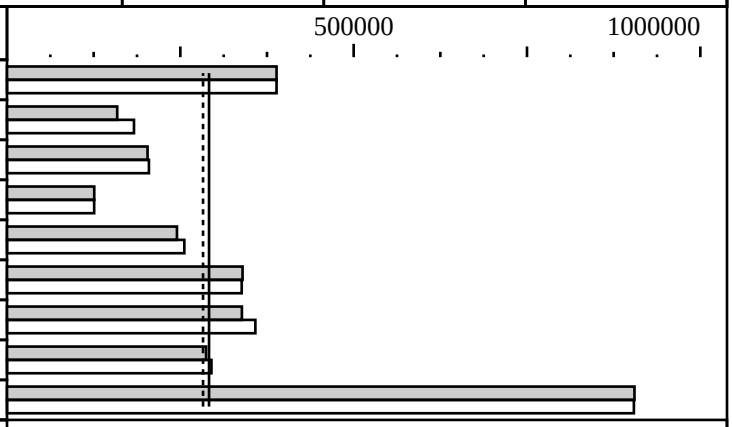
Cisco Systems
B200 M2

SPECompLpeak2001 = 291398

SPECompLbase2001 = 282771

SPEC license #: HPG9019	Tested by: Cisco Systems	Test site: --	Test date: Feb-2011	Hardware Avail: Mar-2011	Software Avail: Feb-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.equake_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

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:	

Software

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 Eviroment 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 eviroment variables:
Large:
OPTIMIZE  = -O3 -xSSE4.2 -ipo1 -openmp
COPTIMIZE = -ansi_alias
PORTABILITY = -mcmodel=medium -shared-intel
export KMP_AFFINITY=compact,1
Peak optimization flags and eviroment variables:
Large:
OPTIMIZE  = -O3 -xSSE4.2 -ipo1 -openmp
COPTIMIZE = -ansi_alias
```

Notes/Tuning Information (Continued)

```
export KMP_AFFINITY=compact,1
Peak per-benchamrk optimization flags and eviroment variables:

311.wupwise_l
basepeak=yes

315.mgrid_l
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_l

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

325.appsi_l
EXTRA_LIBS=-L$(SPECLIB) -lhoard

327.gafort_l
PORTABILITY = -mcmodel=medium -shared-intel
export KMP_AFFINITY=scatter,0

329.fma3d_l
FOPTIMIZE=-no-prec-sqrt -fp-model fast=2
EXTRA_LIBS=-L$(SPECLIB) -lhoard

331.art_l
```