OMPL2001 Result

Copyright 1999-2008, Standard Performance Evaluation Corporation

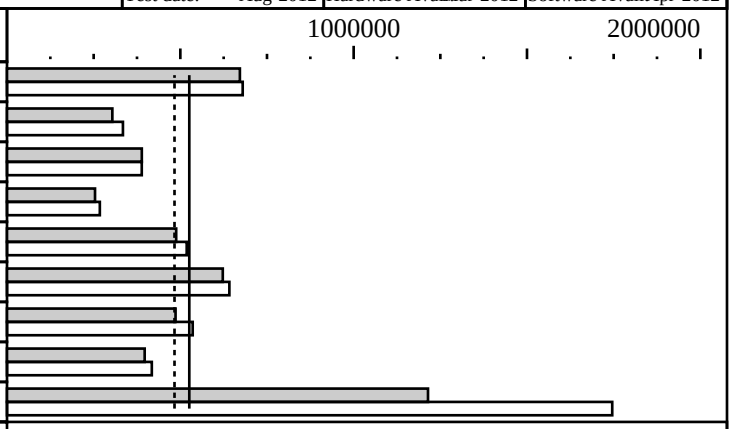
Bull SAS
bullx B510

SPECompLpeak2001 = 525845

SPECompLbase2001 = 483192

SPEC license #: HPG0015 | Tested by: Bull SAS | Test site: -- | Test date: Aug-2012 | Hardware Avail: Mar-2012 | Software Avail: Apr-2012

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
311.wupwise_l	9200	219	671780	217	679881
313.swim_l	12500	658	303882	598	334423
315.mgrid_l	13500	555	388861	556	388722
317.applu_l	13500	851	253903	807	267784
321.equake_l	13000	426	488036	401	518384
325.apsi_l	10500	270	622441	262	641456
327.gafort_l	11000	362	486207	329	535636
329.fma3d_l	23500	947	397139	900	417710
331.art_l	25000	329	1214428	229	1745845



Hardware

CPU:	Intel(R) Xeon(R) Processor E5-2680
CPU MHz:	2700
FPU:	Integrated
CPU(s) enabled:	16 cores, 2 chips, 8 cores/chip, 2 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:	20MB (I+D) on chip
Other Cache:	N/A
Memory:	64 GB (8 x 8 GB 2Rx4 PC3-12800R-11, ECC)
Disk Subsystem:	1 x 64GB SSD disk
Other Hardware:	

Software

OpenMP Threads:	32
Parallel:	OpenMP
Operating System:	Red Hat EL 6.2, 2.6.32-220.el6.x86_64
Compiler:	Intel C/C++ Compiler XE 12.1.4.319 for Linux Build 20120410 Intel FORTRAN Compiler XE 12.1.4.319 for Linux Build 20120410 GNU C Compiler 4.4.6 20110731
File System:	Linux ext4
System State:	Run level 3 (multi-user)

Notes/Tuning Information

```
    BIOS settings notes:
        Intel Hyper-Threading Technology (SMT): Enabled (default is Enabled)
        Intel Turbo Boost Technology (Turbo)  : Enabled (default is Enabled)
    Portability Flags:

    Extra Flags:
        331.art_l: -DINTS_PER_CACHELINE=32 -DDBLS_PER_CACHELINE=16
        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 unlimited
Intel Turbo Boost Technology up to 3.50 GHz enabled
For compiler/openmp flags description please refer:
Intel-ic12.1-intel64-linux-flags-file.html
Base optimization flags and environment variables:
Large:
  OPTIMIZE=-O2 -xAVX -ipo -openmp -no-prec-div -mcmodel=medium -shared-intel
  COPTIMIZE = -ansi_alias
  export KMP_AFFINITY=compact,0

Peak optimization flags and environment variables:
Large:
```

Notes/Tuning Information (Continued)

```
    OPTIMIZE  = -O3 -xAVX -ipo -openmp
    export KMP_AFFINITY=compact,0

  Peak per-benchmark optimization flags and environment variables:
  311.wupwise_l
    OPTIMIZE=-O3 -xSSE4.2 -ipo -openmp

  313.swim_l
    OPTIMIZE=-O3 -xSSE4.2 -ipo -openmp -opt-streaming-stores always -align -mcmodel=medium -shared-intel
    export OMP_NUM_THREADS=16
    export KMP_AFFINITY=compact,1

  315.mgrid_l
    OPTIMIZE=-O3 -xAVX -ipo -openmp -fno-alias

  317.applu_l
    OPTIMIZE=-O3 -xAVX -ipo -openmp -mcmodel=medium -shared-intel
    export KMP_AFFINITY=scatter,0

  321.equake_l
    export KMP_AFFINITY=compact,1
    export OMP_NUM_THREADS=16

  325.apsi_l
    OPTIMIZE=-O2 -xAVX -ipo -openmp -no-prec-div -mcmodel=medium -shared-intel
    COPTIMIZE = -ansi_alias
    export KMP_AFFINITY=compact,0

  327.gafort_l
    OPTIMIZE=-O3 -xSSE4.2 -ipo -openmp -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
    export KMP_AFFINITY=compact,1

  331.art_l
    OPTIMIZE=-O2 -xSSE4.2 -ipo -openmp
    COPTIMIZE=-ansi-alias
```