



OMPL2001 Result

Copyright ©1999-2002, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER HPC2500 (1.3GHz)

SPECompLpeak2001 = --
SPECompLbase2001 = 262140

SPEC license #HPG0003 | Tested by: Fujitsu Limited | Test site: Numazu, Japan | Test date: Oct-2003 | Hardware Avail: Jul-2003 | Software Avail: Dec-2003

| Benchmark | Reference Time | Base Runtime | Base Ratio | Peak Runtime | Peak Ratio | |
|---------------|----------------|--------------|------------|--------------|------------|--|
| 311.wupwise_1 | 9200 | 437 | 336617 | | | |
| 313.swim_1 | 12500 | 939 | 212982 | | | |
| 315.mgrid_1 | 13500 | 859 | 251396 | | | |
| 317.applu_1 | 13500 | 370 | 583083 | | | |
| 321.quake_1 | 13000 | 2042 | 101850 | | | |
| 325.apsi_1 | 10500 | 884 | 190051 | | | |
| 327.gafort_1 | 11000 | 520 | 338751 | | | |
| 329.fma3d_1 | 23500 | 1517 | 247823 | | | |
| 331.art_1 | 25000 | 1169 | 342280 | | | |

Hardware

CPU: SPARC64 V
 CPU MHz: 1299
 FPU: Integrated
 CPU(s) enabled: 128
 CPU(s) orderable: 8 to 128
 Primary Cache: 128KBI+128KBD on chip
 Secondary Cache: 2MB(I+D) on chip, per CPU
 L3 Cache: None
 Other Cache: None
 Memory: 512GB
 Disk Subsystem: 1x 36GB Ultra SCSI
 Other Hardware: None

Software

OpenMP Threads: 124
 Parallel: OpenMP
 Operating System: Solaris 8
 Fujitsu Parallelnavi 2.3 (NQS etc)
 Fujitsu Parallelnavi 2.3 (C & F90)
 Compiler: Fujitsu Parallelnavi 2.3 (C & F90)
 File System: ufs
 System State: Multi-user

Notes/Tuning Information

Baseline flags:

C: -KOMP,fast_GP2=2,V9,hardbarrier
 -x- -Klargepage=2,mfunc,prefetch=2
 F90: -KOMP,fast_GP2=2,V9,hardbarrier -Klargepage=1,prefetch_line=4
 -Nautoobjstack -O5 -Kprefetch_cache_level=3

Portability Flags:

329.fma3d_1: -Am

Extra Flags:

331.art_1: -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8

System tunables:

```
/etc/system:
set shmsys:shminfo_shmmax=2147483648
set shmsys:shminfo_shmmni=256
set shmsys:shminfo_shmseg=256
set autoup=172800
set memscrub_period_sec=345600
/etc/opt/FJSVpnm/lpg.conf:
JOB=256G,SHMSEGSIZE=2048M
/etc/opt/FJSVpnm/cpursc.conf:
CPU_USE=0,1:0,1
```

NQS:

Per-process data size limit = UNLIMITED
 Per-process permanent file size limit = UNLIMITED
 Per-process memory size limit = 128 gigabytes



OMPL2001 Result

Copyright ©1999-2002, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER HPC2500 (1.3GHz)

SPECompLpeak2001 = --
SPECompLbase2001 = 262140

SPEC license #HPG0003 | Tested by: Fujitsu Limited | Test site: Numazu, Japan | Test date: Oct-2003 | Hardware Avail: Jul-2003 | Software Avail: Dec-2003

Notes/Tuning Information (Continued)

Per-request memory size limit = 128 gigabytes
Per-process number of cpus limit = 126
Per-process stack size limit = 4 gigabytes
Per-process CPU time limit = 2147483646.000
Execution mode = SImplex
Jobclass = 0

Submitting the runspec to NQS:
Run the qsub command with the following sh script.

```
cd /spec/omp2001
OMP_NUM_THREADS=124
export OMP_NUM_THREADS
. ./shrc
runspec --config=Fujitsu --reportable large
```