OMPM2001 Result

Copyright ©1999-2002, Standard Performance Evaluation Corporation

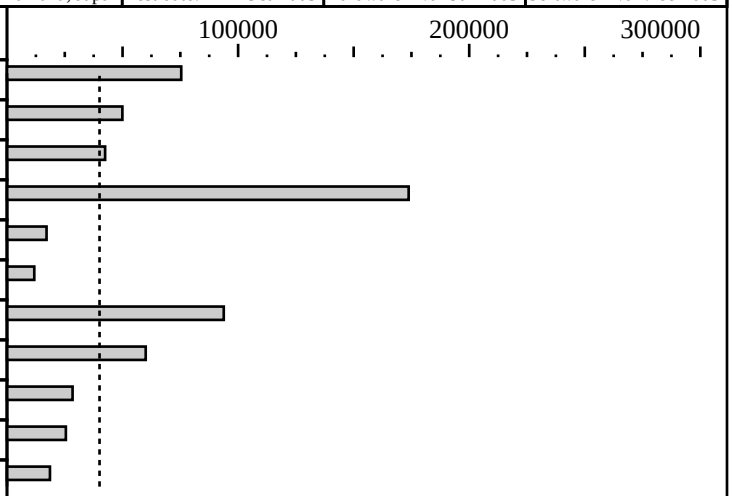
Fujitsu Limited
PRIMEPOWER HPC2500 (1.3GHz)

SPECompMpeak2001 = --

SPECompMbase2001 = 40041

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
310.wupwise_m	6000	79.6	75394		
312.swim_m	6000	120	49924		
314.mgrid_m	7300	172	42454		
316.applu_m	4000	23.0	173793		
318.galgel_m	5100	298	17114		
320.equake_m	2600	220	11805		
324.apsi_m	3400	36.3	93790		
326.gafort_m	8700	145	60021		
328.fma3d_m	4600	162	28373		
330.art_m	6400	251	25470		
332.ammp_m	7000	377	18587		



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)
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:
    318.galgel_m:  -Am -Fixed -w
    328.fma3d_m:   -Am

Extra Flags:
     330.art_m:    -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/FJSVpnrm/lpg.conf:
        JOB=256G,SHMSEGSIZE=2048M
```

Copyright ©1999-2002, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
        /etc/opt/FJSVpnrm/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
            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 medium
```