HPC2002 Result

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Hewlett-Packard Company

HP Superdome 64-way (875MHz PA-8700+)

SPECchemM2002 = 42.3

SPEC license #: HPG2116	Tested by: Hewlett-Packard Company	Test site: Richardson, Texas	Test date: Oct-2002	HW Avail: Jun-2002	SW Avail: Oct-2002

Benchmark	Reference Time	Runtime	Ratio
371.gamess_m	86400	2044	42.3

Hardware

CPU:	PA-8700+
CPU MHz:	875
FPU:	Integrated
CPU(s) enabled:	64
CPU(s) orderable:	8 to 64
Primary Cache:	0.75MB(I) + 1.5MB(D) on chip
Secondary Cache:	None
L3 Cache:	None
Other Cache:	None
Memory:	256GB
Disk Subsystem:	5x9GB Fiberchannel (striped) 1x9GB SCSI disk (root), 28x9GB FC disks (swap)
Other Hardware:	16 cells

Software

Parallel:	MPI & OpenMP
Processes-Threads:	64
MPI Processes:	16
OpenMP Threads:	4
Operating System:	HP-UX 11i TCOE B.11.11.0206.5
Compiler:	HP C/ANSI C Compiler v11.11.04 HP Fortran 90 Compiler v2.6.1 HP aC++ Compiler A.03.35 HP MPI 1.08.00 PHSS_26263 ld(1) and linker tools patch PHSS_25719 LIBCL patch PHSS_27700 CPSlib patch PHSS_26792 ANSI C compiler patch PHSS_26793 +O4/PBO compiler patch PHSS_27735 Fortran90 compiler patch PHSS_26952 aC++ -AA runtime libraries PHSS_24207 libm patch PHSS_26264 linker startup code
File System:	Online JFS
System State:	Multi-user
Other Software:	MPI

Notes/Tuning Information

```
Flags:
  mpif90   +O3   +DA2.0W +Oopenmp
           +Oinfo  +nosignedzero +Onoinline
           -I /opt/mpi/include
           -L /opt/mpi/lib/pa20_64 -lmpi
           +U77 +DA2.0W +FPD +Oopenmp
  mpicc    +O2   -DNOUNDERSCORE +DA2.0W
           -I /opt/mpi/include
           +U77 +DA2.0W +FPD +Oopenmp
           -L /opt/mpi/lib/pa20_64 -lmpi
  /usr/ccs/lbin/cpp    -I. -C -P -D_OPENMP
Alternate Source used for Peak:
  None
User Environment:
  use_submit_for_speed=1
  submit = export OMP_NUM_THREADS=$OMPI_COMM_SIZE;
     MPI_ENABLED=ENABLED; export MPI_ENABLED;
     mpirun -np $MPI_COMM_SIZE $command
Kernel Paramters (/stand/system):
   maxdsiz          3221225472
   maxdsiz_64bit    274877906944
   maxssiz          0x10000000
   maxssiz_64bit    1073741824
   maxtsiz          1073741824
   maxtsiz_64bit    4294967296
   vps_pagesize     4096
   vps_ceiling      16384
   dbc_min_pct      10
   dbc_max_pct      10
```