



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	5	10	15	20	25	30	35	40	45
371.gamess_m	86400	2044	42.3									

Hardware		Software	
CPU:	PA-8700+	Parallel:	MPI & OpenMP
CPU MHz:	875	Processes-Threads:	64
FPU:	Integrated	MPI Processes:	16
CPU(s) enabled:	64	OpenMP Threads:	4
CPU(s) orderable:	8 to 64	Operating System:	HP-UX 11i TCOE B.11.11.0206.5
Primary Cache:	0.75MB(I) + 1.5MB(D) on chip	Compiler:	HP C/ANSI C Compiler v11.11.04
Secondary Cache:	None		HP Fortran 90 Compiler v2.6.1
L3 Cache:	None		HP aC++ Compiler A.03.35
Other Cache:	None		HP MPI 1.08.00
Memory:	256GB		PHSS_26263 ld(1) and linker tools patch
Disk Subsystem:	5x9GB Fiberchannel (striped) 1x9GB SCSI disk (root), 28x9GB FC disks (swap)	File System:	Online JFS
Other Hardware:	16 cells	System State:	Multi-user
		Other Software:	MPI

Notes/Tuning Information

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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/bin/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 \$OMPI_COMM_SIZE \$command
Kernel Parameters (/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

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