CFP2000 Result

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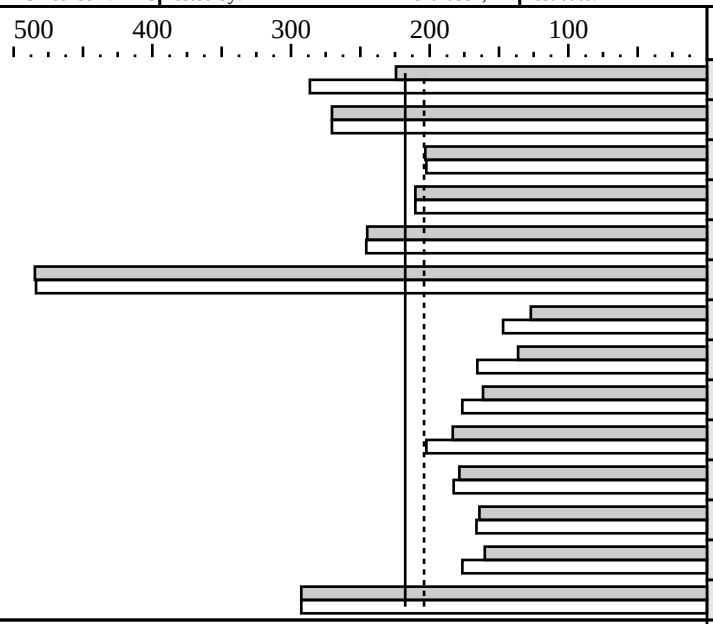
Hewlett-Packard Company

HP9000 Superdome 64-way (552MHz PA-8600)

SPECfp_rate2000 = 218

SPECfp_rate_base2000 = 204

SPEC license #: 3 | Tested by: HP Richardson, TX | Test date: Mar-2001 | Hardware Avail: May-2001 | Software Avail: Jul-2001



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	64	530	224	64	415	286
171.swim	64	851	270	64	851	270
172.mgrid	64	658	203	64	660	202
173.applu	64	741	210	64	741	210
177.mesa	64	424	245	64	423	246
178.galgel	64	444	485	64	445	484
179.art	64	1519	127	64	1313	147
183.equake	64	708	136	64	583	166
187.facerec	64	873	162	64	799	176
188.ammp	64	891	183	64	807	202
189.lucas	64	831	179	64	813	183
191.fma3d	64	950	164	64	938	166
200.sixtrack	64	510	160	64	463	176
301.apsi	64	660	293	64	660	293

Hardware

CPU:	PA-8600
CPU MHz:	552
FPU:	Integrated
CPU(s) enabled:	64 cores, 64 chips, 1 core/chip
CPU(s) orderable:	8-64
Parallel:	No
Primary Cache:	0.5MBI + 1.0MBD on chip
Secondary Cache:	none
L3 Cache:	N/A
Other Cache:	N/A
Memory:	256GB
Disk Subsystem:	5x9GB Fiberchannel (striped) 1x9GB SCSI disk (root), 30x9GB FC disks (swap)
Other Hardware:	16 cells, 500MHz CEC

Software

Operating System:	HP-UX 11i Technical Computing OE
Compiler:	HP ANSI C 11.11.02 Fortran90 11.01.40
File System:	hfs
System State:	Multi-user

Notes/Tuning Information

```
Portability Flags:
  178.galgel:  +source=fixed

Base Flags:
  f90: +O3 +Onofltacc -Wl,-a,archive -Wl,+FPD
  C:   +I/+P +O4 +Odataprefetch -Wl,-a,archive

Peak Flags:

  all:         -Wl,+FPD -Wl,-a,archive
  168.wupwise: +cat +O3 +Odataprefetch +Onofltacc
  171.swim:    +O3 +Onolimit +Oinline_budget=1000
  172.mgrid:   +O3 +Ocache_pad_common +Oloop_unroll=6
               +Oinline_budget=10
  173.applu:   basepeak=true
```

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Notes/Tuning Information (Continued)

```
  177.mesa:    +I/+P +Oall +Odataprefetch +Opromote_indirect_calls
  178.galgel:  +O3 +Oloop_unroll=2
  179.art:     +I/+P +Oall +Onodataprefetch +Onofltacc
               +Optrs_strongly_typed +Opromote_indirect_calls
  183.equake:  +O4 +Olibcalls +Odataprefetch +Optrs_strongly_typed
               +Opromote_indirect_calls
  187.facerec: +cat +O3 +Ofastaccess
  188.ammp:    +I/+P +Oall +Odataprefetch +Optrs_strongly_typed
               +Opromote_indirect_calls
  189.lucas:   +O3 +Onoinline
  191.fma3d:   +O3 +Onolimit
  200.sixtrack: +cat +O3 +Onolibcalls +Onolimit +Onoinline
                +Onodataprefetch
  301.apsi:    basepeak=true
  ONESTEP=true for 168.wupwise, 187.facerec, 200.sixtrack

System tunables:
vps_pagesize 4096, vps_ceiling 16384
dbc_min_pct 20, dbc_max_pct 20
maxdsiz 0x7b03a000, maxssiz 256000000
DataPrefetch enabled (boot time firmware tunable)
```