CFP2000 Result

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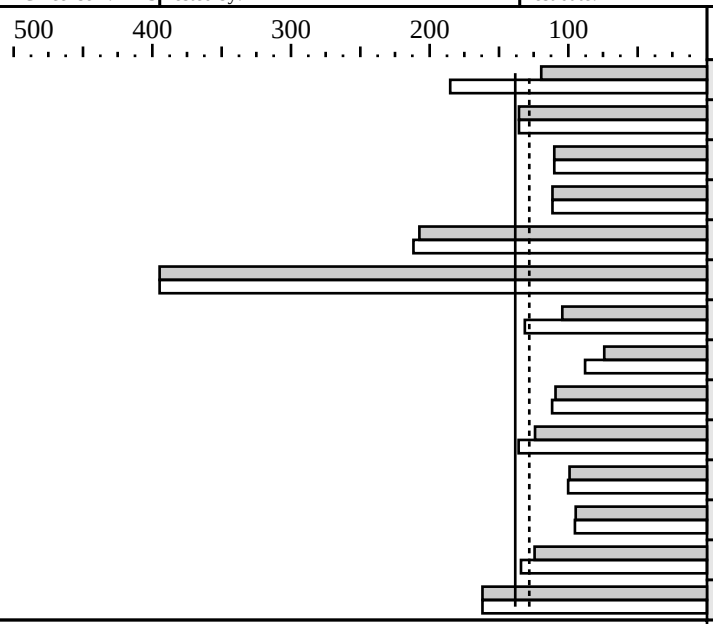
Hewlett-Packard Company

HP Superdome 32-way (750MHz PA-8700)

SPECfp_rate2000 = 138

SPECfp_rate_base2000 = 128

SPEC license #: 3 | Tested by: HP | Test date: Sep-2001 | Hardware Avail: Sep-2001 | Software Avail: Sep-2001



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	32	497	120	32	321	185
171.swim	32	849	136	32	849	136
172.mgrid	32	607	110	32	607	110
173.applu	32	699	111	32	699	111
177.mesa	32	251	207	32	245	212
178.galgel	32	273	395	32	273	395
179.art	32	925	104	32	735	131
183.equake	32	651	74.1	32	549	87.9
187.facerec	32	646	109	32	631	112
188.ammp	32	659	124	32	601	136
189.lucas	32	749	99.1	32	741	100
191.fma3d	32	823	94.7	32	818	95.3
200.sixtrack	32	328	124	32	304	134
301.apsi	32	596	162	32	596	162

Hardware

CPU:	PA-8700
CPU MHz:	750
FPU:	Integrated
CPU(s) enabled:	32 cores, 32 chips, 1 core/chip
CPU(s) orderable:	4-32
Parallel:	No
Primary Cache:	0.75MBI + 1.5MBD on chip
Secondary Cache:	none
L3 Cache:	none
Other Cache:	none
Memory:	128GB
Disk Subsystem:	5x9GB Fiberchannel (striped) 1x9GB SCSI disk (root), 14x9GB FC disks (swap)
Other Hardware:	8 cells

Software

Operating System:	B.11.11.0109.6 HP-UX 11i, September 2001 HWE patches
Compiler:	HP ANSI C 11.11.03 aC++ C.03.30.02 Fortran90 11.11.40 PHSS_24207 libm patch
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:

  168.wupwise: +cat +O3 +Odataprefetch +Onofltacc
               -Wl,+FPD -Wl,-a,archive
  171.swim:    basepeak=true
  172.mgrid:   basepeak=true
  173.applu:   basepeak=true
  177.mesa:    +I/+P +Oall +Odataprefetch +Opromote_indirect_calls
```

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Notes/Tuning Information (Continued)

```
                -Wl,+FPD -Wl,-a,archive
    178.galgel:  basepeak=true
    179.art:     +I/+P +Oall +Onodataprefetch +Onofltacc
                 +Optrs_strongly_typed +Opromote_indirect_calls
                 -Wl,+FPD -Wl,-a,archive
    183.equake:  +O4 +Olibcalls +Odataprefetch +Optrs_strongly_typed
                 +Opromote_indirect_calls
                 -Wl,+FPD -Wl,-a,archive
    187.facerec: +cat +O3 +Ofastaccess
                 -Wl,+FPD -Wl,-a,archive
    188.ammp:    +I/+P +Oall +Odataprefetch +Optrs_strongly_typed
                 +Opromote_indirect_calls
                 -Wl,+FPD -Wl,-a,archive
    189.lucas:   +O3 +Onoinline
                 -Wl,+FPD -Wl,-a,archive
    191.fma3d:   +O3 +Onolimit
                 -Wl,+FPD -Wl,-a,archive
    200.sixtrack: +cat +O3 +Onolibcalls +Onolimit +Onoinline
                  +Onodataprefetch
                 -Wl,+FPD -Wl,-a,archive
    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
    boot time firmware tunable DataPrefetch enabled (default)
```