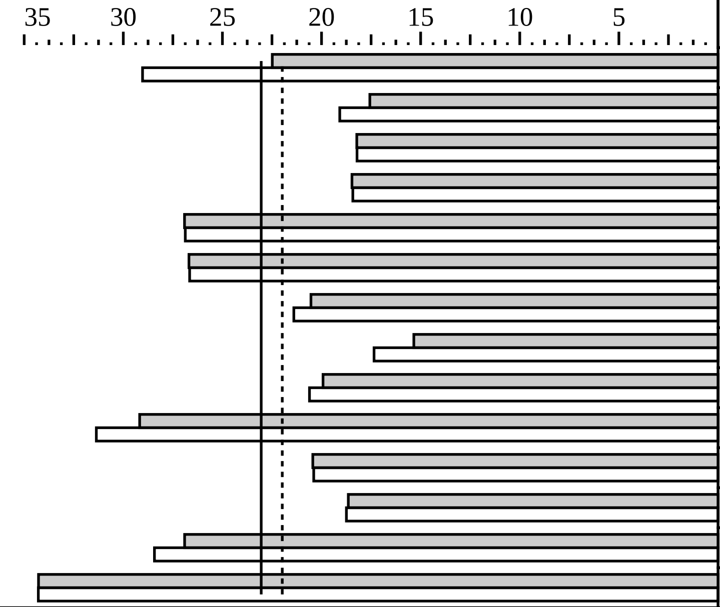
CFP2000 Result

Hewlett-Packard Company
HP 9000 Model N4000

SPECfp_rate2000 = 23.0
SPECfp_rate_base2000 = 22.0

SPEC license #:	Tested by:	Test date:	Hardware Avail:	Software Avail:
3	HP Richardson, TX	Mar-2000	Apr-2000	Apr-2000



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	8	660	22.5	8	511	29.0
171.swim	8	1638	17.6	8	1508	19.1
172.mgrid	8	917	18.2	8	917	18.2
173.applu	8	1055	18.5	8	1058	18.4
177.mesa	8	483	26.9	8	483	26.9
178.galgel	8	1008	26.7	8	1010	26.7
179.art	8	1175	20.5	8	1128	21.4
183.equake	8	786	15.3	8	695	17.4
187.facerec	8	885	19.9	8	856	20.6
188.ammp	8	700	29.2	8	651	31.4
189.lucas	8	908	20.4	8	910	20.4
191.fma3d	8	1045	18.6	8	1040	18.7
200.sixtrack	8	379	26.9	8	359	28.4
301.apsi	8	704	34.3	8	704	34.3

Hardware

CPU:	552 MHz PA-RISC 8600
CPU MHz:	552
FPU:	Integrated
CPU(s) enabled:	8 cores, 8 chips, 1 core/chip
CPU(s) orderable:	1-8
Parallel:	--
Primary Cache:	512KBI+1MBD (on chip)
Secondary Cache:	None
L3 Cache:	None
Other Cache:	None
Memory:	8GB
Disk Subsystem:	1x9GB FC 10,000 rpm
Other Hardware:	--

Software

Operating System:	HP-UX B.11.00
Compiler:	HP92453-01 A.11.01.02 HP C Compiler HP-UX f90 19990722 (140507) B.11.01.08 HP-UX f77 971027 (162928) B.11.00.01
File System:	HP-UX VxFS
System State:	Multi-user

Notes/Tuning Information

```
Portability flags:
cc: -Ae
168.wupwise: -K
178.galgel: +source=fixed

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

Peak flags:
168.wupwise: f77 +DA2.0 +DS2.0 +O4 +Odataprefetch +Onofltacc
171.swim: f77 +DA2.0 +DS2.0 +O4 +Odataprefetch +Ocachepadcommon +Oloop_unroll
172.mgrid: +O3 +Odataprefetch +Onofltacc -Wl,+FPD -Wl,-a,archive
173.applu: +O3 +Odataprefetch +Onofltacc -Wl,+FPD -Wl,-a,archive
177.mesa: +I/+P +Oall +Odataprefetch -Wl,+FPD -Wl,-a,archive
178.galgel: +O3 +Odataprefetch +Onofltacc -Wl,+FPD -Wl,-a,archive
179.art: +Oall +Odataprefetch +Onofltacc +Optrs_strongly_typed -Wl,+FPD -Wl,-a,archive +I/+P
```

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SPEC license #: 3	Tested by: HP Richardson, TX	Test date: Mar-2000	Hardware Avail: Apr-2000	Software Avail: Apr-2000

Notes/Tuning Information (Continued)

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183.equake: +Oall +Odataprefetch +Optrs_strongly_typed
187.facerec: +O2 +Ofastaccess +Omultiprocessor -Wl,+FPD -Wl,-a,archive -Wl,/opt/langtools/lib/fastmem.o
188.ammp: +Oall +Odataprefetch +Optrs_strongly_typed +I/+P
189.lucas: +O3 +Odataprefetch +Onofltacc +Omultiprocessor
191.fma3d: +O3 +Odataprefetch +Onofltacc -Wl,+FPD -Wl,-a,archive
200.sixtrack: f90 +Oall +Ofastaccess +Oloop_block +Omultiprocessor +Onofltacc
              LIBS = -Wl,+FPD -Wl,-a,archive -Wl,/opt/langtools/lib/fastmem.o
301.apsi: +O3 +Odataprefetch +Onofltacc -Wl,+FPD -Wl,-a,archive
Kernel Tunables:
vps_pagesize=256, vps_ceiling=256
```