



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Hewlett-Packard Company  
HP Superdome 16-way (750MHz PA-8700)

SPECint\_rate2000 = 99.4  
SPECint\_rate\_base2000 = 93.9

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
164.gzip	16	287	90.6	16	285	91.2
175.vpr	16	277	93.9	16	277	93.9
176.gcc	16	152	134	16	150	136
181.mcf	16	712	46.9	16	705	47.4
186.crafty	16	155	119	16	155	119
197.parser	16	396	84.4	16	369	90.6
252.eon	16	251	96.2	16	217	111
253.perlbnk	16	352	95.0	16	299	112
254.gap	16	415	49.1	16	396	51.6
255.vortex	16	201	176	16	191	185
256.bzip2	16	365	76.4	16	322	86.5
300.twolf	16	385	145	16	368	151

### Hardware

CPU: PA-8700  
 CPU MHz: 750  
 FPU: Integrated  
 CPU(s) enabled: 16 cores, 16 chips, 1 core/chip  
 CPU(s) orderable: 2-16  
 Parallel: No  
 Primary Cache: 0.75MBI + 1.5MBD on chip  
 Secondary Cache: none  
 L3 Cache: none  
 Other Cache: none  
 Memory: 64GB  
 Disk Subsystem: 5x9GB Fiberchannel (striped)  
 1x9GB SCSI disk (root), 4x9GB FC disks (swap)  
 Other Hardware: 4 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  
 PHSS\_24207 libm patch  
 File System: HFS  
 System State: Multi-user

## Notes/Tuning Information

### Portability Flags:

176.gcc: -DHOST\_WORDS\_BIG\_ENDIAN  
 186.crafty: -DHP  
 252.eon: -DFMAX\_IS\_DOUBLE  
 253.perlbnk: -DSPEC\_CPU2000\_HP  
 254.gap: -DSPEC\_CPU2000\_HP -DSYS\_IS\_USG -DSYS\_HAS\_IOCTL\_PROTO  
 -DSYS\_HAS\_TIME\_PROTO -DSYS\_HAS\_CALLOC\_PROTO

### Base Flags:

C: +Oall +I/+P +Ostatic\_prediction -Wl,-aarchive  
 C++: +O3 +I/+P +Ostatic\_prediction -Wl,-aarchive

### Peak Flags:

164.gzip: +Oall +Optrs\_strongly\_typed +Oinline\_budget=800  
 +I/+P +Ostatic\_prediction -Wl,-aarchive  
 175.vpr: basepeak=true  
 176.gcc: +Oall +ESlit +ESfic +Optrs\_strongly\_typed  
 +I/+P +Ostatic\_prediction -Wl,-aarchive



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Hewlett-Packard Company  
HP Superdome 16-way (750MHz PA-8700)

SPECint\_rate2000 = 99.4  
SPECint\_rate\_base2000 = 93.9

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

## Notes/Tuning Information (Continued)

```
181.mcf: +Oall +Owhole_program_mode +Opromote_indirect_calls
        +I/+P +Ostatic_prediction -Wl,-aarchive
186.crafty: basepeak=true
197.parser: +Oall +Odataprefetch +ESfic +Oinline_budget=400
           +Owhole_program_mode
           +I/+P +Ostatic_prediction -Wl,-aarchive
252.eon: +noeh +O4 +Optrs_strongly_typed +Olibcalls +Oentrysched
        +A +ESfic
        +I/+P +Ostatic_prediction -Wl,-aarchive
253.perlbnk: +Oall +ESlit +ESfic +Optrs_strongly_typed
            +Opromote_indirect_calls -Wl,/opt/langtools/lib/fastmem.o
            +I/+P +Ostatic_prediction -Wl,-aarchive
254.gap: +Oall +ESlit +ESfic +Optrs_strongly_typed
        +Opromote_indirect_calls
        +I/+P +Ostatic_prediction -Wl,-aarchive
255.vortex: +Oall +Oinline_budget=800 +Optrs_strongly_typed
           +I/+P +Ostatic_prediction -Wl,-aarchive
256.bzip2: +Oall +Odataprefetch +Optrs_strongly_typed
           +Owhole_program_mode +Onoptrs_to_globals
           +Oinline_budget=80 +OESlit +OESfic
           +I/+P +Ostatic_prediction -Wl,-aarchive
300.twolf: +Oall +Optrs_strongly_typed
           +I/+P +Ostatic_prediction -Wl,-aarchive
```

### 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)
```