# CINT2000 Result

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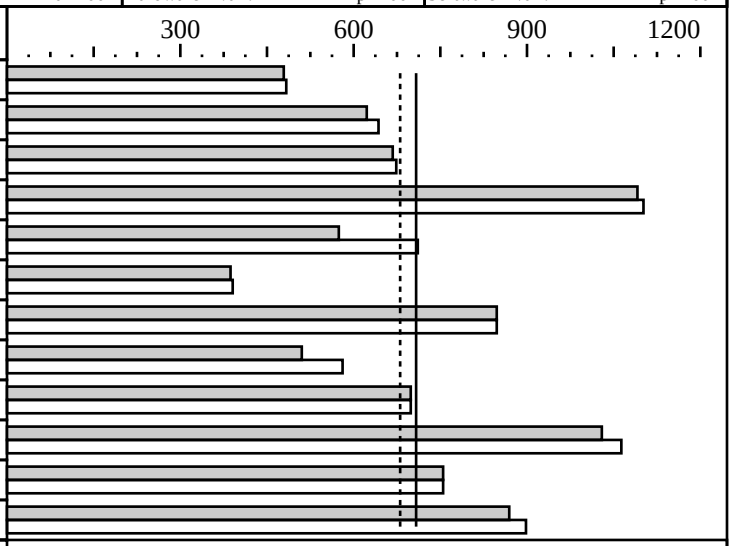
## IBM Corporation
## IBM eServer pSeries 670 (1100 MHz)

SPECint2000 = 708

SPECint_base2000 = 680

SPEC license #: 11 | Tested by: IBM, Austin, TX | Test date: Mar-2002 | Hardware Avail: Apr-2002 | Software Avail: Apr-2002

| Benchmark | Reference Time | Base Runtime | Base Ratio | Runtime | Ratio |
|---|---|---|---|---|---|
| 164.gzip | 1400 | 292 | 479 | 290 | 483 |
| 175.vpr | 1400 | 225 | 623 | 218 | 643 |
| 176.gcc | 1100 | 165 | 668 | 163 | 674 |
| 181.mcf | 1800 | 165 | 1091 | 163 | 1102 |
| 186.crafty | 1000 | 174 | 574 | 141 | 711 |
| 197.parser | 1800 | 465 | 387 | 461 | 391 |
| 252.eon | 1300 | 153 | 848 | 153 | 848 |
| 253.perlbmk | 1800 | 353 | 510 | 310 | 581 |
| 254.gap | 1100 | 157 | 699 | 157 | 699 |
| 255.vortex | 1900 | 185 | 1030 | 179 | 1063 |
| 256.bzip2 | 1500 | 199 | 755 | 199 | 755 |
| 300.twolf | 3000 | 345 | 869 | 334 | 898 |




### Hardware

| | |
|---|---|
| CPU: | POWER4 |
| CPU MHz: | 1100 |
| FPU: | Integrated |
| CPU(s) enabled: | 1 core, 4 chips, 2 cores/chip, 4 chips/MCM |
| CPU(s) orderable: | 4,8,16 (order by # cores) |
| Parallel: | No |
| Primary Cache: | 64KBI+32KBD (on chip) per core |
| Secondary Cache: | 1440KB unified (on chip) per chip |
| L3 Cache: | 32MB * 4 unified (off Chip) |
| Other Cache: | None |
| Memory: | 64GB |
| Disk Subsystem: | 1x18GB 10000RPM |
| Other Hardware: | None |

### Software

| | |
|---|---|
| Operating System: | AIX 5L V5.1 |
| Compiler: | C: IBM VisualAge C for AIX, Version 6.0 Beta<br>C++: IBM VisualAge C++ for AIX, Version 6.0 Beta |
| File System: | AIX/JFS |
| System State: | Multi-user |

## Notes/Tuning Information

```
Portability Flags:
  gcc: -ma -qlanglvl=ansi -DHOST_WORDS_BIG_ENDIAN
  crafty: -DAIX
  eon: -DNEED_EXPLICIT_SPECIALIZATION  EXTRA_LDFLAGS=-I.
       -DNDEBUG
  perlbmk: -DSPEC_CPU2000_AIX
  gap: -DSYS_IS_BSD -DSYS_STRING_H -DSYS_HAS_TIME_PROTO
       -DSYS_HAS_MALLOC_PROTO -DSYS_HAS_CALLOC_PROTO
  twolf: -DHAVE_SIGNED_CHAR
Base Optimization Flags:
  C:   -qpdf1/pdf2 -O5 -blpdata -qalign=natural
  C++: -qpdf1/pdf2 -O5 -lhmu -qalign=natural
Peak Optimization Flags
  164.gzip:    CC= /usr/vac/bin/xlc, -O4 -qpdf1/pdf2
               -L/usr/vac/lib
  175.vpr:     -O4  -qarch=ppc -qtune=pwr3 -blpdata  ,
                fdpr -v -R3
  176.gcc:     -qpdf1/pdf2 -O5 -lhmu -qalign=natural
               -L/usr/vac/lib
  181.mcf:     -O3  -lhmu  -qipa=partition=large -blpdata ,
```

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## Notes/Tuning Information (Continued)

```
                 fdpr -v -R3
    186.crafty:  -O4      -q64 , fdpr -v -R3
    197.parser:  -O5  -blpdata , fdpr -v -R3
    252.eon:     basepeak=1
    253.perlbmk: -qpdf1/pdf2 -O5 -lhmu -qalign=natural
                 -L/usr/vac/lib
    254.gap:     basepeak=1
    255.vortex: -qpdf1/pdf2 -O5 -lhmu -qalign=natural
                -L/usr/vac/lib
    256.bzip2:   basepeak=1
    300.twolf:   CC= /usr/vac/bin/xlc, -O5 -qpdf1/pdf2  -lhmu
                 -qalign=natural -L/usr/vac/lib -blpdata
  fdpr: Feedback directed program restructuring tool
  /usr/spec2000 filesystem mounted with no JFS log file I/O
  APAR IY28102 was applied to AIX 5L V5.1 to enable new hardware
  ulimits set to unlimited.
  Large page mode was set as follows: vmtune -g 16777216 -L 1024
C: IBM VAC++ for AIX 6.0 BETA invoked as cc except
where noted as xlc
C++: IBM VAC++ for AIX 6.0 BETA invoked as xlc
The final version of the compiler will be available by Dec-2002.
```