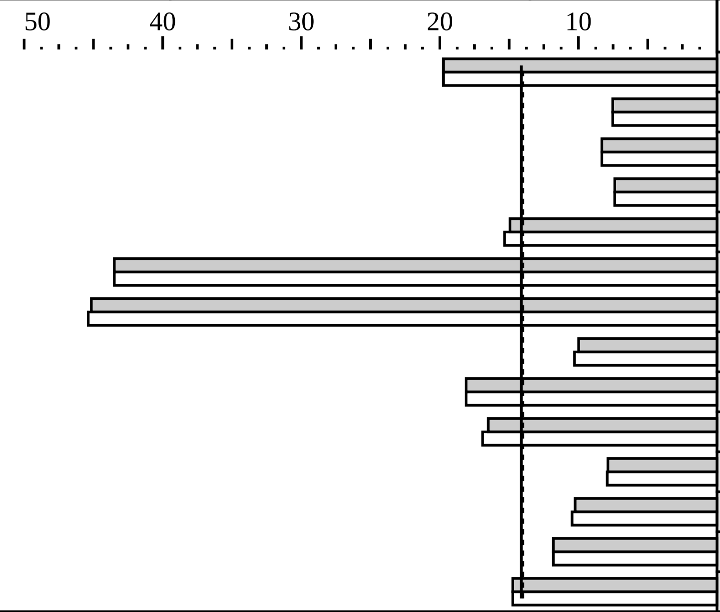
# CFP2000 Result



## IBM Corporation
## IBM eServer pSeries 640 Model B80

SPECfp_rate2000 = 14.1
SPECfp_rate_base2000 = 14.0

| SPEC license #: | 11 | Tested by: | IBM Corp. | Test date: | Sep-2001 | Hardware Avail: | Oct-2001 | Software Avail: | Dec-2001 |
|---|---|---|---|---|---|---|---|---|---|




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 168.wupwise | 4 | 376 | 19.7 | 4 | 376 | 19.7 |
| 171.swim | 4 | 1911 | 7.53 | 4 | 1911 | 7.53 |
| 172.mgrid | 4 | 1005 | 8.31 | 4 | 1005 | 8.31 |
| 173.applu | 4 | 1320 | 7.38 | 4 | 1320 | 7.38 |
| 177.mesa | 4 | 435 | 14.9 | 4 | 424 | 15.3 |
| 178.galgel | 4 | 309 | 43.5 | 4 | 309 | 43.5 |
| 179.art | 4 | 267 | 45.2 | 4 | 266 | 45.4 |
| 183.equake | 4 | 604 | 9.99 | 4 | 587 | 10.3 |
| 187.facerec | 4 | 487 | 18.1 | 4 | 487 | 18.1 |
| 188.ammp | 4 | 618 | 16.5 | 4 | 604 | 16.9 |
| 189.lucas | 4 | 1179 | 7.87 | 4 | 1171 | 7.92 |
| 191.fma3d | 4 | 952 | 10.2 | 4 | 932 | 10.5 |
| 200.sixtrack | 4 | 432 | 11.8 | 4 | 432 | 11.8 |
| 301.apsi | 4 | 819 | 14.7 | 4 | 819 | 14.7 |

### Hardware

| | |
|---|---|
| CPU: | POWER3-II |
| CPU MHz: | 450 |
| FPU: | Integrated |
| CPU(s) enabled: | 4 cores, 4 chips, 1 core/chip |
| CPU(s) orderable: | 2,4 |
| Parallel: | No |
| Primary Cache: | 32KBI+64KBD (on chip) |
| Secondary Cache: | 8MB unified (off chip) |
| L3 Cache: | None |
| Other Cache: | None |
| Memory: | 2GB |
| Disk Subsystem: | 2x18GB 10000RPM |
| Other Hardware: | None |

### Software

| | |
|---|---|
| Operating System: | AIX 5L V5.1 |
| Compiler: | Fortran 77 and 90: IBM xl Fortran 7.1.1.0 invoked as 'xlf90' for Fortran 90 and as xlf for Fortran 77<br>C: IBM VAC++ 5.0.2.0 invoked as 'xlc' |
| File System: | AIX/JFS |
| System State: | Multi-user |

### Notes/Tuning Information

```
Portability Flags
  -qfixed used in: wupwise, swim, mgrid, applu, galgel, sixtrack, apsi
  -qsuffix=f=f90 used in: galgel, facerec, lucas, fma3d
Base Optimization Flags:
  Fortran:   -O5 -lmass
  C:         -O5 -lmass
Peak Optimization Flags
  168.wupwise:  (basepeak=1)
  171.swim:     (basepeak=1)
  172.mgrid:    (basepeak=1)
  173.applu:    -O5 -lmass -qipa=partition=large
  177.mesa:     -O5 -lmass -qipa=partition=large, fdpr -v -R3
  178.galgel:   (basepeak=1)
  179.art:      -O5 -lmass -qalign=natural
  183.equake:   -O5 -lmass -lhmu -qinline
  187.facerec:  (basepeak=1)
  188.ammp:     -O3 -qarch=pwr3
```

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|---|---|---|---|---|

## Notes/Tuning Information (Continued)

```
  189.lucas:    -qpdf1/pdf2 -O3 -lhmu -lmass
                -qipa=partition=large, fdpr -v -R3
  191.fma3d:    -O4 -lmass -qipa=partition=large
  200.sixtrack: (basepeak=1)
  301.apsi:     (basepeak=1)
fpdr: Feedback directed program restructuring tool
/usr/spec2000 filesystem mounted with no JFS log file I/O
APAR IY 21957 was applied to AIX 5L V5.1 to enable new hardware support
```