CFP2000 Result

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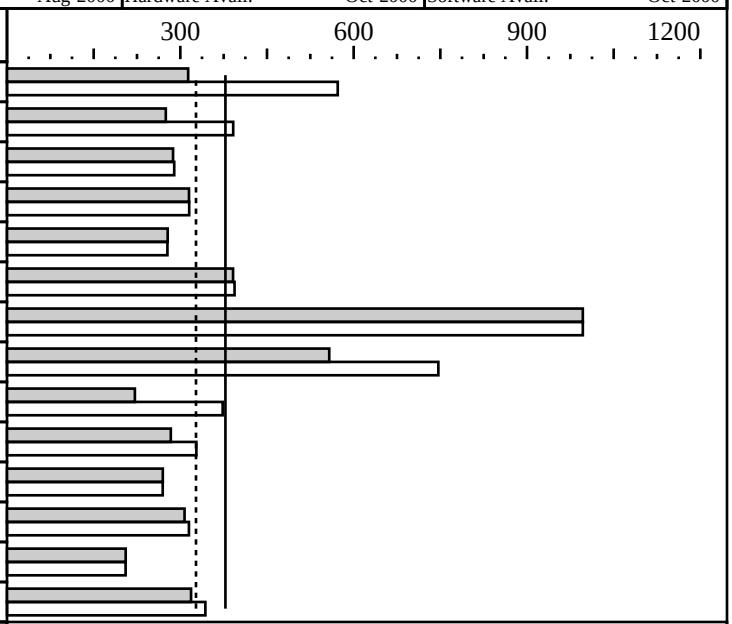
IBM Corporation
IBM eServer pSeries 640 (8 MB L2)

SPECfp2000 = 378

SPECfp_base2000 = 327

SPEC license #: 11 | Tested by: IBM, Austin, TX | Test date: Aug-2000 | Hardware Avail: Oct-2000 | Software Avail: Oct-2000

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	510	314	280	572
171.swim	3100	1128	275	792	391
172.mgrid	1800	626	287	622	289
173.applu	2100	667	315	666	315
177.mesa	1400	503	278	504	278
178.galgel	2900	741	391	736	394
179.art	2600	261	997	261	997
183.equake	1300	233	558	174	747
187.facerec	1900	858	221	509	373
188.ammp	2200	776	284	671	328
189.lucas	2000	742	270	742	270
191.fma3d	2100	683	307	667	315
200.sixtrack	1100	535	205	536	205
301.apsi	2600	816	319	757	343



Hardware

CPU:	IBM Power3-II
CPU MHz:	375
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	2,4
Parallel:	No
Primary Cache:	32KBI+64KBD (on chip)
Secondary Cache:	8MB (I+D) (off chip)
L3 Cache:	None
Other Cache:	None
Memory:	4GB
Disk Subsystem:	1x9.1GB IBM Ultra-2 SCSI, 10000RPM
Other Hardware:	None

Software

Operating System:	AIX 4.3.3 + beta of APAR IY12051
Compiler:	Fortran 77 and 90: IBM xl Fortran 6.1 invoked as 'xlf90' C: IBM VAC 5.0 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
NOTE: The flag combination 'qpdf1/qpdf2' indicates a 2 step compilation
      process, the exact process is as follows:
  fdo_pre0 = rm -rf ${PDFDIR}; mkdir -p ${PDFDIR}
  PASS1_FLAGS    =-qpdf1 {optimization flags}
  PASS1_LDFLAGS  ={libraries} -L{pdf library location} -lpdf
  PASS2_FLAGS    =-qpdf2 {optimization flags}
  PASS2_LDFLAGS  =-{libraries}
Base Optimization Flags:
  Fortran: -qpdf1/pdf2 -O3 -qarch=pwr3 -lmass
  C: -O5 -lmass
Peak Optimization Flags:
  168.wupwise: -qpdf1/pdf2 -O4 -qipa=level=2 -lmass
  171.swim: -qpdf1/pdf2 -O4 -qipa=level=2 -qhot -lmass
  172.mgrid:-O3 -qarch=pwr3 -qhot
```

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Notes/Tuning Information (Continued)

```
173.applu: -qpdf1/pdf2 -O3 -qarch=pwr3 -lmass
177.mesa: -O5 -lmass
178.galgel: -O4 -qipa=level=2 -qhot -lmass
179.art: -O5 -lmass
183.equake: -O5 -lmass -lhmu
187.facerec: -O3 -qarch=pwr3 -qhot -lmass
188.ammp: -O3 -qarch=pwr3 -bnso -bI:/lib/syscalls.exp
189.lucas: -qpdf1/pdf2 -O3 -qarch=pwr3 -lmass
191.fma3d: -O4  -qipa=level=2 -qhot -lmass
200.sixtrack: -O3 -qarch=pwr3
301.apsi: -O4 -qipa=level=2 -qhot -lmass -bnso -bI:/lib/syscalls.exp
```