CFP2000 Result

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IBM Corporation

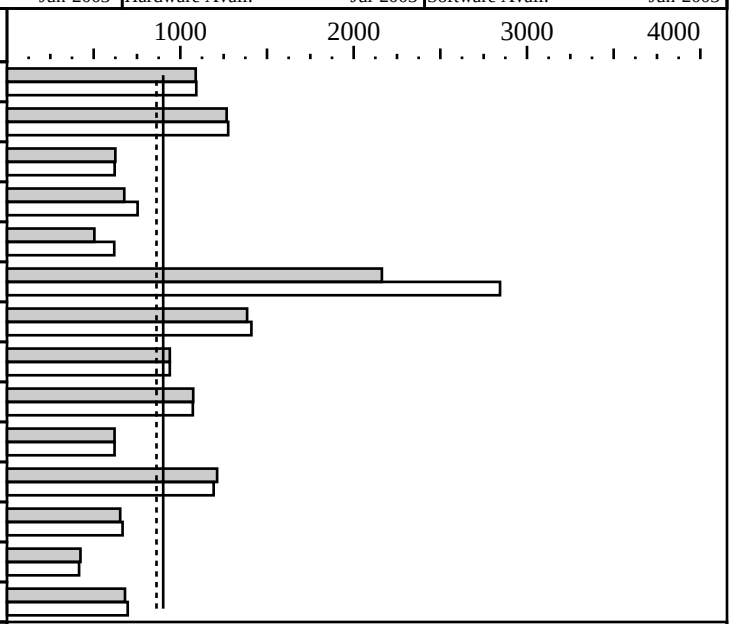
IBM IntelliStation POWER 275 Workstation (1000 MHz, 1 CPU)

SPECfp2000 = 901

SPECfp_base2000 = 862

SPEC license #: 11 | Tested by: IBM, Austin, TX | Test date: Jun-2003 | Hardware Avail: Jul-2003 | Software Avail: Jun-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	147	1089	147	1092
171.swim	3100	245	1267	243	1276
172.mgrid	1800	288	625	290	621
173.applu	2100	310	677	279	754
177.mesa	1400	278	504	226	619
178.galgel	2900	134	2163	102	2845
179.art	2600	188	1385	184	1410
183.equake	1300	138	939	138	939
187.facerec	1900	177	1074	177	1072
188.ammp	2200	355	621	355	621
189.lucas	2000	165	1212	168	1192
191.fma3d	2100	322	653	315	667
200.sixtrack	1100	260	424	265	416
301.apsi	2600	382	681	373	696



Hardware

CPU:	POWER4+
CPU MHz:	1000
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip, 1 processor chip/DCM
CPU(s) orderable:	1 (order by # chips)
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip)
Secondary Cache:	1536KB unified (on chip)
L3 Cache:	8MB unified (off-chip) per DCM, 1 DCM in SUT
Other Cache:	None
Memory:	8 GB
Disk Subsystem:	1x36GB SCSI, 10K RPM
Other Hardware:	None

Software

Operating System:	AIX 5L V5.2
Compiler:	IBM C for AIX, Version 6.0 IBM XL FORTRAN for AIX, Version 8.1.1.0 Other Software: ESSL 3.3.0.5, MASS 3.0
File System:	AIX/JFS
System State:	Multi-User

Notes/Tuning Information

```
Portability Flags
  -qfixed used in: 168.wupwise, 171.swim, 172.mgrid, 173.applu, 178.galgel,
   200.sixtrack, 301.apsi
  -qsuffix=f=f90 used in: 178.galgel, 187.facerec, 189.lucas, 191.fma3d

Base Optimization Flags:
  C:
  -O5 -qalign=natural -blpdata -lmass
  Fortran:
  -O5 -qalign=natural -blpdata -lmass

Floating Point Peak Flags
168.wupwise
  -O5 -qipa=partition=large
171.swim
  -O4 -q64 -blpdata
172.mgrid
```

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Notes/Tuning Information (Continued)

```
  -O5 -qarch=pwr3 -qtune=pwr3 -blpdata
173.applu
  -O3 -qarch=pwr3 -qtune=pwr3 -lmass -qhot -blpdata
177.mesa
  -qpdf1/pdf2
  fdpr -v -R3
  -O3 -qarch=pwr3 -qtune=pwr3 -qipa=level=2 -qalign=natural -blpdata
178.galgel
  -qpdf1/pdf2
  fdpr -v -R3
  -O5 -qalign=natural -qessl -lessl -lmass -blpdata
179.art
 -O4 -lhmu
183.equake
  BASEPEAK = 1
187.facerec
  fdpr -v -R3
  -O5 -lmass -blpdata
188.ammp
  BASEPEAK = 1
189.lucas
  -O3 -q64 -blpdata
191.fma3d
  -qpdf1/pdf2
  -O5 -qarch=pwr4 -qtune=pwr3 -lhmu -qalign=natural -blpdata
200.sixtrack
  -qpdf1/pdf2
  -O5 -lmass
301.apsi
  -O5 -qarch=pwr4 -qtune=pwr3 -blpdata

   DCM: Acronym for "Dual-Chip Module"
   SUT: Acronym for "System Under Test"

   fpdr: Feedback directed program restructuring tool
   /usr/spec2000 filesystem mounted with no JFS log file I/O.
   APAR IY 43549 was applied to AIX to enable new hardware support.
   ulimits set to unlimited.
   C: IBM VAC++ invoked as xlc
   Fortran 77 and 90: IBM XL Fortran for AIX invoked as xlf90.
   Large page mode and memory affinity were set as follows:
     vmo -r -o lgpg_regions=400 -o lgpg_size=16777216 -o memory_affinity=1
     chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
     shutdown -r
     export MEMORY_AFFINITY=MCM
```