CFP2000 Result

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IBM Corporation

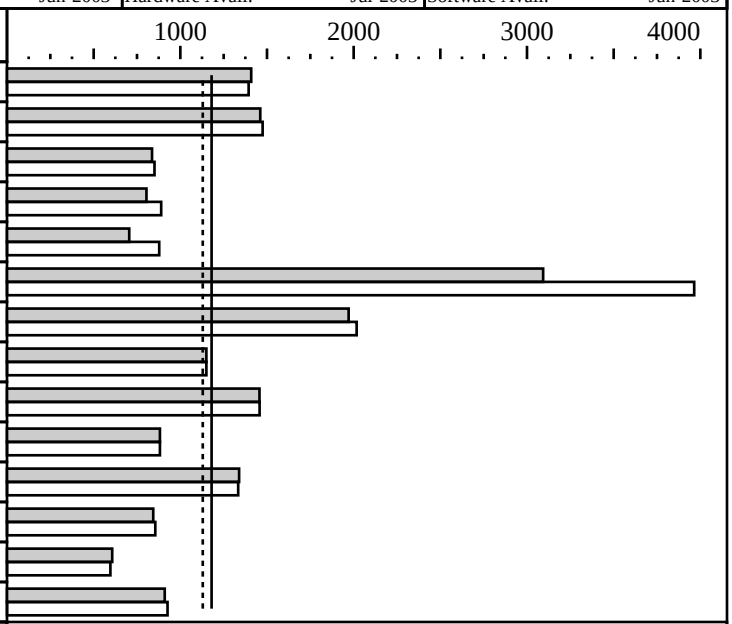
IBM IntelliStation POWER 275 Workstation (1450 MHz, 1 CPU)

SPECfp2000 = 1180

SPECfp_base2000 = 1129

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	114	1409	115	1394
171.swim	3100	212	1461	210	1475
172.mgrid	1800	215	837	212	851
173.applu	2100	261	805	236	889
177.mesa	1400	199	705	159	878
178.galgel	2900	93.8	3093	73.1	3965
179.art	2600	132	1971	129	2017
183.equake	1300	113	1150	113	1150
187.facerec	1900	130	1457	130	1457
188.ammp	2200	249	882	249	882
189.lucas	2000	149	1339	150	1334
191.fma3d	2100	249	844	245	856
200.sixtrack	1100	181	607	184	597
301.apsi	2600	286	910	281	926



Hardware

CPU:	POWER4+
CPU MHz:	1450
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip, 1 processor chip/DCM
CPU(s) orderable:	1,2 (order by # cores)
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip) per core
Secondary Cache:	1536KB unified (on chip) per 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"

   1 processor was deconfigured through the configuration menu.

   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
```