CFP2000 Result

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IBM Corporation

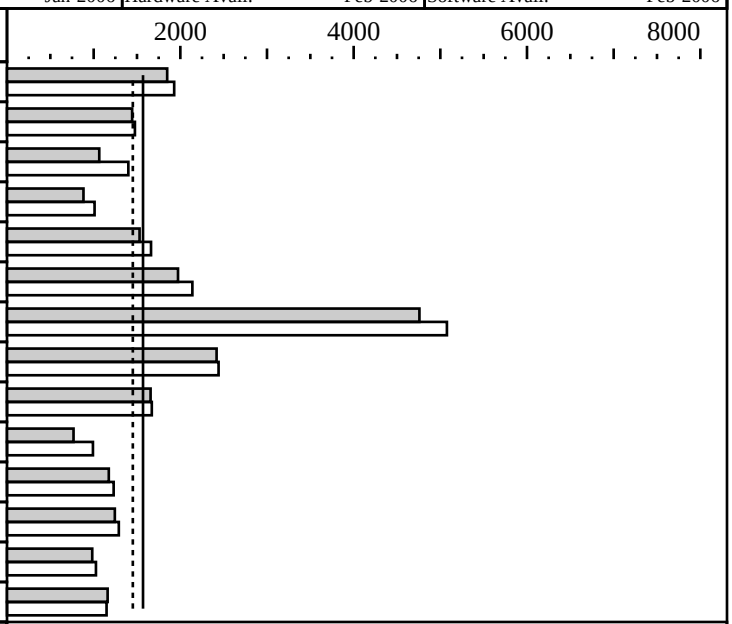
IBM System p5 185 (2500 MHz, 1 CPU)

SPECfp2000 = 1569

SPECfp_base2000 = 1452

SPEC license #: 11 | Tested by: IBM | Test date: Jan-2006 | Hardware Avail: Feb-2006 | Software Avail: Feb-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	86.6	1848	82.9	1929
171.swim	3100	215	1444	210	1476
172.mgrid	1800	169	1065	129	1400
173.applu	2100	238	882	208	1010
177.mesa	1400	91.5	1530	84.2	1662
178.galgel	2900	147	1973	136	2139
179.art	2600	54.6	4759	51.2	5076
183.equake	1300	53.8	2418	53.3	2441
187.facerec	1900	115	1657	114	1671
188.ammp	2200	287	768	222	992
189.lucas	2000	170	1175	163	1231
191.fma3d	2100	169	1244	163	1290
200.sixtrack	1100	112	984	107	1026
301.apsi	2600	224	1161	226	1149



Hardware

CPU:	IBM PowerPC 970MP
CPU MHz:	2500
FPU:	Integrated
CPU(s) enabled:	1 core, 2 chips, 1 core/chip
CPU(s) orderable:	1,2
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip)/core
Secondary Cache:	1MB unified (on chip)/core
L3 Cache:	None
Other Cache:	None
Memory:	4x2GB
Disk Subsystem:	2x73GB SCSI, 10K RPM
Other Hardware:	None

Software

Operating System:	AIX 5L V5.3
Compiler:	XL C/C++ Enterprise Edition Version 8.0 for AIX XL Fortran Enterprise Edition Version 10.1 for AIX Other Software: ESSL 4.2.0.4
File System:	AIX/JFS2
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:
  Fortran:    -O5 -lhmu -blpdata -lmass
  C:          -qpdf1/pdf2
              -O5 -blpdata -qalign=natural

Peak Optimization Flags
  168.wupwise:  -O5 -qsave -blpdata -lhmu -qenablevmx -lmass
  171.swim:     -qpdf1/pdf2
                -O4 -qfdpr -blpdata
                fdpr -q -O3
  172.mgrid:    -qpdf1/pdf2
                -O4 -q64 -blpdata
```

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Notes/Tuning Information (Continued)

```
  173.applu:    -O5 -qarch=pwr3 -qtune=pwr3 -qalign=struct=natural -qfdpr -q64 -blpdata
                fdpr -q -O3
  177.mesa:     -qpdf1/pdf2
                -O5 -qfdpr
                fdpr -q -O3
  178.galgel:   -O5 -qfdpr -q64 -blpdata -qenablevmx -lmass -qessl -lessl
                fdpr -q -O3
  179.art:      -O5 -blpdata -lhmu
  183.equake:   -qpdf1/pdf2
                -O3 -qarch=auto -qtune=auto -qipa=level=2 -blpdata
  187.facerec:  -O5 -qfdpr -blpdata -qenablevmx -lmass -qessl -lessl
                fdpr -q -O3
  188.ammp:     -qpdf1/pdf2
               -O3 -qarch=auto -qtune=auto -qipa=level=2 -blpdata -lhmu -qenablevmx -lmass
  189.lucas:    -O3 -qarch=auto -qtune=auto -qfdpr -blpdata
                 fdpr -q -O3
  191.fma3d:    -O5 -qarch=pwr3 -qtune=pwr3 -qalign=struct=natural -qfdpr -blpdata
                fdpr -q -O3
  200.sixtrack: -O3 -qarch=auto -qtune=auto -qfdpr -q64 -qenablevmx -lmass
                fdpr -q -O3
  301.apsi:     -O5 -qhot=arraypad -Q -qalign=struct=natural -q64 -qenablevmx -lmass


The installed OS level is AIX 5L for POWER version 5.3 with the 5300-04 Recommended Technology Level.

ESSL: Engineering and Scientific Subroutine Library

ANSI C89:       IBM XL C for AIX invoked as xlc
Fortran 77:     IBM XL Fortran for AIX invoked as xlf90
Fortran 90:     IBM XL Fortran for AIX invoked as xlf90

ulimits set to unlimited.
Large page mode and memory affinity were set as follows:
    vmo -r -o lgpg_regions=100 -o lgpg_size=16777216
    chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
    shutdown -rF
    export MEMORY_AFFINITY=MCM
One core was deconfigured at the open-firmware prompt, using the command
    boot -s cpu=1

The following config-file entry was used to assign each benchmark process to a core:
     submit = bindprocessor $$ $SPECUSERNUM; $command
The "bindprocessor" AIX command binds a process to a CPU core.

This result was measured on an IBM System p5 185. The IBM System p5 185 and IBM IntelliStation
POWER 185 models are electronically equivalent.
```