CFP2000 Result

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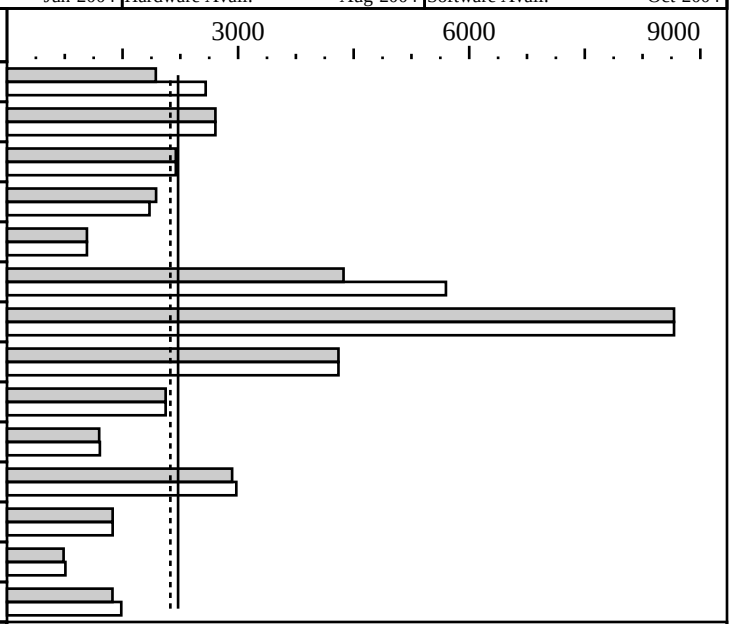
IBM Corporation
IBM eServer p5 550 (1650 MHz, 1 CPU)

SPECfp2000 = 2221

SPECfp_base2000 = 2121

SPEC license #: 11 | Tested by: IBM | Test date: Jun-2004 | Hardware Avail: Aug-2004 | Software Avail: Oct-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	82.8	1932	62.0	2579
171.swim	3100	115	2705	115	2705
172.mgrid	1800	82.1	2192	82.1	2192
173.applu	2100	108	1936	114	1850
177.mesa	1400	135	1038	135	1038
178.galgel	2900	66.4	4369	50.9	5698
179.art	2600	30.0	8659	30.0	8659
183.equake	1300	30.2	4303	30.2	4303
187.facerec	1900	92.3	2059	92.3	2059
188.ammp	2200	184	1197	182	1206
189.lucas	2000	68.4	2922	67.2	2977
191.fma3d	2100	153	1371	153	1371
200.sixtrack	1100	150	735	145	758
301.apsi	2600	190	1369	175	1483



Hardware

CPU:	POWER5
CPU MHz:	1650
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip (SMT off)
CPU(s) orderable:	2,4
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip)/core
Secondary Cache:	1920KB unified (on chip)/chip
L3 Cache:	36MB unified (off chip)/DCM, 2 DCM/SUT
Other Cache:	none
Memory:	16x4 GB
Disk Subsystem:	1x36GB SCSI, 15K RPM
Other Hardware:	

Software

Operating System:	AIX 5L V5.3
Compiler:	XL C/C++ Enterprise Edition Version 7.0 for AIX XL Fortran Enterprise Edition V9.1 for AIX Other Software: IBM Engineering and Scientific Subroutine Library for AIX, Version 4 Release 2
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:
  C:        -qpdf1/pdf2 -O5 -blpdata -qalign=natural
  Fortran:  -qpdf1/pdf2 -O5 -blpdata -lmass

Peak Optimization Flags
  168.wupwise:  -O5 -qarch=pwr3 -qtune=pwr3 -blpdata -lmass
                F77 = xlf
  171.swim:     basepeak = 1
  172.mgrid:    basepeak = 1
  173.applu:    -O5 -blpdata -lmass
```

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Notes/Tuning Information (Continued)

```
  177.mesa:     basepeak = 1
  178.galgel:   -O5 -blpdata -qessl -lessl
  179.art:      basepeak = 1
  183.equake:   basepeak = 1
  187.facerec:  basepeak = 1
  188.ammp:     -qpdf1/pdf2
                -O5 -blpdata -qalign=natural -D_ILS_MACROS
  189.lucas:    -O5 -blpdata -lmass
  191.fma3d:    basepeak = 1
  200.sixtrack: fdpr -quiet -R3
                -O3 -qhot -qarch=pwr5 -qtune=pwr5 -qfdpr
  301.apsi:     -O5 -lmass -qessl -lessl -blpdata -qsave

SMT: Acronym for "Simultaneous Multi-Threading". A processor technology that allows
     the simultaneous execution of multiple thread contexts within a single processor
     core. (Enabled by default)
DCM: Acronym for "Dual-Chip Module" (one dual-core processor chip + one L3-cache chip)
SUT: Acronym for "System Under Test"

ulimits set to unlimited.
Large page mode was set as follows:
   vmo -r -o lgpg_regions=400 -o lgpg_size=16777216
   chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
   reboot -q
Three cores were deconfigured and SMT disabled at the open-firmware prompt, using the
command
   boot -s cpu=1 -s smt_off
```