



CFP2000 Result

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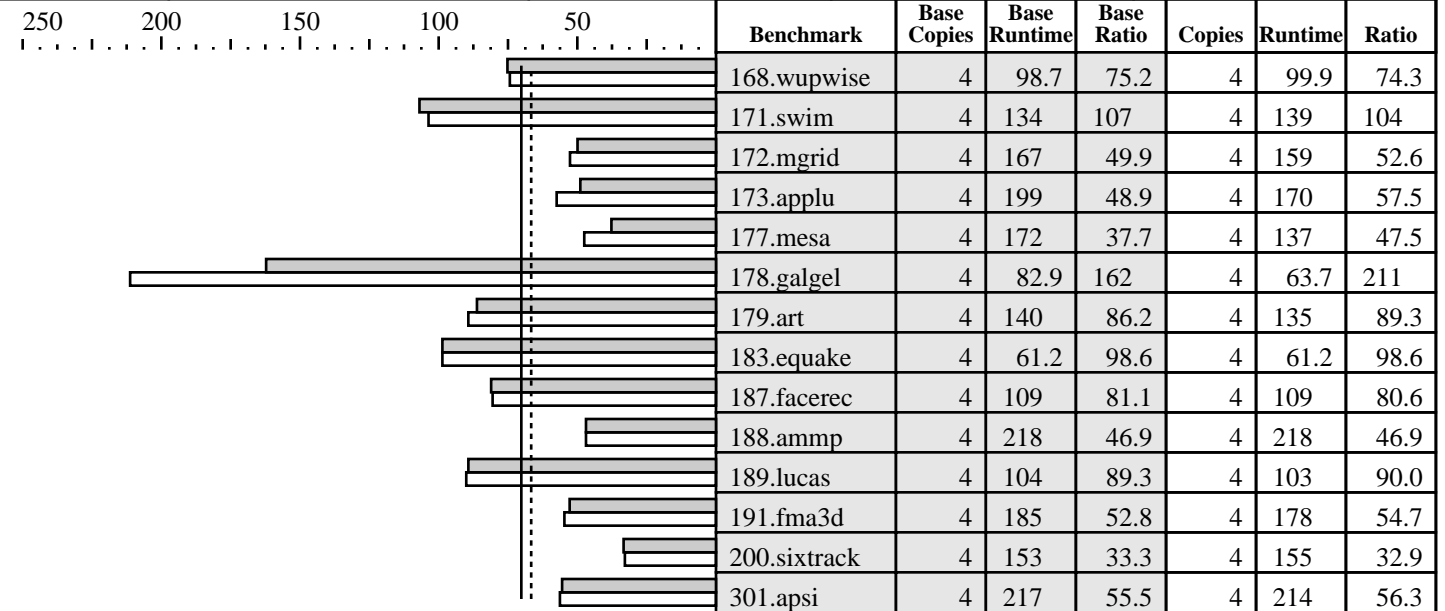
IBM Corporation

IBM eServer pSeries 655 (1700 MHz, 4 CPU LPAR)

SPECfp_rate2000 = 70.2

SPECfp_rate_base2000 = 66.6

SPEC license #: 11 | Tested by: IBM Austin | Test date: Sep-2003 | Hardware Avail: Jul-2003 | Software Avail: Oct-2003



Hardware

CPU: POWER4+
 CPU MHz: 1700
 FPU: Integrated
 CPU(s) enabled: 4 cores, 4 chips, 1 core/chip, 4 chips/MCM
 CPU(s) orderable: 1 (order by # MCM)
 Parallel: No
 Primary Cache: 64KBI+32KBD (on chip) per core
 Secondary Cache: 1536KB unified (on chip) per chip
 L3 Cache: 128MB unified (off-chip) per MCM, 1 MCM in SUT (4 chips per MCM)
 Other Cache: None
 Memory: 16 GB
 Disk Subsystem: 1x36GB SCSI, 15K 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/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: -O5 -qalign=natural -blpdata -lmass
 Fortran: -O5 -qalign=natural -blpdata -lmass

Peak Optimization Flags

168.wupwise: -O5 -qipa=partition=large
 171.swim: -O4 -q64 -blpdata
 172.mgrid: -O5 -qarch=pwr3 -qtune=pwr3 -blpdata
 173.applu: -O3 -qarch=pwr3 -qtune=pwr3 -lmass -qhot -blpdata
 177.mesa: -qpdf1/pdf2



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Notes/Tuning Information (Continued)

```
fdpr -v -R3
-03 -qarch=pwr3 -qtune=pwr3 -qipa=level=2 -qalign=natural -blpdata
178.galgel: -qpdf1/pdf2
fdpr -v -R3
-05 -qalign=natural -qessl -lessl -lmass -blpdata
179.art: -04 -lhm
183.earthquake: basepeak = 1
187.facerec: fdpr -v -R3
-05 -lmass -blpdata
188.ammp: basepeak = 1
189.lucas: -03 -q64 -blpdata
191.fma3d: -qpdf1/pdf2
-05 -qarch=pwr4 -qtune=pwr3 -lhm -qalign=natural -blpdata
200.sixtrack: -qpdf1/pdf2
-05 -lmass
301.apsi: -05 -qarch=pwr4 -qtune=pwr3 -blpdata
```

C: IBM VAC++ invoked as xlc
Fortran 77 and 90: IBM XL Fortran for AIX invoked as xlf90.

fpdr: Feedback directed program restructuring tool
AIX maintenance fixes APAR IY49575 were applied to base operating system.
ulimits set to unlimited.
Large page mode and memory affinity were set as follows:
vmo -r -o lpgg_regions=400 -o lpgg_size=16777216 -o memory_affinity=1
chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE \$USER
shutdown -r
export MEMORY_AFFINITY=MCM

MCM: Acronym for "Multi-Chip Module"
SUT: Acronym for "System Under Test"

Running in 4-CPU Logical Partition with 16 GB memory.
No other partitions running on the system.