



CFP2000 Result

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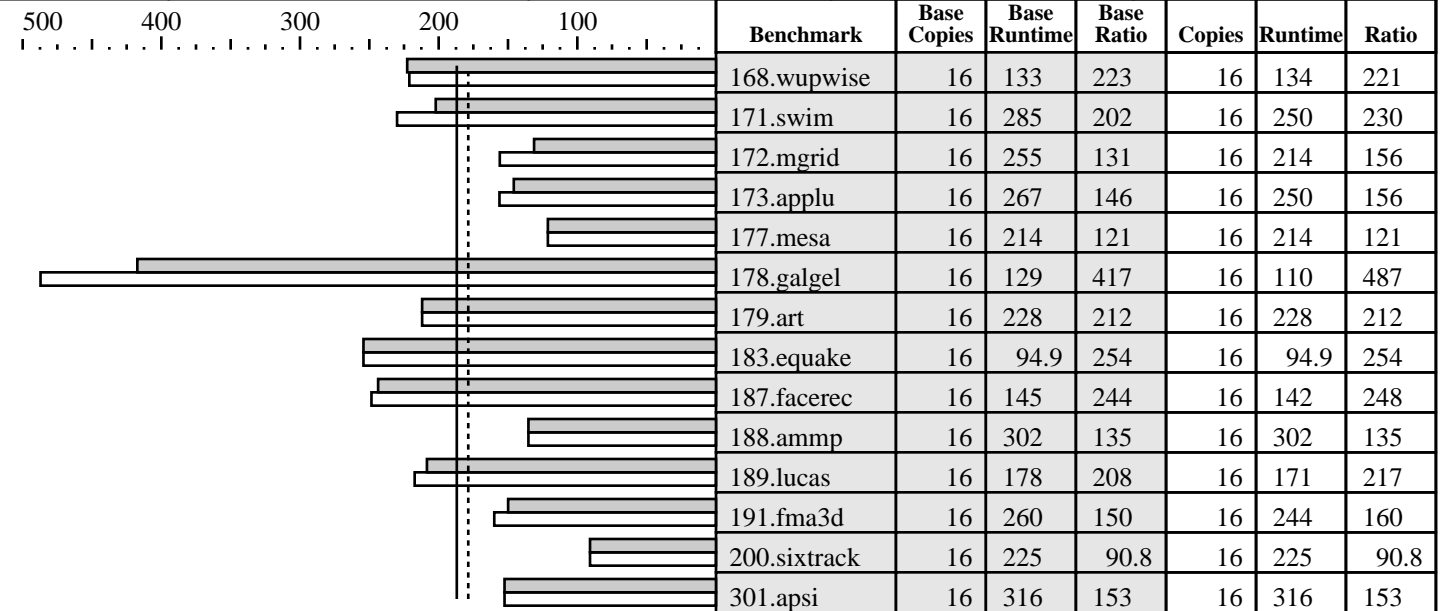
IBM Corporation

IBM eServer pSeries 690 HPC (1300 MHz, 16 CPU)

SPECfp_rate2000 = 187

SPECfp_rate_base2000 = 179

SPEC license #: 11 | Tested by: IBM, Austin, TX | Test date: Jun-2002 | Hardware Avail: Dec-2001 | Software Avail: Sep-2002



Hardware

CPU: POWER4
 CPU MHz: 1300
 FPU: Integrated
 CPU(s) enabled: 16 cores, 16 chips, 1 core/chip, 4 chips/MCM
 CPU(s) orderable: 8,16 (order by # cores)
 Parallel: No
 Primary Cache: 64KBI+32KBD (on chip) per core
 Secondary Cache: 1440KB unified (on chip) per chip
 L3 Cache: 128MB unified (off-chip) per MCM, 4 MCMs in SUT (4 chips per MCM)
 Other Cache: None
 Memory: 128 GB
 Disk Subsystem: 1X16GB 1X8GB
 Other Hardware: None

Software

Operating System: AIX 5L V5.1
 Compiler: IBM VisualAge C for AIX, Version 6.0
 IBM XL FORTRAN for AIX, Version 7.1.1.1
 Other Software: ESSL 3.3, MASS 2.7
 File System: AIX/JFS
 System State: Multi-User

Notes/Tuning Information

Portability Flags:

-qfixed used in: wupwise, swim, mgrid, applu, galgel, sixtrack, apsi
 -qsuffix=f=f90 used in: galgel, facerec, lucas, fma3d

Base Optimization Flags:

C:
 -O5 -qalign=natural -blpdata -lmass
 Fortran:
 -O5 -qalign=natural -blpdata -lmass

Floating Point Peak Flags

168.wupwise
 fdpr -v -R3
 -O5 -lmass -blpdata
 171.swim
 -O4 -q64 -blpdata



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Notes/Tuning Information (Continued)

```
172.mgrid
  -O3 -qarch=pwr3 -qtune=pwr3 -lmass -qhot -qalign=natural -blpdata
173.applu
  -O3 -qarch=pwr3 -qtune=pwr3 -lmass -qhot -blpdata
177.mesa
  BASEPEAK = 1
178.galgel
  -qpdf1/pdf2
  fdpr -v -R3
  -O5 -qalign=natural -qessl -lessl -lmass -blpdata
  PDFDIR = /tmp/pdfdirtwo
179.art
  BASEPEAK = 1
183.quake
  BASEPEAK = 1
187.facerec
  fdpr -v -R3
  -O5 -lmass -blpdata
188.ammp
  BASEPEAK = 1
189.lucas
  -O3 -q64 -blpdata
191.fma3d
  -O4 -qarch=pwr3 -qtune=pwr3 -lmass -qipa=partition=large -qalign=natural -blpdata
200.sixtrack
  BASEPEAK = 1
301.apsi
  BASEPEAK = 1
```

fpdr: Feedback directed program restructuring tool.
/usr/spec2000 filesystem mounted with no JFS log file I/O.
APAR IY 28102 was applied to AIX to enable new hardware support.
ulimits set to unlimited.
Fortran 77 and 90: IBM XL Fortran for AIX invoked as xlf90.
C: IBM VAC++ invoked as xlc.
Large page mode and memory affinity were set as follows:
vmtune -g 16777216 -L 1024 -y1

MCM = Multi-chip Module
SUT = System under Test