



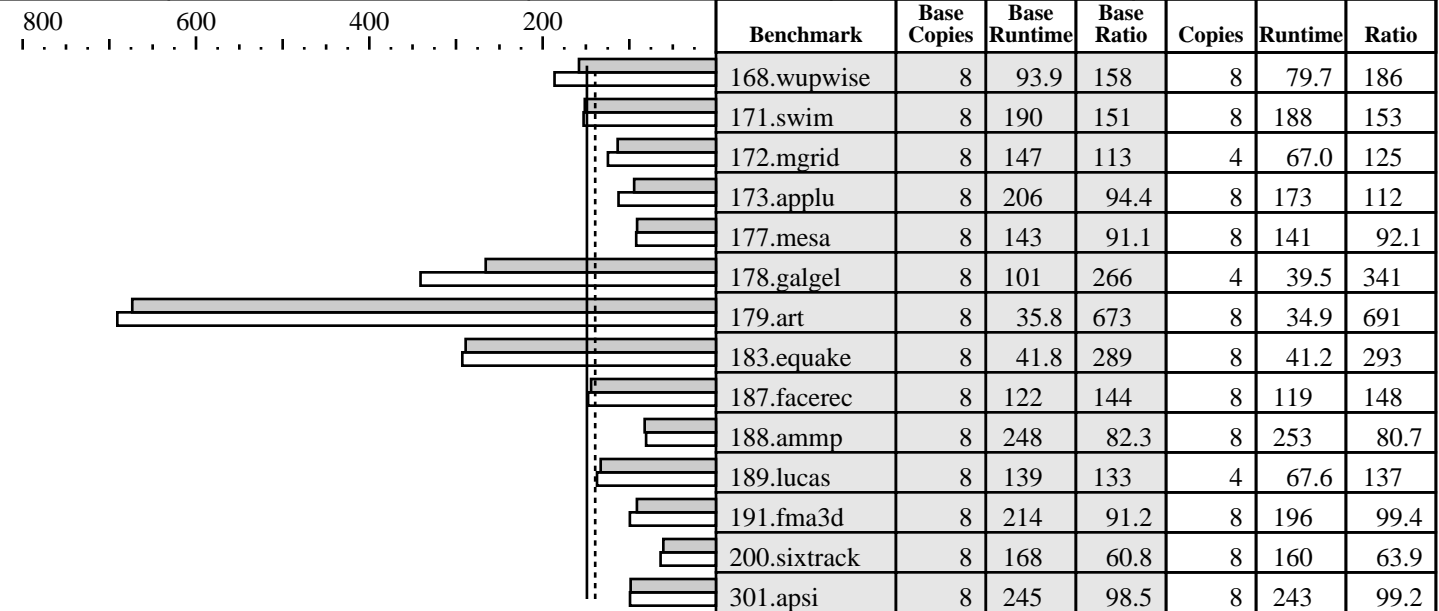
CFP2000 Result

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IBM Corporation
IBM System p5 550 (2100 MHz, 4 CPU)

SPECfp_rate2000 = 149
SPECfp_rate_base2000 = 139

SPEC license #: 11 | Tested by: IBM Austin | Test date: Jul-2006 | Hardware Avail: Aug-2006 | Software Avail: Aug-2006



Hardware

CPU: POWER5+
 CPU MHz: 2100
 FPU: Integrated
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip (SMT on)
 CPU(s) orderable: 2,4 cores
 Parallel: No
 Primary Cache: 64 KB I + 32 KB D on chip per core
 Secondary Cache: 1920 KB I+D on chip per chip
 L3 Cache: 36 MB I+D off chip per chip, 2 chips per SUT
 Other Cache: None
 Memory: 32 GB (8x4 GB)
 Disk Subsystem: 1x73GB SCSI, 15K 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 -lmass
 171.swim: -q64 -O5 -blpdata
 172.mgrid: users = 4
 -qpdf1/pdf2
 -O4 -qipa=partition=large -q64 -blpdata
 173.applu: -qpdf1/pdf2



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Notes/Tuning Information (Continued)

```

-05 -qfdpr -qalign=struct=natural -q64 -blpdata
fdpr -q -03
177.mesa: -qpdf1/pdf2
-05 -qalign=natural
178.galgel: users = 4
-qpdf1/pdf2
-04 -qfdpr -lhmu -blpdata -lmass -qessl -lessl
fdpr -q -03
179.art: -05 -lhmu -blpdata
183.equake: -qpdf1/pdf2
-03 -qarch=auto -qtune=auto -qipa=level=2 -blpdata
187.facerec: -03 -qarch=auto -qtune=auto -qfdpr -blpdata
fdpr -q -03
188.ammp: -05 -qalign=natural -qfdpr -blpdata -lhmu
fdpr -q -03
189.lucas: users = 4
-03 -qarch=auto -qtune=auto -qfdpr -blpdata -qessl -lessl
fdpr -q -03
191.fma3d: -qpdf1/pdf2
-03 -qarch=auto -qtune=auto -qipa=level=2 -q64 -lhmu -blpdata -lmass
200.sixtrack: -qpdf1/pdf2
-05 -qfdpr -qalign=struct=natural
fdpr -q -03
301.apsi: -05

```

The installed OS level is AIX 5L for POWER Version 5.3 with the 5300-05 Recommended Technology Level. The installed C/C++ compiler is XL C/C++ Enterprise Edition Version 8.0 for AIX with the March 2006 PTF. The installed Fortran copiler is XL Fortran Enterprise Edition Version 10.1 with the May 2006 AIX PTF.

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)

SUT: Acronym for "System Under Test"

ESSL: Engineering and Scientific Subroutine Library

PTF: IBM identifier for "Program Fix Level"

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, memory affinity and MATMUL threading were set as follows:

```

vmo -r -o lpgg_regions=1536 -o lpgg_size=16777216
chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
bosboot -aD
shutdown -rF
export MEMORY_AFFINITY=MCM
export XLFRTIOPTS=intrinthds=1

```

The following config-file entry was used to assign each benchmark process to a core:

```
submit = let "MYCPU=2*\$SPECUSERNUM"; if ((" \$MYCPU > 7")) then let "MYCPU=7"; fi; bindprocessor \$\$ \$MYCPU; $command
```

The "bindprocessor" AIX command binds a process to a CPU core.