



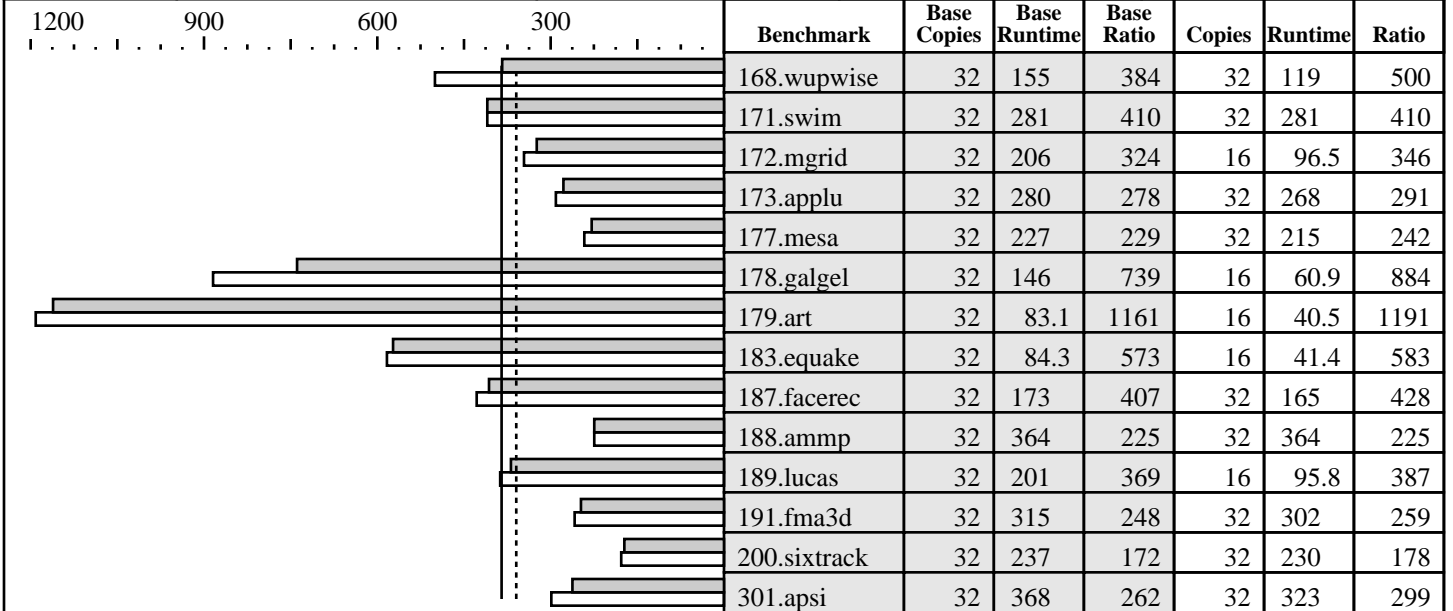
CFP2000 Result

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IBM Corporation
IBM eServer p5 575 (1500 MHz, 16 CPU)

SPECfp_rate2000 = 385
SPECfp_rate_base2000 = 359

SPEC license #: 11 | Tested by: IBM | Test date: Jul-2005 | Hardware Avail: Oct-2005 | Software Avail: Oct-2005



Hardware

CPU: POWER5
 CPU MHz: 1500
 FPU: Integrated
 CPU(s) enabled: 16 cores, 8 chips, 2 cores/chip (SMT on)
 CPU(s) orderable: 16
 Parallel: No
 Primary Cache: 64KBI+32KBD (on chip)/core
 Secondary Cache: 1920KB unified (on chip)/chip
 L3 Cache: 36MB unified (off-chip)/DCM, 8 DCM/SUT
 Other Cache: None
 Memory: 64x1GB
 Disk Subsystem: 2x36GB SCSI, 15K RPM
 Other Hardware: None

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: ESSL 4.2.0.2
 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:
 Fortran: -O5 -blpdata -lmass
 C: -qpdl1/pdf2
 -O5 -blpdata -qalign=natural

Peak Optimization Flags
 168.wupwise: F77=xlfp90
 -q64 -O5 -lmass -qalign=struct=natural -qfdpr
 fdpr -q -O3
 171.swim: basepeak=1
 172.mgrid: -O5 -lmass -qessl -lessl -blpdata -qsave
 users=16



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Notes/Tuning Information (Continued)

```

173.applu:      F77=xl f90
                -q64 -O5 -qarch=pwr3 -qtune=pwr3 -blpdata -lmass -qalign=struct=natural -qfdpr
                fdpr -q -O3
177.mesa:      -qpdf1/pdf2
                -O3 -qarch=auto -qtune=auto -qipa=level=2
178.galgel:    -O5 -blpdata -lmass -qessl -lessl -qfdpr
                fdpr -q -O3
                users=16
179.art:       -O5 -lhm u -blpdata -lmass
                users=16
183.quake:    -qpdf1/pdf2
                -O5 -blpdata -qalign=natural -D_ILS_MACROS
                users=16
187.facerec:  -O5 -blpdata -qfdpr -qalign=struct=natural
                fdpr -q -O3
188.ammp:     basepeak=1
189.lucas:    -O5 -lmass -qessl -lessl -blpdata -qsave
                users=16
191.fma3d:    -qpdf1/pdf2
                -O5 -blpdata -qfdpr -qalign=struct=natural
                fdpr -q -O3
200.sixtrack: F77=xl f90
                -q64 -O5 -blpdata -lmass -qalign=struct=natural -qfdpr
                fdpr -q -O3
301.apsi:     F77=xl f90
                -O5 -lmass -qessl -lessl -blpdata -qsave

```

The installed OS level is AIX 5L for POWER version 5.3 with the 5300-03 Recommended Maintenance package.

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"

ESSL: Engineering and Scientific Subroutine Library

C: IBM XL C for AIX invoked as xlc

Fortran 77: IBM XL Fortran for AIX invoked as xlf90 unless explicitly reassigned

Fortran 90: IBM XL Fortran for AIX invoked as xlf

ulimits set to unlimited.

Large page mode and memory affinity were set as follows:

```

vmo -r -o lpgg_regions=2048 -o lpgg_size=16777216
chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
reboot -q
export MEMORY_AFFINITY=MCM
export LDR_CNTRL=LARGE_PAGE_DATA=M

```

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

```
submit = let "MYCPU=2*\$SPECUSERNUM"; if ((" \$MYCPU > 31")) then let "MYCPU=31"; fi; bindprocessor \$\$ \$MYCPU; $command
```

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

Use flags-description file IBM-20050822-AIX.txt.