CFP2000 Result

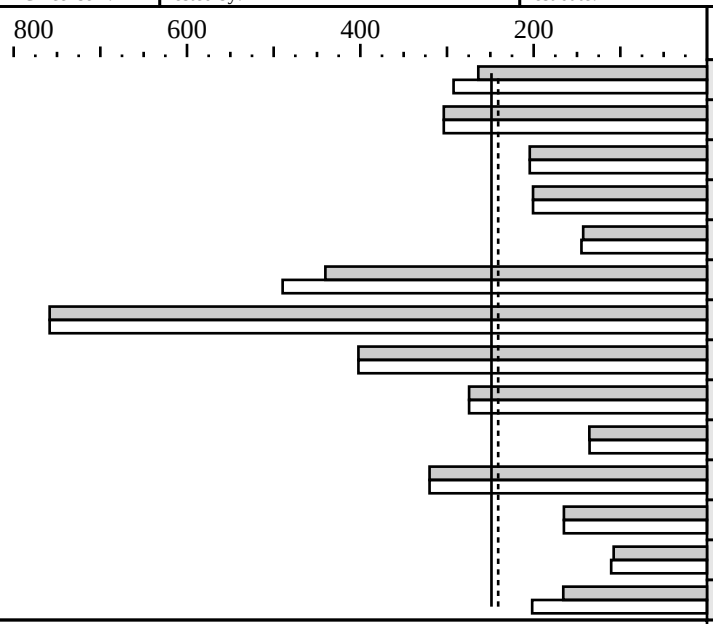
Copyright ©1999-2004, Standard Performance Evaluation Corporation

IBM Corporation
IBM eServer p5 570 (1900 MHz, 8 CPU)

SPECfp_rate2000 = 249

SPECfp_rate_base2000 = 241

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	16	113	264	16	102	292
171.swim	16	189	304	16	189	304
172.mgrid	16	163	205	16	163	205
173.applu	16	194	201	16	194	201
177.mesa	16	182	143	16	179	145
178.galgel	16	122	440	16	110	490
179.art	16	63.6	758	16	63.6	758
183.equake	16	60.0	402	16	60.0	402
187.facerec	16	128	274	16	128	274
188.ammp	16	301	136	16	301	136
189.lucas	16	116	320	16	116	320
191.fma3d	16	236	165	16	236	165
200.sixtrack	16	190	108	16	185	111
301.apsi	16	291	166	16	239	202

Hardware

CPU:	POWER5
CPU MHz:	1900
FPU:	Integrated
CPU(s) enabled:	8 cores, 4 chips, 2 cores/chip (SMT on)
CPU(s) orderable:	2,4,8,12,16
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip)/core
Secondary Cache:	1920KB unified (on chip)/chip
L3 Cache:	36MB unified (off chip)/DCM, 4 DCM/SUT
Other Cache:	none
Memory:	32x1 GB DDR2
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 -q64 -qarch=pwr3 -qtune=pwr3
  171.swim:     basepeak = 1
  172.mgrid:    basepeak = 1
  173.applu:    basepeak = 1
  177.mesa:     -qpdf1/pdf2
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
                -O5 -q64 -blpdata -qalign=natural
  178.galgel:   -qpdf1/pdf2
                -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:    basepeak = 1
  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 and memory affinity were set as follows:
   vmo -r -o lgpg_regions=800 -o lgpg_size=16777216 -o memory_affinity=1
   chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
   reboot -q
   export MEMORY_AFFINITY=MCM
```