CFP2000 Result

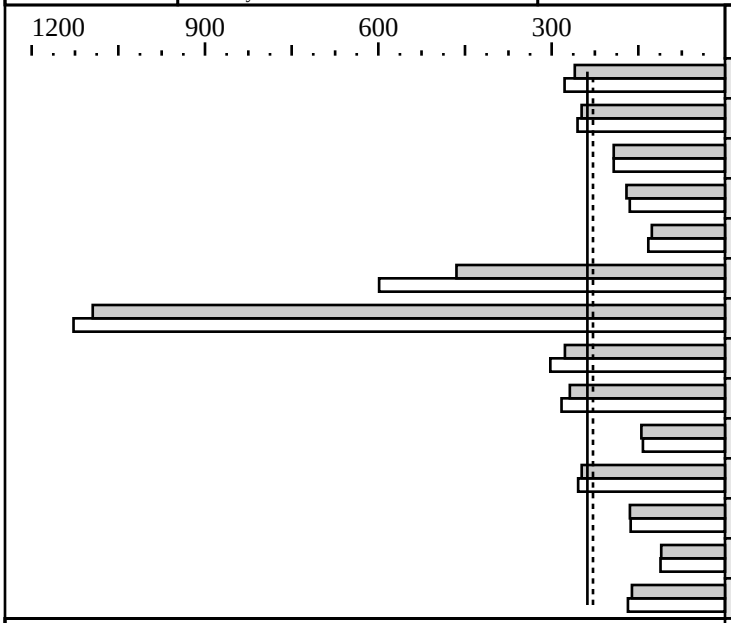
IBM Corporation

IBM eServer p5 575 (1900 MHz, 8 CPU, Linux)

SPECfp_rate2000 = 238

SPECfp_rate_base2000 = 229

SPEC license #: 11 | Tested by: IBM | Test date: Jan-2005 | Hardware Avail: Feb-2005 | Software Avail: Mar-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	16	114	260	16	107	278
171.swim	16	232	248	16	225	255
172.mgrid	16	173	193	16	173	193
173.applu	16	229	171	16	236	165
177.mesa	16	205	127	16	196	133
178.galgel	16	116	465	16	89.9	599
179.art	16	44.1	1094	16	42.8	1128
183.equake	16	87.1	277	16	79.8	302
187.facerec	16	131	269	16	125	283
188.ammp	16	282	145	16	287	142
189.lucas	16	150	248	16	146	254
191.fma3d	16	237	165	16	239	163
200.sixtrack	16	185	110	16	183	112
301.apsi	16	300	161	16	287	168

Hardware

CPU:	POWER5
CPU MHz:	1900
FPU:	Integrated
CPU(s) enabled:	8 cores, 8 chips, 1 core/chip (SMT on)
CPU(s) orderable:	8
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:	64x512 MB
Disk Subsystem:	1x73GB SCSI, 15K RPM
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux AS 4
Compiler:	XL C/C++ Enterprise Edition Version 7.0 for Linux XL Fortran Enterprise Edition V9.1 for Linux Other Software: IBM ESSL for Linux on Power Version 4 Release 2
File System:	EXT2
System State:	Multi-User, run level 3

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 -qpdf1/pdf2
  Fortran:
      -O5 -qpdf1/pdf2

Floating Point Peak Flags
168.wupwise
    -O5 -qarch=pwr3 -qtune=pwr3
171.swim
    -O3 -qarch=pwr5 -qtune=pwr5 -qhot
172.mgrid
```

Notes/Tuning Information (Continued)

```
    -O4 -qarch=pwr4 -qtune=pwr4
173.applu
    -O5 -qarch=pwr5 -qtune=pwr5
177.mesa:  -qpdf1/pdf2
    -O4 -qarch=pwr4 -qtune=pwr4
178.galgel
    -O5 -qessl -lessl
    "Fortran compiler invoked as xlf_r"
179.art:
    -O5 -qarch=pwr5 -qtune=pwr5
183.equake
    -O5 -qarch=pwr5 -qtune=pwr5
187.facerec:  -qpdf1/pdf2
    -O3 -qarch=pwr5 -qtune=pwr5 -qhot
188.ammp:
    -O3 -qarch=pwr4 -qtune=pwr4
189.lucas:
    -O3 -qarch=pwr5 -qtune=pwr5
191.fma3d:  -qpdf1/pdf2
    -O4 -qarch=pwr5 -qtune=pwr5
200.sixtrack:
    -O3 -qarch=pwr5 -qtune=pwr5
301.apsi:
    -O5 -qarch=pwr5 -qtune=pwr5 -qessl -lessl
       "Fortran compiler invoked as xlf_r"

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
Stack size set to unlimited using "ulimit -s unlimited"
C:       IBM XL C/C++ for Linux invoked as xlc
Fortran: IBM XL Fortran for Linux invoked as xlf90 unless explicitly reassigned
Fortran: IBM XL Fortran for Linux invoked as xlf_r where noted
cleanpdf used with -qpdf1/pdf2 to erase the information in the PDF directory if any
     exists to ensure no feedback information is reused between compilations.
Flag file: IBM-20050209-Linux.txt
```