CFP2000 Result

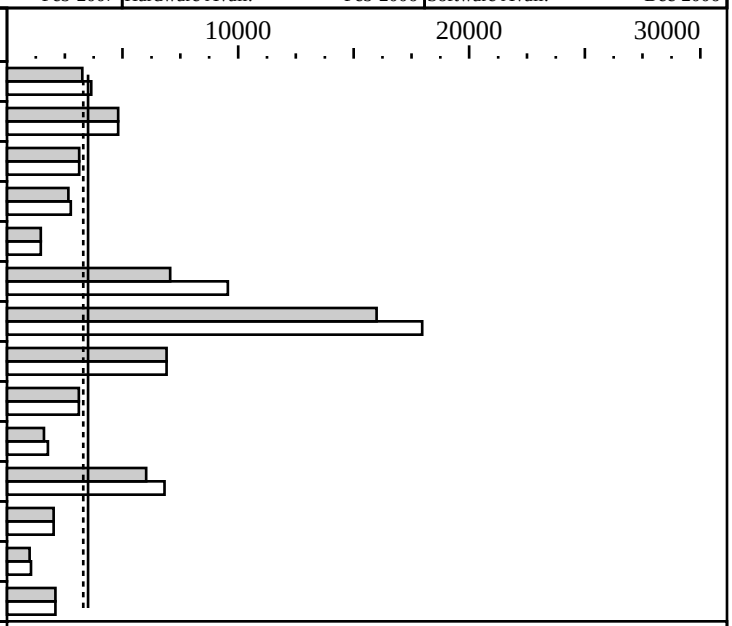
Bull
Escala PL1650R+ (2200 MHz, 1 CPU)

SPECfp2000 = 3510

SPECfp_base2000 = 3303

SPEC license #: 20 | Tested by: Bull | Test date: Feb-2007 | Hardware Avail: Feb-2006 | Software Avail: Dec-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	49.1	3259	43.9	3645
171.swim	3100	64.4	4811	64.4	4811
172.mgrid	1800	57.6	3124	57.6	3124
173.applu	2100	79.0	2657	76.1	2760
177.mesa	1400	95.8	1462	95.8	1462
178.galgel	2900	41.1	7060	30.3	9556
179.art	2600	16.3	15995	14.5	17964
183.equake	1300	18.8	6905	18.8	6905
187.facerec	1900	61.1	3108	61.1	3108
188.ammp	2200	138	1599	124	1770
189.lucas	2000	33.2	6022	29.3	6816
191.fma3d	2100	104	2018	104	2018
200.sixtrack	1100	112	979	106	1038
301.apsi	2600	124	2096	124	2096



Hardware

CPU:	POWER5+
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip (SMT off)
CPU(s) orderable:	2, 4, 6, 8 chips
Parallel:	no
Primary Cache:	64KBI+32KBD (on chip)per core
Secondary Cache:	1920KB unified (on chip) per chip
L3 Cache:	36MB unified off chip per chip
Other Cache:	None
Memory:	128 GB (32x4 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 with the December 2006 PTF XL Fortran Enterprise Edition Version 10.1 for AIX with the November 2006 PTF
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:     basepeak=yes
  172.mgrid:    basepeak=yes
  173.applu:    -qpdf1/pdf2
                -O5 -qfpdr -qalign=struct=natural -q64 -blpdata
                fdpr -q -O3
```

Notes/Tuning Information (Continued)

```
    177.mesa:     basepeak=yes
    178.galgel:   -qpdf1/pdf2
                  -O5 -qfdpr -lhmu -blpdata -lmass -qessl -lessl
                  fdpr -q -O3
    179.art:      -O5 -lhmu -blpdata
    183.equake:   basepeak=yes
    187.facerec:  basepeak=yes
    188.ammp:     -O5 -qalign=natural -qfdpr -blpdata -lhmu
                  fdpr -q -O3
    189.lucas:    -O3 -qarch=auto -qtune=auto -qfdpr -blpdata -qessl -lessl
                  fdpr -q -O3
    191.fma3d:    basepeak=yes
    200.sixtrack: -qpdf1/pdf2
                  -O5 -qfdpr -qalign=struct=natural
                  fdpr -q -O3
    301.apsi:     basepeak=yes


  The installed OS level is AIX 5L for POWER version 5.3 with the 5300-04 Recommended Maintenence 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"

  Extended C:     IBM XL C for AIX invoked as cc
  ANSI C89:       IBM XL C for AIX invoked as xlc
  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 was set as follows:
      vmo -r -o lgpg_regions=800 -o lgpg_size=16777216
 15 cores were deconfigured and SMT disabled using the AIX commands
      smtctl -m off -w boot
      bosboot -aD
      shutdown -rF
      drmgr -r -c cpu (15 times)
```