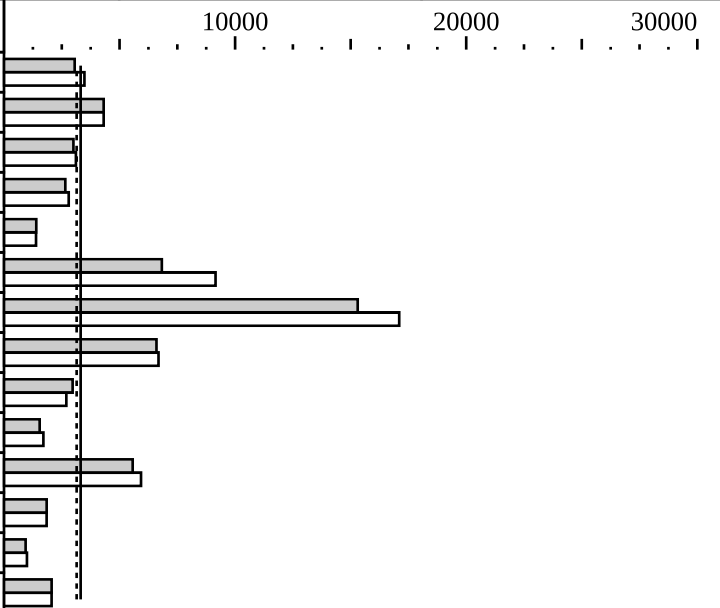
CFP2000 Result

Bull
Escala PL450R+ (2100 MHz, 1 CPU)

SPECfp2000 = 3317
SPECfp_base2000 = 3143

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	52.3	3058	46.0	3480
171.swim	3100	71.9	4313	71.9	4313
172.mgrid	1800	59.9	3004	57.9	3111
173.applu	2100	79.1	2653	75.0	2800
177.mesa	1400	100	1397	101	1386
178.galgel	2900	42.5	6829	31.7	9153
179.art	2600	17.0	15304	15.2	17100
183.equake	1300	19.7	6598	19.4	6686
187.facerec	1900	64.0	2969	70.4	2697
188.ammp	2200	143	1543	129	1704
189.lucas	2000	35.9	5568	33.7	5929
191.fma3d	2100	114	1846	114	1845
200.sixtrack	1100	118	936	111	993
301.apsi	2600	126	2061	126	2060



Hardware

CPU:	POWER5+
CPU MHz:	2100
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip (SMT off)
CPU(s) orderable:	1, 2 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:	32 GB (8x4GB)
Disk Subsystem:	2x73GB 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=1
  172.mgrid:    -qpdf1/pdf2
                -O4 -qipa=partition=large -q64 -blpdata
  173.applu:    -qpdf1/pdf2
                -O5 -qalign=struct=natural -q64 -blpdata
```

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Bull
Escala PL450R+ (2100 MHz, 1 CPU)

SPECfp2000 = 3317
SPECfp_base2000 = 3143

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

Notes/Tuning Information (Continued)

```
                  fdpr -q -O3
   177.mesa:      -qpdf1/pdf2
                  -O5 -qalign=natural
   178.galgel:    -qpdf1/pdf2
                  -O5 -qfdpr -lhmu -blpdata -lmass -qessl -lessl
                  fdpr -q -O3
   179.art:       -O5 -lhmu -blpdata
   183.equake:    -qpdf1/pdf2
                  -O3 -qarch=auto -qtune=auto -qipa=level=2 -blpdata
   187.facerec:   -O3 -qarch=auto -qtune=auto -qfpdr -blpdata
                  fdpr -q -O3
   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:     -qpdf1/pdf2
                 -O3 -qarch=auto -qtune=auto -qipa=level=2 -q64 -lhmu -blpdata -lmass
   200.sixtrack: -qpdf1/pdf2
                  -O5 -qfdpr -qalign=struct=natural
                  fdpr -q -O3
   301.apsi:      -O5
```

The installed OS level is AIX 5L for POWER version 5.3 with the 5300-05 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
3 cores were deconfigured and SMT disabled using the AIX commands
    smtctl -m off -w boot
    bosboot -aD
    shutdown -rF
    drmgr -r -c cpu
    drmgr -r -c cpu
    drmgr -r -c cpu
```