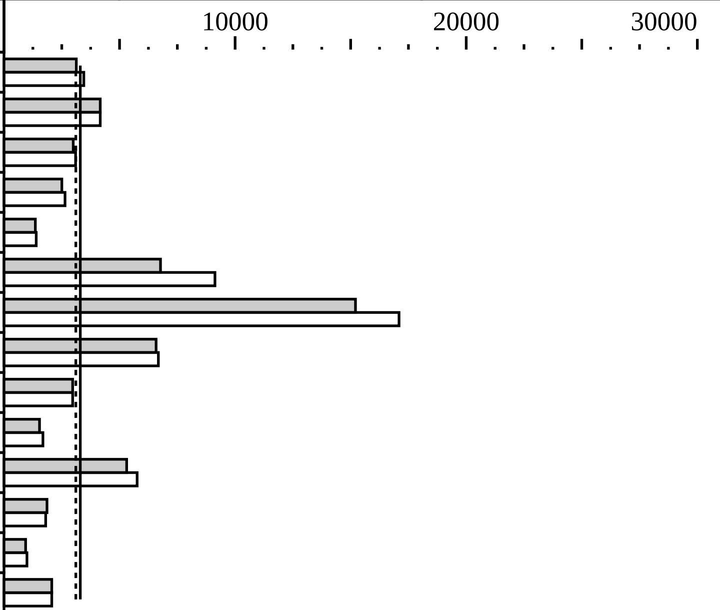
CFP2000 Result

Bull
Escala PL250R+ (2100 MHz, 1 CPU)

SPECfp2000 = 3301
SPECfp_base2000 = 3108

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	51.1	3129	46.3	3454
171.swim	3100	74.4	4164	74.4	4164
172.mgrid	1800	60.1	2996	58.1	3098
173.applu	2100	83.9	2503	79.5	2641
177.mesa	1400	103	1356	100	1394
178.galgel	2900	42.8	6772	31.8	9128
179.art	2600	17.1	15209	15.2	17092
183.equake	1300	19.8	6582	19.5	6679
187.facerec	1900	64.0	2971	64.0	2971
188.ammp	2200	143	1537	131	1685
189.lucas	2000	37.7	5308	34.7	5761
191.fma3d	2100	113	1861	116	1804
200.sixtrack	1100	118	936	111	993
301.apsi	2600	126	2067	126	2067



Hardware

CPU:	POWER5+
CPU MHz:	2100
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip (SMT off)
CPU(s) orderable:	1 chip
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 (8x4 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=1
  172.mgrid:    -qpdf1/pdf2
                -O4 -qipa=partition=large -q64 -blpdata
  173.applu:    -qpdf1/pdf2
                -O5 -qfdpr -qalign=struct=natural -q64 -blpdata
```

CFP2000 Result

Notes/Tuning Information (Continued)

```
                  fdpr -q -O3
   177.mesa:      -qpdf1/pdf2
                  -O5 -qalign=natural
   178.galgel:    -qpdf1/pdf2
                 -O5 -qfdpr -qalign=struct=natural -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:   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:     -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 5300-04 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
1 core was deconfigured and SMT disabled using the AIX commands
    smtctl -m off -w boot
    bosboot -aD
    shutdown -rF
    drmgr -r -c cpu
```