CINT2000 Result

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IBM Corporation

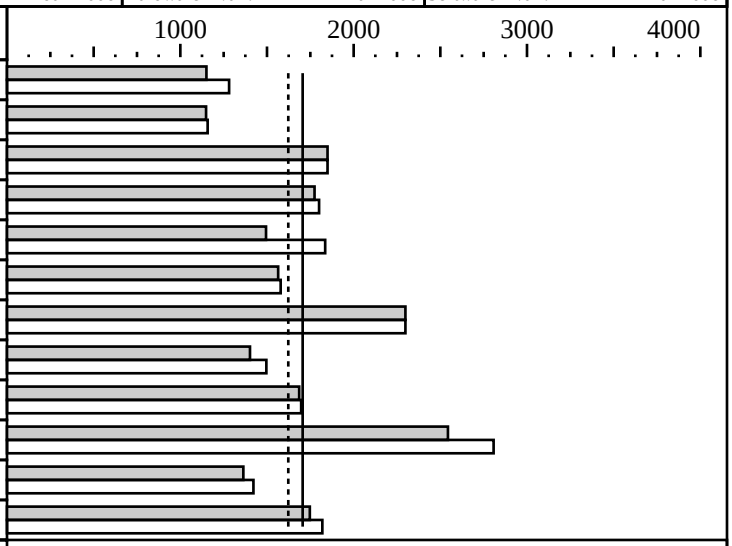
IBM BladeCenter JS21 (2700 MHz, 1 CPU)

SPECint2000 = 1706

SPECint_base2000 = 1623

SPEC license #: 11 | Tested by: IBM | Test date: Jan-2006 | Hardware Avail: Mar-2006 | Software Avail: Mar-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	122	1151	109	1281
175.vpr	1400	122	1149	121	1158
176.gcc	1100	59.5	1849	59.5	1849
181.mcf	1800	101	1774	100.0	1800
186.crafty	1000	66.9	1494	54.5	1836
197.parser	1800	115	1564	114	1579
252.eon	1300	56.6	2299	56.6	2299
253.perlbmk	1800	128	1402	120	1496
254.gap	1100	65.3	1686	64.8	1697
255.vortex	1900	74.7	2544	67.7	2807
256.bzip2	1500	110	1364	106	1422
300.twolf	3000	172	1747	165	1819



Hardware

CPU:	IBM PowerPC 970MP
CPU MHz:	2700
FPU:	Integrated
CPU(s) enabled:	1 core, 2 chips, 1 core/chip
CPU(s) orderable:	2
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip)/core
Secondary Cache:	1MB unified (on chip)/core
L3 Cache:	None
Other Cache:	None
Memory:	4x2GB PC2-4200 533MHz ECC Chipkill DDR2
Disk Subsystem:	2x 73GB 10,000 rpm 2.5" SFF Serial Attached SCSI
Other Hardware:	BladeCenter H

Software

Operating System:	AIX 5L V5.3
Compiler:	XL C/C++ Enterprise Edition Version 8.0 for AIX
File System:	AIX/JFS2
System State:	Multi-user

Notes/Tuning Information

```
Portability Flags:
  176.gcc:      -ma -DHOST_WORDS_BIG_ENDIAN
  186.crafty:   -DAIX
  253.perlbmk:  -DSPEC_CPU2000_AIX
  254.gap:      -DSYS_IS_BSD -DSYS_STRING_H
                -DSYS_HAS_MALLOC_PROTO -DSYS_HAS_CALLOC_PROTO
  300.twolf:    -DHAVE_SIGNED_CHAR

Base Optimization Flags:
  C:    -qpdf1/pdf2
        -O5 -blpdata -D_ILS_MACROS
  C++:  -qpdf1/pdf2
        -O4 -qalign=natural

Peak Optimization Flags
  164.gzip:     -qpdf1/pdf2
               -O5 -qalign=natural -qfdpr -Q -qmaxmem=-1 -q64 -blpdata -lhmu -qenablevmx
                fdpr -q -O3
  175.vpr:      -qpdf1/pdf2
                -O5 -qalign=natural -qfdpr -Q -qmaxmem=-1 -blpdata -lhmu
```

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Notes/Tuning Information (Continued)

```
                fdpr -q -O3
  176.gcc:      basepeak=1
  181.mcf:      -qpdf1/pdf2
                -O5 -qalign=natural -Q -blpdata
                fdpr -q -O3
  186.crafty:   -qpdf1/pdf2
                -O5 -qfdpr -q64 -lhmu
                 fdpr -q -O3
  197.parser:   -qpdf1/pdf2
                -O4 -qfdpr -D_ILS_MACROS -blpdata
                 fdpr -q -O3
  252.eon:      basepeak=1
  253.perlbmk:  -qpdf1/pdf2
                 -O4 -qalign=natural -D_ILS_MACROS -blpdata -lhmu -qenablevmx
  254.gap:      -qpdf1/pdf2
                 -O5 -D_ILS_MACROS -blpdata -lhmu -qenablevmx
  255.vortex:   -qpdf1/pdf2
                -O4 -qfdpr -blpdata -lhmu
                 fdpr -q -O3
  256.bzip2:    -qpdf1/pdf2
                -O5 -qfdpr -blpdata
                fdpr -q -O3
  300.twolf:    -qpdf1/pdf2
                -O4 -qfdpr -qarch=pwr3 -qtune=pwr3 -blpdata
                fdpr -q -O3


The installed OS level is AIX 5L for POWER version 5.3 with the 5300-04 Recommended Technology Level.

Extended C:     IBM XL C for AIX invoked as cc
C++:            IBM XL C for AIX invoked as xlC

ulimits set to unlimited.
Large page mode and memory affinity were set as follows:
    vmo -r -o lgpg_regions=100 -o lgpg_size=16777216
    chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
    shutdown -rF
    export MEMORY_AFFINITY=MCM

The following config-file entry was used to assign each benchmark process to a core:
     submit = bindprocessor $$ $SPECUSERNUM; $command
The "bindprocessor" AIX command binds a process to a CPU core.
One core was deconfigured at the open-firmware prompt, using the command
     boot -s cpu=1
```