CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

IBM Corporation

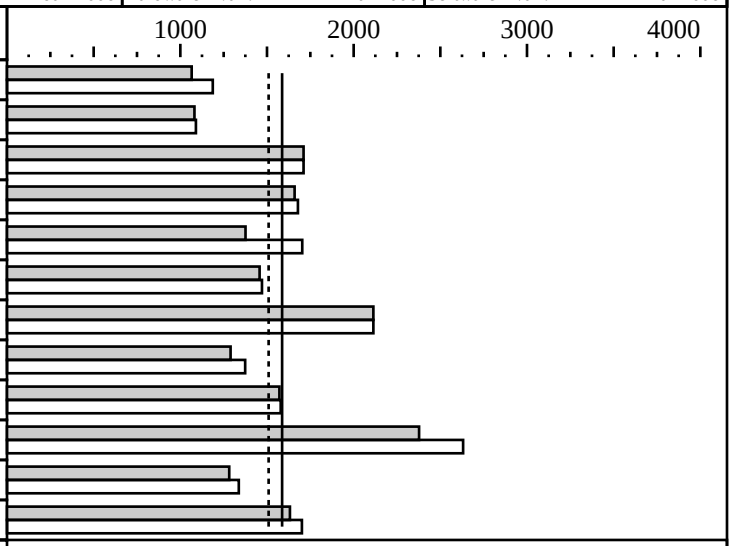
IBM BladeCenter JS21 (2500 MHz, 1 CPU)

SPECint2000 = 1587

SPECint_base2000 = 1509

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	131	1065	118	1187
175.vpr	1400	129	1081	128	1090
176.gcc	1100	64.3	1711	64.3	1711
181.mcf	1800	108	1659	107	1678
186.crafty	1000	72.7	1376	58.7	1703
197.parser	1800	124	1457	122	1471
252.eon	1300	61.5	2114	61.5	2114
253.perlbmk	1800	140	1290	131	1374
254.gap	1100	70.0	1572	69.7	1579
255.vortex	1900	79.9	2377	72.2	2631
256.bzip2	1500	117	1282	112	1337
300.twolf	3000	184	1632	176	1701



Hardware

CPU:	IBM PowerPC 970MP
CPU MHz:	2500
FPU:	Integrated
CPU(s) enabled:	1 core, 2 chips, 2 cores/chip
CPU(s) orderable:	4
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
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
                fdpr -q -O3
  176.gcc:      basepeak=1
  181.mcf:      -qpdf1/pdf2
                -O5 -qalign=natural -qfdpr -Q -qmaxmem=-1 -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=200 -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
```