CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

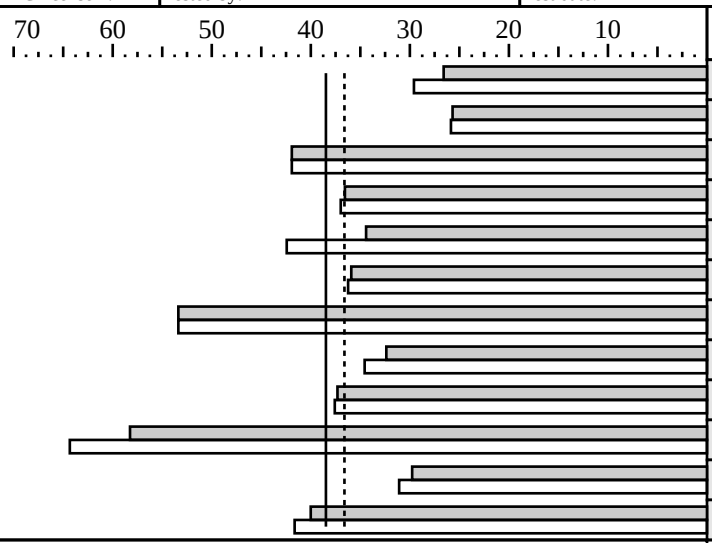
IBM Corporation

IBM BladeCenter JS21 (2700 MHz, 2 CPU)

SPECint_rate2000 = 38.5

SPECint_rate_base2000 = 36.6

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	122	26.6	2	110	29.6
175.vpr	2	126	25.7	2	126	25.9
176.gcc	2	60.9	41.9	2	60.9	41.9
181.mcf	2	114	36.6	2	113	37.0
186.crafty	2	67.4	34.4	2	54.7	42.4
197.parser	2	116	35.9	2	115	36.2
252.eon	2	56.5	53.4	2	56.5	53.4
253.perlbmk	2	129	32.4	2	121	34.6
254.gap	2	68.4	37.3	2	67.9	37.6
255.vortex	2	75.7	58.3	2	68.5	64.3
256.bzip2	2	117	29.8	2	112	31.1
300.twolf	2	174	40.0	2	167	41.6

Hardware

CPU:	IBM PowerPC 970MP
CPU MHz:	2700
FPU:	Integrated
CPU(s) enabled:	2 cores, 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
```

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.
```