CINT2000 Result

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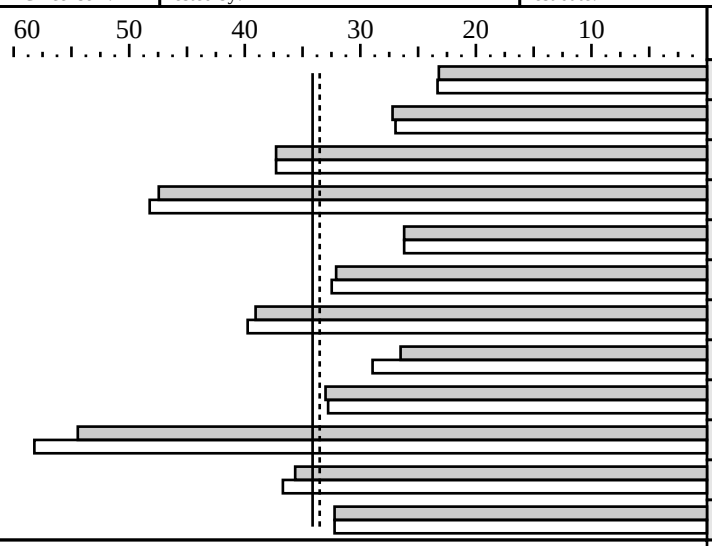
IBM Corporation

IBM System p5 505 (1650 MHz, 2 CPU)

SPECint_rate2000 = 34.1

SPECint_rate_base2000 = 33.5

SPEC license #: 11 | Tested by: IBM | Test date: Sep-2005 | Hardware Avail: Oct-2005 | Software Avail: Oct-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	280	23.2	4	279	23.3
175.vpr	4	239	27.2	4	241	27.0
176.gcc	4	137	37.3	4	137	37.3
181.mcf	4	176	47.4	4	173	48.2
186.crafty	4	177	26.2	4	177	26.2
197.parser	4	260	32.1	4	257	32.5
252.eon	4	154	39.1	4	152	39.8
253.perlbmk	4	315	26.5	4	289	28.9
254.gap	4	155	33.0	4	156	32.8
255.vortex	4	162	54.5	4	151	58.2
256.bzip2	4	195	35.6	4	190	36.7
300.twolf	4	432	32.2	4	432	32.2

Hardware

CPU:	POWER5
CPU MHz:	1650
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/chip (SMT on)
CPU(s) orderable:	2
Parallel:	None
Primary Cache:	64KBI+32KBD (on chip)/core
Secondary Cache:	1920KB unified (on chip)/chip
L3 Cache:	36MB unified (off-chip)/DCM, 1 DCM/SUT
Other Cache:	None
Memory:	8x2GB
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
File System:	AIX/JFS2
System State:	Multi-user

Notes/Tuning Information

```
Portability Flags:
  176.gcc:      -ma -DHOST_WORDS_BIG_ENDIAN
  186.crafty:   -DAIX
  252.eon:      srcalt=fmax_errno
  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
        -O5 -lhmu -qalign=natural

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

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Notes/Tuning Information (Continued)

```
                -O5 -lhmu -blpdata -D_ILS_MACROS
  176.gcc:      basepeak=1
  181.mcf:      -O5 -blpdata -qfdpr
                fdpr -q -O3
  186.crafty:   basepeak=1
  197.parser:   -qpdf1/pdf2
                -O5 -blpdata -D_ILS_MACROS
  252.eon:      -qpdf1/pdf2
                -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -D_ILS_MACROS
  253.perlbmk:  -qpdf1/pdf2
                -O5 -lhmu -qalign=natural -blpdata -D_ILS_MACROS
  254.gap:      -qpdf1/pdf2
                -O5 -qalign=natural -lhmu -blpdata -qfdpr -Q
                fdpr -q -O3
  255.vortex:   -qpdf1/pdf2
                -O5 -lhmu -blpdata
  256.bzip2:    -O5 -blpdata -qfdpr -D_ILS_MACROS
                fdpr -q -O3
  300.twolf:    basepeak=1


Approved alternate-source file 252.eon.fmax_errno.src.alt.tar.gz
was used with 252.eon for POSIX-compatibility.

The installed OS level is AIX 5L for POWER version 5.3 with the 5300-03 Recommended Maintenance 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

ulimits set to unlimited.
Large page mode and memory affinity were set as follows:
    vmo -r -o lgpg_regions=400 -o lgpg_size=16777216
    chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
    reboot -q
    export MEMORY_AFFINITY=MCM

The following config-file entry was used to assign each benchmark process to a core:
   submit = let "MYCPU=2*$SPECUSERNUM"; if (("$MYCPU > 3")) then let "MYCPU-=3"; fi; bindprocessor $$ $MYCPU; $command
The "bindprocessor" AIX command binds a process to a CPU core.

Use flags-description file IBM-20050919-AIX.txt.
```