CINT2000 Result

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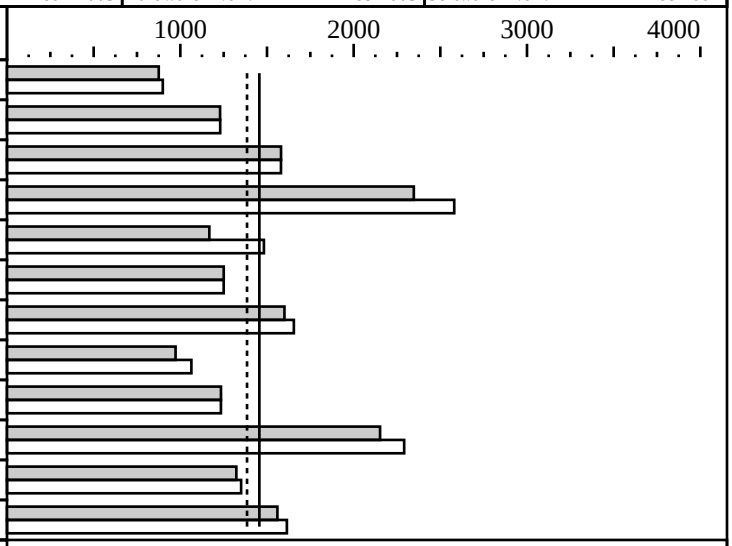
IBM Corporation
IBM eServer p5 575 (1900 MHz, 1 CPU)

SPECint2000 = 1456

SPECint_base2000 = 1385

SPEC license #: 11 | Tested by: IBM | Test date: Jan-2005 | Hardware Avail: Feb-2005 | Software Avail: Dec-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	160	875	156	899
175.vpr	1400	114	1229	114	1230
176.gcc	1100	69.6	1581	69.6	1581
181.mcf	1800	76.7	2347	69.8	2580
186.crafty	1000	85.7	1167	67.5	1482
197.parser	1800	144	1250	144	1250
252.eon	1300	81.2	1601	78.6	1655
253.perlbmk	1800	185	973	169	1064
254.gap	1100	89.1	1234	89.1	1234
255.vortex	1900	88.3	2152	82.9	2291
256.bzip2	1500	113	1323	111	1351
300.twolf	3000	192	1560	186	1615



Hardware

CPU:	POWER5
CPU MHz:	1900
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip (SMT off)
CPU(s) orderable:	8
Parallel:	no
Primary Cache:	64KBI+32KBD (on chip)
Secondary Cache:	1920KB unified (on chip)
L3 Cache:	36MB unified (off-chip)/DCM, 8 DCM/SUT
Other Cache:	None
Memory:	32 GB
Disk Subsystem:	2x36GB SCSI, 15K RPM
Other Hardware:	None

Software

Operating System:	AIX 5L V5.3
Compiler:	XL C/C++ Enterprise Edition Version 7.0 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
                -I.
  253.perlbmk:  -DSPEC_CPU2000_AIX
  254.gap:      -DSYS_IS_BSD -DSYS_STRING_H -DSYS_HAS_TIME_PROTO
                -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
                fdpr -q -O3
                -O5 -blpdata -qfdpr
```

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Notes/Tuning Information (Continued)

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

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

APAR IY62267 was applied to AIX 5L V5.3 to achieve Mantainence Level 1.

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)
      For the 575, only one core is active per chip.
SUT:  Acronym for "System Under Test"

ulimits set to unlimited.
Large page mode and memory affinity were set as follows:
    vmo -r -o lgpg_regions=1664 -o lgpg_size=16777216 -o memory_affinity=1
    chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
    reboot -q
    export MEMORY_AFFINITY=MCM
One core was deconfigured and SMT disabled at the open-firmware prompt, using the
command
    boot -s cpu=1 -s smt_off
```