CINT2000 Result

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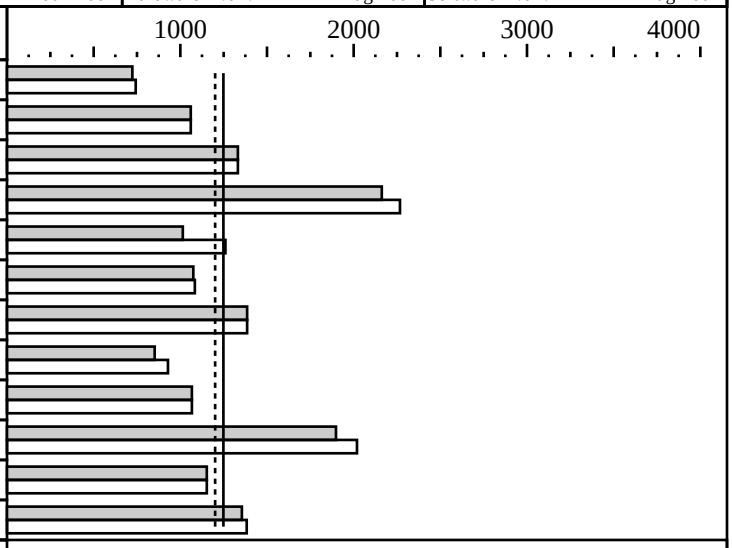
IBM Corporation
IBM eServer i5 520 (1650 MHz, 1 CPU)

SPECint2000 = 1248

SPECint_base2000 = 1201

SPEC license #: 11 | Tested by: IBM | Test date: Jun-2004 | Hardware Avail: Aug-2004 | Software Avail: Aug-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	194	723	189	743
175.vpr	1400	132	1060	132	1060
176.gcc	1100	82.6	1332	82.6	1332
181.mcf	1800	83.2	2162	79.4	2267
186.crafty	1000	98.6	1014	79.4	1260
197.parser	1800	167	1075	166	1084
252.eon	1300	93.8	1385	93.8	1385
253.perlbmk	1800	211	852	194	929
254.gap	1100	103	1067	103	1067
255.vortex	1900	100	1898	94.1	2019
256.bzip2	1500	130	1153	130	1153
300.twolf	3000	221	1355	217	1383



Hardware

CPU:	POWER5
CPU MHz:	1650
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip (SMT off)
CPU(s) orderable:	2
Parallel:	No
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:	8x4 GB
Disk Subsystem:	1x36GB SCSI, 15K RPM
Other Hardware:	

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. -DNDEBUG
  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
```

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Notes/Tuning Information (Continued)

```
                -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -D_ILS_MACROS
                "CC=xlc"
  175.vpr:      basepeak = 1
  176.gcc:      basepeak = 1
  181.mcf:      fdpr -quiet -R3
                -O5 -blpdata -qfdpr -D_ILS_MACROS
  186.crafty:   -qpdf1/pdf2
                fdpr -quiet -R3
                -O4 -q64 -qfdpr -qarch=pwr3 -qtune=pwr3 -D_ILS_MACROS
  197.parser:   -qpdf1/pdf2
                fdpr -quiet -R3
                -O5 -blpdata -D_ILS_MACROS -qfdpr
  252.eon:      basepeak = 1
  253.perlbmk:  -qpdf1/pdf2
                -O5 -D_ILS_MACROS -lhmu -qalign=natural
  254.gap:      basepeak = 1
  255.vortex:   -qpdf1/pdf2
                -O5 -lhmu -qalign=natural -D_ILS_MACROS -blpdata
  256.bzip2:    basepeak = 1
  300.twolf:    -O5 -lhmu -blpdata -qalign=natural
                "CC = xlc"

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

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"

ulimits set to unlimited.
Large page mode and memory affinity were set as follows:
   vmo -r -o lgpg_regions=400 -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
This result was measured on model IBM eServer p5 520.
Model i5 520 and model p5 520 are electronically equivalent.
```