CINT2000 Result

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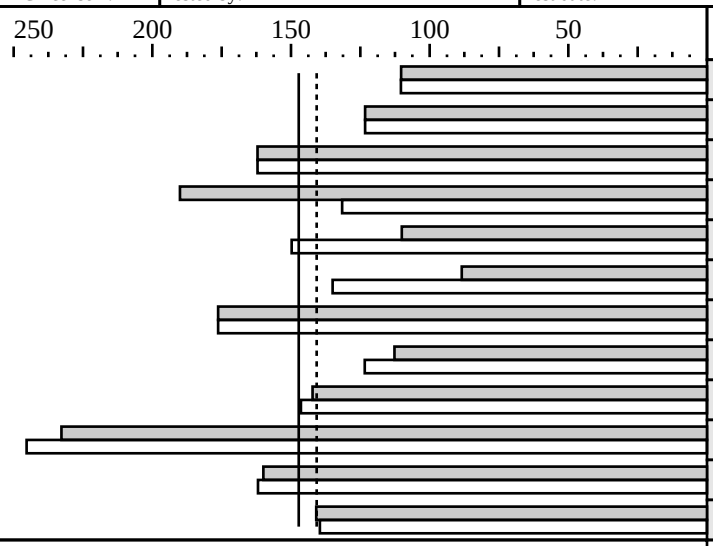
IBM Corporation
IBM eServer p5 570 (1900 MHz, 8 CPU)

SPECint_rate2000 = 147

SPECint_rate_base2000 = 141

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	16	236	110	16	235	110
175.vpr	16	211	123	16	211	123
176.gcc	16	126	162	16	126	162
181.mcf	16	176	190	16	254	132
186.crafty	16	169	110	16	124	150
197.parser	16	378	88.4	16	247	135
252.eon	16	137	176	16	137	176
253.perlbmk	16	296	113	16	271	123
254.gap	16	144	142	16	139	146
255.vortex	16	151	233	16	144	245
256.bzip2	16	174	160	16	172	162
300.twolf	16	395	141	16	399	140

Hardware

CPU:	POWER5
CPU MHz:	1900
FPU:	Integrated
CPU(s) enabled:	8 cores, 4 chips, 2 cores/chip (SMT on)
CPU(s) orderable:	2,4,8,12,16
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip)/core
Secondary Cache:	1920KB unified (on chip)/chip
L3 Cache:	36MB unified (off chip)/DCM, 4 DCM/SUT
Other Cache:	none
Memory:	32x1 GB DDR2
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 -qalign=natural
  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
  186.crafty:   -qpdf1/pdf2
                fdpr -quiet -R3
                -O4 -q64 -qfdpr -qarch=pwr3 -qtune=pwr3 -D_ILS_MACROS
  197.parser:   -qpdf1/pdf2
                fdpr -quiet -R3
                -O4 -blpdata -D_ILS_MACROS -qfdpr -qarch=pwr3 -qtune=pwr3
  252.eon:      basepeak = 1
  253.perlbmk:  -qpdf1/pdf2
                -O5 -D_ILS_MACROS -lhmu -qalign=natural
  254.gap:      -qpdf1/pdf2
                -O4 -qarch=pwr4 -qtune=pwr4 -D_ILS_MACROS -lhmu -qalign=natural
  255.vortex:   -qpdf1/pdf2
                -O5 -lhmu -qalign=natural -D_ILS_MACROS -blpdata
  256.bzip2:    -qpdf1/pdf2
                -O5 -blpdata -qarch=pwr3 -qtune=pwr3 -qalign=natural
  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=800 -o lgpg_size=16777216 -o memory_affinity=1
   chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
   reboot -q
   export MEMORY_AFFINITY=MCM
```