CINT2000 Result

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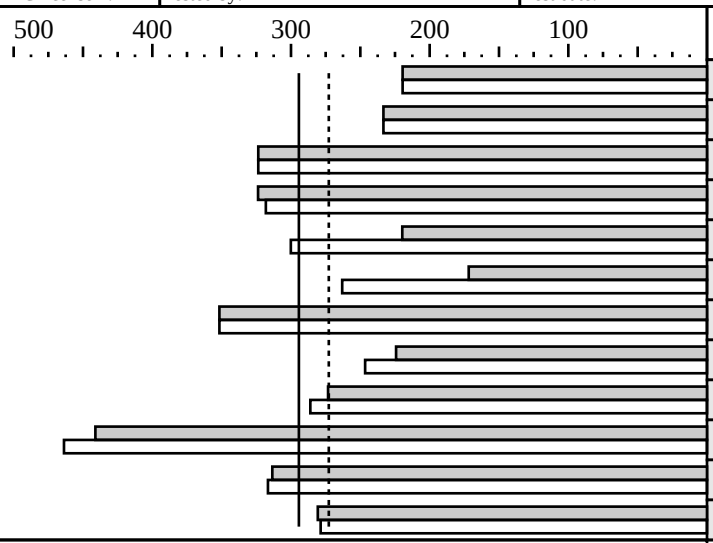
IBM Corporation

IBM eServer p5 570 (1900 MHz, 16 CPU)

SPECint_rate2000 = 294

SPECint_rate_base2000 = 273

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	32	237	220	32	237	220
175.vpr	32	223	233	32	223	233
176.gcc	32	126	324	32	126	324
181.mcf	32	206	324	32	210	318
186.crafty	32	169	220	32	124	300
197.parser	32	389	172	32	254	263
252.eon	32	137	352	32	137	352
253.perlbmk	32	298	224	32	271	247
254.gap	32	149	273	32	143	286
255.vortex	32	160	441	32	152	464
256.bzip2	32	178	313	32	176	317
300.twolf	32	397	281	32	400	279

Hardware

CPU:	POWER5
CPU MHz:	1900
FPU:	Integrated
CPU(s) enabled:	16 cores, 8 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, 8 DCM/SUT
Other Cache:	none
Memory:	64x1 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=400 -o lgpg_size=16777216 -o memory_affinity=1
   chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
   reboot -q
   export MEMORY_AFFINITY=MCM
```