



CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

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.zip	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.perlbnk	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.perlbnk: -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 -lhm -qalign=natural
```

Peak Optimization Flags

```
164.zip: -qpdf1/pdf2
```



CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

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

Notes/Tuning Information (Continued)

```

-04 -qarch=pwr4 -qtune=pwr4 -qalign=natural -D_ILS_MACROS
"CC=xlc"
175.vpr: basepeak = 1
176.gcc: basepeak = 1
181.mcf: fdpr -quiet -R3
-05 -blpdata -qfdpr
186.crafty: -qpdf1/pdf2
fdpr -quiet -R3
-04 -q64 -qfdpr -qarch=pwr3 -qtune=pwr3 -D_ILS_MACROS
197.parser: -qpdf1/pdf2
fdpr -quiet -R3
-04 -blpdata -D_ILS_MACROS -qfdpr -qarch=pwr3 -qtune=pwr3
252.eon: basepeak = 1
253.perlbnk: -qpdf1/pdf2
-05 -D_ILS_MACROS -lhmu -qalign=natural
254.gap: -qpdf1/pdf2
-04 -qarch=pwr4 -qtune=pwr4 -D_ILS_MACROS -lhmu -qalign=natural
255.vortex: -qpdf1/pdf2
-05 -lhmu -qalign=natural -D_ILS_MACROS -blpdata
256.bzip2: -qpdf1/pdf2
-05 -blpdata -qarch=pwr3 -qtune=pwr3 -qalign=natural
300.twolf: -05 -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 lpgg_regions=800 -o lpgg_size=16777216 -o memory_affinity=1
chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
reboot -q
export MEMORY_AFFINITY=MCM

```