



CINT2000 Result

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IBM Corporation

IBM eServer OpenPower 720 (1650 MHz, 4CPU, Linux)

SPECint_rate2000 = 59.8

SPECint_rate_base2000 = 58.8

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	8	269	48.2	8	270	48.2
175.vpr	8	268	48.5	8	268	48.5
176.gcc	8	140	72.8	8	140	72.8
181.mcf	8	259	64.4	8	249	67.0
186.crafty	8	173	53.7	8	164	56.5
197.parser	8	326	51.3	8	326	51.3
252.eon	8	183	65.8	8	173	69.9
253.perlbnk	8	350	47.8	8	345	48.5
254.gap	8	178	57.5	8	178	57.5
255.vortex	8	210	84.0	8	210	84.0
256.bzip2	8	221	62.9	8	219	63.6
300.twolf	8	466	59.7	8	460	60.5

Hardware

CPU: POWER5
 CPU MHz: 1650
 FPU: Integrated
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip (SMT on)
 CPU(s) orderable: 2,4
 Parallel: No
 Primary Cache: 64KBI+32KBD (on chip)/core
 Secondary Cache: 1920KB unified (on chip)/chip
 L3 Cache: 36MB unified (off chip)/DCM, 2 DCM/SUT
 Other Cache: None
 Memory: 16x1 GB
 Disk Subsystem: 1X72GB SCSI, 15K RPM
 Other Hardware: None

Software

Operating System: SUSE LINUX Enterprise Server 9 for IBM POWER
 Compiler: XL Fortran Enterprise Edition Version 9.1 for Linux
 XL C/C++ Enterprise Edition Version 7.0 for Linux
 Other Software:
 File System: ReiserFS
 System State: Single-User

Notes/Tuning Information

Integer Portability Flags:

```
gcc: -DHOST_WORDS_BIG_ENDIAN
crafty: -DLINUX_PPC32
eon: -DHAS_ERRLIST
perlbnk: -DSPEC_CPU2000_LINUX_PPC32 -DSPEC_CPU2000_NEED_BOOL -DHAS_FGETPOS -DHAS_FSETPOS
gap: -DSYS_STRING_H -DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_CALLOC_PROTO
twolf: -DHAVE_SIGNED_CHAR
```

Base Optimization Flags:

```
C:
-qpdf1/pdf2
-O5
C++:
-qpdf1/pdf2
-O5
```

Integer Peak Optimization Flags

```
164.gzip
"C invoked as xlc"
-O5 -qpdf1/pdf2
175.vpr
```



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Notes/Tuning Information (Continued)

```
basepeak=1
176.gcc
basepeak=1
181.mcf:
-04 -qarch=pwr4 -qtune=pwr4
186.crafty: -qpdf1/pdf2
-04 -qarch=pwr4 -qtune=pwr4
197.parser
basepeak=1
252.eon: -qpdf1/pdf2
-04 -qarch=pwr5 -qtune=pwr5
253.perlbnk: -qpdf1/pdf2
-04 -qarch=pwr5 -qtune=pwr5
254.gap
basepeak=1
255.vortex
basepeak=1
256.bzip2: -qpdf1/pdf2
-04 -qarch=pwr5 -qtune=pwr5
300.twolf:
"C invoked as xlc"
-04 -qarch=pwr4 -qtune=pwr4
```

C: invoked as cc except where noted as xlc

C++: invoked as xlc

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"

Stack size set to unlimited using the command "ulimit -s unlimited"

Submitted_by: Kevin Lu <kevinlu@us.ibm.com>

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