



CINT2000 Result

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IBM Corporation

IBM eServer OpenPower 720 (1650 MHz, 1CPU, Linux)

SPECint2000 = 1138

SPECint_base2000 = 1121

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
164.gzip	1400	182	769	182	769	
175.vpr	1400	141	996	141	996	
176.gcc	1100	80.0	1374	80.0	1374	
181.mcf	1800	102	1763	95.7	1881	
186.crafty	1000	97.2	1029	95.9	1043	
197.parser	1800	197	913	197	913	
252.eon	1300	112	1162	109	1192	
253.perlbmk	1800	222	812	216	832	
254.gap	1100	110	1001	110	1001	
255.vortex	1900	108	1762	108	1762	
256.bzip2	1500	147	1020	139	1077	
300.twolf	3000	225	1333	226	1327	

Hardware

CPU: POWER5
 CPU MHz: 1650
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 2 cores/chip (SMT off)
 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:
 File System: ReiserFS
 System State: Single-User

Notes/Tuning Information

Integer Portability Flags:

```
gcc: -DHOST_WORDS_BIG_ENDIAN
crafty: -DLINUX_PPC32
eon: -DHAS_ERRLIST
perlbmk: -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.perlbmk: -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-cspec.cpu2000.notes265: 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 unlimite

Three cores were deconfigured using the Hardware Monitor Console

SMT was disabled at the Linux boot prompt, using the command

smt-enabled=off

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