



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

IBM Corporation  
IBM eServer p5 550 (1650 MHz, 1 CPU)

SPECint2000 = 1248  
SPECint\_base2000 = 1200

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
164.gzip	1400	194	722	189	742	
175.vpr	1400	132	1063	132	1063	
176.gcc	1100	82.7	1330	82.7	1330	
181.mcf	1800	83.0	2169	79.1	2274	
186.crafty	1000	98.6	1014	79.4	1260	
197.parser	1800	167	1075	166	1083	
252.eon	1300	94.2	1380	94.2	1380	
253.perlbmk	1800	211	851	194	928	
254.gap	1100	103	1065	103	1065	
255.vortex	1900	100	1896	94.4	2014	
256.bzip2	1500	130	1153	130	1153	
300.twolf	3000	222	1354	217	1381	

### 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: 16x4 GB  
 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 -D_ILS_MACROS
C++: -qpdf1/pdf2
      -O5 -lhm -qalign=natural
```

### Peak Optimization Flags

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



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

IBM Corporation  
IBM eServer p5 550 (1650 MHz, 1 CPU)

SPECint2000 = 1248  
SPECint\_base2000 = 1200

SPEC license #: 11 | Tested by: IBM | Test date: Jun-2004 | Hardware Avail: Aug-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 -D_ILS_MACROS
186.crafty: -qpdf1/pdf2
fdpr -quiet -R3
-04 -q64 -qfdpr -qarch=pwr3 -qtune=pwr3 -D_ILS_MACROS
197.parser: -qpdf1/pdf2
fdpr -quiet -R3
-05 -blpdata -D_ILS_MACROS -qfdpr
252.eon: basepeak = 1
253.perlbnk: -qpdf1/pdf2
-05 -D_ILS_MACROS -lhmu -qalign=natural
254.gap: basepeak = 1
255.vortex: -qpdf1/pdf2
-05 -lhmu -qalign=natural -D_ILS_MACROS -blpdata
256.bzip2: basepeak = 1
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=400 -o lpgg_size=16777216 -o memory_affinity=1
chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
reboot -q
export MEMORY_AFFINITY=MCM

```

Three cores were deconfigured and SMT disabled at the open-firmware prompt, using the command

```
boot -s cpu=1 -s smt_off
```