



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

## IBM Corporation

IBM IntelliStation POWER 275 Workstation (1000 MHz, 1 CPU)

SPECint2000 = 683

SPECint\_base2000 = 617

SPEC license #: 11 | Tested by: IBM, Austin, TX | Test date: Jun-2003 | Hardware Avail: Jul-2003 | Software Avail: May-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
164.gzip	1400	304	460	304	460	
175.vpr	1400	233	600	233	600	
176.gcc	1100	163	676	163	676	
181.mcf	1800	180	1003	170	1056	
186.crafty	1000	187	534	151	664	
197.parser	1800	680	265	317	567	
252.eon	1300	164	792	164	792	
253.perlbmk	1800	374	482	332	542	
254.gap	1100	194	567	194	567	
255.vortex	1900	197	962	192	992	
256.bzip2	1500	226	664	220	683	
300.twolf	3000	361	831	358	839	

### Hardware

CPU: POWER4+  
CPU MHz: 1000  
FPU: Integrated  
CPU(s) enabled: 1 core, 1 chip, 1 core/chip, 1 processor chip/DCM  
CPU(s) orderable: 1 (order by # cores)  
Parallel: No  
Primary Cache: 64KBI+32KBD (on chip)  
Secondary Cache: 1536KB unified (on chip)  
L3 Cache: 8MB unified (off-chip) per DCM, 1 DCM in SUT  
Other Cache: None  
Memory: 8 GB  
Disk Subsystem: 1x36GB SCSI, 10K RPM  
Other Hardware: None

### Software

Operating System: AIX 5L V5.2  
Compiler: IBM C for AIX, Version 6.0  
IBM VisualAge C++ Professional for AIX, Version 6.0  
File System: AIX/JFS  
System State: Multi-User

## Notes/Tuning Information

### Integer 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 -lhu -qalign=natural
```

### Integer Peak Optimization Flags

164.gzip



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

IBM Corporation

IBM IntelliStation POWER 275 Workstation (1000 MHz, 1 CPU)

SPECint2000 = 683

SPECint\_base2000 = 617

SPEC license #: 11 | Tested by: IBM, Austin, TX | Test date: Jun-2003 | Hardware Avail: Jul-2003 | Software Avail: May-2003

## Notes/Tuning Information (Continued)

```
BASEPEAK = 1
"CC      = /usr/vac/bin/xlc"
175.vpr
BASEPEAK = 1
176.gcc
BASEPEAK = 1
181.mcf
fdpr -v -R3
-O5 -blpdata -D_ILS_MACROS
186.crafty
-qpdf1/pdf2
fdpr -v -R3
-O3 -q64
197.parser
-O5 -blpdata -D_ILS_MACROS
252.eon
BASEPEAK = 1
253.perlbnk
-qpdf1/pdf2
-O5 -lhmu -qalign=natural
254.gap
BASEPEAK = 1
255.vortex
-qpdf1/pdf2
-O5 -lhmu -qalign=natural
256.bzip2
-qpdf1/pdf2
-O5 -blpdata -qarch=pwr3 -qtune=pwr3
300.twolf
-qpdf1/pdf2
-O5 -lhmu -qalign=natural -blpdata
"CC      = /usr/vac/bin/xlc"
```

Approved alternate-source file 252.eon.fmax\_errno.src.alt.tar.gz was used with 252.eon for POSIX-compatibility.

DCM: Acronym for "Dual-Chip Module"  
SUT: Acronym for "System Under Test"

fpdr: Feedback directed program restructuring tool  
/usr/spec2000 filesystem mounted with no JFS log file I/O.  
APAR IY 43549 was applied to AIX to enable new hardware support.  
ulimits set to unlimited.

C: IBM VAC++ invoked as cc except where noted as xlc  
C++: IBM VAC++ invoked as xlc

Large page mode and memory affinity were set as follows:  
vmo -r -o lpgp\_regions=400 -o lpgp\_size=16777216 -o memory\_affinity=1  
chuser capabilities=CAP\_BYPASS\_RAC\_VMM,CAP\_PROPAGATE \$USER  
shutdown -r  
export MEMORY\_AFFINITY=MCM