CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

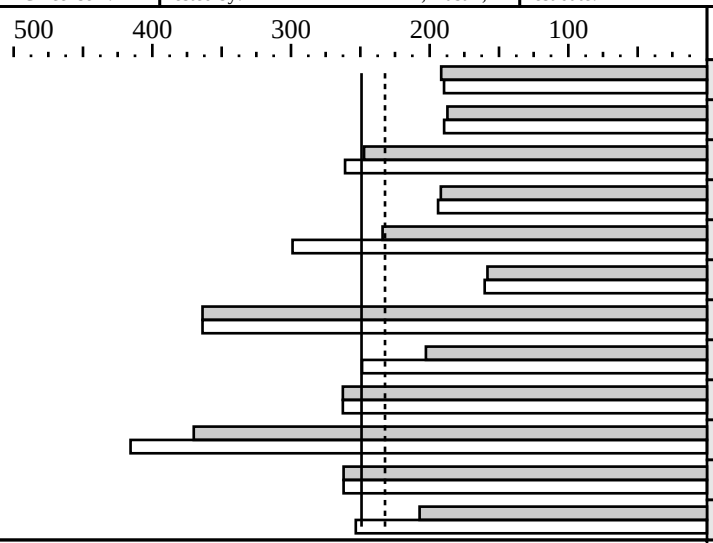
IBM Corporation

IBM eServer pSeries 690 Turbo (1300 MHz, 32 CPU)

SPECint_rate2000 = 249

SPECint_rate_base2000 = 232

SPEC license #: 11 | Tested by: IBM, Austin, TX | Test date: Apr-2002 | Hardware Avail: Dec-2001 | Software Avail: Apr-2002



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	32	271	192	32	274	190
175.vpr	32	278	187	32	274	190
176.gcc	32	165	247	32	156	261
181.mcf	32	348	192	32	345	194
186.crafty	32	159	234	32	124	299
197.parser	32	422	158	32	417	160
252.eon	32	133	364	32	133	364
253.perlbmk	32	330	203	32	269	249
254.gap	32	155	263	32	155	263
255.vortex	32	191	370	32	170	416
256.bzip2	32	212	262	32	212	262
300.twolf	32	537	207	32	440	253

Hardware

CPU:	POWER4
CPU MHz:	1300
FPU:	Integrated
CPU(s) enabled:	32 cores, 16 chips, 2 cores/chip, 4 chips/MCM
CPU(s) orderable:	1,2,3,4 (order by # MCM)
Parallel:	No
Primary Cache:	64KBI+32KBD (on chip) per core
Secondary Cache:	1440KB unified (on chip) per chip
L3 Cache:	128MB unified (off chip)/MCM,4MCM in SUT
Other Cache:	None
Memory:	128GB
Disk Subsystem:	1x9.1GB, 1x18.2GB SCSI
Other Hardware:	None

Software

Operating System:	AIX 5L V5.1
Compiler:	IBM VisualAge C++ for AIX, Version 6.0 BETA
File System:	AIX/JFS
System State:	Multi-user

Notes/Tuning Information

```
Portability Flags:
  gcc:     -ma -qlanglvl=ansi -DHOST_WORDS_BIG_ENDIAN
  crafty:  -DAIX
  eon:     -DNEED_EXPLICIT_SPECIALIZATION -I. -DNDEBUG
  perlbmk: -DSPEC_CPU2000_AIX
  gap:     -DSYS_IS_BSD -DSYS_STRING_H -DSYS_HAS_TIME_PROTO
           -DSYS_HAS_MALLOC_PROTO -DSYS_HAS_CALLOC_PROTO
  twolf:   -DHAVE_SIGNED_CHAR
Base Optimization Flags:
  C:   -qpdf1/pdf2 -O5 -blpdata -qalign=natural
  C++: -qpdf1/pdf2 -O5 -lhmu -qalign=natural
Peak Optimization Flags
  164.gzip:    CC=/usr/vac/bin/xlc, -O4 -qpdf1/pdf2 -L/usr/vac/lib
  175.vpr:     -O4 -qarch=ppc -qtune=pwr3 -blpdata, fdpr -v -R3
  176.gcc:     -qpdf1/pdf2 -O5 -lhmu -qalign=natural -L/usr/vac/lib
  181.mcf:     -O3 -lhmu -qipa=partition=large -blpdata, fdpr -v -R3
  186.crafty:  -O4 -q64, fdpr -v -R3
  197.parser:  -O5 -blpdata, fdpr -v -R3
  252.eon:     basepeak=1
  253.perlbmk: -qpdf1/pdf2 -O5 -lhmu -qalign=natural -L/usr/vac/lib
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
254.gap:     basepeak=1
255.vortex:  -qpdf1/pdf2 -O5 -lhmu -qalign=natural -L/usr/vac/lib
256.bzip2:   basepeak=1
300.twolf:   CC=/usr/vac/bin/xlc, -O5 -qpdf1/pdf2 -lhmu
             -qalign=natural -L/usr/vac/lib -blpdata
fpdr: Feedback directed program restructuring tool
/usr/scratch/spec2000 filesystem mounted with no JFS log file I/O
APAR IY28102 was applied to AIX 5L V5.1 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
The final version of the compiler will be available by Dec-2002.
Large page mode and memory affinity were set as follows:
vmtune -g 16777216 -L 1024 -y1.
SUT was operated in Standard Operation mode
```