CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

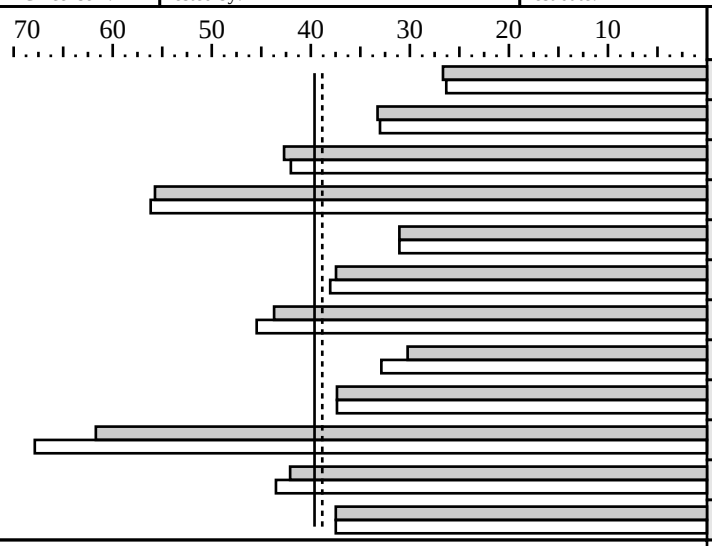
IBM Corporation

IBM IntelliStation POWER 285 Workstation (1900 MHz, 2 CPU)

SPECint_rate2000 = 39.6

SPECint_rate_base2000 = 38.8

SPEC license #: 11 | Tested by: IBM | Test date: Sep-2005 | Hardware Avail: Oct-2005 | Software Avail: Oct-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	244	26.7	4	247	26.3
175.vpr	4	195	33.3	4	197	33.0
176.gcc	4	120	42.7	4	121	42.0
181.mcf	4	150	55.7	4	149	56.2
186.crafty	4	149	31.1	4	149	31.1
197.parser	4	223	37.5	4	220	38.0
252.eon	4	138	43.7	4	133	45.5
253.perlbmk	4	276	30.2	4	254	32.9
254.gap	4	137	37.4	4	137	37.4
255.vortex	4	143	61.7	4	130	67.9
256.bzip2	4	165	42.1	4	160	43.5
300.twolf	4	371	37.5	4	371	37.5

Hardware

CPU:	POWER5+
CPU MHz:	1900
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/chip (SMT on)
CPU(s) orderable:	1,2
Parallel:	None
Primary Cache:	64KBI+32KBD (on chip)/core
Secondary Cache:	1920KB unified (on chip)/chip
L3 Cache:	36MB unified (off-chip)/DCM, 1 DCM/SUT
Other Cache:	None
Memory:	8x2GB
Disk Subsystem:	1x73GB SCSI, 15K RPM
Other Hardware:	None

Software

Operating System:	AIX 5L V5.3
Compiler:	XL C/C++ Enterprise Edition Version 8.0 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
  253.perlbmk:  -DSPEC_CPU2000_AIX
  254.gap:      -DSYS_IS_BSD -DSYS_STRING_H
                -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 -lhmu -qalign=natural

Peak Optimization Flags
  164.gzip:     -qpdf1/pdf2
                -O5 -qalign=natural -lhmu -blpdata -qfdpr -Q
                fdpr -q -O3
  175.vpr:      -qpdf1/pdf2
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
                -O5 -lhmu -blpdata -D_ILS_MACROS
  176.gcc:      -qpdf1/pdf2
                -O5 -blpdata -qalign=natural -D_ILS_MACROS
  181.mcf:      -O5 -blpdata -qfdpr
                fdpr -q -O3
  186.crafty:   basepeak=1
  197.parser:   -qpdf1/pdf2
                -O5 -blpdata -D_ILS_MACROS
  252.eon:      -qpdf1/pdf2
                -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -D_ILS_MACROS
  253.perlbmk:  -qpdf1/pdf2
                -O5 -lhmu -qalign=natural -blpdata -D_ILS_MACROS
  254.gap:      basepeak=1
  255.vortex:   -qpdf1/pdf2
                -O5 -lhmu -blpdata
  256.bzip2:    -O5 -blpdata -qfdpr -D_ILS_MACROS
                fdpr -q -O3
  300.twolf:    basepeak=1


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

The installed OS level is AIX 5L for POWER version 5.3 with the 5300-03 Recommended Maintenance package.

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"

Extended C:     IBM XL C for AIX invoked as cc
ANSI C89:       IBM XL C for AIX invoked as xlc
C++:            IBM XL C for AIX invoked as xlC

ulimits set to unlimited.
Large page mode and memory affinity were set as follows:
    vmo -r -o lgpg_regions=400 -o lgpg_size=16777216
    chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
    reboot -q
    export MEMORY_AFFINITY=MCM

The following config-file entry was used to assign each benchmark process to a core:
   submit = let "MYCPU=2*$SPECUSERNUM"; if (("$MYCPU > 3")) then let "MYCPU-=3"; fi; bindprocessor $$ $MYCPU; $command
The "bindprocessor" AIX command binds a process to a CPU core.

Use flags-description file IBM-20050919-AIX.txt.
```