CINT2000 Result

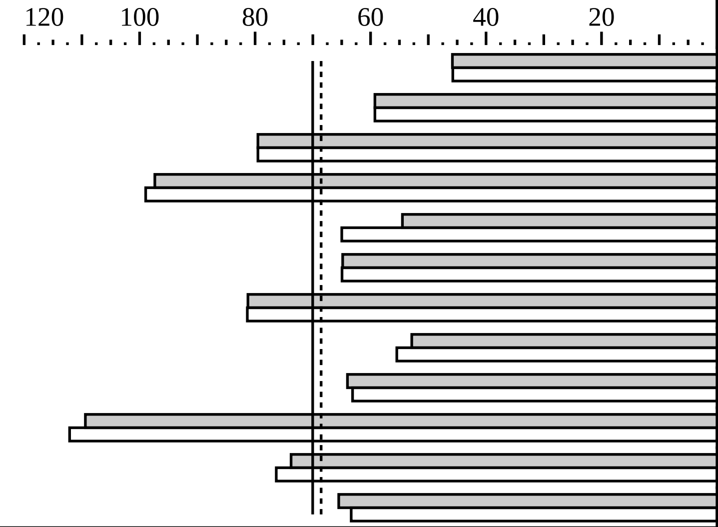
IBM Corporation

IBM System p5 505Q (1650 MHz, 4 CPU)

SPECint_rate2000 = 70.0

SPECint_rate_base2000 = 68.6

SPEC license #: 11	Tested by: IBM Austin	Test date: Jun-2006	Hardware Avail: Aug-2006	Software Avail: Aug-2006



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	8	283	45.8	8	284	45.8
175.vpr	8	219	59.2	8	219	59.2
176.gcc	8	128	79.5	8	128	79.5
181.mcf	8	172	97.4	8	169	99.0
186.crafty	8	170	54.5	8	143	65.0
197.parser	8	258	64.8	8	257	64.9
252.eon	8	148	81.2	8	148	81.3
253.perlbmk	8	316	52.9	8	301	55.5
254.gap	8	159	64.0	8	162	63.1
255.vortex	8	161	109	8	157	112
256.bzip2	8	189	73.8	8	182	76.3
300.twolf	8	425	65.5	8	439	63.4

Hardware

CPU:	POWER5+
CPU MHz:	1650
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip (SMT on)
CPU(s) orderable:	4 cores
Parallel:	No
Primary Cache:	64 KB I + 32 KB D on chip per core
Secondary Cache:	1920 KB I+D on chip per chip
L3 Cache:	36 MB I+D off chip per chip, 2 chips per SUT
Other Cache:	None
Memory:	16 GB (8x2 GB)
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 XL Fortran Enterprise Edition Version 10.1 for AIX Other Software: ESSL 4.2.0.4
File System:	AIX/JFS2
System State:	Multi-user

Notes/Tuning Information

```
Portability Flags:
  176.gcc:      -ma -DHOST_WORDS_BIG_ENDIAN
  186.crafty:   -DAIX
  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
         -O4 -qalign=natural

Peak Optimization Flags
  164.gzip:     -qpdf1/pdf2
                -O4 -qfdpr -blpdata
                fdpr -q -O3
  175.vpr:      basepeak=1
  176.gcc:      basepeak=1
```

Notes/Tuning Information (Continued)

```
    181.mcf:       -qpdf1/pdf2
                   -O5 -blpdata -qalign=natural -qhot=arraypad -qfdpr -Q -qmaxmem=-1
                   fdpr -q -O3
    186.crafty:    -qpdf1/pdf2
                   -O4 -qalign=natural -q64 -lhmu -blpdata
    197.parser:    -qpdf1/pdf2
                   -O4 -qfdpr -D_ILS_MACROS -blpdata
                   fdpr -q -O3
    252.eon:       -qpdf1/pdf2
                   -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural
    253.perlbmk:   -qpdf1/pdf2
                   -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -blpdata -lhmu
    254.gap:       -qpdf1/pdf2
                   -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -blpdata
    255.vortex:    -qpdf1/pdf2
                   -O4 -qfdpr -lhmu -blpdata
                   fdpr -q -O3
    256.bzip2:     -qpdf1/pdf2
                   -O5 -qfdpr -blpdata
                   fdpr -q -O3
    300.twolf:     -O5 -qfdpr -blpdata
                   fdpr -q -O3
```

The installed OS level is AIX 5L for POWER Version 5.3 with the 5300-05 Recommended Technology Level.
The installed C/C++ compiler is XL C/C++ Enterprise Edition Version 8.0 for AIX with the March 2006 PTF.
The installed Fortran copiler is XL Fortran Enterprise Edition Version 10.1 with the May 2006 AIX PTF.

```
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)
SUT:  Acronym for "System Under Test"
PTF:  IBM identifier for "Program Fix Level"

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=800 -o lgpg_size=16777216
    chuser capabilities=CAP_BYPASS_RAC_VMM,CAP_PROPAGATE $USER
    bosboot -aD
    shutdown -rF
    export MEMORY_AFFINITY=MCM

The following config-file entry was used to assign each benchmark process to a core:
     submit = bindprocessor $$ $SPECUSERNUM; $command
The "bindprocessor" AIX command binds a process to a CPU core.
```