CINT2000 Result

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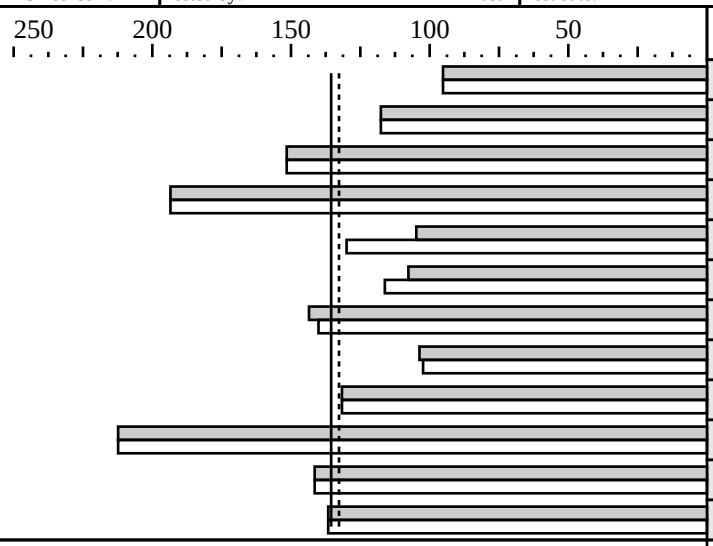
IBM Corporation

IBM System p5 550Q (1650 Mhz, 8 CPU, SLES)

SPECint_rate2000 = 136

SPECint_rate_base2000 = 133

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	16	273	95.2	16	273	95.2
175.vpr	16	221	118	16	221	118
176.gcc	16	135	152	16	135	152
181.mcf	16	173	193	16	173	193
186.crafty	16	177	105	16	143	130
197.parser	16	310	108	16	288	116
252.eon	16	168	144	16	172	140
253.perlbmk	16	322	104	16	326	102
254.gap	16	155	132	16	155	132
255.vortex	16	166	212	16	166	212
256.bzip2	16	197	141	16	197	141
300.twolf	16	408	137	16	408	137

Hardware

CPU:	POWER5+
CPU MHz:	1650
FPU:	Integrated
CPU(s) enabled:	8 cores, 4 chips, 2 cores/chip (SMT on)
CPU(s) orderable:	4,8 core
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
Other Cache:	None
Memory:	32 GB (16x2GB)
Disk Subsystem:	1x73GB SCSI, 15K RPM
Other Hardware:	None

Software

Operating System:	SLES SUSE Linux Enterprise Server 10 (ppc) VERSION = 10 w/2.6.16.21-0.8-ppc64 Linux kernel
Compiler:	IBM XL C/C++ Advanced Edition V8.0.1 for Linux
File System:	reiserfs
System State:	Multi-User

Notes/Tuning Information

```
+FDO
    Feedback directed optimization enabled by:  PASS1=-qpdf1  PASS2=-qpdf2

Integer suite
  C:   invoked as cc
  C++: invoked as xlC

Integer Portability Flags:
  176.gcc:     -DHOST_WORDS_BIG_ENDIAN
  186.crafty:  -DLINUX_PPC32
  252.eon:     -DHAS_ERRLIST
  253.perlbmk: -DSPEC_CPU2000_LINUX_PPC32 -DSPEC_CPU2000_NEED_BOOL
  254.gap:     -DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_CALLOC_PROTO
  300.twolf:   -DHAVE_SIGNED_CHAR

Additional Peak Portability Flags:
   252.eon:     -DSPEC_CPU2000_LP64    (for 64-bit compilation)
   253.perlbmk: -DSPEC_CPU2000_LP64    (for 64-bit compilation)

Integer Base Optimization Flags:
```

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Notes/Tuning Information (Continued)

```
  C:   +FDO -O5
  C++: +FDO -O5


Integer Peak Optimization Flags

164.gzip
    basepeak=1
175.vpr
    basepeak=1
176.gcc
    basepeak=1
181.mcf
    basepeak=1
186.crafty
    +FDO -O4 -qarch=pwr4 -qtune=pwr4 -q64
197.parser
    +FDO -O5 -qstaticlink
252.eon
    +FDO -O5 -q64
253.perlbmk:
    +FDO -O5 -q64
254.gap
   basepeak=1
255.vortex
    basepeak=1
256.bzip2
    basepeak=1
300.twolf
    basepeak=1


System Settings:
-- ulimit stack size set to unlimited


SMT: Acronym for 'Simultaneous Multi-Threading'.  A processor technology that allows
     the simultaneous execution of multiple thread contexts within a single processor
     core. SMT is enabled by default.

Large pages reserved as follows by root user:
    echo 480 > /proc/sys/vm/nr_hugepages
System configured with libhugetlbfs library for application access to large pages
Environment variables set as follows:
    export HUGETLB_MORECORE=yes
    export LD_PRELOAD=libhugetlbfs.so
        (export LD_PRELOAD=libhugetlbfs.so not used for --action build.)


Each process was bound to a cpu using submit= with the taskset command
   submit = taskset -p -c $SPECUSERNUM $$ >/dev/null ; $command
```