CINT2000 Result

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IBM

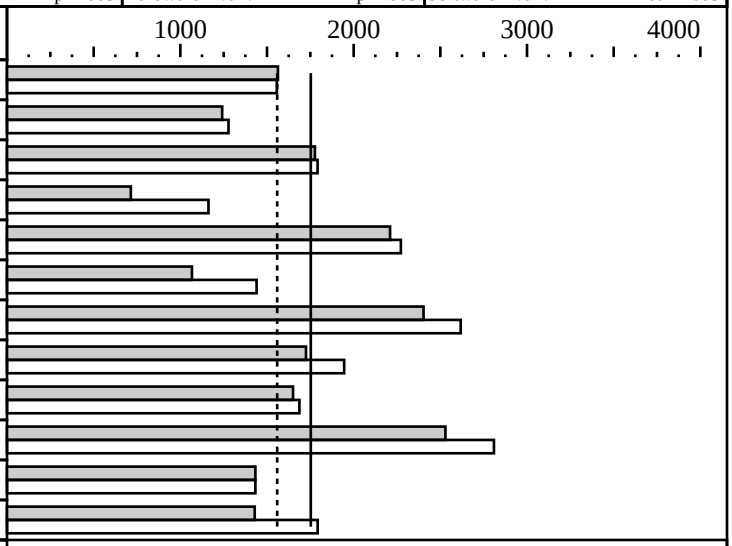
AMD Opteron LS20 for IBM eServer Blade Center (AMD Opteron (TM) 252)

SPECint2000 = 1753

SPECint_base2000 = 1559

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Apr-2005 | Hardware Avail: Apr-2005 | Software Avail: Jan-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	89.6	1563	89.9	1557
175.vpr	1400	113	1241	110	1278
176.gcc	1100	61.9	1776	61.4	1792
181.mcf	1800	252	714	155	1162
186.crafty	1000	45.2	2210	44.0	2272
197.parser	1800	169	1067	125	1440
252.eon	1300	54.1	2403	49.7	2618
253.perlbmk	1800	104	1725	92.5	1945
254.gap	1100	66.7	1650	65.2	1687
255.vortex	1900	75.1	2529	67.6	2809
256.bzip2	1500	105	1433	105	1433
300.twolf	3000	210	1429	167	1792



Hardware

CPU:	AMD Opteron 252
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1,2
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4x2048MB, DDR400
Disk Subsystem:	SCSI, 36GB 10K RPM
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.0 SLES 64 bit Kernel 2.6.5-7.139-smp (SP1)
Compiler:	PathScale EKO Compiler Suite, Release 2.0
File System:	Linux/reiserfs
System State:	Multi-user, run level 3

Notes/Tuning Information

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Tested by IBM Corporation

 +FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata

 Baseline optimization flags:
   C programs:       -Ofast +FDO
   C++ programs:     -Ofast +FDO

 Portability Flags:
   181.mcf:     -DWANT_STDC_PROTO
   186.crafty:  -DLINUX_i386
   252.eon:     -DHAS_ERRLIST -DSPEC_CPU2000_LP64
                srcalt fmax_errno
   253.perlbmk: -DSPEC_CPU2000_LINUX_I386 -DSPEC_CPU2000_NEED_BOOL
                -DSPEC_CPU2000_GLIBC22 -DSPEC_CPU2000_LP64
   254.gap:     -DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_TIME_PROTO
                -DSYS_HAS_SIGNAL_PROTO -DSYS_HAS_ANSI
                -DSYS_HAS_CALLOC_PROTO -DSPEC_CPU2000_LP64
   255.vortex:  -DSPEC_CPU2000_LP64
                srcalt=closed_files
```

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Notes/Tuning Information (Continued)

```
    300.twolf:   -DHAVE_SIGNED_CHAR

  Peak Tuning:
    164.gzip:    -O3 -ipa -m3dnow -WOPT:val=0 +FDO
    175.vpr:     -O2 -ipa -OPT:alias=disjoint
                 -CG:p2align_freq=500000 -INLINE:aggressive=on
                 -IPA:space=300:plimit=10000:callee_limit=5000:linear=on
                 +FDO
    176.gcc:     -O3 -ipa -OPT:goto=off +FDO
    181.mcf:     -O3 -ipa -IPA:field_reorder=on -m32 +FDO
    186.crafty:  -O3 -OPT:goto=off +FDO
    197.parser:  -O3 -ipa -m32 -IPA:ctype=on +FDO
    252.eon:     -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off
                 -OPT:treeheight=on -TENV:X=4:frame_pointer=off
                 -fno-exceptions -LNO:fu=10:full_unroll_outer=on
                 -IPA:plimit=4000 +FDO
    253.perlbmk: -Ofast -OPT:transform_to_memlib=off -IPA:plimit=10000 +FDO
    254.gap:     -Ofast -WOPT:aggstr=0 +FDO
    255.vortex:  -Ofast -OPT:goto=off -IPA:plimit=1800 -CG:p2align=on
                 +FDO
    256.bzip2:   basepeak=TRUE
    300.twolf:   -O2 -CG:gcm=off:p2align_freq=100000
                 -OPT:Ofast:unroll_times=8:unroll_size=256:alias=disjoint
                 -WOPT:mem_opnds=on -m32 +FDO
```