CINT2000 Result

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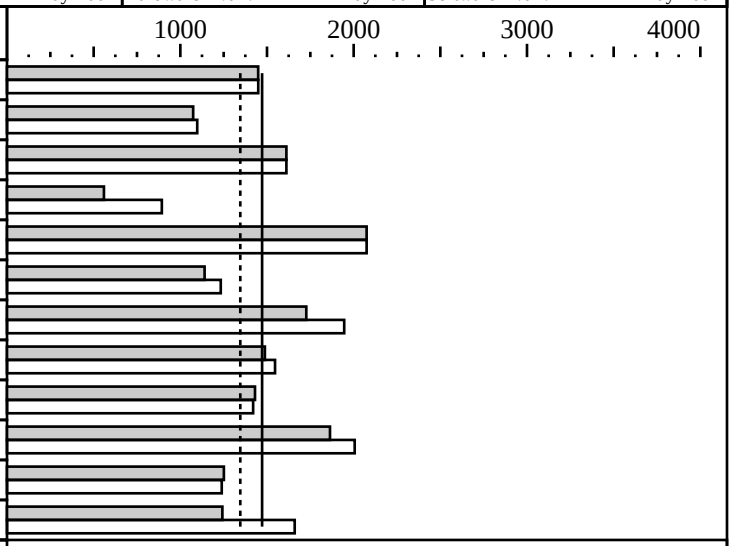
IBM Corporation
eServer 325, 2.4 GHz AMD Opteron (TM)

SPECint2000 = 1472

SPECint_base2000 = 1346

SPEC license #: 11 | Tested by: IBM, Research Triangle Park, NC | Test date: May-2004 | Hardware Avail: May-2004 | Software Avail: May-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	96.6	1449	96.6	1450
175.vpr	1400	130	1074	128	1097
176.gcc	1100	68.2	1612	68.2	1612
181.mcf	1800	322	559	202	893
186.crafty	1000	48.2	2075	48.2	2075
197.parser	1800	158	1140	146	1233
252.eon	1300	75.3	1727	66.8	1945
253.perlbmk	1800	121	1488	116	1546
254.gap	1100	76.9	1431	77.5	1420
255.vortex	1900	102	1863	94.7	2006
256.bzip2	1500	120	1251	121	1239
300.twolf	3000	241	1243	181	1660



Hardware

CPU:	AMD Opteron 250
CPU MHz:	2400
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:	4x512MB, DDR333
Disk Subsystem:	SCSI, 36GB 10K RPM
Other Hardware:	None

Software

Operating System:	SUSE Linux 8.0 SLES 64-bit Kernel 2.4.19-249 (SP2)
Compiler:	PathScale EKO Compiler Suite, Release 1.1
File System:	Linux/reiserfs
System State:	Multi-user, run level 3

Notes/Tuning Information

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

Baseline optimization flags:
  C programs:       -O3 -ipa +FDO
  C++ programs:     -Ofast +FDO

Portability Flags:
  175.vpr: -DSPEC_CPU2000
  181.mcf: -DWANT_STDC_PROTO
  186.crafty: -DLINUX_i386 -DSPEC_CPU2000
  252.eon: -DHAS_ERRLIST -DFMAX_IS_DOUBLE -DSPEC_CPU2000_LP64 -DNDEBUG
  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
  300.twolf: -DSPEC_CPU2000 -DHAVE_SIGNED_CHAR
```

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Notes/Tuning Information (Continued)

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    Peak Tuning:
    164.gzip: -O3 -ipa -WOPT:val=0 -CG:p2align_freq=10000 +FDO
    175.vpr: -O2 -ipa -OPT:alias=disjoint -LNO:prefetch_ahead=2 -CG:p2align_freq=500000
             -INLINE:aggressive=on -IPA:space=300:plimit=10000:callee_limit=5000:linear=on
             +FDO
    186.crafty: basepeak = true
    181.mcf: -O3 -static -OPT:Ofast -m32 +FDO
    197.parser: -O3 -ipa -m32 -IPA:ctype=on +FDO
    252.eon: -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off
             -OPT:unroll_times_max=16:treeheight=on -TENV:X=4:frame_pointer=off
             -fno-exceptions +FDO
    253.perlbmk: -O3 -ipa -TENV:X=3 +FDO -IPA:min_hotness=5:plimit=20000
    254.gap:  -O3 -ipa +FDO -IPA:min_hotness=7
    255.vortex: -Ofast -LNO:opt=0 -TENV:X=4
        -OPT:goto=off:unroll_analysis=off:unroll_size=0:unroll_times_max=8
        +FDO -IPA:min_hotness=14:space=500:plimit=3600
    256.bzip2: -O3 -ipa -OPT:unroll_times=8:unroll_size=256 +FDO
    300.twolf: -O2 -CG:gcm=off:p2align_freq=100000 -TENV:X=4 +FDO -m32
               -OPT:unroll_times=8:unroll_size=256:alias=disjoint:Ofast

  Notes
     BIOS build level M1E127AUS, date, May-2004.
```