CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

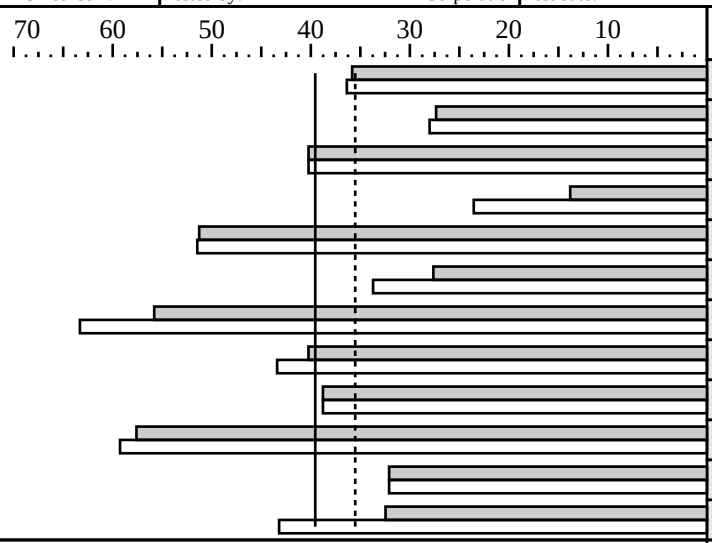
IBM

IBM eServer e326 (AMD Opteron (TM) 252)

SPECint_rate2000 = 39.6

SPECint_rate_base2000 = 35.5

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	90.7	35.8	2	89.3	36.4
175.vpr	2	119	27.4	2	116	28.0
176.gcc	2	63.4	40.2	2	63.4	40.2
181.mcf	2	302	13.8	2	177	23.5
186.crafty	2	45.3	51.3	2	45.1	51.5
197.parser	2	151	27.6	2	124	33.7
252.eon	2	54.0	55.8	2	47.6	63.3
253.perlbmk	2	104	40.2	2	96.2	43.4
254.gap	2	65.8	38.8	2	65.8	38.8
255.vortex	2	76.5	57.6	2	74.4	59.3
256.bzip2	2	108	32.1	2	108	32.1
300.twolf	2	214	32.5	2	161	43.2

Hardware

CPU:	AMD Opteron 252
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 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:	8 x 1GB, DDR400
Disk Subsystem:	SCSI, 36GB 10K RPM
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.0 SP1 SLES 64 bit Kernel 2.6.5-7.139-smp
Compiler:	PathScale EKOPath(TM) Compiler Suite, Release 2.1 AMD Core Math Library 2.5.1
File System:	Linux/reiserfs
System State:	Multi-user, run level 3

Notes/Tuning Information

```
Tested by IBM Corporation
 +FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata
 Base tuning for C programs:   -O3 -ipa +FDO
 Base tuning for C++ programs: -Ofast +FDO
 Portability flags:
   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
 Peak tuning:
   164.gzip:    -Ofast +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:     basepeak=true
   181.mcf:     -O3 -ipa -IPA:field_reorder=on -m32 +FDO
   186.crafty:  -Ofast +FDO
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
    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:pu_reorder=1 +FDO
    253.perlbmk: -O3 -ipa -IPA:plimit=10000 +FDO
    254.gap:     -O3 -ipa -OPT:transform_to_memlib=on +FDO
    255.vortex:  -Ofast -IPA:space=70:plimit=3000
                 -OPT:goto=off:unroll_analysis=off:unroll_size=0:unroll_times_max=8
    256.bzip2:   basepeak=true
    300.twolf:   -O2 -OPT:unroll_times_max=8:unroll_size=256:alias=disjoint:Ofast
                 -CG:gcm=off:p2align_freq=100000 -WOPT:mem_opnds=on -m32 +FDO
BIOS Configuration Notes
  Node Interleaving Disabled
Other Configuration Notes
   Taskset utility used to bind process to CPU(s)
```