CINT2000 Result

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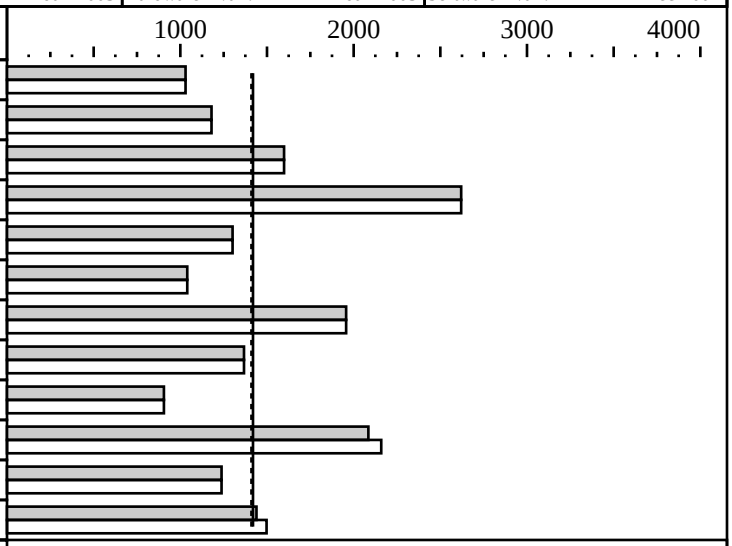
ION
I2X4 (1.6GHz Itanium 2 processor)

SPECint2000 = 1419

SPECint_base2000 = 1410

SPEC license #: 2697 | Tested by: ION | Test date: Jan-2005 | Hardware Avail: Jan-2005 | Software Avail: Dec-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	136	1030	136	1030
175.vpr	1400	119	1180	119	1180
176.gcc	1100	68.8	1598	68.8	1598
181.mcf	1800	68.7	2620	68.7	2620
186.crafty	1000	76.8	1301	76.8	1301
197.parser	1800	173	1040	173	1040
252.eon	1300	66.4	1957	66.4	1957
253.perlbmk	1800	132	1367	132	1367
254.gap	1100	122	905	122	905
255.vortex	1900	91.1	2085	88.0	2159
256.bzip2	1500	121	1238	121	1238
300.twolf	3000	208	1439	200	1497



Hardware

CPU:	Intel Itanium 2 processor
CPU MHz:	1596
FPU:	Integrated
CPU(s) enabled:	4 cores, 4 chips, 1 core/chip
CPU(s) orderable:	1-4
Parallel:	No
Primary Cache:	16KBI + 16KBD (on chip) per CPU
Secondary Cache:	256KB (I+D) (on chip) per CPU
L3 Cache:	9MB (I+D) (on chip) per CPU
Other Cache:	N/A
Memory:	32 GB (16x2048MB DDR266 DIMMS)
Disk Subsystem:	1x36GB SCSI (Seagate Cheetah 15k rpm)
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux AS 3 Update 4, 2.4.21-27.EL, IPF
Compiler:	Intel(R) C Compiler for Linux 8.1, IPF (Build 20041123) Intel(R) C++ Compiler for Linux 8.1, IPF (Build 20041123) MicroQuill SmartHeap library 7.01, IPF
File System:	ext3
System State:	Multi-user, run level 3

Notes/Tuning Information

```
Tested by ION Computer Systems
```

```
INT Baseline optimization flags:
  C Programs: -fast -auto_ilp32 +FDO
    C++ programs: -fast +FDO -cxxlib-icc
            +FDO: PASS1=-prof_gen  PASS2=-prof_use
INT Peak optimization flags:
      164.gzip: basepeak=yes
       175.vpr: basepeak=yes
       176.gcc: basepeak=yes
       181.mcf: basepeak=yes
    186.crafty: basepeak=yes
    197.parser: basepeak=yes
252.eon: basepeak=yes
   253.perlbmk: basepeak=yes
```

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Notes/Tuning Information (Continued)

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        254.gap: basepeak=yes
     255.vortex: -fast -auto_ilp32 /opt/SmartHeap_7.01/lib/libsmartheap64.a +FDO
      256.bzip2: basepeak=yes
     300.twolf: -fast -auto_ilp32 -ansi_alias /opt/SmartHeap_7.01/lib/libsmartheap64.a +FDO

Portability Flags:
  176.gcc: -DSPEC_CPU2000_LP64 -Dalloca=_builtin_alloca
  176.gcc: srcalt=64bitgcc35
  186.crafty: -DLINUX_i386
  252.eon: -DSPEC_CPU2000_LP64 -DHAS_ERRLIST
  252.eon: srcalt=stdcpp
  253.perlbmk: -DSPEC_CPU2000_LP64 -DSPEC_CPU2000_NEED_BOOL
               -DSPEC_CPU2000_LINUX_IA64 -DSPEC_CPU2000_GLIBC22
  254.gap: -DSPEC_CPU2000_LP64 -DSYS_HAS_CALLOC_PROTO -DSYS_IS_USG
           -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_TIME_PROTO -DSYS_HAS_SIGNAL_PROTO
  255.vortex: -DSPEC_CPU2000_LP64
  255.vortex: srcalt=closed_files
```