CINT2000 Result

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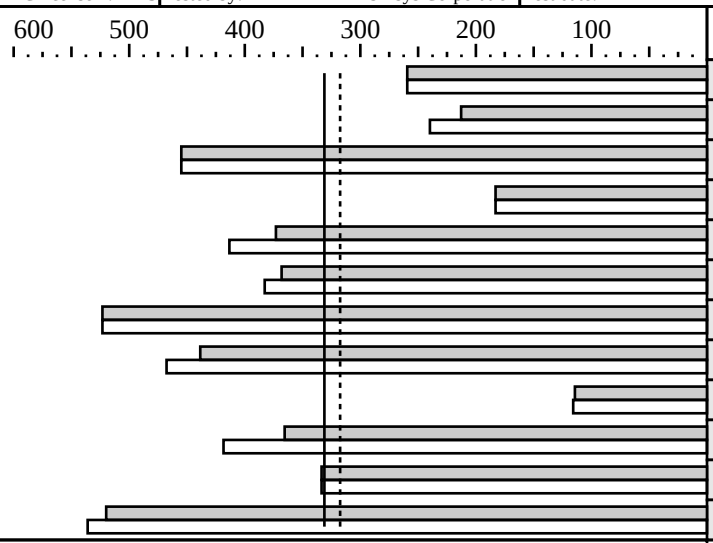
Unisys Corporation
ES7000 ORION 540 (3.0GHz Xeon MP)

SPECint_rate2000 = 331

SPECint_rate_base2000 = 317

SPEC license #: 15 | Tested by: Unisys Corporation | Test date: Jul-2004 | Hardware Avail: Apr-2004 | Software Avail: Aug-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	32	200	259	32	200	259
175.vpr	32	244	213	32	217	240
176.gcc	32	89.8	455	32	89.8	455
181.mcf	32	365	183	32	365	183
186.crafty	32	99.5	373	32	89.8	413
197.parser	32	182	368	32	175	383
252.eon	32	92.2	523	32	92.2	523
253.perlbmk	32	152	439	32	143	468
254.gap	32	357	114	32	353	116
255.vortex	32	193	365	32	169	418
256.bzip2	32	167	334	32	167	334
300.twolf	32	214	520	32	208	536

Hardware

CPU:	Intel Xeon MP(400MHz system bus)
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	32 cores, 32 chips, 1 core/chip (HT Technology disabled)
CPU(s) orderable:	16,20,24,28,32
Parallel:	No
Primary Cache:	12K(I) micro-ops + 8KB(D) on chip
Secondary Cache:	512KB (I+D) on chip
L3 Cache:	4096KB (I+D) on chip
Other Cache:	32MB L4 Cache off chip per 4 CPUs
Memory:	8 GB
Disk Subsystem:	1X36GB SCSI DISK (15K rpm)
Other Hardware:	

Software

Operating System:	Suse Linux Enterprise Server release 9.0 RC 5, 2.6.5-7.97-bigsmp
Compiler:	Intel(R) C++ Compiler for Linux 7.1 (Build 20040309Z) Intel(R) C++ Compiler for Linux 8.0 (Build 20040412Z)
File System:	ext2
System State:	Multi-user (init 3)

Notes/Tuning Information

```
Portability Flags:
      176.gcc: -Dalloca=_alloca -DUSG
   186.crafty: -DLINUX_i386
      252.eon: -DHAS_ERRLIST
      252.eon: srcalt=fmax_errno
  253.perlbmk: -DSPEC_CPU2000_LINUX_I386 -DSPEC_CPU2000_NEED_BOOL
               -DSPEC_CPU2000_GLIBC22
      254.gap: -DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_TIME_PROTO
               -DSYS_HAS_SIGNAL_PROTO -DSYS_HAS_ANSI -DSYS_HAS_CALLOC_PROTO
   255.vortex: srcalt=closed_files

Baseline tuning flags:
      C programs  : -xi     -ipo -fp_port
      CXX programs: -xW -O3 -ipo +FDO

Peak tuning flags:
      164.gzip: basepeak=yes
       175.vpr: PASS1= -xW          -prof_gen PASS2= -xW -O3 -ipo          -prof_use
       176.gcc: basepeak=yes
```

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Notes/Tuning Information (Continued)

```
      181.mcf: basepeak=yes
   186.crafty: PASS1= -xW          -prof_gen PASS2= -xW -O3 -ipo          -prof_use
   197.parser: PASS1= -xW          -prof_gen PASS2= -xW -O3 -ipo          -prof_use
      252.eon: basepeak=yes
253.perlbmk: PASS1= -xW          -prof_gen PASS2= -xW -O3 -ipo          -prof_use
      254.gap: PASS1= -xi          -prof_gen PASS2= -xi     -ipo -fp_port -prof_use
   255.vortex: PASS1= -xi          -prof_gen PASS2= -xi     -ipo -fp_port -prof_use
    256.bzip2: basepeak=yes
    300.twolf: PASS1= -xW          -prof_gen PASS2= -xW -ipo -Oa -O3      -prof_use

HyperThreading disabled in BIOS

Enabled two user settings in the BIOS:
1. "Adjacent Sector Prefetch"
2. "Prefetch Queue"
The Intel 8.0 and 7.1 compilers were invoked using their fully qualified paths;
the environment setting scripts were not used during compilation or runtime.
```