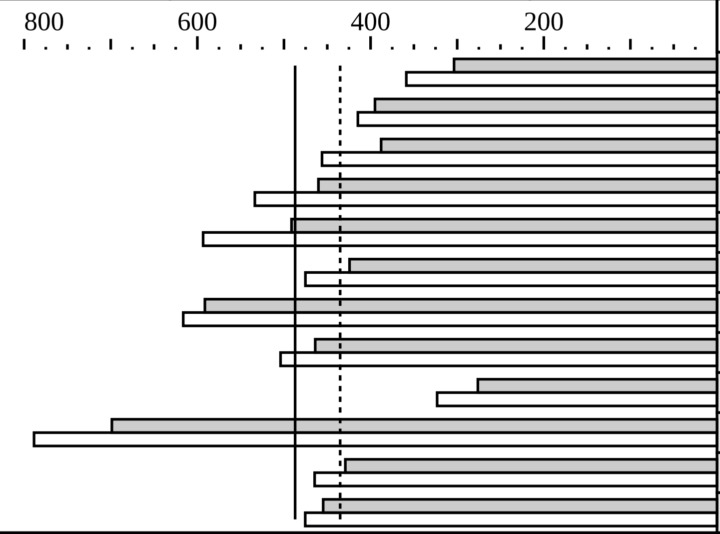
CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire E25K (36 processor)

SPECint_rate2000 = 487
SPECint_rate_base2000 = 435

SPEC license #:	6	Tested by:	Sun Microsystems	Test date:	Jun-2004	Hardware Avail:	Jul-2004	Software Avail:	Apr-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	72	385	304	72	326	359
175.vpr	72	296	395	72	282	415
176.gcc	72	237	388	72	201	456
181.mcf	72	327	460	72	282	534
186.crafty	72	170	491	72	141	593
197.parser	72	354	424	72	316	475
252.eon	72	184	591	72	176	616
253.perlbmk	72	324	464	72	298	504
254.gap	72	333	276	72	284	323
255.vortex	72	227	699	72	201	789
256.bzip2	72	292	429	72	270	465
300.twolf	72	551	455	72	527	475

Hardware

CPU:	UltraSPARC IV
CPU MHz:	1200
FPU:	Integrated
CPU(s) enabled:	72 cores, 36 chips, 2 cores/chip
CPU(s) orderable:	4-72 (order by chips in groups of 4)
Parallel:	No
Primary Cache:	32KBI+64KBD per core on chip (64KBI+128KBD on chip)
Secondary Cache:	8MB(I+D) per core off chip (16MB(I+D) off chip)
L3 Cache:	None
Other Cache:	None
Memory:	144GB 16-way interleaved
Disk Subsystem:	Sun StorEdge S1 Disk Array (2x36GB) Sun StorEdge T3 Array for the Workgroup (9x36GB)
Other Hardware:	None

Software

Operating System:	Solaris 9 04/04
Compiler:	Sun Studio 8 Sun Performance Library 8
File System:	ufs with ufs logging
System State:	Multi-User

Notes/Tuning Information

```
Compiler invocation:
  C: cc
  CXX: CC

Integer base flags:
  -fast -xipo=2 with ONESTEP=yes and feedback

Integer peak flags:
  ONESTEP=yes and feedback for all benchmarks

  164.gzip:    -xO4  -xbuiltin=%all -xtarget=native -xalias_level=std
              -xipo=2 -Wc,-Qeps:enabled=1,-Qeps:rp_filtering_margin=100
  175.vpr:     -fast -xalias_level=std -xipo=2
               -Wc,-Qeps:enabled=1,-Qeps:rp_filtering_margin=100 -lmopt -lm
  176.gcc:     -fast -xipo=2 -ll2amm
  181.mcf:     -fast -xipo=2 -xprefetch_level=2 -Wc,-Qeps:enabled=1
  186.crafty:  -fast -xinline= -xipo=2 -xalias_level=strong -W2,-Ashort_ldst
```

CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire E25K (36 processor)

SPECint_rate2000 =	487
SPECint_rate_base2000 =	435

SPEC license #: 6	Tested by: Sun Microsystems	Test date: Jun-2004	Hardware Avail: Jul-2004	Software Avail: Apr-2004

Notes/Tuning Information (Continued)

```
                 Feedback adds -xlinkopt in PASS2
   197.parser:   -fast -xipo=2 -xalias_level=strong
                 -Wc,-Qgsched-T6,-Qipa:valueprediction
   252.eon:      -fast -xipo=2 -xalias_level=compatible -noex
                 -Qoption cg -Qeps:enabled=1,-Qeps:ws=32
   253.perlbmk: -xO5 -xtarget=native -xipo -xalias_level=std -xsafe=mem
                 -Wc,-Qeps:enabled=1,-Qeps:ws=8,-Qiselect-sw_pf_tbl_th=20,
                 -Qiselect-funcalign=32,-Qicache-chbab=1
   254.gap:      -fast -xipo=2 -xalias_level=strong -xvector
                 -xprefetch_level=3 -W2,-Abcopy
   255.vortex:   -fast -xrestrict -xipo=2
                 -W2,-crit,-Ainline:recursion=1:cs=500:irs=6000
                 -Wc,-Qeps:enabled=1,-Qdepgraph-early_cross_call=1,
                 -Qiselect-funcalign=32,-Qpeep-Sh0 -ll2amm
   256.bzip2:    -fast -xipo -xalias_level=strong -xrestrict
                 -Wc,-Qeps:enabled=1
   300.twolf:    -fast -xalias_level=strong -xsafe=mem -xipo=2
                 -xprefetch=no%auto -Wc,-Qms_pipe+intdivusefp

 Feedback is done as follows, unless otherwise noted:
   fdo_pre0:     rm -rf ./feedback.profile ./SunWS_cache
   PASS1:        -xprofile=collect:./feedback
   PASS2:        -xprofile=use:./feedback

 Portability:
   176.gcc:      -Dalloca=__builtin_alloca -DHOST_WORDS_BIG_ENDIAN
   186.crafty:   -DSUN
   252.eon:      -library=iostream
   253.perlbmk: -DSPEC_CPU2000_SOLARIS
   254.gap:      -DSYS_IS_USG -DSYS_HAS_TIME_PROTO -DSYS_HAS_SIGNAL_PROTO
                 -DSYS_HAS_CALLOC_PROTO -DSYS_HAS_IOCTL_PROTO

 Shell Environments:
   Stack size set to unlimited via "ulimit -s unlimited"
   MPSSHEAP=4M
   MPSSSTACK=4M
   LD_PRELOAD=mpss.so.1

 Kernel Parameters (/etc/system):
   autoup=900
   tune_t_fsflushr=1

 Processes were bound to CPUs using submit=pbind

 The system was configured with multiple file systems.
 The O/S was installed on one disk of the Sun StorEdge S1
 Disk Array (ufs, ufs w/logging).  The benchmark was run on
 the Sun StorEdge T3 Array, using H/W Raid 5 and ufs with
 ufs logging file system.
```