



CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER850 (2160MHz)

SPECint_rate2000 = 143

SPECint_rate_base2000 = 131

SPEC license #: 19 Tested by: Fujitsu Limited Test date: Dec-2005 Hardware Avail: Feb-2006 Software Avail: Nov-2005

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	8	129	101	8	128	102
175.vpr	8	108	121	8	105	123
176.gcc	8	129	79.0	8	69.8	146
181.mcf	8	126	132	8	105	159
186.crafty	8	62.8	148	8	60.1	154
197.parser	8	142	118	8	129	129
252.eon	8	78.7	153	8	75.9	159
253.perlbnk	8	118	141	8	117	143
254.gap	8	96.4	106	8	94.8	108
255.vortex	8	69.5	254	8	67.8	260
256.bzip2	8	106	131	8	103	135
300.twolf	8	187	149	8	187	149

Hardware

CPU: SPARC64 V
CPU MHz: 2160
FPU: Integrated
CPU(s) enabled: 8 cores, 8 chips, 1 core/chip
CPU(s) orderable: 1 to 16 (increments of 1)
Parallel: None
Primary Cache: 128KBI + 128KBD on chip
Secondary Cache: 4MB(I+D) on chip
L3 Cache: None
Other Cache: None
Memory: 32GB (512MB x 64)
Disk Subsystem: 1 x 36.4GB SCSI (10000rpm)
Other Hardware: None

Software

Operating System: Solaris 10
Compiler: Sun Studio 11
File System: ufs
System State: multi user

Notes/Tuning Information

FDO: (for Sun Studio 11)
fdo_pre0=rm -rf ./feedback.profile ./SunWS_cache
PASS1=-xprofile=collect:./feedback
PASS2=-xprofile=use:./feedback

Integer base flags:
(using C compiler of Sun Studio 11)
-fast -xtarget=ultra3cu -xipo=2 ONESTEP=yes FDO
(using C++ compiler of Sun Studio 11)
-fast -xipo=2 ONESTEP=yes FDO

Integer peak flags:
(using C compiler of Sun Studio 11)
164.gzip: -xarch=v8plusb -xchip=ultra2 -xcache=128/64/2:4096/64/4
-xalias_level=std -xipo=2 -W2,-whole -xO5 ONESTEP=yes FDO
175.vpr: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
-xalias_level=std -xchip=ultra2 -xipo=2 ONESTEP=yes FDO
176.gcc: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
-xipo=2 -l12amm ONESTEP=yes FDO



CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER850 (2160MHz)

SPECint_rate2000 = 143
SPECint_rate_base2000 = 131

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: Dec-2005 | Hardware Avail: Feb-2006 | Software Avail: Nov-2005

Notes/Tuning Information (Continued)

```

181.mcf:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xprefetch_level=3 -W2,-Apf:l1list=3:noninnerl1list
              ONESTEP=yes FDO
186.crafty:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xipo=2 -xpagesize=512K -W2,-Ashort_ldst
              ONESTEP=yes FDO
197.parser:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xipo=2 -Wc,-Qgsched-T6,
              -Qgsched-trace_late=1,-Qipa:valueprediction ONESTEP=yes FDO
253.perlbnk:  -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xalias_level=std ONESTEP=yes FDO
254.gap:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xipo=2 -xprefetch_level=3 -xvector
              -W2,-Abcopy ONESTEP=yes FDO
255.vortex:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xrestrict -W2,-crit,-Ainline:recursion=1:cs=500:irs=6000
              -Wc,-Qdeprgraph-early_cross_call=1 -l12amm ONESTEP=yes FDO
256.bzip2:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xalias_level=strong -xrestrict ONESTEP=yes FDO
300.twolf:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 ONESTEP=yes FDO

```

(using C++ compiler of Sun Studio 11)

```

252.eon:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -noex -xalias_level=compatible -xipo=2
              -Qoption cg -Qeps:enabled=1,-Qeps:ws=32 ONESTEP=yes FDO

```

Portability:

```

176.gcc:      -Dalloca=__builtin_alloca -DHOST_WORDS_BIG_ENDIAN
186.crafty:   -DSUN
253.perlbnk:  -DSPEC_CPU2000_SOLARIS
254.gap:      -DSYS_IS_USG -DSYS_HAS_TIME_PROTO -DSYS_HAS_SIGNAL_PROTO
              -DSYS_HAS_CALLOC_PROTO -DSYS_HAS_IOCTL_PROTO

```

System Tunables:

```

(for /etc/system)
  set consistent_coloring=1
  set tune_t_fsflushr=86400
  set autoup=86400
  set memscrub_period_sec=172800

```

Shell Environments:

```

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

```

Processes were bound to CPUs using "submit=pbind"

Extended Interleave Mode enabled.

4 CPUs each on 2 system board. Unused CPUs have physically removed.

Sun Studio 11, posted at URL <http://www.sun.com/software/products/studio/index.xml> was used for this submission.



CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER850 (2160MHz)

SPECint_rate2000 = 143

SPECint_rate_base2000 = 131

SPEC license #: 19 Tested by: Fujitsu Limited Test date: Dec-2005 Hardware Avail: Feb-2006 Software Avail: Nov-2005

Notes/Tuning Information (Continued)

Model PRIMEPOWER850 (2160MHz) and model PRIMEPOWER900 (2160MHz) are electronically equivalent. This result was measured on model PRIMEPOWER900 (2160MHz).