SPEC® CINT2006 Result

Fujitsu

PRIMERGY RX350 S8, Intel Xeon E5-2630 v2, 2.60 GHz

SPECint®2006 = 50.4

SPECint_base2006 = 47.7

CPU2006 license: 19		**Test date:**	Sep-2013
Test sponsor: Fujitsu		**Hardware Availability:**	Oct-2013
Tested by: Fujitsu		**Software Availability:**	Sep-2013

Results by benchmark:

- 400.perlbench: 34.9 / 29.3
- 401.bzip2: 21.6 / 21.3
- 403.gcc: 30.6 / 30.0
- 429.mcf: 62.8
- 445.gobmk: 24.3 / 22.4
- 456.hmmer: 54.3
- 458.sjeng: 26.7 / 26.0
- 462.libquantum: 2440
- 464.h264ref: 50.9 / 44.3
- 471.omnetpp: 29.4 / 23.6
- 473.astar: 28.4 / 28.2
- 483.xalancbmk: 51.1

SPECint_base2006 = 47.7

SPECint2006 = 50.4

Hardware

CPU Name:	Intel Xeon E5-2630 v2
CPU Characteristics:	Intel Turbo Boost Technology up to 3.10 GHz
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	12 cores, 2 chips, 6 cores/chip, 2 threads/core
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	256 KB I+D on chip per core
L3 Cache:	15 MB I+D on chip per chip
Other Cache:	None
Memory:	256 GB (16 x 16 GB 2Rx4 PC3-12800R-11, ECC)
Disk Subsystem:	1 x SATA, 500 GB, 7200 RPM
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux Server release 6.4 (Santiago) 2.6.32-358.11.1.el6.x86_64
Compiler:	C/C++: Version 14.0.0.080 of Intel C++ Studio XE for Linux
Auto Parallel:	Yes
File System:	ext4
System State:	Run level 3 (multi-user)
Base Pointers:	32/64-bit
Peak Pointers:	32/64-bit
Other Software:	Microquill SmartHeap V10.0

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX350 S8, Intel Xeon E5-2630 v2, 2.60 GHz

$SPECint2006 =$ 50.4

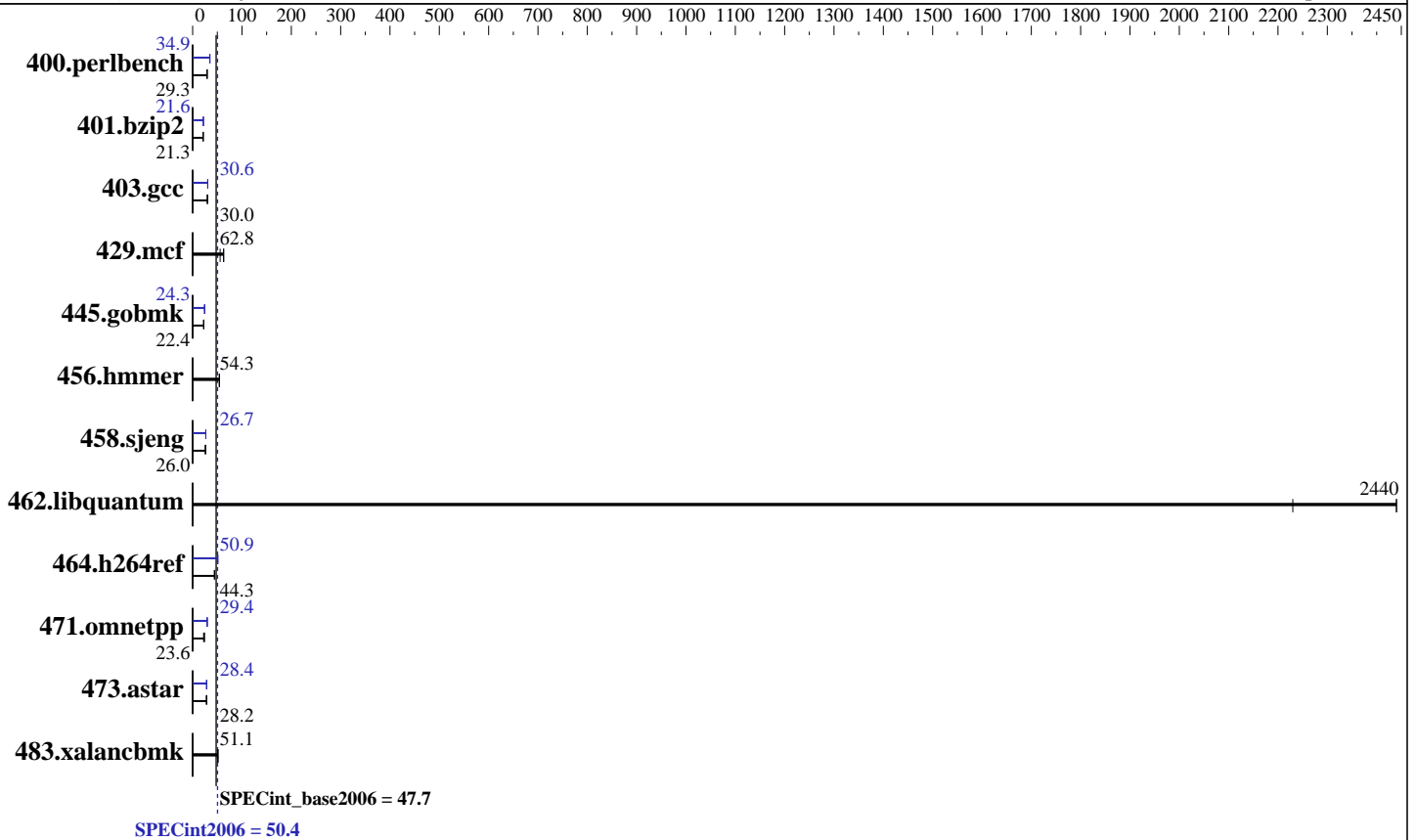$SPECint\_base2006 =$ 47.7

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

Test date: Sep-2013
Hardware Availability: Oct-2013
Software Availability: Sep-2013

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	333	29.3	334	29.2	**333**	**29.3**	279	35.0	**280**	**34.9**	280	34.9
401.bzip2	**452**	**21.3**	452	21.4	452	21.3	446	21.6	446	21.6	**446**	**21.6**
403.gcc	269	29.9	269	30.0	**269**	**30.0**	264	30.5	263	30.6	**263**	**30.6**
429.mcf	145	62.9	164	55.7	**145**	**62.8**	145	62.9	164	55.7	**145**	**62.8**
445.gobmk	467	22.5	469	22.4	**467**	**22.4**	**433**	**24.3**	433	24.3	433	24.3
456.hmmer	172	54.4	**172**	**54.3**	173	54.0	172	54.4	**172**	**54.3**	173	54.0
458.sjeng	**466**	**26.0**	466	26.0	466	26.0	454	26.7	**453**	**26.7**	453	26.7
462.libquantum	8.49	2440	9.29	2230	**8.49**	**2440**	8.49	2440	9.29	2230	**8.49**	**2440**
464.h264ref	500	44.3	**500**	**44.3**	499	44.3	**435**	**50.9**	435	50.9	435	50.9
471.omnetpp	**264**	**23.6**	262	23.9	282	22.2	212	29.5	**212**	**29.4**	212	29.4
473.astar	249	28.2	249	28.2	**249**	**28.2**	**247**	**28.4**	249	28.2	246	28.5
483.xalancbmk	**135**	**51.1**	135	51.1	135	51.2	**135**	**51.1**	135	51.1	135	51.2

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Submit Notes

The config file option 'submit' was used.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

Platform Notes

```
    BIOS configuration:
    Energy Performance = Performance
    Utilization Profile = Unbalanced
```

General Notes

```
    Environment variables set by runspec before the start of the run:
    KMP_AFFINITY = "granularity=fine,compact,1,0"
    LD_LIBRARY_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64:/SPECcpu2006/sh"
    OMP_NUM_THREADS = "12"

    Binaries compiled on a system with 1x Core i7-860 CPU + 8GB
    memory using RedHat EL 6.4
    Transparent Huge Pages enabled with:
    echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
    runspec command invoked through numactl i.e.:
    numactl --interleave=all runspec <etc>
    This result was measured on the PRIMERGY RX350 S8. The PRIMERGY RX350 S8
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX350 S8, Intel Xeon E5-2630 v2, 2.60 GHz

$SPECint2006 =$ 50.4

$SPECint\_base2006 =$ 47.7

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

Test date: Sep-2013
Hardware Availability: Oct-2013
Software Availability: Sep-2013

General Notes (Continued)

and the PRIMERGY TX300 S8 are electronically equivalent.
For information about Fujitsu please visit: http://www.fujitsu.com

Base Compiler Invocation

C benchmarks:
    icc -m64

C++ benchmarks:
    icpc -m64

Base Portability Flags

    400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
        401.bzip2: -DSPEC_CPU_LP64
          403.gcc: -DSPEC_CPU_LP64
          429.mcf: -DSPEC_CPU_LP64
       445.gobmk: -DSPEC_CPU_LP64
       456.hmmer: -DSPEC_CPU_LP64
        458.sjeng: -DSPEC_CPU_LP64
    462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
       464.h264ref: -DSPEC_CPU_LP64
      471.omnetpp: -DSPEC_CPU_LP64
        473.astar: -DSPEC_CPU_LP64
    483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
    -xAVX -ipo -O3 -no-prec-div -parallel -opt-prefetch -auto-p32

C++ benchmarks:
    -xAVX -ipo -O3 -no-prec-div -opt-prefetch -auto-p32 -Wl,-z,muldefs
    -L/sh -lsmartheap64

Base Other Flags

C benchmarks:

        403.gcc: -Dalloca=_alloca

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX350 S8, Intel Xeon E5-2630 v2, 2.60 GHz

SPECint2006 =   50.4

SPECint_base2006 =   47.7

CPU2006 license: 19	**Test date:** Sep-2013
Test sponsor: Fujitsu	**Hardware Availability:** Oct-2013
Tested by: Fujitsu	**Software Availability:** Sep-2013

Peak Compiler Invocation

C benchmarks (except as noted below):
    `icc  -m64`

    400.perlbench: `icc -m32`

     445.gobmk: `icc -m32`

    464.h264ref: `icc -m32`

C++ benchmarks (except as noted below):
    `icpc -m64`

     471.omnetpp: `icpc -m32`

Peak Portability Flags

        400.perlbench: `-DSPEC_CPU_LINUX_IA32`
          401.bzip2: `-DSPEC_CPU_LP64`
           403.gcc: `-DSPEC_CPU_LP64`
           429.mcf: `-DSPEC_CPU_LP64`
         456.hmmer: `-DSPEC_CPU_LP64`
          458.sjeng: `-DSPEC_CPU_LP64`
    462.libquantum: `-DSPEC_CPU_LP64 -DSPEC_CPU_LINUX`
          473.astar: `-DSPEC_CPU_LP64`
      483.xalancbmk: `-DSPEC_CPU_LP64 -DSPEC_CPU_LINUX`

Peak Optimization Flags

C benchmarks:

    400.perlbench: `-xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)`
                `-no-prec-div(pass 2) -prof-use(pass 2) -opt-prefetch`
                `-ansi-alias`

      401.bzip2: `-xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)`
                `-no-prec-div -prof-use(pass 2) -auto-ilp32 -opt-prefetch`
                `-ansi-alias`

       403.gcc: `-xAVX -ipo -O3 -no-prec-div -inline-calloc`
                `-opt-malloc-options=3 -auto-ilp32`

       429.mcf: `basepeak = yes`

     445.gobmk: `-xAVX(pass 2) -prof-gen(pass 1) -prof-use(pass 2)`
                `-ansi-alias`

Fujitsu

PRIMERGY RX350 S8, Intel Xeon E5-2630 v2, 2.60 GHz

$SPECint2006 =$ 50.4

$SPECint\_base2006 =$ 47.7

CPU2006 license: 19		**Test date:**	Sep-2013
Test sponsor: Fujitsu		**Hardware Availability:**	Oct-2013
Tested by: Fujitsu		**Software Availability:**	Sep-2013

Peak Optimization Flags (Continued)

456.hmmer: basepeak = yes

458.sjeng: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll4

462.libquantum: basepeak = yes

464.h264ref: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll2
-ansi-alias

C++ benchmarks:

471.omnetpp: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2)
-opt-ra-region-strategy=block   -ansi-alias
-Wl,-z,muldefs -L/sh -lsmartheap

473.astar: -xAVX -ipo -O3 -no-prec-div -opt-prefetch -auto-p32
-Wl,-z,muldefs -L/sh -lsmartheap64

483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.html
http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20130924.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.xml
http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20130924.xml

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX350 S8, Intel Xeon E5-2630 v2, 2.60 GHz

SPECint2006 = 50.4

SPECint_base2006 = 47.7

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

Test date: Sep-2013
Hardware Availability: Oct-2013
Software Availability: Sep-2013

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.2.
Report generated on Thu Jul 24 17:02:02 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 9 October 2013.