SPEC® CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 6027R-N3RFT+ (X9DRW-3TF+, Intel E5-2650)

$SPECint^®_rate2006 = $ 536
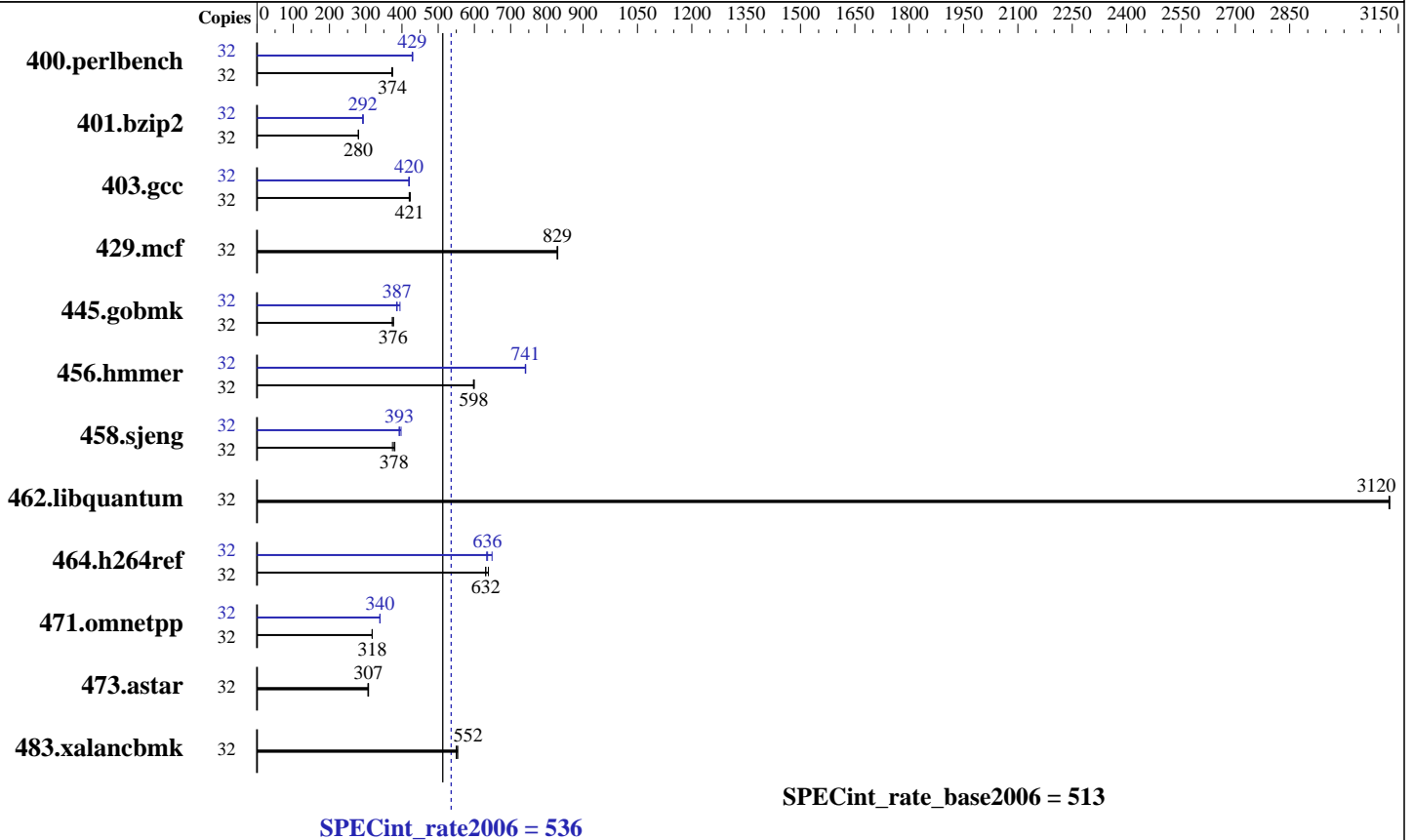
$SPECint_rate_base2006 = $ 513

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Mar-2012

Hardware Availability: Mar-2012

Software Availability: Oct-2011

Benchmark	Copies	base/peak
400.perlbench	32	429 / 374
401.bzip2	32	292 / 280
403.gcc	32	420 / 421
429.mcf	32	829
445.gobmk	32	387 / 376
456.hmmer	32	741 / 598
458.sjeng	32	393 / 378
462.libquantum	32	3120
464.h264ref	32	636 / 632
471.omnetpp	32	340 / 318
473.astar	32	307
483.xalancbmk	32	552

SPECint_rate_base2006 = 513

SPECint_rate2006 = 536

Hardware

CPU Name: Intel Xeon E5-2650

CPU Characteristics: Intel Turbo Boost Technology up to 2.80 GHz

CPU MHz: 2000

FPU: Integrated

CPU(s) enabled: 16 cores, 2 chips, 8 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: 20 MB I+D on chip per chip

Other Cache: None

Memory: 128 GB (16 x 8 GB 2Rx4 PC3-12800R-11, ECC)

Disk Subsystem: 1 x 1 TB SATA II, 7200 RPM

Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server Release 6.1, Kernel 2.6.32-131.0.15.el6.x86_64

Compiler: C/C++: Version 12.1.0.225 of Intel C++ Studio XE for Linux

Auto Parallel: No

File System: ext4

System State: Run level 3 (multi-user)

Base Pointers: 32-bit

Peak Pointers: 32/64-bit

Other Software: Microquill SmartHeap V9.01

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 6027R-N3RFT+ (X9DRW-3TF+, Intel E5-2650)

SPECint_rate2006 = 536

SPECint_rate_base2006 = 513

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Mar-2012
Hardware Availability: Mar-2012
Software Availability: Oct-2011

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	32	836	374	**836**	**374**	840	372	32	730	428	**730**	**429**	727	430
401.bzip2	32	1104	280	**1104**	**280**	1102	280	32	**1057**	**292**	1057	292	1055	293
403.gcc	32	613	420	609	423	**612**	**421**	32	**614**	**420**	615	419	613	420
429.mcf	32	**352**	**829**	352	830	352	828	32	**352**	**829**	352	830	352	828
445.gobmk	32	900	373	891	377	**894**	**376**	32	851	395	870	386	**868**	**387**
456.hmmer	32	498	600	500	597	**499**	**598**	32	403	740	**403**	**741**	403	741
458.sjeng	32	1036	374	**1023**	**378**	1018	380	32	**986**	**393**	986	393	974	398
462.libquantum	32	212	3120	212	3130	**212**	**3120**	32	212	3120	212	3130	**212**	**3120**
464.h264ref	32	**1121**	**632**	1109	639	1123	631	32	**1113**	**636**	1092	649	1117	634
471.omnetpp	32	629	318	**629**	**318**	629	318	32	590	339	589	340	**589**	**340**
473.astar	32	734	306	730	308	**732**	**307**	32	734	306	730	308	**732**	**307**
483.xalancbmk	32	**400**	**552**	402	550	398	554	32	**400**	**552**	402	550	398	554

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

Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes

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

General Notes

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/usr/cpu2006/libs/32:/usr/cpu2006/libs/64"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RHEL5.5
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
Filesystem page cache cleared with:
echo 1>   /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>

SPEC CINT2006 Result

Supermicro

SuperServer 6027R-N3RFT+ (X9DRW-3TF+, Intel E5-2650)

SPECint_rate2006 =   536

SPECint_rate_base2006 = 513

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Mar-2012

Hardware Availability: Mar-2012

Software Availability: Oct-2011

Base Compiler Invocation

C benchmarks:
        icc   -m32

C++ benchmarks:
        icpc -m32

Base Portability Flags

        400.perlbench: -DSPEC_CPU_LINUX_IA32
        462.libquantum: -DSPEC_CPU_LINUX
        483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
        -xAVX -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3

C++ benchmarks:
        -xAVX -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3
        -Wl,-z,muldefs -L/smartheap -lsmartheap

Base Other Flags

C benchmarks:

        403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
        icc   -m32

    400.perlbench: icc -m64

        401.bzip2: icc -m64

    456.hmmer: icc -m64

        458.sjeng: icc -m64

C++ benchmarks:
        icpc -m32

SPEC CINT2006 Result

Supermicro

SuperServer 6027R-N3RFT+ (X9DRW-3TF+, Intel E5-2650)

SPECint_rate2006 =   536

SPECint_rate_base2006 = 513

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Mar-2012

Hardware Availability: Mar-2012

Software Availability: Oct-2011

Peak Portability Flags

```
    400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
        401.bzip2: -DSPEC_CPU_LP64
       456.hmmer: -DSPEC_CPU_LP64
        458.sjeng: -DSPEC_CPU_LP64
   462.libquantum: -DSPEC_CPU_LINUX
    483.xalancbmk: -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) -auto-ilp32

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

          403.gcc: -xAVX -ipo -O3 -no-prec-div

          429.mcf: basepeak = yes

        445.gobmk: -xAVX(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
                   -ansi-alias -opt-mem-layout-trans=3

       456.hmmer: -xAVX -ipo -O3 -no-prec-div -unroll2 -auto-ilp32

        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
                   -auto-ilp32

   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) -ansi-alias
                   -opt-ra-region-strategy=block -Wl,-z,muldefs
                   -L/smartheap -lsmartheap

        473.astar: basepeak = yes

    483.xalancbmk: basepeak = yes
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 6027R-N3RFT+ (X9DRW-3TF+, Intel E5-2650)

SPECint_rate2006 = 536

SPECint_rate_base2006 = 513

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Mar-2012
Hardware Availability: Mar-2012
Software Availability: Oct-2011

Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml

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 04:49:04 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 9 May 2012.