



# SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

## Supermicro

SuperServer 6018R-MT  
(X10DRL-i , Intel Xeon E5-2667 v3)

SPECint®2006 = 64.8

SPECint\_base2006 = 61.7

CPU2006 license: 001176

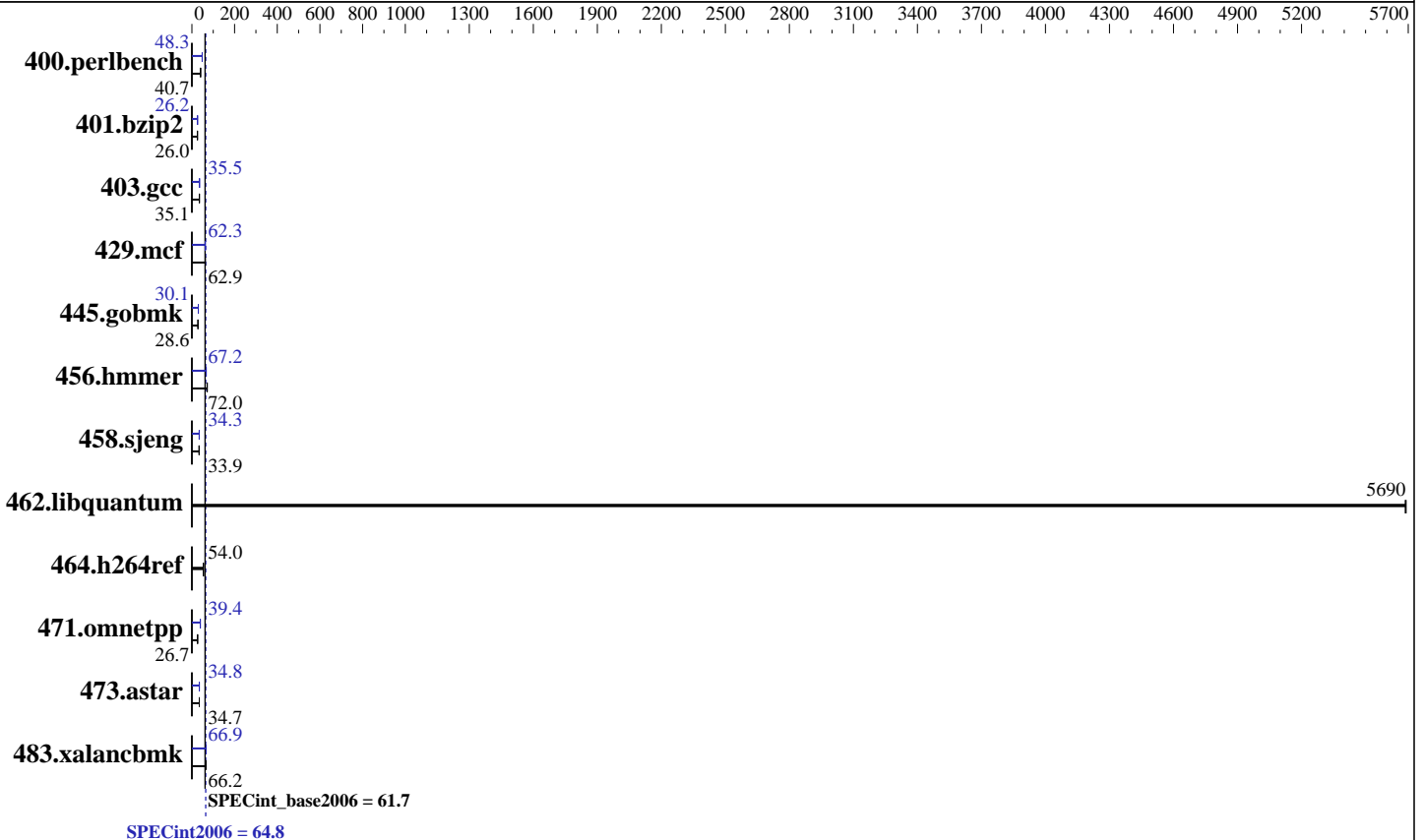
Test sponsor: Supermicro

Tested by: Supermicro

Test date: Dec-2014

Hardware Availability: Nov-2014

Software Availability: Sep-2013



### Hardware

CPU Name: Intel Xeon E5-2667 v3  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz  
 CPU MHz: 3200  
 FPU: Integrated  
 CPU(s) enabled: 16 cores, 2 chips, 8 cores/chip  
 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 (8 x 16 GB 2Rx4 PC4-2133P-R)  
 Disk Subsystem: 1 x 500 GB SATA III, 7200 RPM  
 Other Hardware: None

### Software

Operating System: Red Hat Enterprise Linux Server release 6.4, Kernel 2.6.32-431.el6.17.1.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 2006-2015 Standard Performance Evaluation Corporation

## Supermicro

SuperServer 6018R-MT  
(X10DRL-i , Intel Xeon E5-2667 v3)

SPECint2006 = **64.8**

SPECint\_base2006 = **61.7**

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

Test date: Dec-2014  
Hardware Availability: Nov-2014  
Software Availability: Sep-2013

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	240	40.7	<b>240</b>	<b>40.7</b>	240	40.7	<b>202</b>	<b>48.3</b>	202	48.3	202	48.3
401.bzip2	<b>371</b>	<b>26.0</b>	371	26.0	371	26.0	368	26.3	<b>368</b>	<b>26.2</b>	368	26.2
403.gcc	229	35.2	<b>229</b>	<b>35.1</b>	230	35.0	<b>227</b>	<b>35.5</b>	227	35.4	226	35.6
429.mcf	146	62.5	<b>145</b>	<b>62.9</b>	145	62.9	144	63.4	146	62.3	<b>146</b>	<b>62.3</b>
445.gobmk	368	28.5	<b>367</b>	<b>28.6</b>	367	28.6	349	30.1	348	30.1	<b>348</b>	<b>30.1</b>
456.hammer	<b>130</b>	<b>72.0</b>	131	71.0	130	72.0	139	67.2	140	66.8	<b>139</b>	<b>67.2</b>
458.sjeng	357	33.9	<b>357</b>	<b>33.9</b>	357	33.9	<b>352</b>	<b>34.3</b>	352	34.4	353	34.3
462.libquantum	3.64	5690	3.64	5690	<b>3.64</b>	<b>5690</b>	3.64	5690	3.64	5690	<b>3.64</b>	<b>5690</b>
464.h264ref	409	54.1	<b>410</b>	<b>54.0</b>	410	54.0	409	54.1	<b>410</b>	<b>54.0</b>	410	54.0
471.omnetpp	235	26.6	234	26.7	<b>234</b>	<b>26.7</b>	157	39.7	159	39.4	<b>159</b>	<b>39.4</b>
473.astar	203	34.6	<b>203</b>	<b>34.7</b>	203	34.7	201	34.8	202	34.7	<b>202</b>	<b>34.8</b>
483.xalancbmk	104	66.1	<b>104</b>	<b>66.2</b>	104	66.3	103	66.9	<b>103</b>	<b>66.9</b>	104	66.6

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 settings:  
 Enforce POR = Disable  
 Memory Frequency = 2133  
 Hyper-Threading (ALL) = Disable  
 Memory info from dmidecode is incorrect. There are only 8x 16GB Samsung memory DIMMs installed  
 Sysinfo program /root/cpu2006/config/sysinfo.rev6818  
 \$Rev: 6818 \$ \$Date:: 2012-07-17 # \$ e86d102572650a6e4d596a3cee98f191  
 running on 23-125.hnet Tue Dec 16 17:51:06 2014

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see: <http://www.spec.org/cpu2006/Docs/config.html#sysinfo>

From /proc/cpuinfo  
 model name : Intel(R) Xeon(R) CPU E5-2667 v3 @ 3.20GHz  
 2 "physical id"s (chips)  
 16 "processors"  
 cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with  
 Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

## Supermicro

SuperServer 6018R-MT  
(X10DRL-i , Intel Xeon E5-2667 v3)

SPECint2006 = 64.8

SPECint\_base2006 = 61.7

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

Test date: Dec-2014  
Hardware Availability: Nov-2014  
Software Availability: Sep-2013

### Platform Notes (Continued)

```
caution.)
cpu cores : 8
siblings  : 8
physical 0: cores 0 1 2 3 4 5 6 7
physical 1: cores 0 1 2 3 4 5 6 7
cache size : 20480 KB
```

```
From /proc/meminfo
MemTotal:      132051032 kB
HugePages_Total:      0
Hugepagesize:    2048 kB
```

```
/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.4 (Santiago)
```

```
From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.4 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.4 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server
```

```
uname -a:
Linux 23-125.hnet 2.6.32-431.17.1.el6.x86_64 #1 SMP Fri Apr 11 17:27:00 EDT
2014 x86_64 x86_64 x86_64 GNU/Linux
```

```
run-level 3 Dec 16 15:20
```

```
SPEC is set to: /root/cpu2006
Filesystem      Type      Size      Used Avail Use% Mounted on
/dev/sda3        ext4      260G      13G   234G   6% /
```

```
Additional information from dmidecode:
BIOS American Megatrends Inc. 1.0a 08/01/2014
Memory:
8x 16 GB
8x Samsung (date:14/16) M393A2G40DB0-CPB 16 GB 2133 MHz 2 rank
```

(End of data from sysinfo program)

### General Notes

Environment variables set by runspec before the start of the run:  
KMP\_AFFINITY = "granularity=fine,scatter"  
LD\_LIBRARY\_PATH = "/root/cpu2006/libs/32:/root/cpu2006/libs/64:/root/cpu2006/sh"  
OMP\_NUM\_THREADS = "16"

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>



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

## Supermicro

SuperServer 6018R-MT  
(X10DRL-i , Intel Xeon E5-2667 v3)

SPECint2006 = 64.8

SPECint\_base2006 = 61.7

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

Test date: Dec-2014  
Hardware Availability: Nov-2014  
Software Availability: Sep-2013

## 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:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -opt-prefetch -auto-p32  
  
C++ benchmarks:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch -auto-p32  
-Wl,-z,muldefs -L/sh -lsmartheap64

## Base Other Flags

C benchmarks:  
403.gcc: -Dalloca=\_alloca

## Peak Compiler Invocation

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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

## Supermicro

SuperServer 6018R-MT  
(X10DRL-i , Intel Xeon E5-2667 v3)

**SPECint2006 = 64.8**

**SPECint\_base2006 = 61.7**

**CPU2006 license:** 001176

**Test sponsor:** Supermicro

**Tested by:** Supermicro

**Test date:** Dec-2014

**Hardware Availability:** Nov-2014

**Software Availability:** Sep-2013

## Peak Compiler Invocation (Continued)

400.perlbench: `icc -m32`

445.gobmk: `icc -m32`

C++ benchmarks (except as noted below):

`icpc -m32`

473.astar: `icpc -m64`

## 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`  
464.h264ref: `-DSPEC_CPU_LP64`  
473.astar: `-DSPEC_CPU_LP64`  
483.xalancbmk: `-DSPEC_CPU_LINUX`

## Peak Optimization Flags

C benchmarks:

400.perlbench: `-xCORE-AVX2(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: `-xCORE-AVX2(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: `-xCORE-AVX2 -ipo -O3 -no-prec-div -inline-calloc  
-opt-malloc-options=3 -auto-ilp32`

429.mcf: `-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel  
-opt-prefetch -auto-p32`

445.gobmk: `-xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)  
-ansi-alias`

456.hmmer: `-xCORE-AVX2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32  
-ansi-alias`

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

## Supermicro

SuperServer 6018R-MT  
(X10DRL-i , Intel Xeon E5-2667 v3)

**SPECint2006 = 64.8**

**SPECint\_base2006 = 61.7**

**CPU2006 license:** 001176

**Test sponsor:** Supermicro

**Tested by:** Supermicro

**Test date:** Dec-2014

**Hardware Availability:** Nov-2014

**Software Availability:** Sep-2013

## Peak Optimization Flags (Continued)

458.sjeng: -xCORE-AVX2(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: basepeak = yes

C++ benchmarks:

471.omnetpp: -xCORE-AVX2(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: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch  
-auto-p32 -Wl,-z,muldefs -L/sh -lsmartheap64

483.xalancbmk: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch  
-ansi-alias -Wl,-z,muldefs -L/sh -lsmartheap

## 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/Supermicro-Platform-Settings-V1.2-revD.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/Supermicro-Platform-Settings-V1.2-revD.xml>

SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester.  
For other inquiries, please contact [webmaster@spec.org](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.2.  
Report generated on Wed Jan 14 10:25:51 2015 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 13 January 2015.