



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1280 v2, 3.60 GHz

**SPECint®\_rate2006 = 200**

**SPECint\_rate\_base2006 = 192**

CPU2006 license: 19

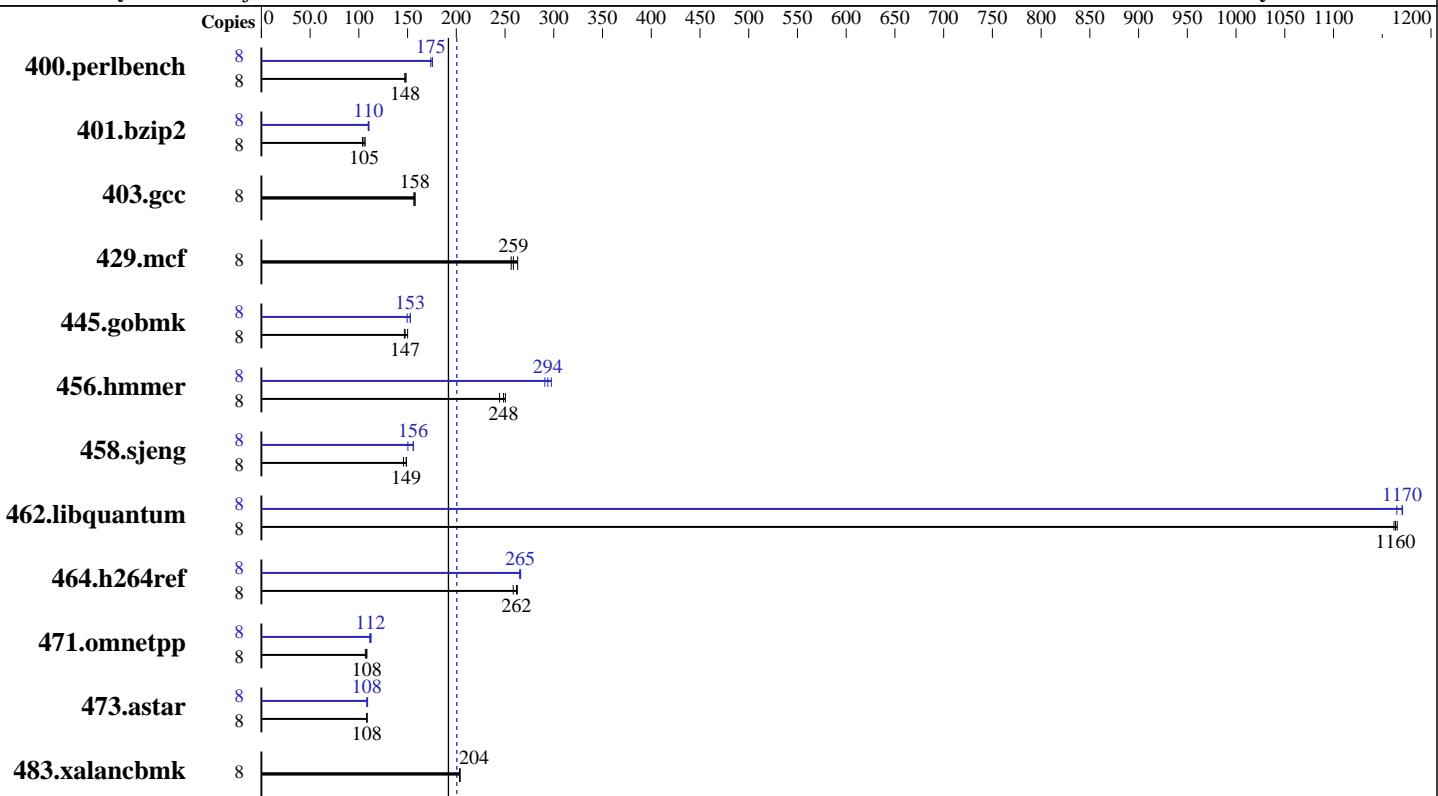
Test sponsor: Fujitsu

Tested by: Fujitsu

**Test date:** Apr-2012

**Hardware Availability:** May-2012

**Software Availability:** Feb-2012



**SPECint\_rate\_base2006 = 192**

**SPECint\_rate2006 = 200**

### Hardware

CPU Name: Intel Xeon E3-1280 v2  
CPU Characteristics: Intel Turbo Boost Technology up to 4.0 GHz  
CPU MHz: 3600  
FPU: Integrated  
CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip, 2 threads/core  
CPU(s) orderable: 1 chip  
Primary Cache: 32 KB I + 32 KB D on chip per core  
Secondary Cache: 256 KB I+D on chip per core  
L3 Cache: 8 MB I+D on chip per chip  
Other Cache: None  
Memory: 16 GB (2 x 8 GB 2Rx8 PC3-12800E-11, ECC)  
Disk Subsystem: 1 x SATA, 500 GB, 7200 RPM  
Other Hardware: None

### Software

Operating System: Red Hat Enterprise Linux Server release 6.2 (Santiago)  
Compiler: 2.6.32-220.el6.x86\_64  
C/C++: Version 12.1.0.293 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 V10.0



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1280 v2, 3.60 GHz

**SPECint\_rate2006 = 200**

**SPECint\_rate\_base2006 = 192**

CPU2006 license: 19

Test date: Apr-2012

Test sponsor: Fujitsu

Hardware Availability: May-2012

Tested by: Fujitsu

Software Availability: Feb-2012

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	526	148	531	147	<b>530</b>	<b>148</b>	8	<b>446</b>	<b>175</b>	445	175	450	174
401.bzip2	8	744	104	725	106	<b>733</b>	<b>105</b>	8	<b>704</b>	<b>110</b>	<b>702</b>	<b>110</b>	699	110
403.gcc	8	412	156	409	158	<b>409</b>	<b>158</b>	8	412	156	409	158	<b>409</b>	<b>158</b>
429.mcf	8	277	263	<b>282</b>	<b>259</b>	285	256	8	277	263	<b>282</b>	<b>259</b>	285	256
445.gobmk	8	<b>569</b>	<b>147</b>	572	147	559	150	8	561	150	549	153	<b>549</b>	<b>153</b>
456.hammer	8	298	250	305	244	<b>301</b>	<b>248</b>	8	257	291	<b>254</b>	<b>294</b>	251	298
458.sjeng	8	664	146	651	149	<b>651</b>	<b>149</b>	8	644	150	<b>621</b>	<b>156</b>	621	156
462.libquantum	8	<b>142</b>	<b>1160</b>	142	1170	143	1160	8	142	1170	142	1170	<b>142</b>	<b>1170</b>
464.h264ref	8	674	263	<b>676</b>	<b>262</b>	685	258	8	<b>667</b>	<b>265</b>	668	265	665	266
471.omnetpp	8	<b>463</b>	<b>108</b>	462	108	469	107	8	450	111	<b>446</b>	<b>112</b>	444	113
473.astar	8	518	108	<b>519</b>	<b>108</b>	519	108	8	<b>518</b>	<b>108</b>	515	109	519	108
483.xalancbmk	8	271	204	<b>271</b>	<b>204</b>	271	203	8	271	204	<b>271</b>	<b>204</b>	271	203

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 = "/SPECcpu2006/lib\$32:/SPECcpu2006/lib\$64"

Binaries compiled on a system with 2x E5-2650 CPU + 96 GB memory using RHEL6.2

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 TX140 S1p. The PRIMERGY TX140 S1p and the PRIMERGY TX120 S3p are electronically equivalent.

For information about Fujitsu please visit: <http://www.fujitsu.com>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1280 v2, 3.60 GHz

**SPECint\_rate2006 = 200**

**SPECint\_rate\_base2006 = 192**

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Apr-2012

Hardware Availability: May-2012

Software Availability: Feb-2012

## 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:

`-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3`

C++ benchmarks:

`-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3  
-Wl,-z,muldefs -L/opt/SmartHeap/lib -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

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1280 v2, 3.60 GHz

**SPECint\_rate2006 = 200**

**SPECint\_rate\_base2006 = 192**

**CPU2006 license:** 19

**Test sponsor:** Fujitsu

**Tested by:** Fujitsu

**Test date:** Apr-2012

**Hardware Availability:** May-2012

**Software Availability:** Feb-2012

## 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: -xSSE4.2(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: -xSSE4.2(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: basepeak = yes  
  
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: -xSSE4.2 -ipo -O3 -no-prec-div -unroll12 -auto-ilp32  
  
458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-unroll14 -auto-ilp32  
  
462.libquantum: -xAVX -ipo -O3 -no-prec-div -opt-prefetch  
-opt-mem-layout-trans=3  
  
464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-unroll12 -ansi-alias

C++ benchmarks:

471.omnetpp: -xSSE4.2(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/opt/SmartHeap/lib -lsmartheap  
  
473.astar: -xAVX -ipo -O3 -no-prec-div -opt-prefetch  
-opt-mem-layout-trans=3 -Wl,-z,muldefs  
-L/opt/SmartHeap/lib -lsmartheap

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1280 v2, 3.60 GHz

**SPECint\_rate2006 = 200**

**SPECint\_rate\_base2006 = 192**

**CPU2006 license:** 19

**Test sponsor:** Fujitsu

**Tested by:** Fujitsu

**Test date:** Apr-2012

**Hardware Availability:** May-2012

**Software Availability:** Feb-2012

## Peak Optimization Flags (Continued)

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-ic12.1-official-linux64.20111122.html>  
<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml>  
<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.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 Thu Jul 24 05:37:38 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 5 June 2012.