Fujitsu

PRIMERGY CX2570 M1, Intel Xeon E5-2630 v3, 2.4 GHz

SPECint\(\text{rate}_{2006}\) = 686
SPECint\(\text{rate}_{base2006}\) = 658

<table>
<thead>
<tr>
<th>Test sponsor:</th>
<th>Fujitsu</th>
<th>Hardware Availability:</th>
<th>Sep-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tested by:</td>
<td>Fujitsu</td>
<td>Software Availability:</td>
<td>Sep-2014</td>
</tr>
<tr>
<td>CPU(\text{2006 license}:)</td>
<td>19</td>
<td>CPU(\text{2006 license}:)</td>
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<tr>
<td>Test date:</td>
<td>Nov-2014</td>
<td>Test date:</td>
<td>Nov-2014</td>
</tr>
<tr>
<td>Hardware</td>
<td></td>
<td>Software</td>
<td></td>
</tr>
<tr>
<td>CPU Name:</td>
<td></td>
<td>Operating System:</td>
<td>Red Hat Enterprise Linux Server release 7.0 (Maipo)</td>
</tr>
<tr>
<td>CPU Characteristics:</td>
<td></td>
<td>Compiler:</td>
<td>C/C++: Version 15.0.0.0.90 of Intel C++ Studio XE for Linux</td>
</tr>
<tr>
<td>CPU MHz:</td>
<td>2400</td>
<td>Auto Parallel:</td>
<td>No</td>
</tr>
<tr>
<td>FPU:</td>
<td></td>
<td>File System:</td>
<td>xfs</td>
</tr>
<tr>
<td>CPU(s) enabled:</td>
<td>16 cores, 2 chips, 8 cores/chip, 2 threads/core</td>
<td>System State:</td>
<td>Run level 3 (multi-user)</td>
</tr>
<tr>
<td>CPU(s) orderable:</td>
<td>1.2 chip</td>
<td>Base Pointers:</td>
<td>32-bit</td>
</tr>
<tr>
<td>Primary Cache:</td>
<td>32 KB I + 32 KB D on chip per core</td>
<td>Peak Pointers:</td>
<td>32/64-bit</td>
</tr>
<tr>
<td>Secondary Cache:</td>
<td>256 KB I+D on chip per core</td>
<td>Other Software:</td>
<td>Microquill SmartHeap V10.0</td>
</tr>
<tr>
<td>L3 Cache:</td>
<td>20 MB I+D on chip per chip</td>
<td></td>
<td></td>
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<tr>
<td>Other Cache:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory:</td>
<td>256 GB (16 x 16 GB 2Rx4 PC4-2133P-R, running at 1866 MHz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disk Subsystem:</td>
<td>1 x SATA, 500 GB, 7200 RPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Hardware:</td>
<td>None</td>
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</table>
### Fujitsu

**spec CINT2006 Result**

**Fujitsu**

**PRIMERGY CX2570 M1, Intel Xeon E5-2630 v3, 2.4 GHz**

**CPU2006 license:** 19  
**Test sponsor:** Fujitsu  
**Tested by:** Fujitsu  
**Test date:** Nov-2014  
**Hardware Availability:** Sep-2014  
**Software Availability:** Sep-2014

#### SPECint_rate2006 = 686

#### SPECint_rate_base2006 = 658

### Results Table

<table>
<thead>
<tr>
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<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Base</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Peak</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Peak</th>
<th>Seconds</th>
<th>Ratio</th>
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<tr>
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<td>32</td>
<td>666</td>
<td>469</td>
<td>673</td>
<td>464</td>
<td>673</td>
<td>466</td>
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<td>429.mcf</td>
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<td>458.sjeng</td>
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<td>475</td>
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<td>462.libquantum</td>
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<td>97.9</td>
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<td>97.5</td>
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<td>473.astar</td>
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<tr>
<td>483.xalancbmk</td>
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<td>731</td>
<td>302</td>
<td>731</td>
<td>302</td>
<td>731</td>
</tr>
</tbody>
</table>

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"

### Platform Notes

**BIOS configuration:**  
Energy Performance = Performance  
Utilization Profile = Unbalanced  
QPI snoop mode: Home Snoop  
COD Enable = Disabled, Early Snoop = Disabled  
CPU C1E Support = Disabled

### General Notes

Environment variables set by runspec before the start of the run:  
LD_LIBRARY_PATH = "/home/SPECcpu2006/libs/32:/home/SPECcpu2006/libs/64:/home/SPECcpu2006/sh"  
Binaries compiled on a system with 1x Core i5-4670K CPU + 16GB memory using RedHat EL 7.0  
Filesystem page cache cleared with:  
```
echo 1 > /proc/sys/vm/drop_caches
```
Fujitsu

PRIMERGY CX2570 M1, Intel Xeon E5-2630 v3, 2.4 GHz

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SPECint_rate_base2006 = 658

General Notes (Continued)

runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>

This result was measured on the PRIMERGY CX2550 M1. The PRIMERGY CX2550 M1 and the PRIMERGY CX2570 M1 are electronically equivalent.

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

Base Compiler Invocation

C benchmarks:
  icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

C++ benchmarks:
  icpc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

Base Portability Flags

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

Base Optimization Flags

C benchmarks:
  -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch

C++ benchmarks:
  -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
  -L/sh -lsmartheap

Base Other Flags

C benchmarks:
  403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
  icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32
## Peak Compiler Invocation (Continued)

- `400.perlbench`: `icc -m64`
- `401.bzip2`: `icc -m64`
- `456.hmmer`: `icc -m64`
- `458.sjeng`: `icc -m64`

C++ benchmarks:

```
icpc -m32 -L/opt/intel/composer_xe_2015/lib/ia32
```
Fujitsu PRIMERGY CX2570 M1, Intel Xeon E5-2630 v3, 2.4 GHz

CPU2006 license: 19  
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Peak Optimization Flags (Continued)

462.libquantum: basepeak = yes

464.h264ref: -xCORE-AVX2(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: -xCORE-AVX2(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/sh -lsmartheap

473.astar: basepeak = yes

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-ic15.0-official-linux64.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic15.0-official-linux64.xml
http://www.spec.org/cpu2006/flags/Fujitsu-Platform-Settings-V1.2-HSW-RevA.xml

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

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