Fujitsu

PRIMERGY TX140 S1, Intel Core i3-2120, 3.30 GHz

**SPECint\_rate2006 = 82.4**

**SPECint\_rate\_base2006 = 79.0**

<table>
<thead>
<tr>
<th>Test sponsor</th>
<th>Fujitsu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tested by</td>
<td>Fujitsu</td>
</tr>
<tr>
<td>Test date</td>
<td>May-2011</td>
</tr>
<tr>
<td>Hardware</td>
<td></td>
</tr>
<tr>
<td>CPU Name</td>
<td>Intel Core i3-2120</td>
</tr>
<tr>
<td>CPU Characteristics:</td>
<td></td>
</tr>
<tr>
<td>CPU MHz:</td>
<td>3300</td>
</tr>
<tr>
<td>FPU:</td>
<td>Integrated</td>
</tr>
<tr>
<td>CPU(s) enabled:</td>
<td>2 cores, 1 chip, 2 cores/chip, 2 threads/core</td>
</tr>
<tr>
<td>CPU(s) orderable:</td>
<td>1 chip</td>
</tr>
<tr>
<td>Primary Cache:</td>
<td>32 KB I + 32 KB D on chip per core</td>
</tr>
<tr>
<td>Secondary Cache:</td>
<td>256 KB I+D on chip per core</td>
</tr>
<tr>
<td>L3 Cache:</td>
<td>3 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Other Cache:</td>
<td>None</td>
</tr>
<tr>
<td>Memory:</td>
<td>8 GB (2 x 4 GB 2Rx8 PC3-10600E-9, ECC)</td>
</tr>
<tr>
<td>Disk Subsystem:</td>
<td>1 x SATA, 300 GB, 7200 RPM</td>
</tr>
<tr>
<td>Other Hardware:</td>
<td>None</td>
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<tr>
<td>Software</td>
<td></td>
</tr>
<tr>
<td>Operating System:</td>
<td>SUSE Linux Enterprise Server 11 (x86_64) with SP1, Kernel 2.6.32.12-0.7-default</td>
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<tr>
<td>Compiler:</td>
<td>Intel C++ Compiler XE for applications running on IA-32 Version 12.0.1.116 Build 20101116</td>
</tr>
<tr>
<td>Auto Parallel:</td>
<td>No</td>
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<tr>
<td>File System:</td>
<td>ext3</td>
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<tr>
<td>System State:</td>
<td>Run level 3 (multi-user)</td>
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<tr>
<td>Base Pointers:</td>
<td>32-bit</td>
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<tr>
<td>Peak Pointers:</td>
<td>32/64-bit</td>
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<tr>
<td>Other Software:</td>
<td>Microquill SmartHeap V9.01</td>
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</tbody>
</table>
Fujitsu

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SPECint_rate2006 = 82.4
SPECint_rate_base2006 = 79.0

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
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<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
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<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
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<tbody>
<tr>
<td>400.perlbench</td>
<td>4</td>
<td>615</td>
<td>63.6</td>
<td>619</td>
<td>63.1</td>
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<td>4</td>
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<td>76.7</td>
<td>515</td>
<td>75.9</td>
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<td>893</td>
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<td>894</td>
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<td>4</td>
<td>836</td>
<td>46.2</td>
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<td>45.7</td>
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<td>475</td>
<td>67.7</td>
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<td>470</td>
<td>68.5</td>
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<td>83.2</td>
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<td>83.2</td>
<td>442</td>
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<td>210</td>
<td>87.0</td>
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<td>4</td>
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<td>101</td>
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<td>101</td>
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<td>458.sjeng</td>
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<td>4</td>
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<td>462.libquantum</td>
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<td>200</td>
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<td>471.omnetpp</td>
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<td>54.6</td>
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<td>54.3</td>
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<tr>
<td>473.astar</td>
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<tr>
<td>483.xalancbmk</td>
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<td>83.3</td>
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<td>332</td>
<td>83.1</td>
<td>334</td>
<td>82.7</td>
</tr>
</tbody>
</table>

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.
numactl was used to bind copies to the cores

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
Large pages were not enabled for this run

General Notes

For information about Fujitsu please visit: http://www.fujitsu.com
Binaries were compiled on RHEL5.5
This result was measured on the PRIMERGY TX140 S1. The PRIMERGY TX120 S3
and the PRIMERGY TX140 S1 are electronically equivalent.

Base Compiler Invocation

C benchmarks:
icc -m32

C++ benchmarks:
icpc -m32
Fujitsu

PRIMERGY TX140 S1, Intel Core i3-2120, 3.30 GHz

SPECint\textsubscript{rate}2006 = 82.4
SPECint\textsubscript{rate base}2006 = 79.0

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

Test date: May-2011
Hardware Availability: Jun-2011
Software Availability: Jan-2011

---

**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
- -B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

C++ benchmarks:
- -xAVX -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
- -L/smartheap -lsmartheap
- -B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

---

**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
  - 458.sjeng: icc -m64

C++ benchmarks:
- icpc -m32

---

**Peak Portability Flags**

400.perlbench: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX\_X64
401.bzip2: -DSPEC\_CPU\_LP64
458.sjeng: -DSPEC\_CPU\_LP64
462.libquantum: -DSPEC\_CPU\_LINUX

Continued on next page
Fujitsu

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Hardware Availability: Jun-2011
Software Availability: Jan-2011

Peak Portability Flags (Continued)

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)
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

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
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

403.gcc: -xAVX -ipo -O3 -no-prec-div
-B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

429.mcf: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -ansi-alias
-auto-ilp32

445.gobmk: -xAVX(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias -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) -unroll12
-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
-1/L/smartheap -1smartheap

473.astar: basepeak = yes

Continued on next page
SPEC CINT2006 Result

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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/Fujitsu-Platform.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.20110316.xml
http://www.spec.org/cpu2006/flags/Fujitsu-Platform.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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