## Fujitsu

**PRIMERGY TX1330 M3, Intel Xeon E3-1225 v6, 3.3 GHz**

<table>
<thead>
<tr>
<th>SPECint®_rate2006 = Not Run</th>
<th>SPECint_rate_base2006 = 210</th>
</tr>
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<tbody>
<tr>
<td>Test date: Oct-2017</td>
<td>Hardware Availability: May-2017</td>
</tr>
<tr>
<td>Test sponsor: Fujitsu</td>
<td>Software Availability: Nov-2016</td>
</tr>
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<td>Tested by: Fujitsu</td>
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</tr>
</tbody>
</table>

### SPECint®_rate2006

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>SPECint Rate Base2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>perlbench</td>
<td>4</td>
<td>165</td>
</tr>
<tr>
<td>bzip2</td>
<td>4</td>
<td>94.6</td>
</tr>
<tr>
<td>gcc</td>
<td>4</td>
<td>160</td>
</tr>
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<td>mcf</td>
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<tr>
<td>gobmk</td>
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<td>hammer</td>
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<td>332</td>
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<td>sjeng</td>
<td>4</td>
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<td>libquantm</td>
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<td>h264ref</td>
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<td>277</td>
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<td>omnetpp</td>
<td>4</td>
<td>102</td>
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<tr>
<td>astar</td>
<td>4</td>
<td>114</td>
</tr>
<tr>
<td>xalancbmk</td>
<td>4</td>
<td>280</td>
</tr>
</tbody>
</table>

### Software

- **Operating System**: SUSE Linux Enterprise Server 12 SP2 4.4.21-69-default
- **Compiler**: C/C++: Version 17.0.0.098 of Intel C/C++ Compiler for Linux
- **Auto Parallel**: No
- **File System**: xfs
- **System State**: Run level 3 (multi-user)
- **Base Pointers**: 32-bit
- **Peak Pointers**: Not Applicable
- **Other Software**: Microquill SmartHeap V10.2

### Hardware

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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<tbody>
<tr>
<td>CPU Name:</td>
<td>Intel Xeon E3-1225 v6</td>
</tr>
<tr>
<td>CPU Characteristics:</td>
<td>Intel Turbo Boost Technology up to 3.70 GHz</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>4 cores, 1 chip, 4 cores/chip</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>8 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Other Cache:</td>
<td>None</td>
</tr>
<tr>
<td>Memory:</td>
<td>64 GB (4 x 16 GB 2Rx8 PC4-2400T-E)</td>
</tr>
<tr>
<td>Disk Subsystem:</td>
<td>1 x SATA, 500 GB, 7200RPM</td>
</tr>
<tr>
<td>Other Hardware:</td>
<td>None</td>
</tr>
</tbody>
</table>

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Standard Performance Evaluation Corporation
info@spec.org
http://www.spec.org/
## Fujitsu

PRIMERGY TX1330 M3, Intel Xeon E3-1225 v6, 3.3 GHz

### SPEC CINT2006 Result

<table>
<thead>
<tr>
<th>Benchmark</th>
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<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
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<td>202</td>
<td>160</td>
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<td>347</td>
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<tr>
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<td>333</td>
<td>113</td>
<td>332</td>
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<td>4</td>
<td>360</td>
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<td>135</td>
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<td>98.6</td>
<td>280</td>
<td>98.7</td>
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</tr>
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</table>

### 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"
Set CPU frequency governor to maximum performance with:
cpupower -c all frequency-set -g performance
cpu idle state set with:
cpupower idle-set -d 2
cpupower idle-set -d 3
Process tuning settings:
echo always > /sys/kernel/mm/transparent_hugepage/enabled
echo 1 > /proc/sys/vm/drop_caches
echo 1000000000 > /proc/sys/kernel/sched_min_granularity_ns

### Platform Notes

Sysinfo program /home/Benchmark/spec/cpu2006/bin0922/config/sysinfo_rev6993
Revision 6993 of 2015-11-06 (b5e8d4b4eb51ed287f98696cbe290c1)
running on linux-n511 Sun Oct 22 04:36:22 2017

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

---

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

Test date: Oct-2017
Hardware Availability: May-2017
Software Availability: Nov-2016
Fujitsu
PRIMERGY TX1330 M3, Intel Xeon E3-1225 v6, 3.3 GHz

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

Test date: Oct-2017
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Software Availability: Nov-2016

Platform Notes (Continued)

From /proc/cpuinfo
model name : Intel(R) Xeon(R) CPU E3-1225 v6 @ 3.30GHz
  1 "physical id"s (chips)
  4 "processors"
cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)
  cpu cores : 4
  siblings : 4
  physical 0: cores 0 1 2 3
  cache size : 8192 KB

From /proc/meminfo
MemTotal: 65652660 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
SUSE Linux Enterprise Server 12 SP2

From /etc/*release* /etc/*version*
SuSE-release:
  SUSE Linux Enterprise Server 12 (x86_64)
  VERSION = 12
  PATCHLEVEL = 2
  # This file is deprecated and will be removed in a future service pack or release.
  # Please check /etc/os-release for details about this release.
  os-release:
    NAME="SLES"
    VERSION="12-SP2"
    VERSION_ID="12.2"
    PRETTY_NAME="SUSE Linux Enterprise Server 12 SP2"
    ID="sles"
    ANSI_COLOR="0;32"
    CPE_NAME="cpe:/o:suse:sles:12:sp2"

uname -a:
  Linux linux-n511 4.4.21-69-default #1 SMP Tue Oct 25 10:58:20 UTC 2016
    (9464f67) x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Oct 22 04:28
SPEC is set to: /home/Benchmark/speccpu2006-bin0922

Additional information from dmidecode:

Warning: Use caution when you interpret this section. The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the "DMTF SMBIOS" standard.

Continued on next page
**Fujitsu**

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**Platform Notes (Continued)**

BIOS FUJITSU // American Megatrends Inc. V5.0.0.11 R1.0.0 for D3373-B1x

02/20/2017

Memory:

4x Samsung M391A2K43BB1-CRC 16 GB 2 rank 2400 MHz

(End of data from sysinfo program)

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**General Notes**

Environment variables set by runspec before the start of the run:

`LD_LIBRARY_PATH = "/$LD_LIBRARY_PATH:/home/Benchmark/speccpu2006-bin0922/sh10.2"

Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM
memory using Redhat Enterprise Linux 7.2
Transparent Huge Pages enabled by default
Filesystem page cache cleared with:

    echo 1 > /proc/sys/vm/drop_caches
runcspec command invoked through numactl i.e.:

    numactl --interleave=all runspec <etc>

---

**Base Compiler Invocation**

C benchmarks:

    icc -m32 -L/opt/intel/compilers_and_libraries_2017/linux/lib/ia32

C++ benchmarks:

    icpc -m32 -L/opt/intel/compilers_and_libraries_2017/linux/lib/ia32

---

**Base Portability Flags**

```
400.perlbench: -D_FILE_OFFSET_BITS=64 -DSPEC_CPU_LINUX_IA32
401.bzip2: -D_FILE_OFFSET_BITS=64
403.gcc: -D_FILE_OFFSET_BITS=64
429.mcf: -D_FILE_OFFSET_BITS=64
445.gobmk: -D_FILE_OFFSET_BITS=64
456.hmmer: -D_FILE_OFFSET_BITS=64
458.sjeng: -D_FILE_OFFSET_BITS=64
462.libquantum: -D_FILE_OFFSET_BITS=64 -DSPEC_CPU_LINUX
464.h264ref: -D_FILE_OFFSET_BITS=64
471.omnetpp: -D_FILE_OFFSET_BITS=64
473.astar: -D_FILE_OFFSET_BITS=64
483.xalancbmk: -D_FILE_OFFSET_BITS=64 -DSPEC_CPU_LINUX
```

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</tr>
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</table>

Base Optimization Flags

C benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch
-qopt-mem-layout-trans=3

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch
-qopt-mem-layout-trans=3 -Wl,-z,muldefs -L/sh10.2 -lsmartheap

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic17.0-official-linux64.xml
http://www.spec.org/cpu2006/flags/Fujitsu-Platform-Settings-V1.2-BDW-RevF.xml

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

Tested with SPEC CPU2006 v1.2.