SPEC® CINT2006 Result

Fujitsu
PRIMERGY RX200 S7, Intel Xeon E5-2640, 2.50 GHz

SPECint®_rate2006 = 463
SPECint_rate_base2006 = 443

CPU2006 license: 19
Test date: Jan-2012
Test sponsor: Fujitsu
Hardware Availability: Mar-2012
Tested by: Fujitsu
Software Availability: Dec-2011

400.perlbench
401.bzip2
403.gcc
429.mcf
445.gobmk
456.hmmer
458.sjeng
462.libquantum
464.h264ref
471.omnetpp
473.astar
483.xalancbmk

SPECint_rate2006 = 463
SPECint_rate_base2006 = 443

Hardware
CPU Name: Intel Xeon E5-2640
CPU Characteristics: Intel Turbo Boost Technology up to 3.0 GHz
CPU MHz: 2500
FPU: Integrated
CPU(s) enabled: 12 cores, 2 chips, 6 cores/chip, 2 threads/core
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: 15 MB I+D on chip per chip
Other Cache: None
Memory: 128 GB (16 x 8 GB 2Rx4 PC3L-12800R-11, ECC, running at 1333 MHz and CL9)
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: C/C++: Version 12.1.0.225 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 V9.01
Fujitsu

PRIMERGY RX200 S7, Intel Xeon E5-2640, 2.50 GHz

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

SPECint_rate2006 = 463
SPECint_rate_base2006 = 443

Fujitsu

PRIMERGY RX200 S7, Intel Xeon E5-2640, 2.50 GHz

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td>24</td>
<td>714</td>
<td></td>
<td>328</td>
<td></td>
<td>714</td>
<td></td>
<td>328</td>
<td></td>
</tr>
<tr>
<td>401.bzip2</td>
<td>24</td>
<td>959</td>
<td></td>
<td>242</td>
<td></td>
<td>958</td>
<td></td>
<td>242</td>
<td></td>
</tr>
<tr>
<td>403.gcc</td>
<td>24</td>
<td>536</td>
<td>60</td>
<td>536</td>
<td>60</td>
<td>536</td>
<td>60</td>
<td>536</td>
<td>60</td>
</tr>
<tr>
<td>429.mcf</td>
<td>24</td>
<td>313</td>
<td>700</td>
<td>313</td>
<td>700</td>
<td>313</td>
<td>700</td>
<td>313</td>
<td>700</td>
</tr>
<tr>
<td>445.gobmk</td>
<td>24</td>
<td>763</td>
<td></td>
<td>330</td>
<td></td>
<td>764</td>
<td></td>
<td>330</td>
<td></td>
</tr>
<tr>
<td>456.hmmer</td>
<td>24</td>
<td>399</td>
<td>561</td>
<td>402</td>
<td>557</td>
<td>401</td>
<td>558</td>
<td>399</td>
<td>561</td>
</tr>
<tr>
<td>458.sjeng</td>
<td>24</td>
<td>891</td>
<td></td>
<td>326</td>
<td></td>
<td>884</td>
<td></td>
<td>328</td>
<td></td>
</tr>
<tr>
<td>462.libquantum</td>
<td>24</td>
<td>188</td>
<td>2640</td>
<td>188</td>
<td>2640</td>
<td>188</td>
<td>2640</td>
<td>188</td>
<td>2640</td>
</tr>
<tr>
<td>464.h264ref</td>
<td>24</td>
<td>943</td>
<td>563</td>
<td>951</td>
<td>559</td>
<td>956</td>
<td>556</td>
<td>948</td>
<td>560</td>
</tr>
<tr>
<td>471.omnetpp</td>
<td>24</td>
<td>580</td>
<td>259</td>
<td>580</td>
<td>259</td>
<td>583</td>
<td>257</td>
<td>544</td>
<td>276</td>
</tr>
<tr>
<td>473.astar</td>
<td>24</td>
<td>637</td>
<td>264</td>
<td>632</td>
<td>267</td>
<td>634</td>
<td>266</td>
<td>637</td>
<td>264</td>
</tr>
<tr>
<td>483.xalancbmk</td>
<td>24</td>
<td>350</td>
<td>473</td>
<td>352</td>
<td>471</td>
<td>351</td>
<td>472</td>
<td>350</td>
<td>473</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"

General Notes

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RHEL5.5
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>
For information about Fujitsu please visit: http://www.fujitsu.com

Base Compiler Invocation

C benchmarks:
  icc -m32

continued on next page
Fujitsu

PRIMERGY RX200 S7, Intel Xeon E5-2640, 2.50 GHz

SPECint_rate2006 = 463
SPECint_rate_base2006 = 443

CPU2006 license: 19
Test sponsor: Fujitsu
Test date: Jan-2012
Tested by: Fujitsu
Hardware Availability: Mar-2012
Software Availability: Dec-2011

Base Compiler Invocation (Continued)

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/smartheap -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
Fujitsu

PRIMERGY RX200 S7, Intel Xeon E5-2640, 2.50 GHz

SPECint_rate2006 = 463
SPECint_rate_base2006 = 443

C benchmarks:
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

C++ benchmarks:
471.omnetpp: -DSPEC_CPU_LP64
473.astar: basepeak = yes
Fujitsu
PRIMERGY RX200 S7, Intel Xeon E5-2640, 2.50 GHz

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

SPECint_rate2006 = 463
SPECint_rate_base2006 = 443

Test date: Jan-2012
Hardware Availability: Mar-2012
Software Availability: Dec-2011

Peak Optimization Flags (Continued)

483.xalancbmk: basepeak = yes

Peak 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/Fujitsu-Platform.20120320.xml
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.html
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.html

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.

Tested with SPEC CPU2006 v1.2.
Originally published on 10 April 2012.