**SPEC® CINT2006 Result**

ASUSTeK Computer Inc.  
(Test Sponsor: Intel Corporation)

ASUS A88X-PRO Motherboard (AMD A10 PRO-7850B with Radeon R7 Graphics)

| SPECint®2006 = | 31.4 |
| SPECint_base2006 = | 30.6 |

<table>
<thead>
<tr>
<th>CPU2006 license: 13</th>
<th>Test date: Jul-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test sponsor: Intel Corporation</td>
<td>Hardware Availability: Jul-2014</td>
</tr>
<tr>
<td>Tested by: Intel Corporation</td>
<td>Software Availability: Aug-2015</td>
</tr>
</tbody>
</table>

---

**Hardware**

<table>
<thead>
<tr>
<th>CPU Name:</th>
<th>AMD A10 PRO-7850B</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Characteristics:</td>
<td>AMD Turbo CORE technology up to 4.00 GHz</td>
</tr>
<tr>
<td>CPU MHz:</td>
<td>3700</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>192 KB I on chip per chip, 96 KB I shared / 2 cores; 16 KB D on chip per core</td>
</tr>
<tr>
<td>Secondary Cache:</td>
<td>4 MB I+D on chip per chip, 2 MB shared / 2 cores</td>
</tr>
<tr>
<td>L3 Cache:</td>
<td>None</td>
</tr>
<tr>
<td>Other Cache:</td>
<td>None</td>
</tr>
<tr>
<td>Memory:</td>
<td>8 GB (2 x 4 GB 2Rx8 PC3-10600U-11)</td>
</tr>
<tr>
<td>Disk Subsystem:</td>
<td>Seagate Barracuda 250 GB SATA, 7200 RPM</td>
</tr>
<tr>
<td>Other Hardware:</td>
<td>None</td>
</tr>
</tbody>
</table>

---

**Software**

| Operating System: | Microsoft Windows 7 Ultimate 6.1.7601 Service Pack 1 Build 7601 |
| Auto Parallel: | Yes |
| File System: | NTFS |
| System State: | Default |
| Base Pointers: | 32/64-bit |
| Peak Pointers: | 32/64-bit |
| Other Software: | SmartHeap Library Version 11.0 from http://www.microquill.com/ |
ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)
ASUS A88X-PRO Motherboard (AMD A10 PRO-7850B with Radeon R7 Graphics)

SPECint2006 = 31.4
SPECint_base2006 = 30.6

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Results Table

<table>
<thead>
<tr>
<th>Benchmark</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>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td>401</td>
<td>24.4</td>
<td>403</td>
<td>24.2</td>
<td>400</td>
<td>24.4</td>
<td>341</td>
<td>28.7</td>
<td>341</td>
<td>28.6</td>
</tr>
<tr>
<td>401.bzip2</td>
<td>582</td>
<td>16.6</td>
<td>586</td>
<td>16.5</td>
<td>578</td>
<td>16.7</td>
<td>578</td>
<td>16.7</td>
<td>602</td>
<td>16.0</td>
</tr>
<tr>
<td>403.mcf</td>
<td>486</td>
<td>16.6</td>
<td>485</td>
<td>16.6</td>
<td>485</td>
<td>16.6</td>
<td>480</td>
<td>16.8</td>
<td>481</td>
<td>16.8</td>
</tr>
<tr>
<td>429.gcc</td>
<td>276</td>
<td>33.1</td>
<td>276</td>
<td>33.3</td>
<td>276</td>
<td>33.0</td>
<td>276</td>
<td>33.1</td>
<td>276</td>
<td>33.0</td>
</tr>
<tr>
<td>445.gobmk</td>
<td>450</td>
<td>23.3</td>
<td>449</td>
<td>23.3</td>
<td>450</td>
<td>23.3</td>
<td>433</td>
<td>24.2</td>
<td>434</td>
<td>24.2</td>
</tr>
<tr>
<td>456.hmmer</td>
<td>189</td>
<td>49.3</td>
<td>191</td>
<td>49.0</td>
<td>189</td>
<td>49.3</td>
<td>189</td>
<td>49.3</td>
<td>189</td>
<td>49.3</td>
</tr>
<tr>
<td>458.sjeng</td>
<td>547</td>
<td>22.1</td>
<td>548</td>
<td>22.1</td>
<td>546</td>
<td>22.2</td>
<td>547</td>
<td>22.1</td>
<td>548</td>
<td>22.1</td>
</tr>
<tr>
<td>462.libquantum</td>
<td>69.0</td>
<td>300</td>
<td>70.1</td>
<td>296</td>
<td>69.2</td>
<td>299</td>
<td>69.0</td>
<td>300</td>
<td>70.1</td>
<td>296</td>
</tr>
<tr>
<td>464.h264ref</td>
<td>496</td>
<td>44.6</td>
<td>497</td>
<td>44.6</td>
<td>497</td>
<td>44.5</td>
<td>496</td>
<td>44.6</td>
<td>497</td>
<td>44.6</td>
</tr>
<tr>
<td>471.omnetpp</td>
<td>349</td>
<td>17.9</td>
<td>348</td>
<td>17.9</td>
<td>350</td>
<td>17.8</td>
<td>327</td>
<td>19.1</td>
<td>326</td>
<td>19.2</td>
</tr>
<tr>
<td>473.astar</td>
<td>363</td>
<td>19.3</td>
<td>362</td>
<td>19.4</td>
<td>365</td>
<td>19.2</td>
<td>363</td>
<td>19.3</td>
<td>362</td>
<td>19.4</td>
</tr>
</tbody>
</table>

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Compiler Invocation Notes

To compile these binaries, the Intel Compiler 16.0 was set up to generate 64-bit binaries with the command: "psxevars.bat intel64" (shortcut provided in the Intel(r) Parallel Studio XE 2016 program folder)

Platform Notes

Sysinfo program C:\SPEC16.0\Docs\sysinfo
$Rev: 6775 $ $Date:: 2011-08-16 #$ \8787f7622badcf24e01c368b1db4377c
running on Clt1C872C5C6B24 Wed Jul  6 12:44:33 2016

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

Trying 'systeminfo'
OS Name: Microsoft Windows 7 Ultimate
OS Version: 6.1.7601 Service Pack 1 Build 7601
System Manufacturer: System manufacturer
System Model: System Product Name
Processor(s): 1 Processor(s) Installed.
[01]: AMD64 Family 21 Model 48 Stepping 1 AuthenticAMD ~3700 Mhz
BIOS Version: American Megatrends Inc. 2502, 12/11/2015
Total Physical Memory: 7,108 MB

Trying 'wmic cpu get /value'
DeviceID: CPU0

Continued on next page
ASUSTeK Computer Inc. 
(Test Sponsor: Intel Corporation)
ASUS A88X-PRO Motherboard (AMD A10 PRO-7850B with 
Radeon R7 Graphics)

SPECint2006 = 31.4
SPECint_base2006 = 30.6

Platform Notes (Continued)

L2CacheSize : 25359
L3CacheSize : 0
MaxClockSpeed : 3700
Name : AMD A10 PRO-7850B R7, 12 Compute Cores 4C+8G
NumberOfCores : 2
NumberOfLogicalProcessors: 4

(End of data from sysinfo program)

Component Notes

Tested systems can be used with Shin-G ATX case,
PC Power and Cooling 1200W power supply

General Notes

OMP_NUM_THREADS set to number of processors cores
KMP_AFFINITY set to granularity=fine,scatter
Binaries compiled on a system with 1x Intel Xeon E5-2699 v3 CPU
+ 64GB memory using Windows 8.1 Enterprise 64-bit

Base Compiler Invocation

C benchmarks:
icl -Qvc12 -Qstd=c99

C++ benchmarks:
icl -Qvc12

Base Portability Flags

400.perlbench: -DSPEC_CPU_P64 -DSPEC_CPU_WIN64_X64
401.bzip2: -DSPEC_CPU_P64
403.gcc: -DSPEC_CPU_P64 -DSPEC_CPU_WIN64
429.mcf: -DSPEC_CPU_P64
445.gobmk: -DSPEC_CPU_P64
456.hmmer: -DSPEC_CPU_P64
458.sjeng: -DSPEC_CPU_P64
462.libquantum: -DSPEC_CPU_P64
464.h264ref: -DSPEC_CPU_P64 -DWIN32
471.omnetpp: -DSPEC_CPU_P64 -DSPEC_CPU_WIN64
473.astar: -DSPEC_CPU_P64
483.xalancbmk: -DSPEC_CPU_P64 -Qoption,cpp,--no_wchar_t_keyword -DWIN64
ASUSTeK Computer Inc.  
(ASUS A88X-PRO Motherboard (AMD A10 PRO-7850B with Radeon R7 Graphics)  

| SPECint2006 | 31.4 |
| SPECint_base2006 | 30.6 |

CPU2006 license: 13  
Test Sponsor: Intel Corporation  
Test by: Intel Corporation  

Base Optimization Flags

C benchmarks:
```
/arch:AVX -Qipo -O3 -Qprec-div -Qopt-prefetch -Qparallel 
-Qauto-ilp32 /F64000000
```

C++ benchmarks:
```
/arch:AVX -Qipo -O3 -Qprec-div -Qopt-prefetch -Qcxx-features 
-Qauto-ilp32 /F64000000 shmW64M.lib -link /FORCE:MULTIPLE
```

Base Other Flags

C benchmarks:
```
403.gcc: -Dalloca=_alloca
```

Peak Compiler Invocation

C benchmarks:
```
icl -Qvc12 -Qstd=c99
```

C++ benchmarks:
```
icl -Qvc12
```

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
```
400.perlbench: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) 
-Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch 
-Qauto-ilp32 /F64000000 shmW64M.lib 
/F256000000 -link /FORCE:MULTIPLE
```

```
401.bzip2: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) 
-Qipo -O3 -Qprec-div -Qopt-prefetch -Qansi-alias 
-Qauto-ilp32 /F64000000
```

```
403.gcc: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) 
-Qipo -O3 -Qprec-div -Qauto-ilp32 /F64000000
```
ASUSTeK Computer Inc.  
(Test Sponsor: Intel Corporation)
ASUS A88X-PRO Motherboard (AMD A10 PRO-7850B with Radeon R7 Graphics)

SPECint2006 = 31.4  
SPECint_base2006 = 30.6

CPU2006 license: 13  
Test sponsor: Intel Corporation  
Tested by: Intel Corporation

Peak Optimization Flags (Continued)

429.mcf: basepeak = yes
445.gobmk: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O2 -Qprec-div -Qansi-alias -Qauto-ilp32 /F64000000
456.hmmer: basepeak = yes
458.sjeng: basepeak = yes
462.libquantum: basepeak = yes
464.h264ref: basepeak = yes

C++ benchmarks:
471.omnetpp: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-ra-region-strategy=block -Qauto-ilp32 /F64000000 shlW64M.lib -link /FORCE:MULTIPLE
473.astar: basepeak = yes
483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

The flags file that was used to format this result can be browsed at

You can also download the XML flags source by saving the following link:
<table>
<thead>
<tr>
<th><strong>ASUSTeK Computer Inc.</strong></th>
<th><strong>SPECint2006 =</strong> 31.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Test Sponsor: Intel Corporation)</td>
<td>SPECint_base2006 = 30.6</td>
</tr>
<tr>
<td>ASUS A88X-PRO Motherboard (AMD A10 PRO-7850B with Radeon R7 Graphics)</td>
<td></td>
</tr>
<tr>
<td>CPU2006 license: 13</td>
<td>Test date: Jul-2016</td>
</tr>
<tr>
<td>Test sponsor: Intel Corporation</td>
<td>Hardware Availability: Jul-2014</td>
</tr>
<tr>
<td>Tested by: Intel Corporation</td>
<td>Software Availability: Aug-2015</td>
</tr>
</tbody>
</table>

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.
Report generated on Tue Sep 20 15:06:58 2016 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 20 September 2016.