Hewlett-Packard Company
(Test Sponsor: Intel Corporation)

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

CPU Name: Intel Core i5-4340M
CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz
CPU MHz: 2900
CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip, 2 threads/core
CPU(s) orderable: 1 chip
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 256 KB I+D on chip per core
L3 Cache: 3 MB I+D on chip per chip
Other Cache: None
Memory: 8 GB (2 x 4 GB 2Rx4 PC3-12800U-11)
Disk Subsystem: 1 TB HDD, 5400 RPM
Other Hardware: None

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Operating System: Microsoft Windows 10 Pro 10.0.10240 N/A Build 10240
Compiler: C/C++: Version 16.0.0.110 of Intel C++ Studio XE for Windows;
Auto Parallel: No
File System: NTFS
System State: Default
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: SmartHeap Library Version 11.0 from http://www.microquill.com/
Results Table

<table>
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<th>Ratio</th>
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</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 32-bit binaries with the command:
"ipsxe-comp-vars.bat ia32 vs2010" (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 CltA01D48C0E889 Thu Nov 12 04:44:33 2015

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 10 Pro
OS Version   : 10.0.10240 N/A Build 10240
System Manufacturer: Hewlett-Packard
System Model : HP ENVY 15 Notebook PC
Processor(s) : 1 Processor(s) Installed.
               [01]: Intel64 Family 6 Model 60 Stepping 3 GenuineIntel ~2901 Mhz
BIOS Version : Insyde F.36, 10/24/2013
Total Physical Memory: 8,128 MB

Trying 'wmic cpu get /value'
DeviceID     : CPU0

Continued on next page
SPEC CINT2006 Result

Hewlett-Packard Company
(Test Sponsor: Intel Corporation)
HP ENVY 15 Notebook PC 15t-j100 (Intel Core i5-4340M)

SPECint_rate2006 = 109
SPECint_rate_base2006 = 104

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

Platform Notes (Continued)

L2CacheSize : 256
L3CacheSize : 3072
MaxClockSpeed : 2901
Name : Intel(R) Core(TM) i5-4340M CPU @ 2.90GHz
NumberOfCores : 2
NumberOfLogicalProcessors: 4

(End of data from sysinfo program)

General Notes

Binaries compiled on a system with 1x Intel Xeon E5-2699 v3 CPU + 64GB memory using Windows 8.1 Enterprise 64-bit

Base Compiler Invitation

C benchmarks:
   icl -Qvc12 -Qstd=c99

C++ benchmarks:
   icl -Qvc12

Base Portability Flags

   403.gcc: -DSPEC_CPU_WIN32
   464.h264ref: -DWIN32
   483.xalancbmk: -Qoption,cpp,--no_wchar_t_keyword

Base Optimization Flags

C benchmarks:
   -QxCORE-AVX2 -Qipo -O3 -Qprec-div -Qopt-prefetch /F256000000

C++ benchmarks:
   -QxCORE-AVX2 -Qipo -O3 -Qprec-div -Qopt-prefetch -Qcxx-features /F2560000000 shlw32M.lib -link /FORCE:MULTIPLE

Base Other Flags

C benchmarks:
   403.gcc: -Dalloca=_alloca
SPEC CINT2006 Result

Hewlett-Packard Company
(Test Sponsor: Intel Corporation)
HP ENVY 15 Notebook PC 15t-j100 (Intel Core i5-4340M)

SPECint_rate2006 = 109
SPECint_rate_base2006 = 104

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

Peak Compiler Invocation

C benchmarks (except as noted below):
    icl -Qvc12 -Qstd=c99

C++ benchmarks (except as noted below):
    icl -Qvc12

Peak Portability Flags

403.gcc: -DSPEC_CPU_WIN32
456.hmmer: -DSPEC_CPU_P64
458.sjeng: -DSPEC_CPU_P64
462.libquantum: -DSPEC_CPU_P64
464.h264ref: -DWIN32
473.astar: -DSPEC_CPU_P64
483.xalancbmk: -Qoption,cpp,--no_wchar_t_keyword

Peak Optimization Flags

C benchmarks:

400.perlbench: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
    -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch /F2560000000 shlw32m.lib
    -link /FORCE:MULTIPLE

401.bzip2: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
    -Qipo -O3 -Qprec-div -Qopt-prefetch -Qansi-alias /F2560000000

403.gcc: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
    -Qipo -O3 -Qprec-div -Qopt-prefetch /F2560000000

429.mcf: basepeak = yes

445.gobmk: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
    -Qipo -O2 -Qprec-div -Qansi-alias /F2560000000

464.h264ref: basepeak = yes

C++ benchmarks:

471.omnetpp: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
    -Qipo -O3 -Qprec-div -Qansi-alias
    -Qopt-ra-region-strategy=block /F2560000000 shlw32m.lib
    -link /FORCE:MULTIPLE
Hewlett-Packard Company
(Test Sponsor: Intel Corporation)
HP ENVY 15 Notebook PC 15t-j100 (Intel Core i5-4340M)

SPECint\_rate2006 = 109
SPECint\_rate\_base2006 = 104

CPU2006 license: 13
Test sponsor: Intel Corporation
Test date: Nov-2015
Tested by: Intel Corporation
Hardware Availability: May-2014
Software Availability: Aug-2015

Peak Optimization Flags (Continued)

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:

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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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