SPEC® CINT2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Dell Inc.

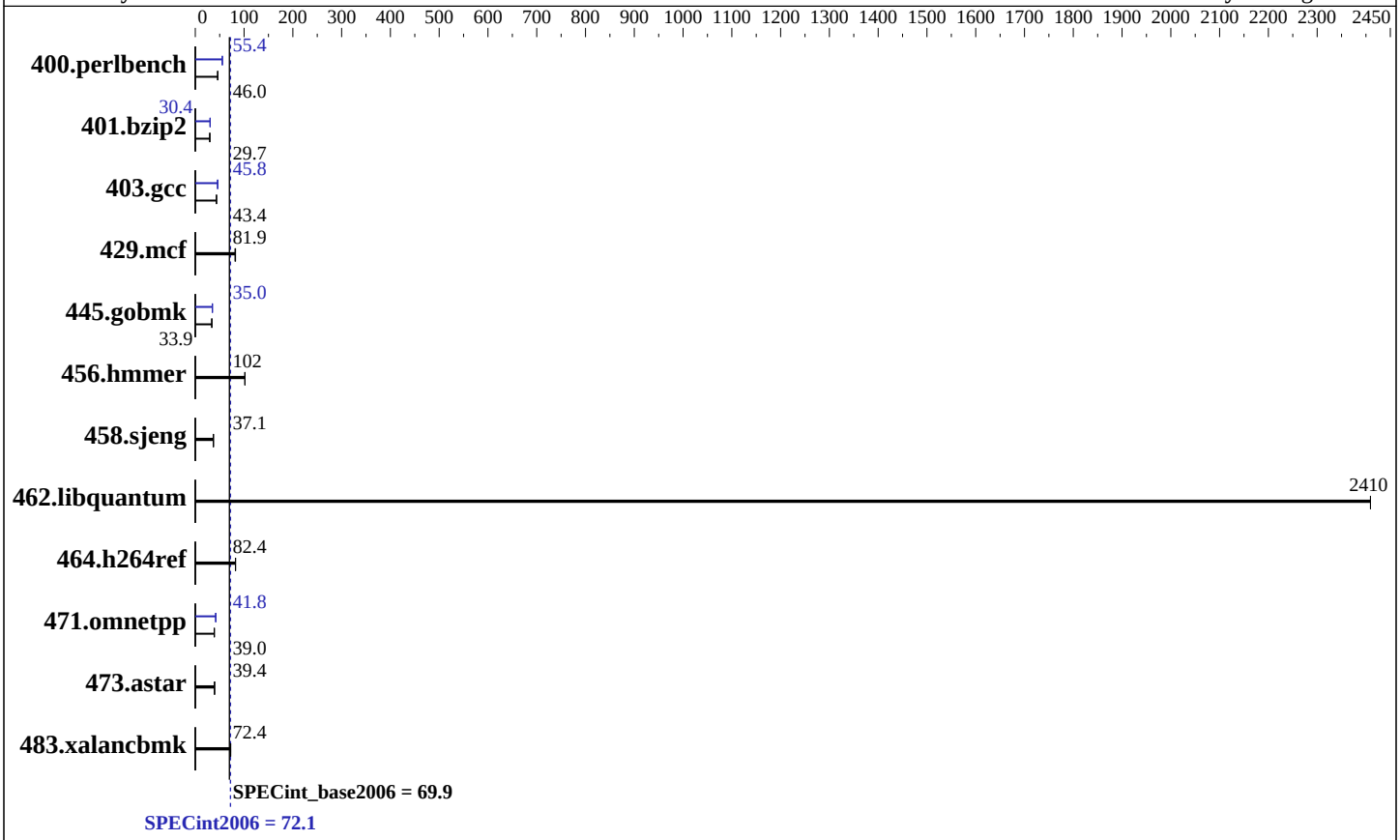
Precision 7710 (Intel Xeon E3-1575M v5, 3.00 GHz)

SPECint®2006 = 72.1

SPECint_base2006 = 69.9

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Aug-2016
Hardware Availability: Aug-2016
Software Availability: Aug-2016



Hardware

CPU Name:	Intel Xeon E3-1575M v5
CPU Characteristics:	Intel Turbo Boost Technology up to 3.90 GHz
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	4 cores, 1 chip, 4 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:	8 MB I+D on chip per chip
Other Cache:	None
Memory:	64 GB (4 x 16 GB 2Rx4 PC4-2133P-E)
Disk Subsystem:	512 GB Samsung NVMe SSD
Other Hardware:	None

Software

Operating System:	Microsoft Windows 10 Pro Build 10586
Compiler:	C/C++: Version 16.0.0.110 of Intel C++ Studio XE for Windows; Libraries: Version 18.00.30723 of Microsoft Visual Studio 2013
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/

SPEC CINT2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Dell Inc.

Precision 7710 (Intel Xeon E3-1575M v5, 3.00 GHz)

SPECint2006 = 72.1

SPECint_base2006 = 69.9

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Aug-2016
Hardware Availability: Aug-2016
Software Availability: Aug-2016

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	**212**	**46.0**	213	45.8	212	46.0	**176**	**55.4**	176	55.4	177	55.4
401.bzip2	325	29.7	325	29.7	**325**	**29.7**	318	30.3	**318**	**30.4**	318	30.4
403.gcc	185	43.5	186	43.3	**185**	**43.4**	176	45.8	**176**	**45.8**	176	45.7
429.mcf	111	82.5	112	81.6	**111**	**81.9**	111	82.5	112	81.6	**111**	**81.9**
445.gobmk	310	33.9	310	33.8	**310**	**33.9**	300	35.0	299	35.1	**299**	**35.0**
456.hmmer	91.8	102	91.5	102	**91.7**	**102**	91.8	102	91.5	102	**91.7**	**102**
458.sjeng	326	37.1	**326**	**37.1**	326	37.1	326	37.1	**326**	**37.1**	326	37.1
462.libquantum	8.60	2410	**8.60**	**2410**	8.60	2410	8.60	2410	**8.60**	**2410**	8.60	2410
464.h264ref	269	82.4	268	82.5	**269**	**82.4**	269	82.4	268	82.5	**269**	**82.4**
471.omnetpp	161	38.8	160	39.1	**160**	**39.0**	148	42.1	**150**	**41.8**	150	41.8
473.astar	178	39.5	178	39.4	**178**	**39.4**	178	39.5	178	39.4	**178**	**39.4**
483.xalancbmk	**95.3**	**72.4**	95.0	72.6	95.3	72.4	**95.3**	**72.4**	95.0	72.6	95.3	72.4

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:\CPU200~1.0-2/Docs/sysinfo
$Rev: 6775 $ $Date:: 2011-08-16 #$ \8787f7622badcf24e01c368b1db4377c
running on DESKTOP-DQ7JMF0 Thu Aug 11 17:01:13 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 10 Pro
OS Version     : 10.0.10586 N/A Build 10586
System Manufacturer: Dell Inc.
System Model   : Precision 7710
Processor(s)   : 1 Processor(s) Installed.
     [01]: Intel64 Family 6 Model 94 Stepping 3 GenuineIntel ~3000 Mhz
BIOS Version   : Dell Inc. 01.06.06, 7/27/2016
Total Physical Memory: 65,420 MB

Trying 'wmic cpu get /value'
DeviceID       : CPU0
```

Continued on next page

Platform Notes (Continued)

```
 L2CacheSize   : 1024
 L3CacheSize   : 8192
 MaxClockSpeed : 3000
 Name          : Intel(R) Xeon(R) CPU E3-1575M v5 @ 3.00GHz
 NumberOfCores : 4
 NumberOfLogicalProcessors: 8

 (End of data from sysinfo program)
```

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

Base Optimization Flags

C benchmarks:

```
-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qparallel
-Qauto-ilp32 /F64000000
```

Continued on next page

Base Optimization Flags (Continued)

C++ benchmarks:
-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qcxx-features
-Qauto-ilp32 /F64000000 shlW64M.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: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F64000000 shlW64M.lib
/F256000000 -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
-Qauto-ilp32 /F64000000

403.gcc: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qauto-ilp32 /F64000000

429.mcf: basepeak = yes

445.gobmk: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O2 -Qprec-div- -Qansi-alias -Qauto-ilp32
/F64000000

Continued on next page

Peak Optimization Flags (Continued)

456.hmmer: basepeak = yes

458.sjeng: basepeak = yes

462.libquantum: basepeak = yes

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 -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
http://www.spec.org/cpu2006/flags/Intel-ic16.0-official-windows.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic16.0-official-windows.xml

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 6 16:57:10 2016 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 6 September 2016.