



## **intel-core-i5-6200u-280ghz**

Intel Core i5-6200U testing with a HP 8079 (N75 Ver. 01.18 BIOS) and Intel HD 520 3072MB on Ubuntu 18.04 via the Phoronix Test Suite.

### **Test Systems:**

**SAMSUNG MZNLN256**

**Intel Core i5-6200U**

**Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079**

**Intel HD 520**

**Intel Connection I219-V**

Processor: Intel Core i5-6200U @ 2.80GHz (2 Cores / 4 Threads), Motherboard: HP 8079 (N75 Ver. 01.18 BIOS), Chipset: Intel Xeon E3-1200 v5/E3-1500, Memory: 16384MB, Disk: 256GB SAMSUNG MZNLN256, Graphics: Intel HD

520 3072MB (1000MHz), Audio: Conexant CX20724, Network: Intel Connection I219-V + Intel Wireless 8260

OS: Ubuntu 18.04, Kernel: 4.18.0-21-generic (x86\_64), Desktop: GNOME Shell 3.28.4, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.2.8, Compiler: GCC 7.4.0, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86\_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --host=x86\_64-linux-gnu --program-prefix=x86\_64-linux-gnu- --target=x86\_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib --with-tune=generic --without-cuda-driver -v

Processor Notes: Scaling Governor: intel\_pstate powersave

Security Notes: KPTI + \_\_user pointer sanitization + Full generic retpoline IBPB: conditional IBRS\_FW STIBP: conditional RSB filling Protection

SAMSUNG MZNLN256	Intel Core i5-6200U	Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079	Intel HD 520	Intel Connection I219-V
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hdparm Timed Disk Reads - 524.51

/dev/sda (MB/s)

Standard Deviation 0.5%

Himeno Benchmark - P.P.S

1841

(MFLOPS)

Standard Deviation

1.5%

Hierarchical INTegration -

FLOAT (QUIPs)

281417773

Standard Deviation

0.2%

Hierarchical INTegration -

DOUBLE (QUIPs)

653886506

Standard Deviation

0.3%

Timed HMMer Search - P.D.S

19.24

(sec)

Standard Deviation

1.1%

HPC Challenge - G-HPL

20.14827

(GFLOPS)

Standard Deviation

0.2%

HPC Challenge - G-Ffte

3.21539

Standard Deviation

1.2%

HPC Challenge - G-Ffte

3.21539

Standard Deviation

1.2%

HPC Challenge - EP-DGEMM

5.22681

(GFLOPS)

Standard Deviation

0.1%

HPC Challenge - G-Ptrans (GB/s)

0.31648

Standard Deviation

0.6%

HPC Challenge - EP-STREAM

4.72101

Triad (GB/s)

Standard Deviation

0.1%

<b>HPC Challenge - G-Rand Access</b>	0.00204	
<b>(GUP/s)</b>		
Standard Deviation	0.7%	
<b>HPC Challenge - R.R.L (usecs)</b>	0.66375	
Standard Deviation	0.6%	
<b>HPC Challenge - R.R.B (GB/s)</b>	2.70117	
Standard Deviation	0.7%	
<b>HPC Challenge - M.P.P.B (MB/s)</b>	7552	
Standard Deviation	2.7%	
<b>High Performance Conjugate</b>	1.09	
<b>Gradient (GFLOP/s)</b>		
Standard Deviation	0%	
<b>Interbench - X - Burn (Max</b>		246
<b>Latency ms)</b>		
Standard Deviation		2.1%
<b>Interbench - X - Read (Max</b>		48
<b>Latency ms)</b>		
Standard Deviation		17.3%
<b>Interbench - Audio - X (Max</b>		0.25
<b>Latency ms)</b>		
Standard Deviation		21.9%
<b>Interbench - Video - X (Max</b>		16.83
<b>Latency ms)</b>		
Standard Deviation		0.3%
<b>Interbench - X - Video (Max</b>		34
<b>Latency ms)</b>		
Standard Deviation		29.5%
<b>Interbench - X - Write (Max</b>		86
<b>Latency ms)</b>		
Standard Deviation		32.1%
<b>Interbench - Gaming - X (Max</b>		2.10
<b>Latency ms)</b>		
<b>Interbench - X - Compile (Max</b>		446
<b>Latency ms)</b>		
Standard Deviation		18.3%
<b>Interbench - X - Memload (Max</b>		15
<b>Latency ms)</b>		
Standard Deviation		105.8%
<b>Interbench - Audio - Burn (Max</b>		4.53
<b>Latency ms)</b>		
Standard Deviation		143.5%
<b>Interbench - Audio - Read (Max</b>		0.60
<b>Latency ms)</b>		
Standard Deviation		124.7%
<b>Interbench - Video - Burn (Max</b>		48.20
<b>Latency ms)</b>		
Standard Deviation		3%
<b>Interbench - Video - Read (Max</b>		5.98
<b>Latency ms)</b>		
Standard Deviation		139%

<b>Interbench - Audio - Video (Max Latency ms)</b>	0.20
Standard Deviation	0%
<b>Interbench - Audio - Write (Max Latency ms)</b>	124.02
Standard Deviation	44.2%
<b>Interbench - Gaming - Burn (Max Latency ms)</b>	100.08
Standard Deviation	6.5%
<b>Interbench - Video - Write (Max Latency ms)</b>	122.48
Standard Deviation	48.5%
<b>Interbench - Gaming - Write (Max Latency ms)</b>	51.20
Standard Deviation	27.7%
<b>Interbench - Audio - Compile (Max Latency ms)</b>	127.43
Standard Deviation	1.9%
<b>Interbench - Audio - Memload (Max Latency ms)</b>	0.68
Standard Deviation	63.7%
<b>Interbench - Video - Compile (Max Latency ms)</b>	142.68
Standard Deviation	26.5%
<b>Interbench - Video - Memload (Max Latency ms)</b>	0.38
Standard Deviation	99.6%
<b>Interbench - Gaming - Compile (Max Latency ms)</b>	267.97
Standard Deviation	18.6%
<b>Interbench - Gaming - Memload (Max Latency ms)</b>	2.80
<b>IOzone - 1MB - 2GB - Read Performance (MB/s)</b>	6933
Standard Deviation	2%
<b>IOzone - 1MB - 4GB - Read Performance (MB/s)</b>	6255
Standard Deviation	2.9%
<b>IOzone - 1MB - 8GB - Read Performance (MB/s)</b>	6988
Standard Deviation	2.2%
<b>IOzone - 4Kb - 2GB - Read Performance (MB/s)</b>	3394
Standard Deviation	3.3%
<b>IOzone - 4Kb - 4GB - Read Performance (MB/s)</b>	3677
Standard Deviation	0.4%
<b>IOzone - 4Kb - 8GB - Read Performance (MB/s)</b>	3726
Standard Deviation	1.3%

**IOzone - 1MB - 2GB - Write** 254.98  
**Performance (MB/s)**  
Standard Deviation 4%

**IOzone - 1MB - 4GB - Write** 264.61  
**Performance (MB/s)**  
Standard Deviation 4%

**IOzone - 1MB - 8GB - Write** 285.24  
**Performance (MB/s)**  
Standard Deviation 0.4%

**IOzone - 4Kb - 2GB - Write** 255.24  
**Performance (MB/s)**  
Standard Deviation 1.8%

**IOzone - 4Kb - 4GB - Write** 271.24  
**Performance (MB/s)**  
Standard Deviation 0.5%

**IOzone - 4Kb - 8GB - Write** 279.97  
**Performance (MB/s)**  
Standard Deviation 0.3%

**IOzone - 64Kb - 2GB - Read** 6208  
**Performance (MB/s)**  
Standard Deviation 0.4%

**IOzone - 64Kb - 4GB - Read** 6527  
**Performance (MB/s)**  
Standard Deviation 3.1%

**IOzone - 64Kb - 8GB - Read** 7201  
**Performance (MB/s)**  
Standard Deviation 1.3%

**IOzone - 1MB - 512MB - Read** 4076  
**Performance (MB/s)**  
Standard Deviation 2.2%

**IOzone - 4Kb - 512MB - Read** 2802  
**Performance (MB/s)**  
Standard Deviation 0.6%

**IOzone - 64Kb - 2GB - Write** 261.09  
**Performance (MB/s)**  
Standard Deviation 3.5%

**IOzone - 64Kb - 4GB - Write** 278.01  
**Performance (MB/s)**  
Standard Deviation 0.3%

**IOzone - 64Kb - 8GB - Write** 285.38  
**Performance (MB/s)**  
Standard Deviation 0.2%

**IOzone - 1MB - 512MB - Write** 233.79  
**Performance (MB/s)**  
Standard Deviation 3.2%

**IOzone - 4Kb - 512MB - Write** 230.88  
**Performance (MB/s)**  
Standard Deviation 2.7%

**IOzone - 64Kb - 512MB - Read** 4390  
**Performance (MB/s)**  
Standard Deviation 11.3%

<b>IOzone - 64Kb - 512MB - Write</b>	205.94		
<b>Performance (MB/s)</b>			
Standard Deviation	14.2%		
<b>Java 2D Microbenchmark - Text</b>		11706	
<b>Rendering (Units/sec)</b>			
Standard Deviation		3.5%	
<b>Java 2D Microbenchmark -</b>		1555370	
<b>Image Rendering (Units/sec)</b>			
Standard Deviation		0.3%	
<b>Java 2D Microbenchmark - A.R.T</b>		1042552	
<b>(Units/sec)</b>			
Standard Deviation		2.1%	
<b>Java 2D Microbenchmark - V.G.R</b>		895155	
<b>(Units/sec)</b>			
Standard Deviation		0.9%	
<b>Java Gradle Build - Reactor (sec)</b>	30.76		
Standard Deviation	0.8%		
<b>Java SciMark - Composite</b>	1708		
Standard Deviation	0.8%		
<b>Java SciMark - Monte Carlo</b>	684.09		
<b>(Mflops)</b>			
Standard Deviation	0.5%		
<b>Java SciMark - F.F.T (Mflops)</b>	1070		
Standard Deviation	2.6%		
<b>Java SciMark - S.M.M (Mflops)</b>	1587		
Standard Deviation	0.4%		
<b>Java SciMark - D.L.M.F (Mflops)</b>	4189		
Standard Deviation	1%		
<b>Java SciMark - J.S.O.R (Mflops)</b>	1011		
Standard Deviation	0.2%		
<b>John The Ripper - Blowfish (Real</b>	2501		
<b>C/S)</b>			
Standard Deviation	0.1%		
<b>John The Ripper - Traditional</b>	9620333		
<b>DES (Real C/S)</b>			
Standard Deviation	0.2%		
<b>John The Ripper - MD5 (Real</b>	80361		
<b>)</b>			
Standard Deviation	0.1%		
<b>JuliaGPU - CPU (Samples/sec)</b>		2211180	
Standard Deviation		0%	
<b>JuliaGPU - CPU+GPU</b>		2210998	
<b>(Samples/sec)</b>			
Standard Deviation		0%	
<b>JXRenderMark - Simple Blit -</b>		279588	
<b>32x32 (Operations/sec)</b>			
Standard Deviation		3%	
<b>JXRenderMark - 12pt Text LCD -</b>		155144	
<b>32x32 (Operations/sec)</b>			
Standard Deviation		3.1%	

JXRenderMark - Simple Blit - 128x128 (Operations/sec)	256952
Standard Deviation	6.2%
JXRenderMark - Simple Blit - 256x256 (Operations/sec)	95896
Standard Deviation	7.9%
JXRenderMark - Simple Blit - 512x512 (Operations/sec)	19533
Standard Deviation	8.5%
JXRenderMark - 12pt Text LCD - 128x128 (Operations/sec)	111009
Standard Deviation	4.2%
JXRenderMark - 12pt Text LCD - 256x256 (Operations/sec)	83353
Standard Deviation	3.4%
JXRenderMark - 12pt Text LCD - 512x512 (Operations/sec)	54374
Standard Deviation	3.5%
JXRenderMark - Put Composition - 32x32	15174
Standard Deviation	1.6%
JXRenderMark - Simple Blit - 1024x1024 (Operations/sec)	8913
Standard Deviation	17.3%
JXRenderMark - 12pt Text LCD - 1024x1024 (Operations/sec)	32527
Standard Deviation	4.3%
JXRenderMark - Put Composition - 128x128	11500
Standard Deviation	1.1%
JXRenderMark - Put Composition - 256x256	8504
Standard Deviation	4.5%
JXRenderMark - Put Composition - 512x512	5393
Standard Deviation	4.9%
JXRenderMark - Rects Composition - 32x32 (Operations/sec)	45354
Standard Deviation	3.6%
JXRenderMark - 1.T.G - 32x32 (Operations/sec)	154396
Standard Deviation	3.5%
JXRenderMark - Put Composition - 1024x1024	3347
Standard Deviation	10.4%
JXRenderMark - Rects Composition - 128x128 (Operations/sec)	35241
Standard Deviation	5.4%

JXRenderMark - Rects Composition - 256x256 (Operations/sec)	17806
Standard Deviation	5.4%
JXRenderMark - Rects Composition - 512x512 (Operations/sec)	9935
Standard Deviation	10.3%
JXRenderMark - 1.T.G - 128x128 (Operations/sec)	110398
Standard Deviation	3.4%
JXRenderMark - 1.T.G - 256x256 (Operations/sec)	82554
Standard Deviation	2.9%
JXRenderMark - 1.T.G - 512x512 (Operations/sec)	53410
Standard Deviation	5.1%
JXRenderMark - G.T.T - 32x32 (Operations/sec)	15247
Standard Deviation	3.6%
JXRenderMark - L.G.B - 32x32 (Operations/sec)	17945
Standard Deviation	3%
JXRenderMark - R.G.P - 32x32 (Operations/sec)	17663
Standard Deviation	3.5%
JXRenderMark - Rects Composition - 1024x1024 (Operations/sec)	5522
Standard Deviation	18.5%
JXRenderMark - 1.T.G - 1024x1024 (Operations/sec)	31972
Standard Deviation	2%
JXRenderMark - G.T.T - 128x128 (Operations/sec)	14173
Standard Deviation	3.4%
JXRenderMark - G.T.T - 256x256 (Operations/sec)	8898
Standard Deviation	6.1%
JXRenderMark - G.T.T - 512x512 (Operations/sec)	3209
Standard Deviation	8.5%
JXRenderMark - L.G.B - 128x128 (Operations/sec)	16741
Standard Deviation	3.7%
JXRenderMark - L.G.B - 256x256 (Operations/sec)	10638
Standard Deviation	8%
JXRenderMark - L.G.B - 512x512 (Operations/sec)	4037
Standard Deviation	7.6%

JXRenderMark - R.G.P - 128x128	16952
(Operations/sec)	
Standard Deviation	1.9%
JXRenderMark - R.G.P - 256x256	12016
(Operations/sec)	
Standard Deviation	3.5%
JXRenderMark - R.G.P - 512x512	5169
(Operations/sec)	
Standard Deviation	12.2%
JXRenderMark - T.B.L - 32x32	205110
(Operations/sec)	
Standard Deviation	1.3%
JXRenderMark - G.T.T - 1024x1024	2217
(Operations/sec)	
Standard Deviation	10.2%
JXRenderMark - L.G.B - 1024x1024	1829
(Operations/sec)	
Standard Deviation	13.5%
JXRenderMark - R.G.P - 1024x1024	2347
(Operations/sec)	
Standard Deviation	7.2%
JXRenderMark - T.B.B - 32x32	46869
(Operations/sec)	
Standard Deviation	1.9%
JXRenderMark - T.B.L - 128x128	193199
(Operations/sec)	
Standard Deviation	5.4%
JXRenderMark - T.B.L - 256x256	55114
(Operations/sec)	
Standard Deviation	8.8%
JXRenderMark - T.B.L - 512x512	15424
(Operations/sec)	
Standard Deviation	22.7%
JXRenderMark - T.T.P - 32x32	49442
(Operations/sec)	
Standard Deviation	3.4%
JXRenderMark - T.B.B - 128x128	42487
(Operations/sec)	
Standard Deviation	4%
JXRenderMark - T.B.B - 256x256	25935
(Operations/sec)	
Standard Deviation	7.2%
JXRenderMark - T.B.B - 512x512	8860
(Operations/sec)	
Standard Deviation	8%
JXRenderMark - T.B.L - 1024x1024	69108
(Operations/sec)	
Standard Deviation	132.1%
JXRenderMark - T.T.P - 128x128	46930
(Operations/sec)	
Standard Deviation	3.4%

JXRenderMark - T.T.P - 256x256 (Operations/sec)		18621
Standard Deviation		6.3%
JXRenderMark - T.T.P - 512x512 (Operations/sec)		9580
Standard Deviation		6.9%
JXRenderMark - T.B.B - 1024x1024 (Operations/sec)		4985
Standard Deviation		10%
JXRenderMark - T.T.P - 1024x1024 (Operations/sec)		5441
Standard Deviation		9.4%
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (Loop Time)	44.46	
Standard Deviation	0.4%	
LLVM Test Suite - Time To Run (sec)	293.54	
Standard Deviation	0.2%	
LuaJIT - Composite (Mflops)	918.47	
Standard Deviation	0.4%	
LuaJIT - Monte Carlo (Mflops)	347.12	
Standard Deviation	0.6%	
LuaJIT - F.F.T (Mflops)	213.57	
Standard Deviation	0.4%	
LuaJIT - S.M.M (Mflops)	886.88	
Standard Deviation	0.5%	
LuaJIT - D.L.M.F (Mflops)	2103	
Standard Deviation	0.7%	
LuaJIT - J.S.O.R (Mflops)	1041	
Standard Deviation	0.4%	
Izbench - XZ 0 - Compression (MB/s)	25	
Izbench - XZ 0 - Decompression (MB/s)	69	
Izbench - Zstd 1 - Compression (MB/s)	279	
Izbench - Zstd 1 - Decompression (MB/s)	749	
Izbench - Brotli 0 - Compression (MB/s)	288	
Standard Deviation	0.8%	
Izbench - Brotli 0 - Decompression (MB/s)	377	
Standard Deviation	0.6%	
Izbench - Libdeflate 1 - Compression (MB/s)	145	
Izbench - Libdeflate 1 - Decompression (MB/s)	735	
Standard Deviation	0.4%	
m-queens - Time To Solve (sec)	547.31	

Standard Deviation	0%	
<b>Timed MAFFT Alignment - M.S.A</b>	9.72	
(sec)		
Standard Deviation	1.1%	
<b>MandelbulbGPU - CPU</b>		602305
(Samples/sec)		
Standard Deviation	0.1%	
<b>MandelbulbGPU - CPU+GPU</b>		602012
(Samples/sec)		
Standard Deviation	0.1%	
<b>MandelGPU - CPU (Samples/sec)</b>		1650180
Standard Deviation	0%	
<b>MandelGPU - CPU+GPU</b>		1650583
(Samples/sec)		
Standard Deviation	0.1%	
<b>MBW - Memory Copy - 128 MiB</b>		11242
(MiB/s)		
Standard Deviation	0.9%	
<b>MBW - Memory Copy - 512 MiB</b>		10719
(MiB/s)		
Standard Deviation	0.2%	
<b>MBW - Memory Copy - 1024 MiB</b>		10261
(MiB/s)		
Standard Deviation	6.9%	
<b>MBW - Memory Copy - 4096 MiB</b>		11005
(MiB/s)		
Standard Deviation	8%	
<b>MBW - M.C.F.B.S - 128 MiB</b>		6640
(MiB/s)		
Standard Deviation	0.8%	
<b>MBW - M.C.F.B.S - 512 MiB</b>		6594
(MiB/s)		
Standard Deviation	0.3%	
<b>MBW - M.C.F.B.S - 1024 MiB</b>		6504
(MiB/s)		
Standard Deviation	0.2%	
<b>MBW - M.C.F.B.S - 4096 MiB</b>		6628
(MiB/s)		
Standard Deviation	2.2%	
<b>Memcached mcperf - Add</b>		51218
(Operations/sec)		
Standard Deviation	0.9%	
<b>Memcached mcperf - Get</b>		79289
(Operations/sec)		
Standard Deviation	0.5%	
<b>Memcached mcperf - Set</b>		51305
(Operations/sec)		
Standard Deviation	0.6%	
<b>Memcached mcperf - Append</b>		53966
(Operations/sec)		
Standard Deviation	1.3%	

<b>Memcached mcperf - Delete</b>		79660	
<b>(Operations/sec)</b>			
Standard Deviation		1%	
<b>Memcached mcperf - Prepend</b>		54383	
<b>(Operations/sec)</b>			
Standard Deviation		0.3%	
<b>Memcached mcperf - Replace</b>		53288	
<b>(Operations/sec)</b>			
Standard Deviation		3.1%	
<b>Mencoder - AVI To LAVC (sec)</b>	25.56		
Standard Deviation	0.4%		
<b>Minion - Graceful (sec)</b>	78.53		
Standard Deviation	0.5%		
<b>Minion - Solitaire (sec)</b>	102.82		
Standard Deviation	0.3%		
<b>Minion - Quasigroup (sec)</b>	174.51		
Standard Deviation	0.6%		
<b>Mixbench - Integer (GIOPS)</b>			5.30
Standard Deviation			1.9%
<b>Mixbench - Double Precision</b>			5.82
<b>(GFLOPS)</b>			
Standard Deviation			0.1%
<b>Mixbench - Single Precision</b>			0.12
<b>(GFLOPS)</b>			
Standard Deviation			0%
<b>MKL-DNN - IP Batch 1D - f32</b>	37.42		
Standard Deviation	1.3%		
<b>MKL-DNN - IP Batch All - f32</b>	437.58		
Standard Deviation	1.3%		
<b>MKL-DNN - IP Batch 1D -</b>	23.05		
<b>u8s8u8s32 (ms)</b>			
Standard Deviation	1%		
<b>MKL-DNN - IP Batch 1D -</b>	22.19		
<b>u8s8f32s32 (ms)</b>			
Standard Deviation	1%		
<b>MKL-DNN - IP Batch All -</b>	280.78		
<b>u8s8u8s32 (ms)</b>			
Standard Deviation	0.9%		
<b>MKL-DNN - IP Batch All -</b>	279.23		
<b>u8s8f32s32 (ms)</b>			
Standard Deviation	2.2%		
<b>MKL-DNN - C.B.c - f32 (ms)</b>	95.42		
Standard Deviation	0.1%		
<b>MKL-DNN - C.B.c - f32 (ms)</b>	16768		
Standard Deviation	0%		
<b>MKL-DNN - D.B.d - f32 (ms)</b>	34.68		
Standard Deviation	0.5%		
<b>MKL-DNN - D.B.d - f32 (ms)</b>	36.09		
Standard Deviation	0.6%		
<b>MKL-DNN - C.B.c - f32 (ms)</b>	2251		
Standard Deviation	0.1%		
<b>MKL-DNN - D.B.d - f32 (ms)</b>	13428		

Standard Deviation	0.2%
<b>MKL-DNN - C.B.c - u8s8u8s32</b>	77617
(ms)	
Standard Deviation	0%
<b>MKL-DNN - C.B.c - u8s8f32s32</b>	79533
(ms)	
Standard Deviation	0.1%
<b>MKL-DNN - C.B.c - u8s8u8s32</b>	93554
(ms)	
Standard Deviation	0.1%
<b>MKL-DNN - C.B.c - u8s8f32s32</b>	91265
(ms)	
Standard Deviation	0.1%
<b>MKL-DNN - C.B.c - f32 (ms)</b>	931.12
Standard Deviation	0.1%
<b>MKL-DNN - D.B.d - u8s8u8s32</b>	39192
(ms)	
Standard Deviation	0%
<b>MKL-DNN - D.B.d - u8s8u8s32</b>	63700
(ms)	
Standard Deviation	0%
<b>MKL-DNN - C.B.c - u8s8u8s32</b>	3152
(ms)	
Standard Deviation	0.4%
<b>MKL-DNN - D.B.d - u8s8f32s32</b>	38981
(ms)	
Standard Deviation	0.1%
<b>MKL-DNN - D.B.d - u8s8f32s32</b>	63906
(ms)	
Standard Deviation	0%
<b>MKL-DNN - D.B.d - u8s8u8s32</b>	112049
(ms)	
Standard Deviation	0.1%
<b>MKL-DNN - C.B.c - u8s8f32s32</b>	2892
(ms)	
Standard Deviation	0.1%
<b>MKL-DNN - C.B.c - u8s8u8s32</b>	1856
(ms)	
Standard Deviation	0.4%
<b>MKL-DNN - C.B.c - u8s8f32s32</b>	1610
(ms)	
Standard Deviation	0.2%
<b>GNU MPC - M.P.B (Global Score)</b>	6447
Standard Deviation	0.3%
<b>Timed MrBayes Analysis - P.P.A</b>	576.39
(sec)	
Standard Deviation	0%
<b>Multichase Pointer Chaser -</b>	9.53
<b>4.A.6.B.S (ns)</b>	
Standard Deviation	2.7%

<b>Multichase Pointer Chaser -</b>	90.39		
<b>1.A.2.B.S (ns)</b>			
Standard Deviation	1.7%		
<b>Multichase Pointer Chaser -</b>	91.63		
<b>2.A.2.B.S (ns)</b>			
Standard Deviation	0.5%		
<b>Multichase Pointer Chaser -</b>	99.84		
<b>1.A.2.B.S.2.T (ns)</b>			
Standard Deviation	0.8%		
<b>Multichase Pointer Chaser -</b>	187.87		
<b>1.A.2.B.S.4.T (ns)</b>			
Standard Deviation	2.5%		
<b>N-Queens - Elapsed Time (sec)</b>	96.74		
Standard Deviation	0.2%		
<b>NAMD - ATPase Simulation -</b>	10.46223		
<b>327,506 Atoms (days/ns)</b>			
Standard Deviation	0.2%		
<b>Open FMM Nero2D - Total Time</b>	241.16		
<b>(sec)</b>			
Standard Deviation	0.7%		
<b>Loopback TCP Network</b>			12.39
<b>Performance - T.T.T.1.V.L (sec)</b>			
Standard Deviation			0.3%
<b>NGINX Benchmark - S.W.P.S</b>		22358	
<b>(Reqs/sec)</b>			
Standard Deviation		0.2%	
<b>Node.js Octane Benchmark</b>	27150		
<b>(Score)</b>			
Standard Deviation	0.8%		
<b>NAS Parallel Benchmarks - BT.A</b>	2094		
<b>(Mop/s)</b>			
Standard Deviation	1.2%		
<b>NAS Parallel Benchmarks - EP.C</b>	127.79		
<b>(Mop/s)</b>			
Standard Deviation	0.4%		
<b>NAS Parallel Benchmarks - FT.A</b>	3800		
<b>(Mop/s)</b>			
Standard Deviation	0.4%		
<b>NAS Parallel Benchmarks - FT.B</b>	3837		
<b>(Mop/s)</b>			
Standard Deviation	0.6%		
<b>NAS Parallel Benchmarks - LU.A</b>	6926		
<b>(Mop/s)</b>			
Standard Deviation	0.3%		
<b>NAS Parallel Benchmarks - LU.C</b>	5893		
<b>(Mop/s)</b>			
Standard Deviation	0.1%		
<b>NAS Parallel Benchmarks - SP.A</b>	1856		
<b>(Mop/s)</b>			
Standard Deviation	1%		

<b>Numenta Anomaly Benchmark - Time To Completion (sec)</b>	961.02	
Standard Deviation	0.4%	
<b>Numpy Benchmark</b>	7139022	
<b>Nuttcp - 10G+ UDP - 5.20.0.41 (Mbits/s)</b>		166.07
Standard Deviation		5.7%
<b>Nuttcp - TCP Transfer - Default - 5.20.0.41 (Mbits/s)</b>		127.38
Standard Deviation		6.4%
<b>OpenArena - 800 x 600 (FPS)</b>		178.87
Standard Deviation		0.4%
<b>OpenArena - 1024 x 768 (FPS)</b>		126.23
Standard Deviation		0%
<b>OpenArena - 1920 x 1080 (FPS)</b>		49.07
Standard Deviation		0.1%
<b>OpenArena - 2560 x 1440 (FPS)</b>		197.00
Standard Deviation		0.8%
<b>OpenSSL - R.4.b.P (Signs/sec)</b>	410.97	
Standard Deviation	0.1%	
<b>Optcarrot - O.B (FPS)</b>		82.75
Standard Deviation		0.6%
<b>OSBench - Create Files</b>		20.43
Standard Deviation		1%
<b>OSBench - Create Threads (us/Event)</b>		19.31
Standard Deviation		3.1%
<b>OSBench - Launch Programs (us/Event)</b>		118.63
Standard Deviation		0.4%
<b>OSBench - Create Processes (us/Event)</b>		34.92
Standard Deviation		0.5%
<b>OSBench - Memory Allocations (Ns/Event)</b>		106.60
Standard Deviation		0.1%
<b>ParaView - Many Spheres - 800 x 600 (Frames / Sec)</b>		5.03
Standard Deviation		0.3%
<b>ParaView - Many Spheres - 800 x 600 (MiPolys / Sec)</b>		504.59
Standard Deviation		0.3%
<b>ParaView - Many Spheres - 1024 x 576 (Frames / Sec)</b>		5.02
Standard Deviation		0.7%
<b>ParaView - Many Spheres - 1024 x 576 (MiPolys / Sec)</b>		503.21
Standard Deviation		0.7%
<b>ParaView - Many Spheres - 1024 x 768 (Frames / Sec)</b>		5.00
Standard Deviation		0.1%

<b>ParaView - Many Spheres - 1024</b>	501.01
<b>x 768 (MiPolys / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1280</b>	4.99
<b>x 800 (Frames / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1280</b>	499.93
<b>x 800 (MiPolys / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1280</b>	4.95
<b>x 960 (Frames / Sec)</b>	
Standard Deviation	0%
<b>ParaView - Many Spheres - 1280</b>	495.97
<b>x 960 (MiPolys / Sec)</b>	
Standard Deviation	0%
<b>ParaView - Many Spheres - 1368</b>	5.01
<b>x 768 (Frames / Sec)</b>	
Standard Deviation	0.3%
<b>ParaView - Many Spheres - 1368</b>	501.96
<b>x 768 (MiPolys / Sec)</b>	
Standard Deviation	0.3%
<b>ParaView - Many Spheres - 1400</b>	4.93
<b>x 900 (Frames / Sec)</b>	
Standard Deviation	1.1%
<b>ParaView - Many Spheres - 1400</b>	494.32
<b>x 900 (MiPolys / Sec)</b>	
Standard Deviation	1%
<b>ParaView - Many Spheres - 1440</b>	4.97
<b>x 810 (Frames / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1440</b>	498.74
<b>x 810 (MiPolys / Sec)</b>	
Standard Deviation	0.2%
<b>ParaView - Many Spheres - 1440</b>	4.95
<b>x 900 (Frames / Sec)</b>	
Standard Deviation	0.2%
<b>ParaView - Many Spheres - 1440</b>	496.10
<b>x 900 (MiPolys / Sec)</b>	
Standard Deviation	0.2%
<b>ParaView - Many Spheres - 1600</b>	4.94
<b>x 900 (Frames / Sec)</b>	
Standard Deviation	0%
<b>ParaView - Many Spheres - 1600</b>	495.22
<b>x 900 (MiPolys / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1280</b>	4.91
<b>x 1024 (Frames / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1280</b>	492.47
<b>x 1024 (MiPolys / Sec)</b>	
Standard Deviation	0.1%

<b>ParaView - Many Spheres - 1400</b>	4.91
<b>x 1050 (Frames / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1400</b>	491.74
<b>x 1050 (MiPolys / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1600</b>	4.89
<b>x 1024 (Frames / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1600</b>	490.80
<b>x 1024 (MiPolys / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1680</b>	4.88
<b>x 1050 (Frames / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1680</b>	489.43
<b>x 1050 (MiPolys / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1920</b>	4.88
<b>x 1080 (Frames / Sec)</b>	
Standard Deviation	0.1%
<b>ParaView - Many Spheres - 1920</b>	489.54
<b>x 1080 (MiPolys / Sec)</b>	
Standard Deviation	0%
<b>ParaView - Wavelet Volume - 800</b>	36.68
<b>x 600 (Frames / Sec)</b>	
Standard Deviation	0.4%
<b>ParaView - Wavelet Volume - 800</b>	586.84
<b>x 600 (MiVoxels / Sec)</b>	
Standard Deviation	0.4%
<b>ParaView - Wavelet Contour -</b>	30.77
<b>800 x 600 (Frames / Sec)</b>	
Standard Deviation	0.9%
<b>ParaView - Wavelet Contour -</b>	320.66
<b>800 x 600 (MiPolys / Sec)</b>	
Standard Deviation	0.9%
<b>ParaView - Wavelet Volume -</b>	37.96
<b>1024 x 576 (Frames / Sec)</b>	
Standard Deviation	0.6%
<b>ParaView - Wavelet Volume -</b>	607.32
<b>1024 x 576 (MiVoxels / Sec)</b>	
Standard Deviation	0.6%
<b>ParaView - Wavelet Volume -</b>	28.60
<b>1024 x 768 (Frames / Sec)</b>	
Standard Deviation	0.8%
<b>ParaView - Wavelet Volume -</b>	457.66
<b>1024 x 768 (MiVoxels / Sec)</b>	
Standard Deviation	0.8%
<b>ParaView - Wavelet Volume -</b>	27.10
<b>1280 x 800 (Frames / Sec)</b>	
Standard Deviation	0.3%

<b>ParaView - Wavelet Volume - 1280 x 800 (MiVoxels / Sec)</b>	433.66
Standard Deviation	0.2%
<b>ParaView - Wavelet Volume - 1280 x 960 (Frames / Sec)</b>	22.94
Standard Deviation	0.5%
<b>ParaView - Wavelet Volume - 1280 x 960 (MiVoxels / Sec)</b>	367.08
Standard Deviation	0.6%
<b>ParaView - Wavelet Volume - 1368 x 768 (Frames / Sec)</b>	28.27
Standard Deviation	0.4%
<b>ParaView - Wavelet Volume - 1368 x 768 (MiVoxels / Sec)</b>	452.36
Standard Deviation	0.4%
<b>ParaView - Wavelet Volume - 1400 x 900 (Frames / Sec)</b>	24.23
Standard Deviation	0.3%
<b>ParaView - Wavelet Volume - 1400 x 900 (MiVoxels / Sec)</b>	387.66
Standard Deviation	0.3%
<b>ParaView - Wavelet Volume - 1440 x 810 (Frames / Sec)</b>	26.76
Standard Deviation	0.4%
<b>ParaView - Wavelet Volume - 1440 x 810 (MiVoxels / Sec)</b>	428.15
Standard Deviation	0.4%
<b>ParaView - Wavelet Volume - 1440 x 900 (Frames / Sec)</b>	24.14
Standard Deviation	0.7%
<b>ParaView - Wavelet Volume - 1440 x 900 (MiVoxels / Sec)</b>	386.32
Standard Deviation	0.7%
<b>ParaView - Wavelet Volume - 1600 x 900 (Frames / Sec)</b>	24.03
Standard Deviation	0.6%
<b>ParaView - Wavelet Volume - 1600 x 900 (MiVoxels / Sec)</b>	384.45
Standard Deviation	0.6%
<b>ParaView - Wavelet Contour - 1024 x 576 (Frames / Sec)</b>	32.16
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1024 x 576 (MiPolys / Sec)</b>	335.16
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1024 x 768 (Frames / Sec)</b>	20.63
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1024 x 768 (MiPolys / Sec)</b>	215.04
Standard Deviation	0.2%

<b>ParaView - Wavelet Contour - 1280 x 800 (Frames / Sec)</b>	19.50
Standard Deviation	0%
<b>ParaView - Wavelet Contour - 1280 x 800 (MiPolys / Sec)</b>	203.27
Standard Deviation	0%
<b>ParaView - Wavelet Contour - 1280 x 960 (Frames / Sec)</b>	15.72
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1280 x 960 (MiPolys / Sec)</b>	163.83
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1368 x 768 (Frames / Sec)</b>	20.55
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1368 x 768 (MiPolys / Sec)</b>	214.18
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1400 x 900 (Frames / Sec)</b>	16.84
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1400 x 900 (MiPolys / Sec)</b>	175.53
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1440 x 810 (Frames / Sec)</b>	19.12
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1440 x 810 (MiPolys / Sec)</b>	199.22
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1440 x 900 (Frames / Sec)</b>	16.81
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1440 x 900 (MiPolys / Sec)</b>	175.16
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1600 x 900 (Frames / Sec)</b>	16.80
Standard Deviation	0.2%
<b>ParaView - Wavelet Contour - 1600 x 900 (MiPolys / Sec)</b>	175.01
Standard Deviation	0.2%
<b>ParaView - Wavelet Volume - 1280 x 1024 (Frames / Sec)</b>	21.62
Standard Deviation	0.3%
<b>ParaView - Wavelet Volume - 1280 x 1024 (MiVoxels / Sec)</b>	345.95
Standard Deviation	0.3%
<b>ParaView - Wavelet Volume - 1400 x 1050 (Frames / Sec)</b>	21.36
Standard Deviation	0.2%

<b>ParaView - Wavelet Volume - 1400 x 1050 (MiVoxels / Sec)</b>	341.83
Standard Deviation	0.2%
<b>ParaView - Wavelet Volume - 1600 x 1024 (Frames / Sec)</b>	20.93
Standard Deviation	0.8%
<b>ParaView - Wavelet Volume - 1600 x 1024 (MiVoxels / Sec)</b>	334.93
Standard Deviation	0.8%
<b>ParaView - Wavelet Volume - 1680 x 1050 (Frames / Sec)</b>	20.99
Standard Deviation	0.3%
<b>ParaView - Wavelet Volume - 1680 x 1050 (MiVoxels / Sec)</b>	335.81
Standard Deviation	0.3%
<b>ParaView - Wavelet Volume - 1920 x 1080 (Frames / Sec)</b>	20.97
Standard Deviation	0.1%
<b>ParaView - Wavelet Volume - 1920 x 1080 (MiVoxels / Sec)</b>	335.61
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1280 x 1024 (Frames / Sec)</b>	14.64
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1280 x 1024 (MiPolys / Sec)</b>	152.53
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1400 x 1050 (Frames / Sec)</b>	14.58
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1400 x 1050 (MiPolys / Sec)</b>	151.91
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1600 x 1024 (Frames / Sec)</b>	14.45
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1600 x 1024 (MiPolys / Sec)</b>	150.58
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1680 x 1050 (Frames / Sec)</b>	14.44
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1680 x 1050 (MiPolys / Sec)</b>	150.44
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1920 x 1080 (Frames / Sec)</b>	14.43
Standard Deviation	0.1%
<b>ParaView - Wavelet Contour - 1920 x 1080 (MiPolys / Sec)</b>	150.43
Standard Deviation	0.1%

<b>Parboil - OpenMP LBM (sec)</b>	181.55	
Standard Deviation	0.9%	
<b>Parboil - OpenMP CUTCP (sec)</b>	23.08	
Standard Deviation	0.2%	
<b>Parboil - OpenMP Stencil (sec)</b>	33.54	
Standard Deviation	0.7%	
<b>Parboil - O.M.G (sec)</b>	30.74	
Standard Deviation	2.2%	
<b>Perl Benchmarks - Pod2html</b>	0.17173742	
Standard Deviation	1%	
<b>Perl Benchmarks - Interpreter</b>	0.00138340	
Standard Deviation	0.3%	
<b>PostgreSQL pgbench - On-Disk - Normal Load - Read Only (TPS)</b>		55343
Standard Deviation		1.6%
<b>PostgreSQL pgbench - On-Disk - Normal Load - Read Write (TPS)</b>		312.78
Standard Deviation		0.2%
<b>PostgreSQL pgbench - On-Disk - Single Thread - Read Only (TPS)</b>		20891
Standard Deviation		1.8%
<b>PostgreSQL pgbench - Mostly RAM - Normal Load - Read Only (TPS)</b>		0.07
Standard Deviation		0.1%
<b>PostgreSQL pgbench - On-Disk - Single Thread - Read Write (TPS)</b>		91.69
Standard Deviation		0.6%
<b>PostgreSQL pgbench - Buffer Test - Normal Load - Read Only</b>		38061
Standard Deviation		0.8%
<b>PostgreSQL pgbench - Mostly RAM - Normal Load - Read Write (TPS)</b>		0.04
Standard Deviation		0.3%
<b>PostgreSQL pgbench - Buffer Test - Normal Load - Read Write</b>		870.09
Standard Deviation		0.5%
<b>PostgreSQL pgbench - Mostly RAM - Single Thread - Read Only (TPS)</b>		0.01
Standard Deviation		0.1%
<b>PostgreSQL pgbench - On-Disk - Heavy Contention - Read Only (TPS)</b>		51057
Standard Deviation		0.7%
<b>PostgreSQL pgbench - Buffer Test - Single Thread - Read Only</b>		14428
Standard Deviation		0.3%

PostgreSQL pgbench - On-Disk - Heavy Contention - Read Write (TPS)	309.28	
Standard Deviation	0.3%	
PostgreSQL pgbench - Buffer Test - Single Thread - Read Write	148.94	
Standard Deviation	9.1%	
PostgreSQL pgbench - Mostly RAM - Heavy Contention - Read Only (TPS)	0.07	
Standard Deviation	0.7%	
PostgreSQL pgbench - Buffer Test - Heavy Contention - Read Only (TPS)	35013	
Standard Deviation	0.5%	
PostgreSQL pgbench - Mostly RAM - Heavy Contention - Read Write (TPS)	0.04	
Standard Deviation	2.1%	
PostgreSQL pgbench - Buffer Test - Heavy Contention - Read Write (TPS)	1190	
Standard Deviation	7%	
PHP Micro Benchmarks - Zend bench (sec)	0.59	
Standard Deviation	0.5%	
PHP Micro Benchmarks - Zend micro_bench (sec)	2.93	
Standard Deviation	0.9%	
PHPBench - P.B.S (Score)	445196	
Standard Deviation	0.4%	
Pjdfstest (sec)	176	
PolyBench-C - C.C (sec)	8.31	
Standard Deviation	1.2%	
PolyBench-C - C.C (sec)	8.23	
Standard Deviation	0.5%	
PolyBench-C - 3.M.M (sec)	5.74	
Standard Deviation	0.8%	
PostMark - D.T.P (TPS)	4190	
Standard Deviation	1%	
POV-Ray - Trace Time (sec)	299.17	
Standard Deviation	0.2%	
Primesieve - 1.P.N.G (sec)	152.26	
Standard Deviation	0.6%	
PyBench - T.F.A.T.T	1521	
Standard Deviation	0.6%	
QGears2 - OpenGL - Text (FPS)	532.12	
Standard Deviation	0.2%	
QGears2 - OpenGL - Gears (FPS)	607.31	
Standard Deviation	1.9%	

QGears2 - OpenGL - Image Scaling (FPS)		2390
Standard Deviation		0.6%
QGears2 - CPU-based Raster - Text (FPS)		293.73
Standard Deviation		0.9%
QGears2 - CPU-based Raster - Gears (FPS)		179.38
Standard Deviation		0.1%
QGears2 - XRender Extension - Text (FPS)		280.15
Standard Deviation		0.1%
QGears2 - XRender Extension - Gears (FPS)		186.50
Standard Deviation		0.1%
QGears2 - CPU-based Raster - Image Scaling (FPS)		1328
Standard Deviation		0.4%
QGears2 - XRender Extension - Image Scaling (FPS)		1639
Standard Deviation		0.6%
Qmlbench - Fib10 (Frames)	263.20	
Qmlbench - Canvas Text Simple (Frames)	241.20	
Qmlbench - C.D.F (Frames)	285	
Qmlbench - M.I.A (Frames)	383.20	
Radiance Benchmark - Serial	1133	
Radiance Benchmark - SMP Parallel (sec)	594.13	
RAMspeed SMP - Add - Integer (MB/s)	19479	
RAMspeed SMP - Copy - Integer (MB/s)	17464	
RAMspeed SMP - Scale - Integer (MB/s)	17513	
RAMspeed SMP - Triad - Integer (MB/s)	19752	
RAMspeed SMP - Average - Integer (MB/s)	18553	
RAMspeed SMP - Add - Floating Point (MB/s)	19556	
RAMspeed SMP - Copy - Floating Point (MB/s)	17485	
RAMspeed SMP - Scale - Floating Point (MB/s)	17498	
RAMspeed SMP - Triad - Floating Point (MB/s)	19454	

<b>RAMspeed SMP - Average -</b>		18497	
<b>Floating Point (MB/s)</b>			
<b>R Benchmark (sec)</b>	0.5950		
Standard Deviation	0.7%		
<b>Redis - LPOP (Reqs/sec)</b>		1870223	
Standard Deviation		10.9%	
<b>Redis - SADD (Reqs/sec)</b>		1543506	
Standard Deviation		1.7%	
<b>Redis - LPUSH (Reqs/sec)</b>		1208132	
Standard Deviation		6.8%	
<b>Redis - GET (Reqs/sec)</b>		1777741	
Standard Deviation		11%	
<b>Redis - SET (Reqs/sec)</b>		1230756	
Standard Deviation		7.7%	
<b>Renaissance - Scala Dotty (ms)</b>	13687		
Standard Deviation	2.5%		
<b>Renaissance - Twitter Finagle</b>	11028		
Standard Deviation	3.4%		
<b>Renaissance - Apache Spark</b>	12630		
<b>ALS (ms)</b>			
Standard Deviation	3.3%		
<b>Renaissance - Apache Spark</b>	19291		
<b>Bayes (ms)</b>			
Standard Deviation	5%		
<b>Renaissance - Savina</b>	24755		
<b>Reactors.IO (ms)</b>			
Standard Deviation	1.5%		
<b>Renaissance - A.S.P (ms)</b>	55023		
Standard Deviation	1.3%		
<b>Renaissance - I.M.D.S (ms)</b>	11442		
Standard Deviation	4.9%		
<b>Renaissance - A.U.C.T (ms)</b>	25099		
Standard Deviation	3.5%		
<b>Render Bench (sec)</b>		17.17	
Standard Deviation		0.2%	
<b>Rodinia - OpenMP LavaMD (sec)</b>	471.34		
Standard Deviation	0.1%		
<b>Rodinia - OpenMP CFD Solver</b>	114.02		
<b>(sec)</b>			
Standard Deviation	0.1%		
<b>Rodinia - O.S (sec)</b>	55.31		
Standard Deviation	0.2%		
<b>CP2K Molecular Dynamics -</b>	866.15		
<b>Fayalite-FIST Data (sec)</b>			
<b>GROMACS - Water Benchmark</b>		0.24	
<b>(Ns/Day)</b>			
Standard Deviation		0%	
<b>Rust Mandelbrot - T.T.C.S.P.M</b>	147.15		
<b>(sec)</b>			
Standard Deviation	0.1%		

<b>Rust Prime Benchmark -</b>	72.19	
<b>P.N.T.T.2.0.0 (sec)</b>		
Standard Deviation	0.1%	
<b>Schbench - 2 - 2 (usec, 99.9th</b>		2503
<b>Latency Percentile)</b>		
Standard Deviation		124.3%
<b>Schbench - 2 - 4 (usec, 99.9th</b>		14675
<b>Latency Percentile)</b>		
Standard Deviation		9.1%
<b>Schbench - 2 - 6 (usec, 99.9th</b>		38293
<b>Latency Percentile)</b>		
Standard Deviation		3.3%
<b>Schbench - 2 - 8 (usec, 99.9th</b>		45803
<b>Latency Percentile)</b>		
Standard Deviation		1.2%
<b>Schbench - 4 - 2 (usec, 99.9th</b>		16829
<b>Latency Percentile)</b>		
Standard Deviation		7.4%
<b>Schbench - 4 - 4 (usec, 99.9th</b>		41963
<b>Latency Percentile)</b>		
Standard Deviation		3.1%
<b>Schbench - 4 - 6 (usec, 99.9th</b>		56811
<b>Latency Percentile)</b>		
Standard Deviation		6.5%
<b>Schbench - 4 - 8 (usec, 99.9th</b>		91605
<b>Latency Percentile)</b>		
Standard Deviation		0.8%
<b>Schbench - 6 - 2 (usec, 99.9th</b>		34923
<b>Latency Percentile)</b>		
Standard Deviation		2.2%
<b>Schbench - 6 - 4 (usec, 99.9th</b>		54848
<b>Latency Percentile)</b>		
Standard Deviation		2.1%
<b>Schbench - 6 - 6 (usec, 99.9th</b>		103552
<b>Latency Percentile)</b>		
Standard Deviation		0.9%
<b>Schbench - 6 - 8 (usec, 99.9th</b>		134955
<b>Latency Percentile)</b>		
Standard Deviation		2.7%
<b>Schbench - 8 - 2 (usec, 99.9th</b>		39659
<b>Latency Percentile)</b>		
Standard Deviation		2.7%
<b>Schbench - 8 - 4 (usec, 99.9th</b>		82517
<b>Latency Percentile)</b>		
Standard Deviation		10.2%
<b>Schbench - 8 - 6 (usec, 99.9th</b>		129941
<b>Latency Percentile)</b>		
Standard Deviation		3.7%
<b>Schbench - 8 - 8 (usec, 99.9th</b>		168960
<b>Latency Percentile)</b>		
Standard Deviation		6.6%

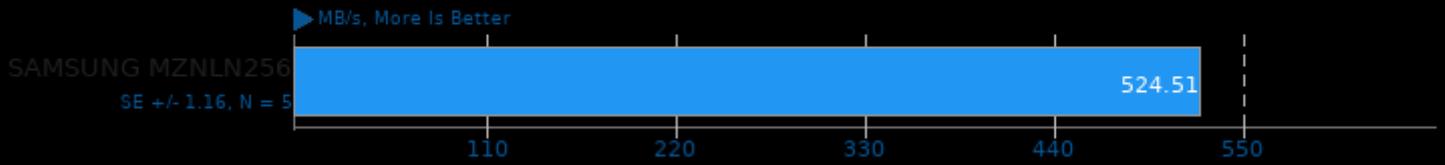
<b>Schbench - 16 - 2 (usec, 99.9th Latency Percentile)</b>	55360
Standard Deviation	1.6%
<b>Schbench - 16 - 4 (usec, 99.9th Latency Percentile)</b>	171093
Standard Deviation	1.5%
<b>Schbench - 16 - 6 (usec, 99.9th Latency Percentile)</b>	243584
Standard Deviation	6.6%
<b>Schbench - 16 - 8 (usec, 99.9th Latency Percentile)</b>	316587
Standard Deviation	1.8%
<b>Schbench - 2 - 16 (usec, 99.9th Latency Percentile)</b>	93653
Standard Deviation	5.5%
<b>Schbench - 2 - 24 (usec, 99.9th Latency Percentile)</b>	128192
Standard Deviation	3.8%
<b>Schbench - 2 - 32 (usec, 99.9th Latency Percentile)</b>	169472
Standard Deviation	5.8%
<b>Schbench - 32 - 2 (usec, 99.9th Latency Percentile)</b>	150443
Standard Deviation	3.5%
<b>Schbench - 32 - 4 (usec, 99.9th Latency Percentile)</b>	328192
Standard Deviation	2.4%
<b>Schbench - 32 - 6 (usec, 99.9th Latency Percentile)</b>	552619
Standard Deviation	3%
<b>Schbench - 32 - 8 (usec, 99.9th Latency Percentile)</b>	703147
Standard Deviation	6.1%
<b>Schbench - 4 - 16 (usec, 99.9th Latency Percentile)</b>	170069
Standard Deviation	6.3%
<b>Schbench - 4 - 24 (usec, 99.9th Latency Percentile)</b>	243456
Standard Deviation	3.9%
<b>Schbench - 4 - 32 (usec, 99.9th Latency Percentile)</b>	361301
Standard Deviation	2.7%
<b>Schbench - 6 - 16 (usec, 99.9th Latency Percentile)</b>	243840
Standard Deviation	3.3%
<b>Schbench - 6 - 24 (usec, 99.9th Latency Percentile)</b>	404309
Standard Deviation	1.2%
<b>Schbench - 6 - 32 (usec, 99.9th Latency Percentile)</b>	568320
Standard Deviation	3.4%

Schbench - 8 - 16 (usec, 99.9th Latency Percentile)		354816
Standard Deviation		2.8%
Schbench - 8 - 24 (usec, 99.9th Latency Percentile)		541696
Standard Deviation		3.3%
Schbench - 8 - 32 (usec, 99.9th Latency Percentile)		701440
Standard Deviation		3.8%
Schbench - 16 - 16 (usec, 99.9th Latency Percentile)		715776
Standard Deviation		9.1%
Schbench - 16 - 24 (usec, 99.9th Latency Percentile)		1040384
Standard Deviation		3%
Schbench - 16 - 32 (usec, 99.9th Latency Percentile)		1374208
Standard Deviation		3.4%
Schbench - 32 - 16 (usec, 99.9th Latency Percentile)		1313451
Standard Deviation		5.5%
Schbench - 32 - 24 (usec, 99.9th Latency Percentile)		2069163
Standard Deviation		18%
Schbench - 32 - 32 (usec, 99.9th Latency Percentile)		2688341
Standard Deviation		13.4%
Scikit-Learn (sec)		42.36
Standard Deviation		0.5%
SciMark - Composite (Mflops)	420.35	
Standard Deviation	0.4%	
SciMark - Monte Carlo (Mflops)	95.40	
Standard Deviation	0.6%	
SciMark - F.F.T (Mflops)	120.72	
Standard Deviation	0.2%	
SciMark - S.M.M (Mflops)	498.72	
Standard Deviation	0.5%	
SciMark - D.L.M.F (Mflops)	604.12	
Standard Deviation	0.5%	
SciMark - J.S.O.R (Mflops)	782.81	
Standard Deviation	0.4%	
SHOC Scalable Heterogeneous Computing - OpenCL - Triad (GB/s)		7.15
Standard Deviation		0.2%
SHOC Scalable Heterogeneous Computing - OpenCL - FFT SP (GFLOPS)		0.99
Standard Deviation		0%

SHOC Scalable HeterOgeneous		0.02
Computing - OpenCL - MD5		
Hash (GHash/s)		
Standard Deviation		0%
SHOC Scalable HeterOgeneous		74.00
Computing - OpenCL - Max SP		
Flops (GFLOPS)		
Standard Deviation		2.9%
SHOC Scalable HeterOgeneous		14.76
Computing - OpenCL - Bus		
Speed Download (GB/s)		
Standard Deviation		5%
SHOC Scalable HeterOgeneous		14.15
Computing - OpenCL - Bus		
Speed Readback (GB/s)		
Standard Deviation		3%
SHOC Scalable HeterOgeneous		2.14
Computing - OpenCL - T.R.B		
(GB/s)		
Standard Deviation		0.2%
Smallpt - G.I.R.1.S (sec)	73.70	
Standard Deviation	0.1%	

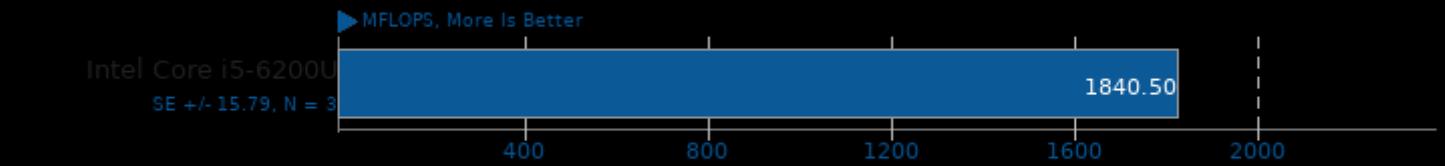
### hdparm Timed Disk Reads

Disk To Read: /dev/sda



### Himeno Benchmark 3.0

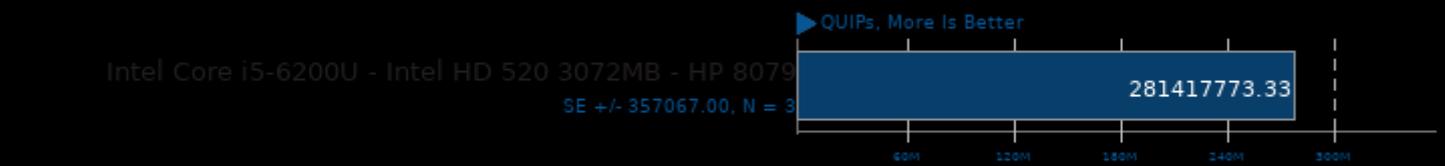
Poisson Pressure Solver



1. (CC) gcc options: -O3 -mavx2

### Hierarchical INTegration 1.0

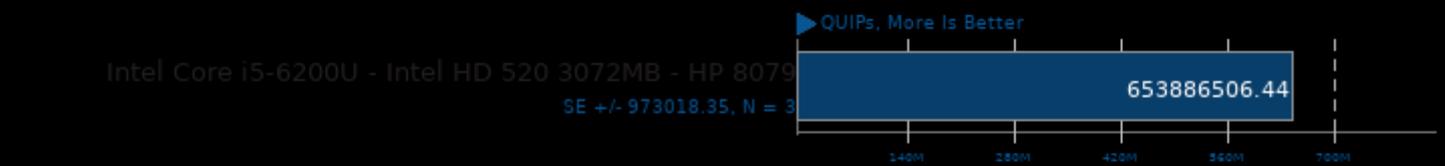
Test: FLOAT



1. (CC) gcc options: -O3 -march=native -lm

### Hierarchical INTegration 1.0

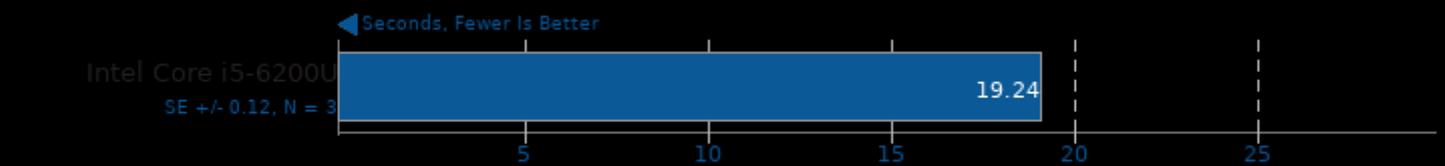
Test: DOUBLE



1. (CC) gcc options: -O3 -march=native -lm

### Timed HMMer Search 2.3.2

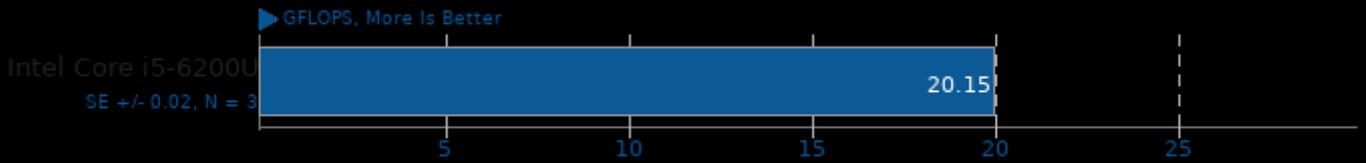
Pfam Database Search



1. (CC) gcc options: -O2 -pthread -lhmmmer -lsquid -lm

### HPC Challenge 1.5.0

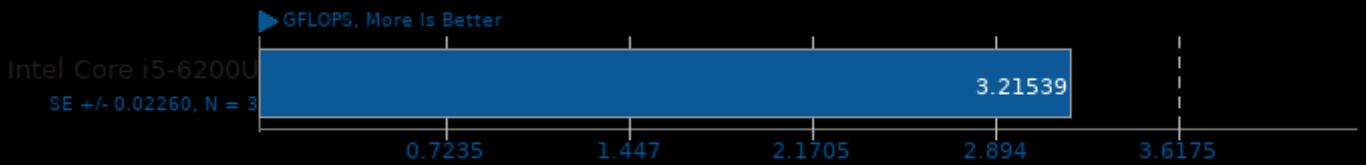
Test / Class: G-HPL



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

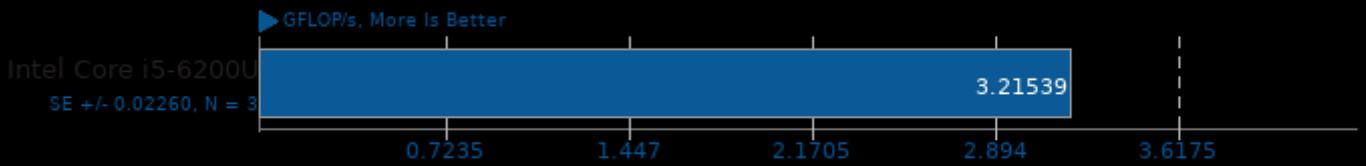
Test / Class: G-Ffte



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

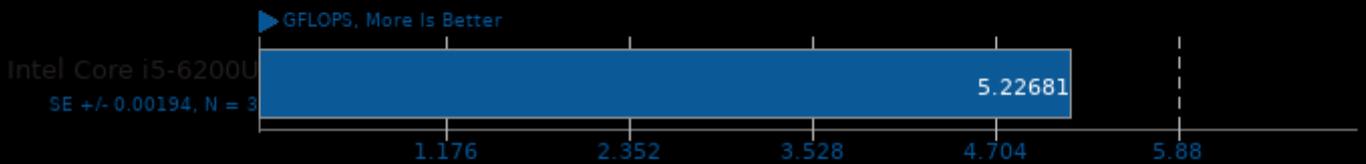
Test / Class: G-Ffte



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

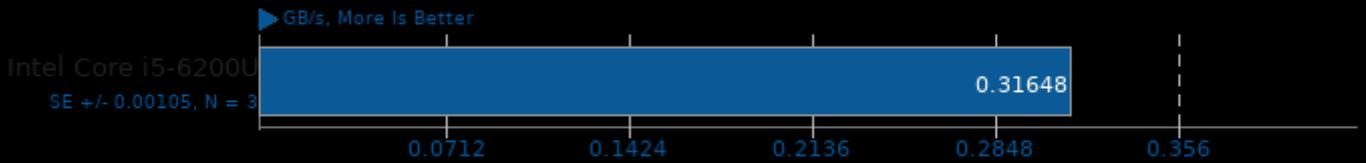
Test / Class: EP-DGEMM



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

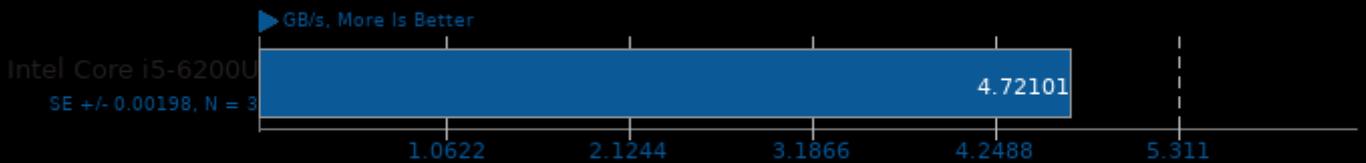
Test / Class: G-Ptrans



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

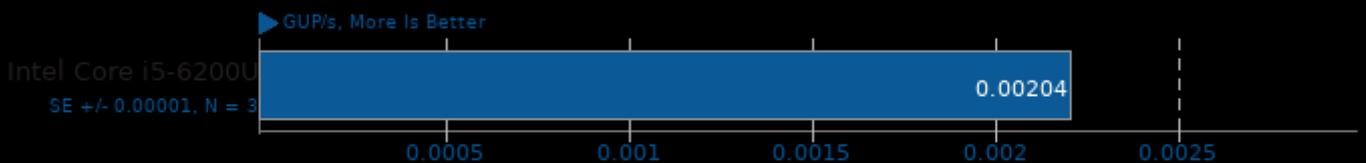
Test / Class: EP-STREAM Triad



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

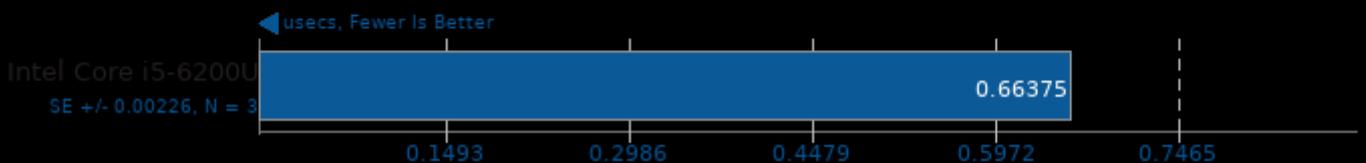
Test / Class: G-Random Access



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

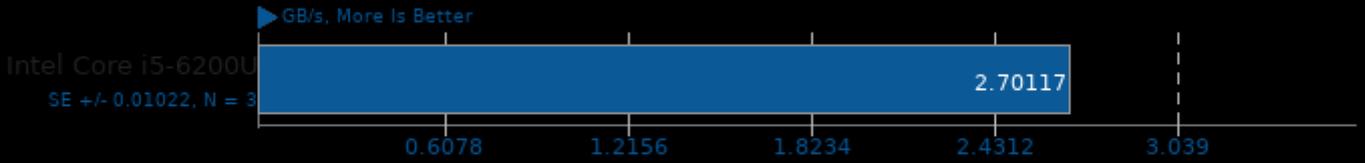
Test / Class: Random Ring Latency



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -O3 -march=native -funroll-loops  
2. ATLAS + Open MPI 2.1.1

### HPC Challenge 1.5.0

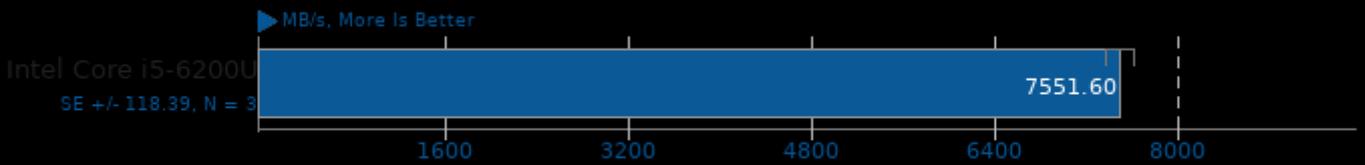
Test / Class: Random Ring Bandwidth



- 1. (CC) gcc options: -lblas -lm -pthread -lm -fomit-frame-pointer -O3 -march=native -funroll-loops
- 2. ATLAS + Open MPI 2.1.1

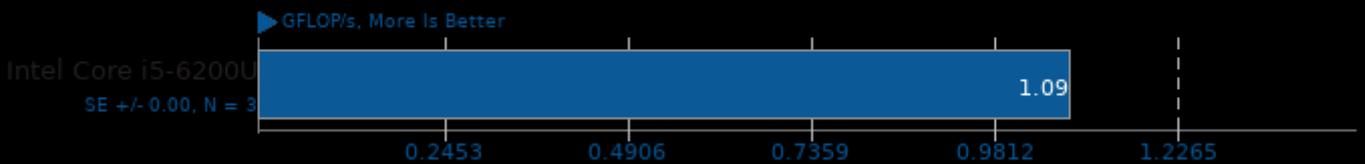
### HPC Challenge 1.5.0

Test / Class: Max Ping Pong Bandwidth



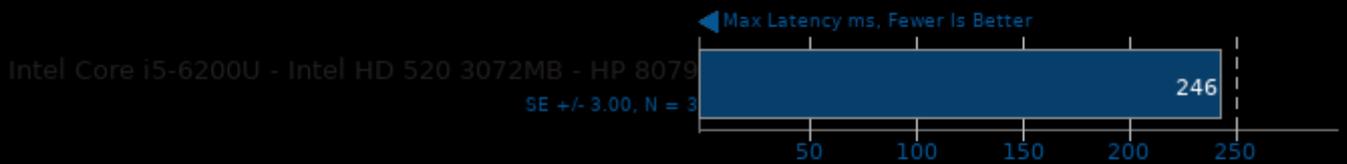
- 1. (CC) gcc options: -lblas -lm -pthread -lm -fomit-frame-pointer -O3 -march=native -funroll-loops
- 2. ATLAS + Open MPI 2.1.1

### High Performance Conjugate Gradient 3.0



### Interbench 0.31

Benchmark: X - Background Load: Burn



- 1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: X - Background Load: Read



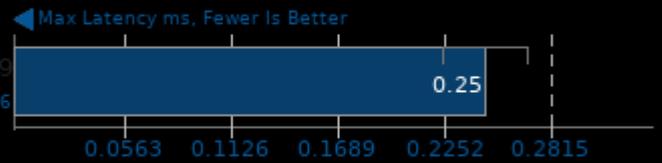
- 1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Audio - Background Load: X

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 0.02, N = 6



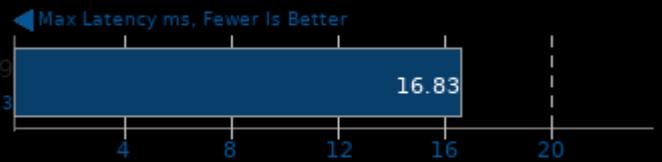
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Video - Background Load: X

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 0.03, N = 3



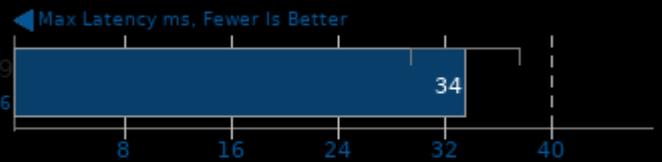
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: X - Background Load: Video

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 4.12, N = 6



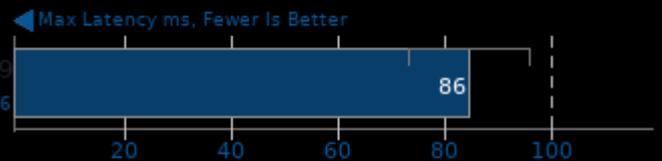
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: X - Background Load: Write

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 11.22, N = 6

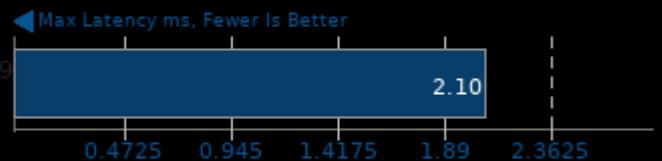


1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Gaming - Background Load: X

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079



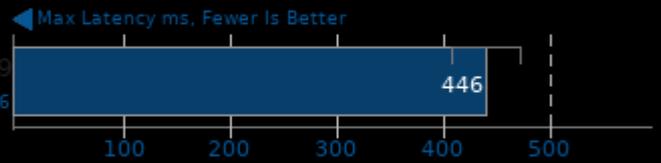
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: X - Background Load: Compile

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 33.23, N = 6



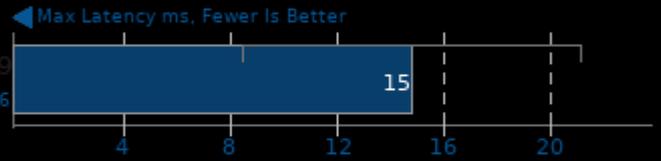
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: X - Background Load: Memload

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 6.41, N = 6



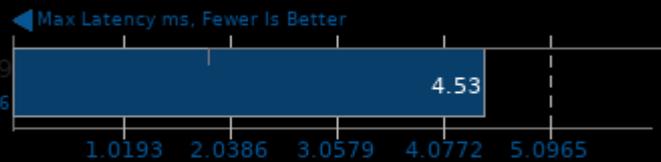
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Audio - Background Load: Burn

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 2.66, N = 6



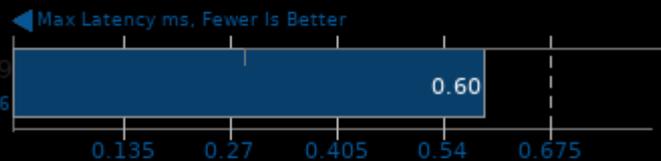
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Audio - Background Load: Read

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 0.31, N = 6



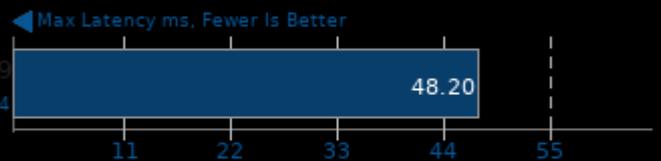
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Video - Background Load: Burn

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 0.72, N = 4



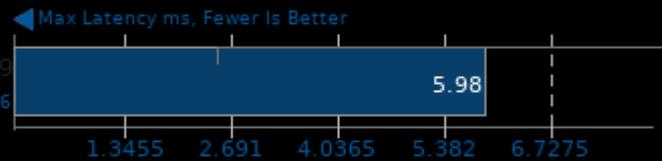
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Video - Background Load: Read

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 3.39, N = 6



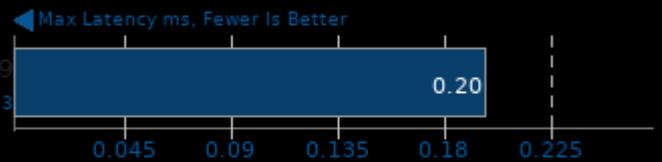
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Audio - Background Load: Video

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 0.00, N = 3



1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Audio - Background Load: Write

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 22.40, N = 6



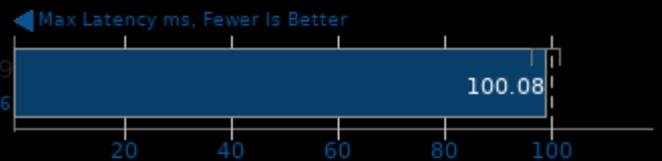
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Gaming - Background Load: Burn

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 2.65, N = 6



1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Video - Background Load: Write

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 24.23, N = 6



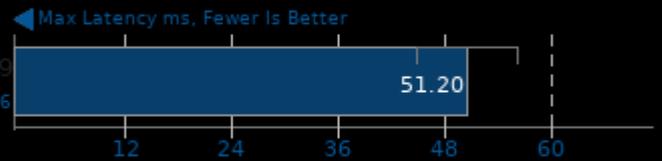
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Gaming - Background Load: Write

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 5.79, N = 6



1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Audio - Background Load: Compile

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1.39, N = 3



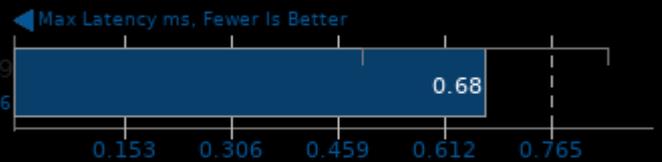
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Audio - Background Load: Memload

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 0.18, N = 6



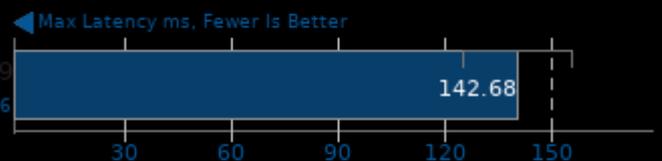
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Video - Background Load: Compile

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 15.46, N = 6



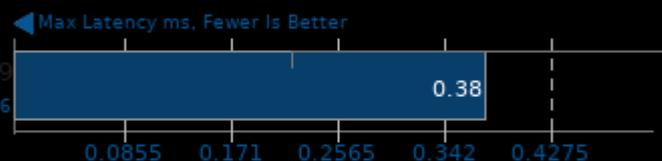
1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Video - Background Load: Memload

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

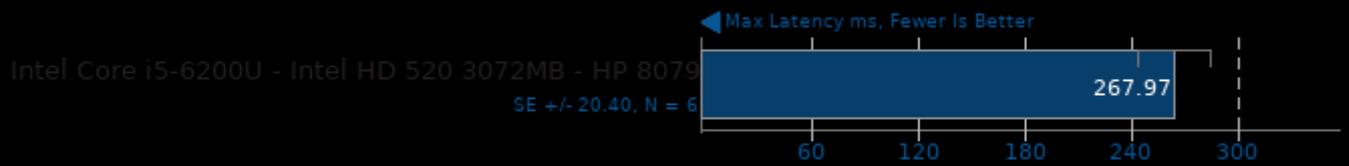
SE +/- 0.16, N = 6



1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

Benchmark: Gaming - Background Load: Compile



1. (CC) gcc options: -O3 -lrt -lm -pthread

### Interbench 0.31

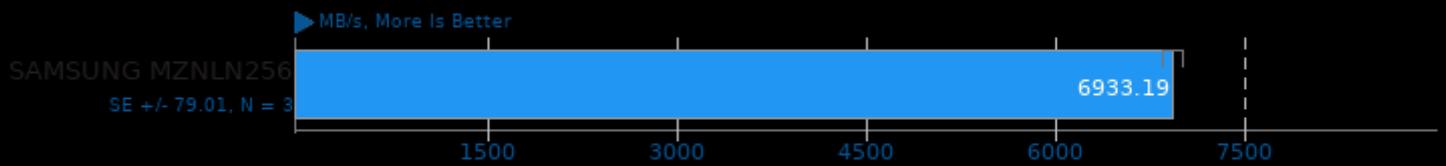
Benchmark: Gaming - Background Load: Memload



1. (CC) gcc options: -O3 -lrt -lm -pthread

### IOzone 3.465

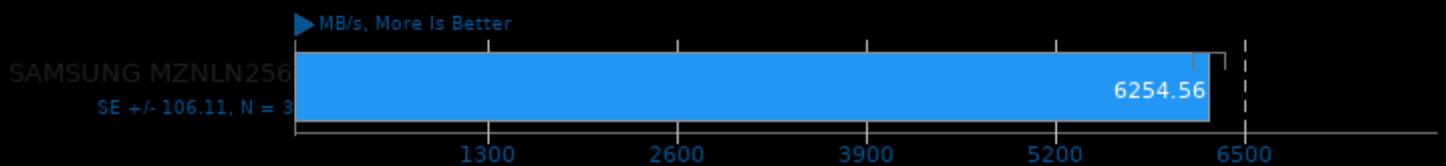
Record Size: 1MB - File Size: 2GB - Disk Test: Read Performance



1. (CC) gcc options: -O3

### IOzone 3.465

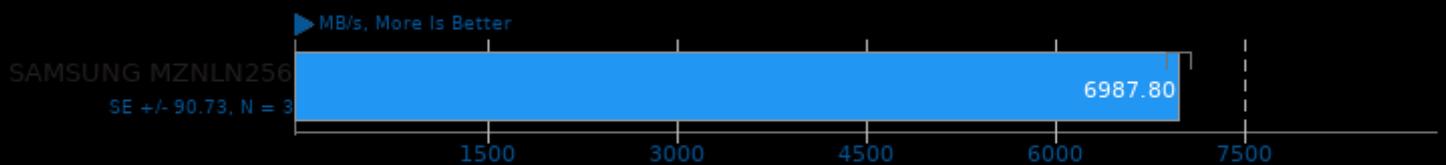
Record Size: 1MB - File Size: 4GB - Disk Test: Read Performance



1. (CC) gcc options: -O3

### IOzone 3.465

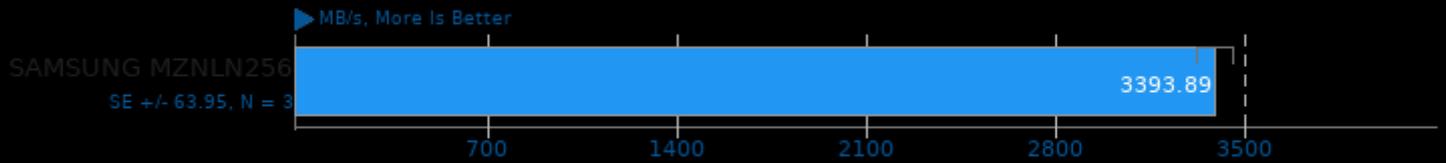
Record Size: 1MB - File Size: 8GB - Disk Test: Read Performance



1. (CC) gcc options: -O3

### IOzone 3.465

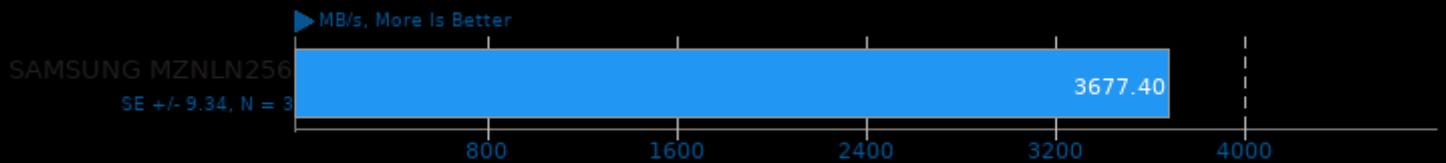
Record Size: 4Kb - File Size: 2GB - Disk Test: Read Performance



1, (C) gcc options: -O3

### IOzone 3.465

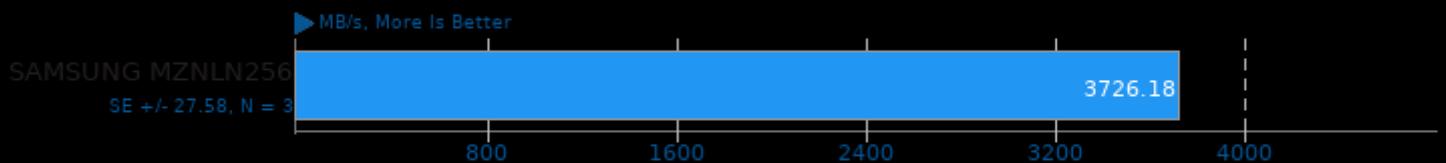
Record Size: 4Kb - File Size: 4GB - Disk Test: Read Performance



1, (C) gcc options: -O3

### IOzone 3.465

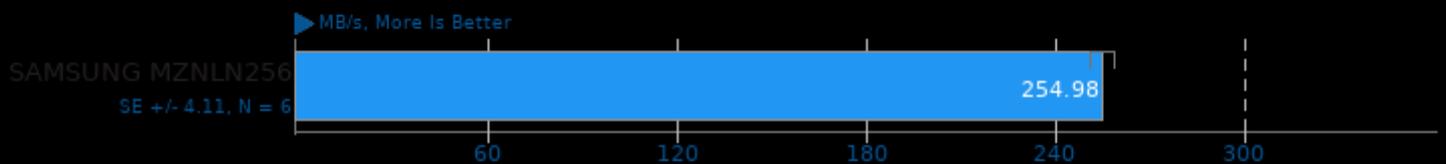
Record Size: 4Kb - File Size: 8GB - Disk Test: Read Performance



1, (C) gcc options: -O3

### IOzone 3.465

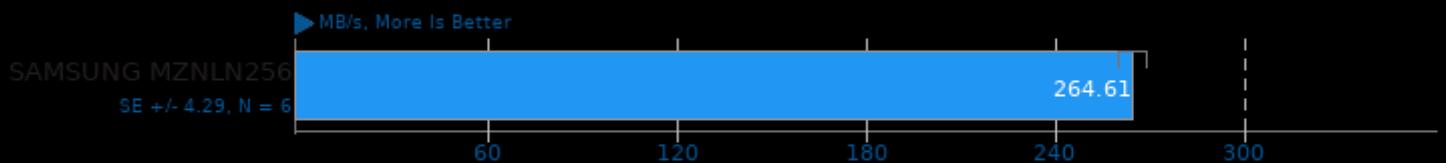
Record Size: 1MB - File Size: 2GB - Disk Test: Write Performance



1, (C) gcc options: -O3

### IOzone 3.465

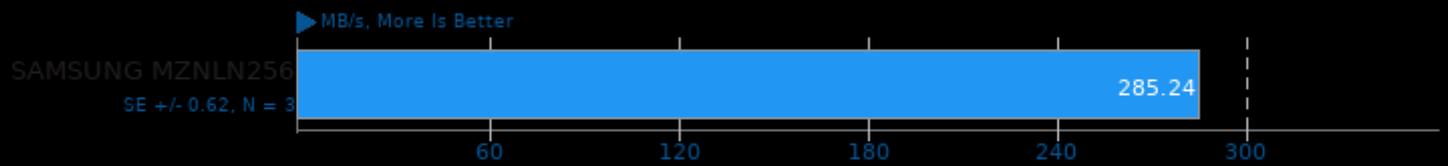
Record Size: 1MB - File Size: 4GB - Disk Test: Write Performance



1, (C) gcc options: -O3

### IOzone 3.465

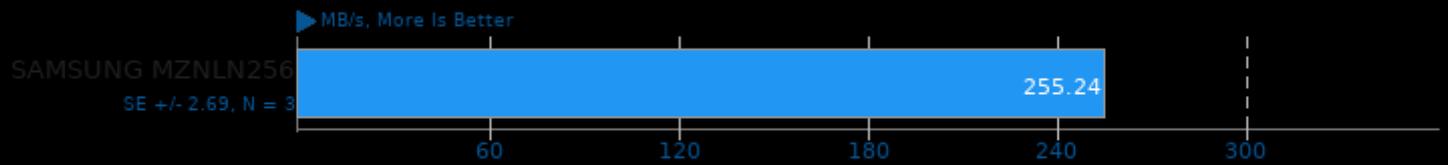
Record Size: 1MB - File Size: 8GB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

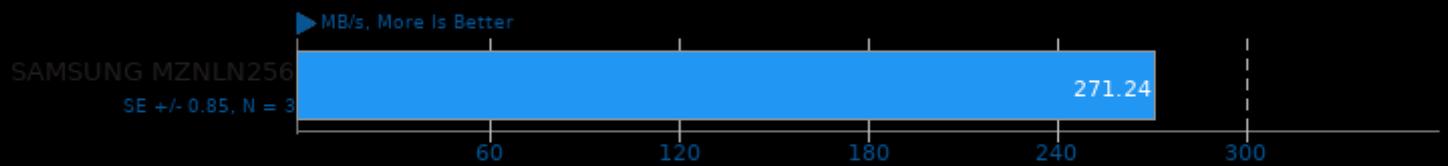
Record Size: 4Kb - File Size: 2GB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

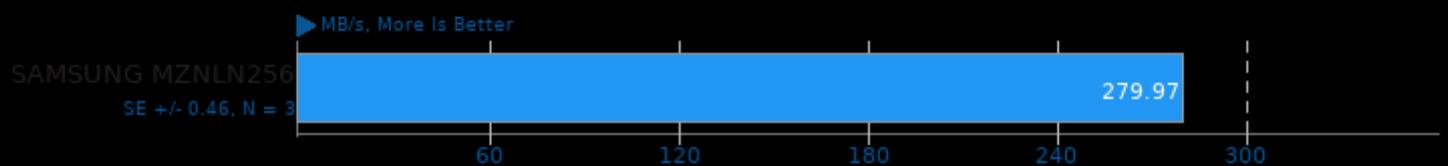
Record Size: 4Kb - File Size: 4GB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

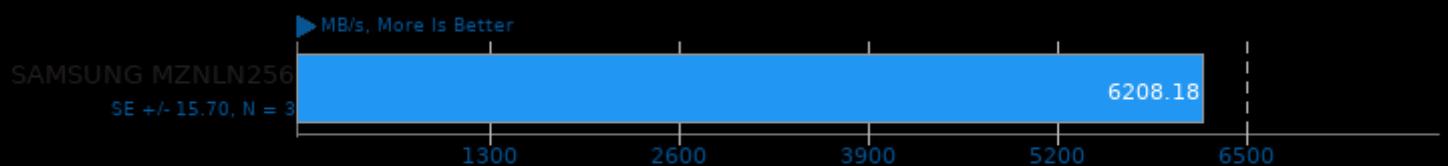
Record Size: 4Kb - File Size: 8GB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

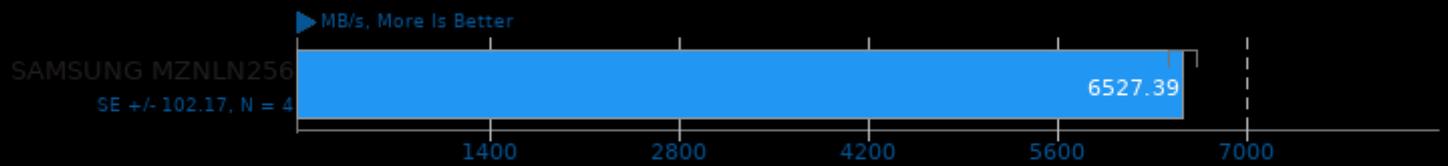
Record Size: 64Kb - File Size: 2GB - Disk Test: Read Performance



1, (CC) gcc options: -O3

### IOzone 3.465

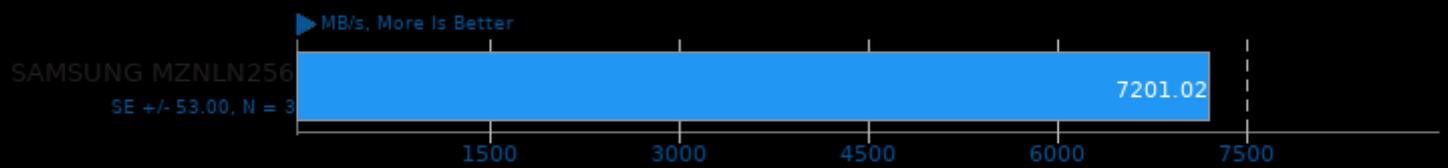
Record Size: 64Kb - File Size: 4GB - Disk Test: Read Performance



1, (CC) gcc options: -O3

### IOzone 3.465

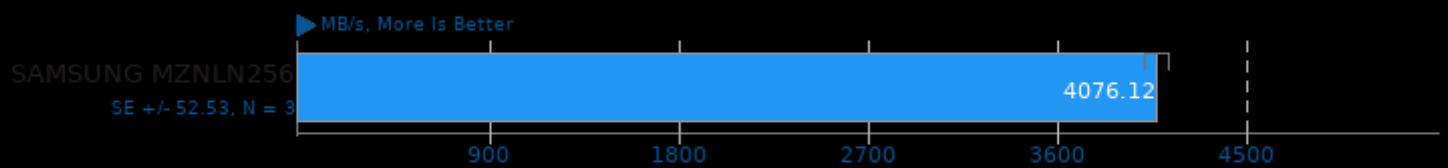
Record Size: 64Kb - File Size: 8GB - Disk Test: Read Performance



1, (CC) gcc options: -O3

### IOzone 3.465

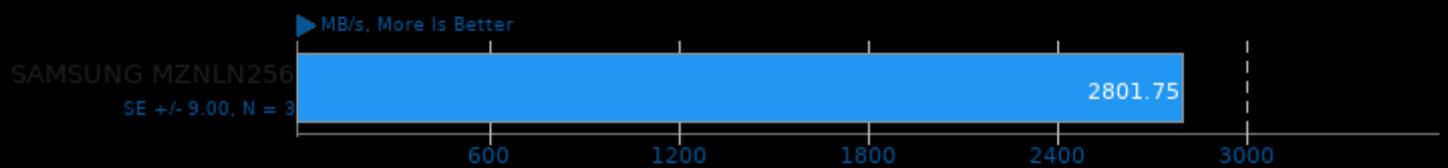
Record Size: 1MB - File Size: 512MB - Disk Test: Read Performance



1, (CC) gcc options: -O3

### IOzone 3.465

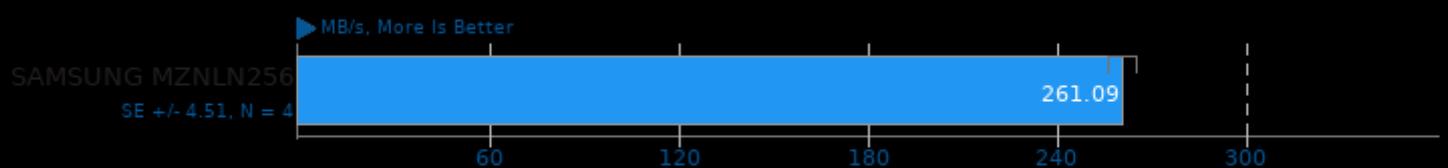
Record Size: 4Kb - File Size: 512MB - Disk Test: Read Performance



1, (CC) gcc options: -O3

### IOzone 3.465

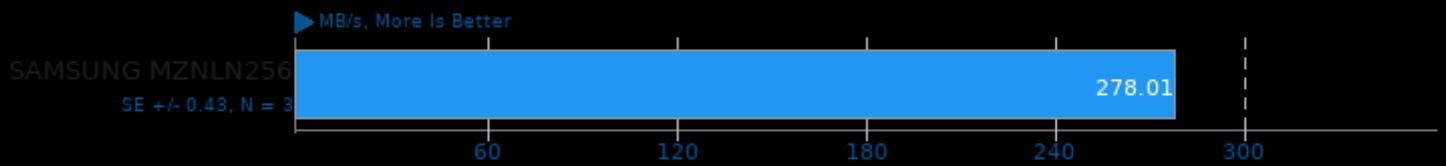
Record Size: 64Kb - File Size: 2GB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

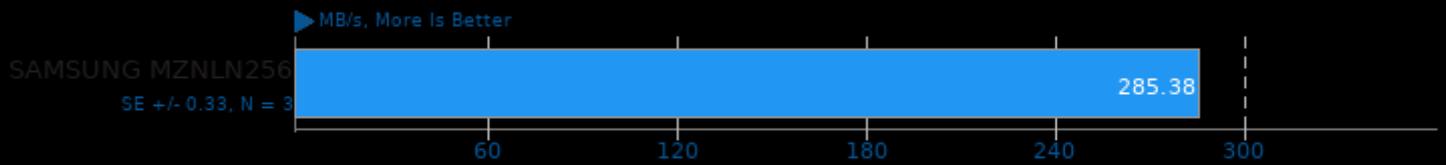
Record Size: 64Kb - File Size: 4GB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

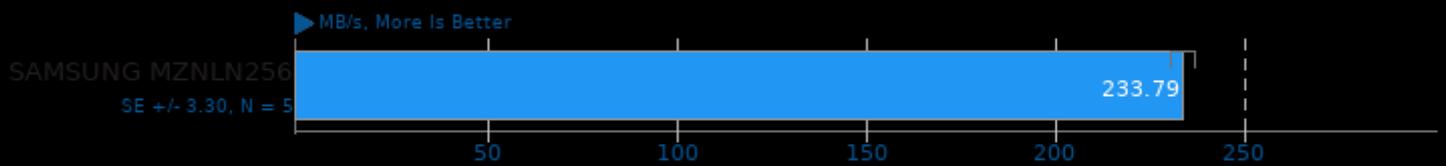
Record Size: 64Kb - File Size: 8GB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

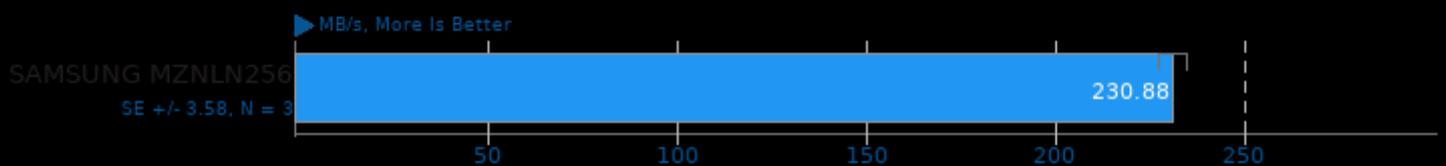
Record Size: 1MB - File Size: 512MB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

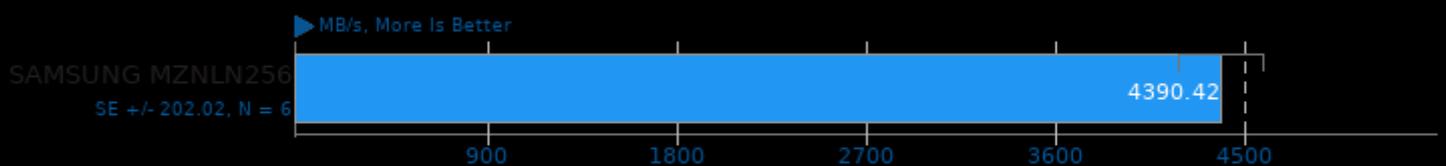
Record Size: 4Kb - File Size: 512MB - Disk Test: Write Performance



1, (CC) gcc options: -O3

### IOzone 3.465

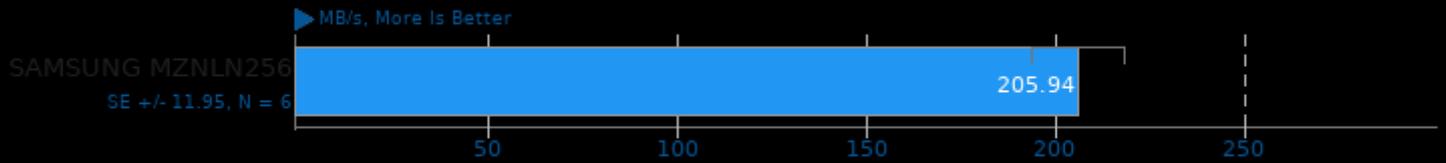
Record Size: 64Kb - File Size: 512MB - Disk Test: Read Performance



1, (CC) gcc options: -O3

### IOzone 3.465

Record Size: 64Kb - File Size: 512MB - Disk Test: Write Performance



1, (CC) gcc options: -O3

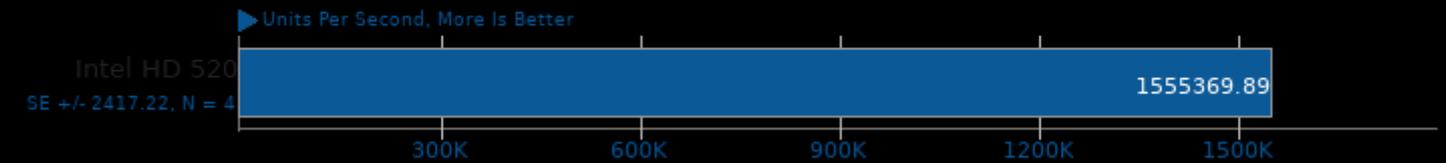
### Java 2D Microbenchmark 1.0

Rendering Test: Text Rendering



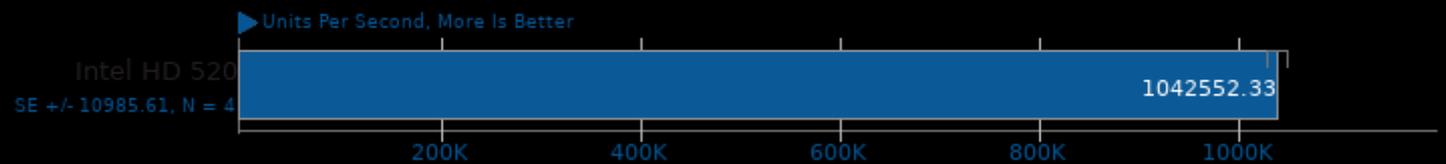
### Java 2D Microbenchmark 1.0

Rendering Test: Image Rendering



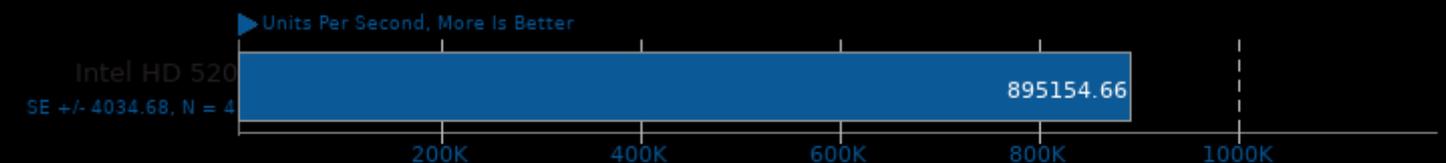
### Java 2D Microbenchmark 1.0

Rendering Test: All Rendering Tests



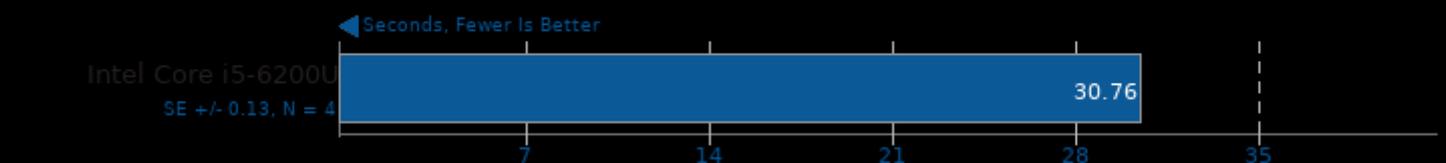
### Java 2D Microbenchmark 1.0

Rendering Test: Vector Graphics Rendering



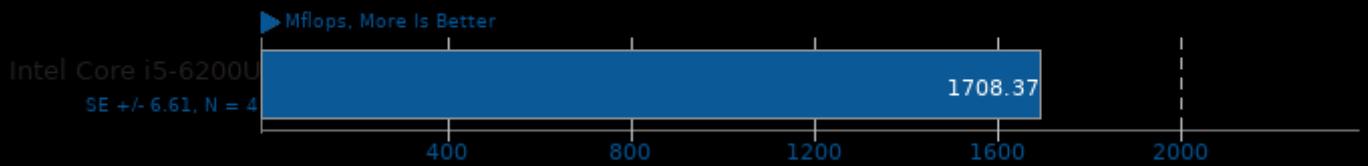
### Java Gradle Build 1.0

Gradle Build: Reactor



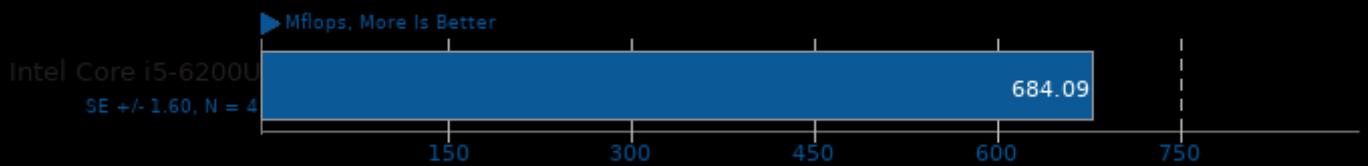
### Java SciMark 2.0

Computational Test: Composite



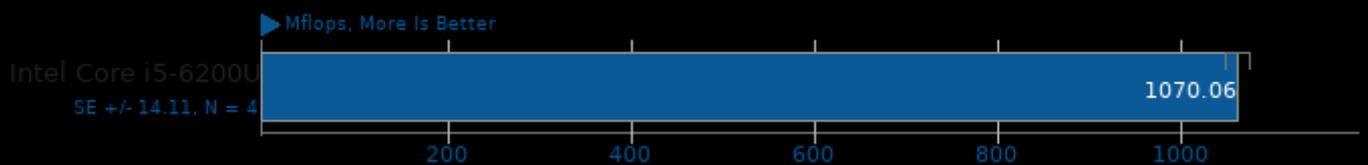
### Java SciMark 2.0

Computational Test: Monte Carlo



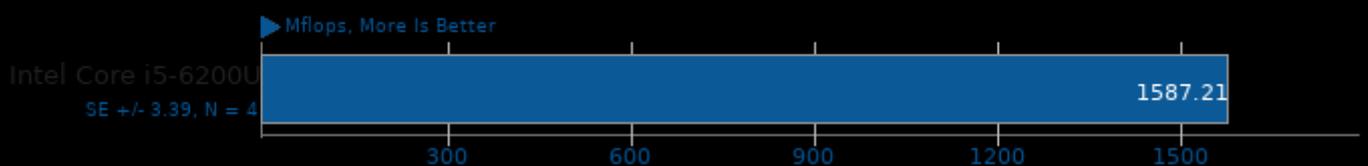
### Java SciMark 2.0

Computational Test: Fast Fourier Transform



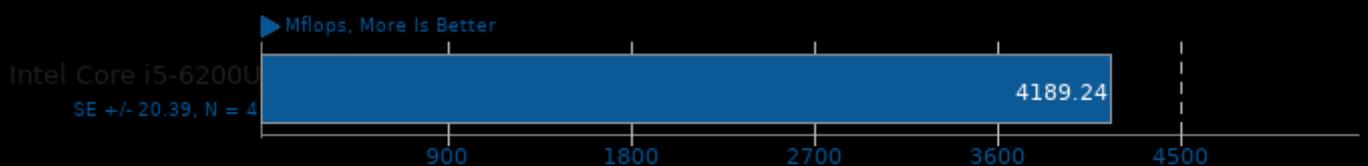
### Java SciMark 2.0

Computational Test: Sparse Matrix Multiply



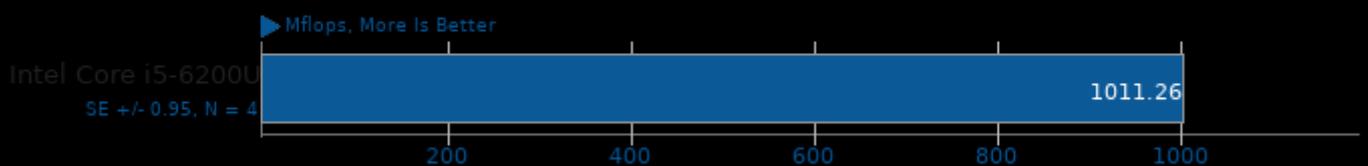
### Java SciMark 2.0

Computational Test: Dense LU Matrix Factorization



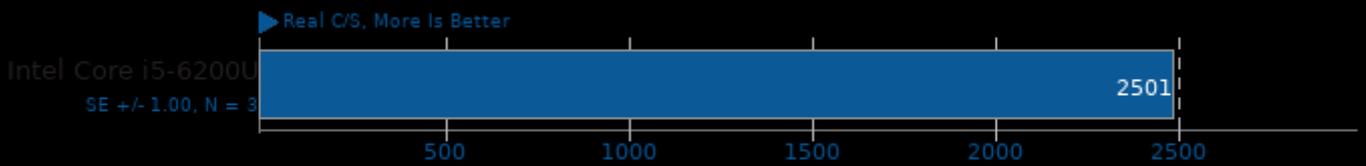
### Java SciMark 2.0

Computational Test: Jacobi Successive Over-Relaxation



### John The Ripper 1.8.0-jumbo-1

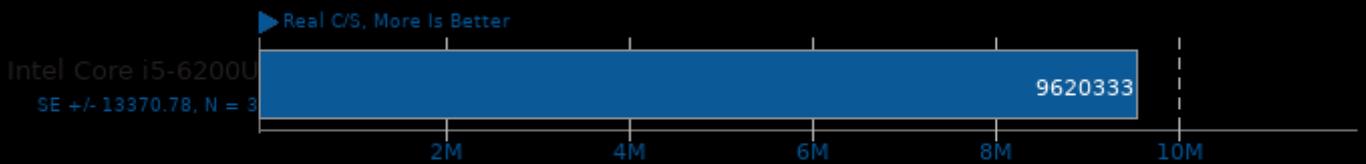
Test: Blowfish



1. (CC) gcc options: -lssl -lcrypto -fopenmp -pthread -lm -lz -ldl -lcrypt

### John The Ripper 1.8.0-jumbo-1

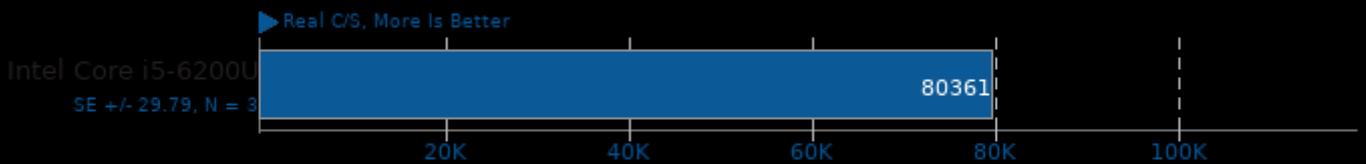
Test: Traditional DES



1. (CC) gcc options: -lssl -lcrypto -fopenmp -pthread -lm -lz -ldl -lcrypt

### John The Ripper 1.8.0-jumbo-1

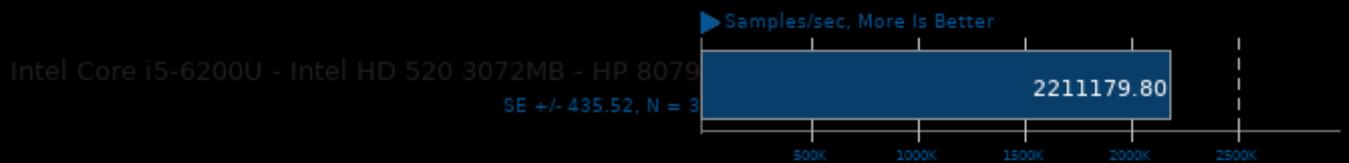
Test: MD5



1. (CC) gcc options: -lssl -lcrypto -fopenmp -pthread -lm -lz -ldl -lcrypt

### JuliaGPU 1.2pts1

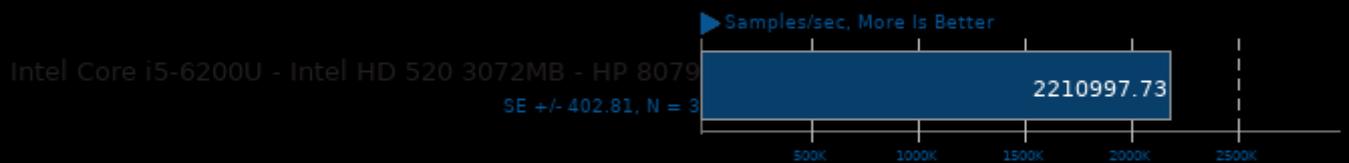
OpenCL Device: CPU



1. (CC) gcc options: -O3 -march=native -ftree-vectorize -funroll-loops -lglut -lOpenCL -lGL -lm

### JuliaGPU 1.2pts1

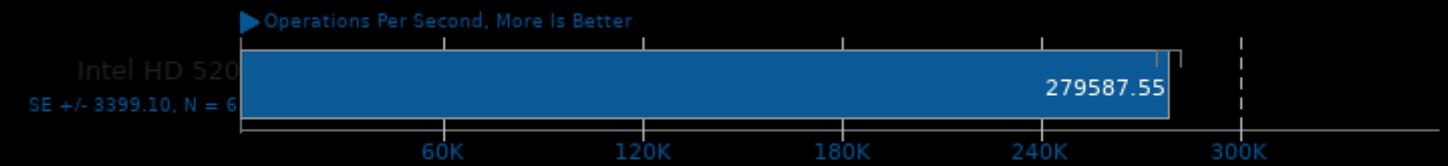
OpenCL Device: CPU+GPU



1. (CC) gcc options: -O3 -march=native -ftree-vectorize -funroll-loops -lglut -lOpenCL -lGL -lm

### JXRenderMark 1.0.1

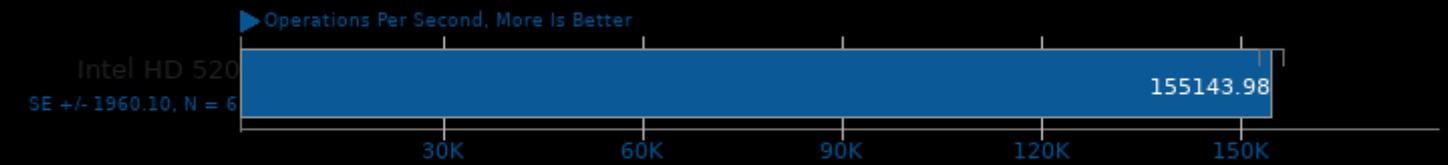
Test: Simple Blit - Size: 32x32



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

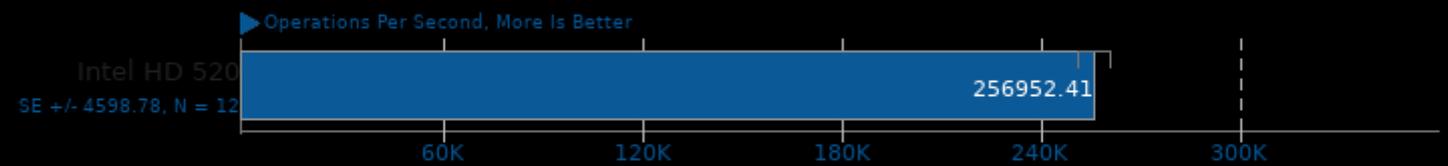
Test: 12pt Text LCD - Size: 32x32



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

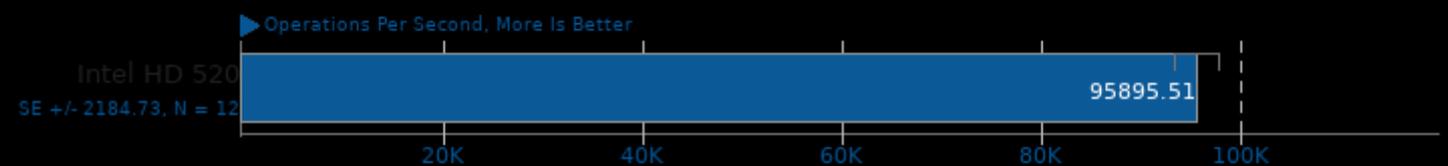
Test: Simple Blit - Size: 128x128



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

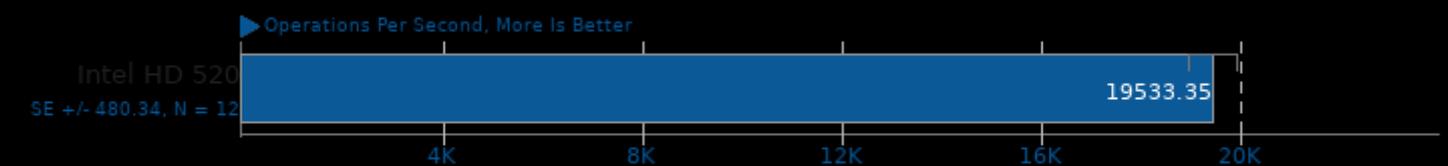
Test: Simple Blit - Size: 256x256



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

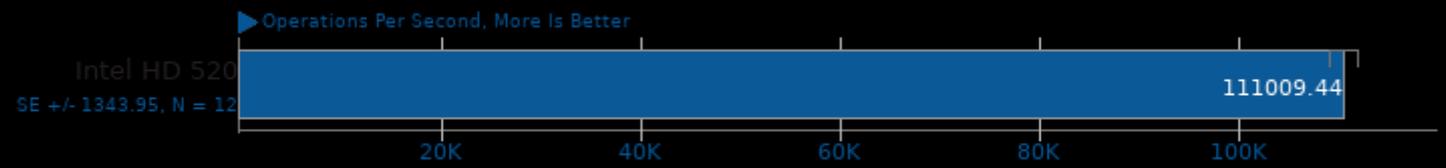
Test: Simple Blit - Size: 512x512



1. (C) gcc options: -fX11 -fXrender

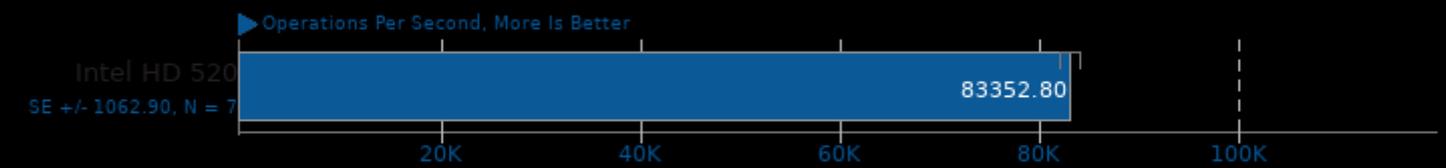
### JXRenderMark 1.0.1

Test: 12pt Text LCD - Size: 128x128



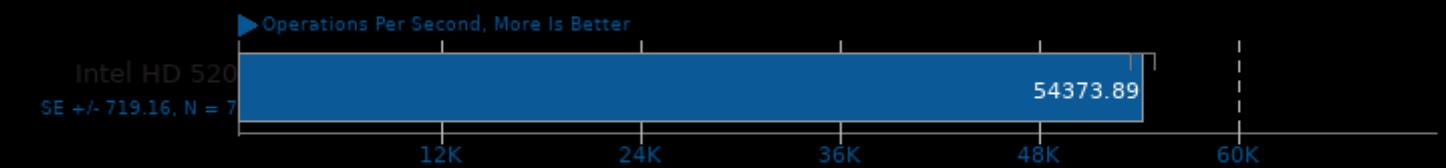
### JXRenderMark 1.0.1

Test: 12pt Text LCD - Size: 256x256



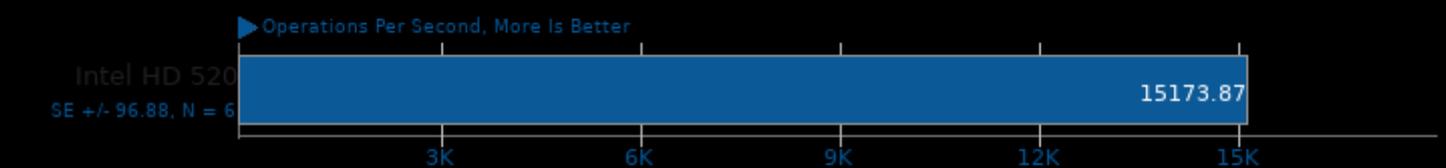
### JXRenderMark 1.0.1

Test: 12pt Text LCD - Size: 512x512



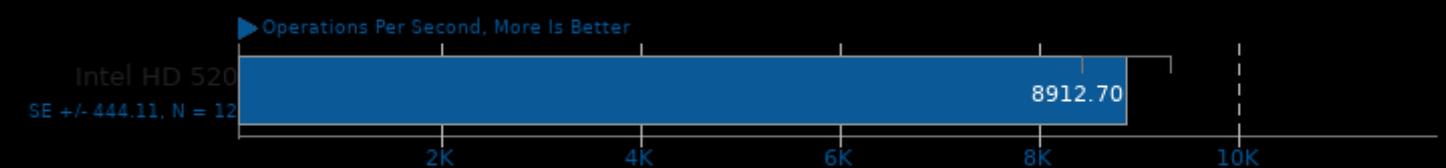
### JXRenderMark 1.0.1

Test: Put Composition - Size: 32x32



### JXRenderMark 1.0.1

Test: Simple Blit - Size: 1024x1024



### JXRenderMark 1.0.1

Test: 12pt Text LCD - Size: 1024x1024



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Put Composition - Size: 128x128



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

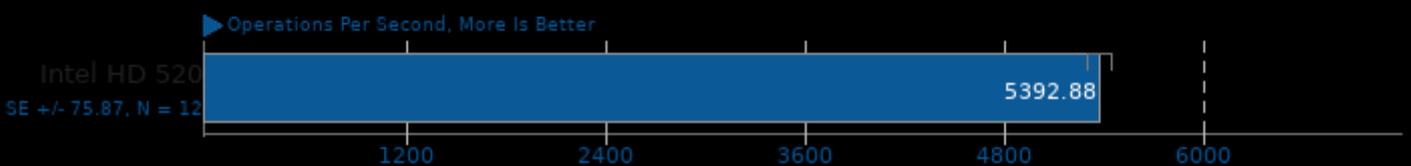
Test: Put Composition - Size: 256x256



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Put Composition - Size: 512x512



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

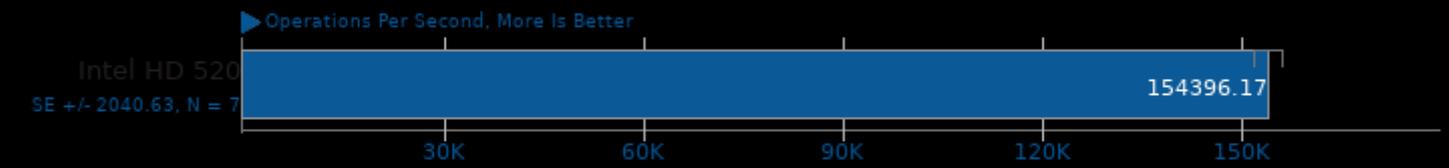
Test: Rects Composition - Size: 32x32



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

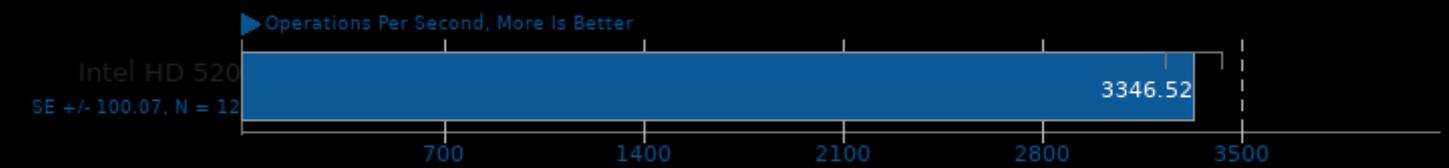
Test: 12pt Text Grayscale - Size: 32x32



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

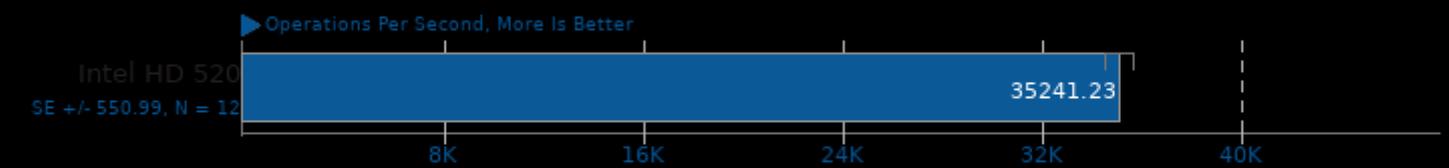
Test: Put Composition - Size: 1024x1024



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

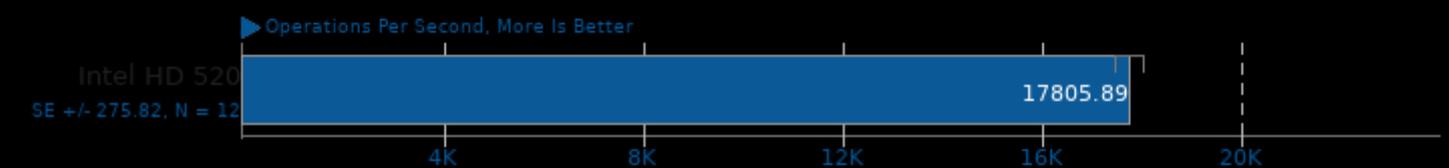
Test: Rects Composition - Size: 128x128



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

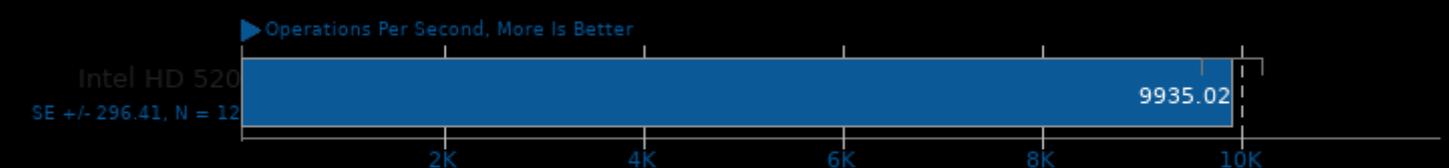
Test: Rects Composition - Size: 256x256



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Rects Composition - Size: 512x512



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: 12pt Text Grayscale - Size: 128x128



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: 12pt Text Grayscale - Size: 256x256



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: 12pt Text Grayscale - Size: 512x512



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Gradient+Temp Texture - Size: 32x32



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Linear Gradient Blend - Size: 32x32



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

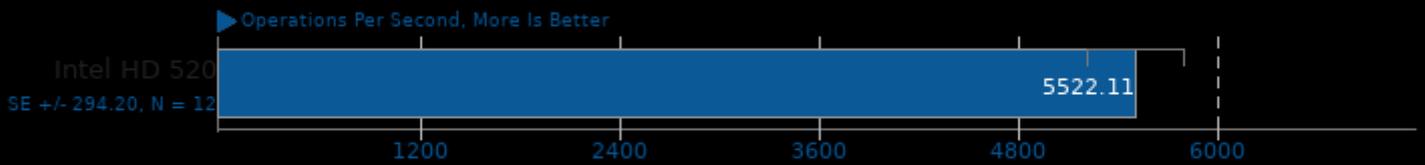
Test: Radial Gradient Paint - Size: 32x32



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Rects Composition - Size: 1024x1024



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: 12pt Text Grayscale - Size: 1024x1024



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Gradient+Temp Texture - Size: 128x128



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

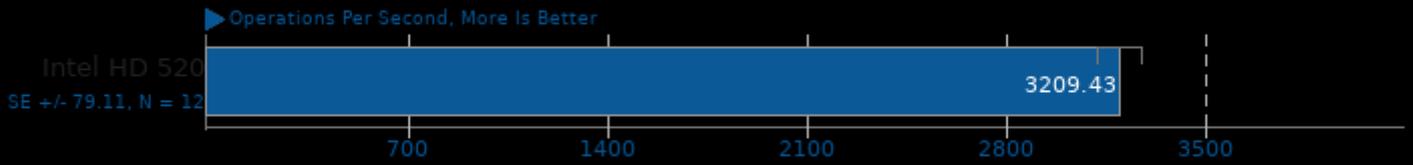
Test: Gradient+Temp Texture - Size: 256x256



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Gradient+Temp Texture - Size: 512x512



### JXRenderMark 1.0.1

Test: Linear Gradient Blend - Size: 128x128



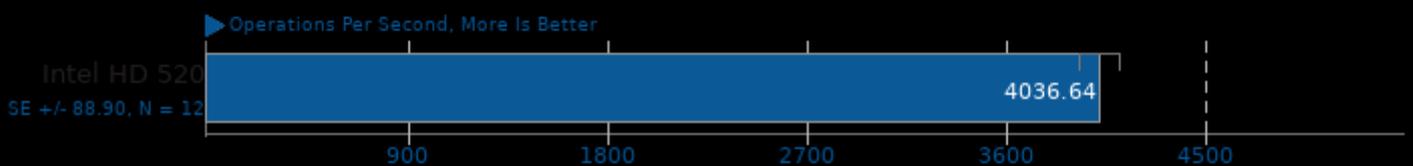
### JXRenderMark 1.0.1

Test: Linear Gradient Blend - Size: 256x256



### JXRenderMark 1.0.1

Test: Linear Gradient Blend - Size: 512x512



### JXRenderMark 1.0.1

Test: Radial Gradient Paint - Size: 128x128



### JXRenderMark 1.0.1

Test: Radial Gradient Paint - Size: 256x256



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Radial Gradient Paint - Size: 512x512



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

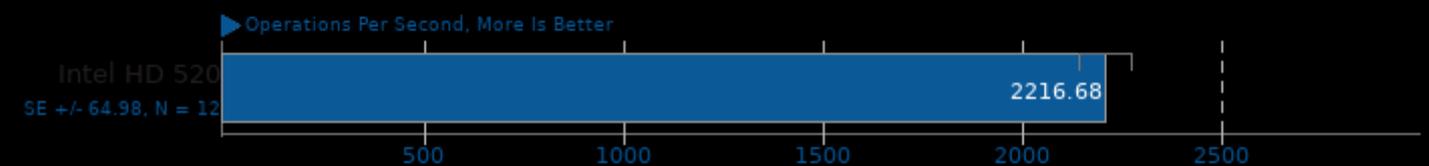
Test: Transformed Blit Linear - Size: 32x32



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Gradient+Temp Texture - Size: 1024x1024



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

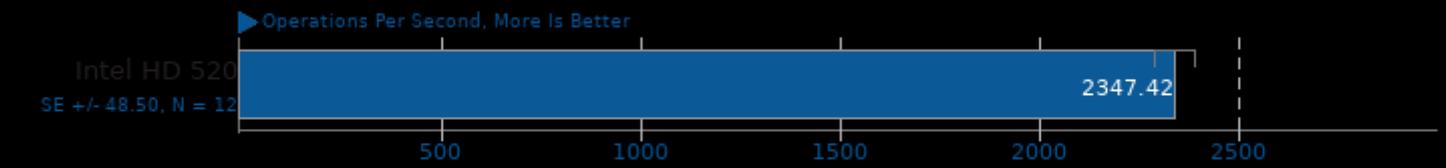
Test: Linear Gradient Blend - Size: 1024x1024



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

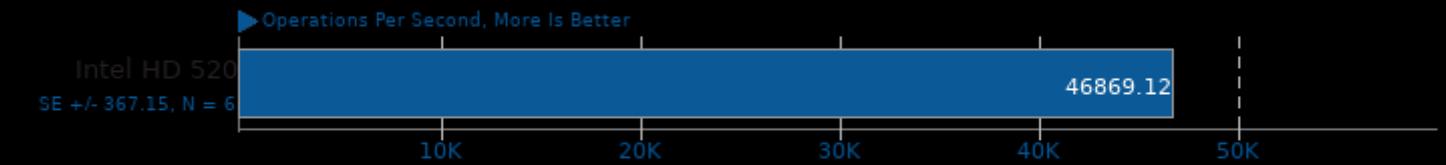
Test: Radial Gradient Paint - Size: 1024x1024



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

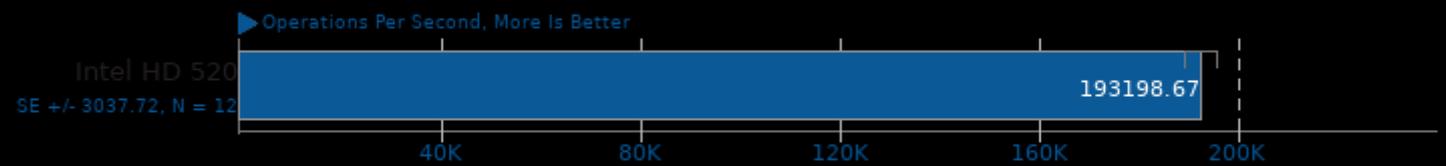
Test: Transformed Blit Bilinear - Size: 32x32



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

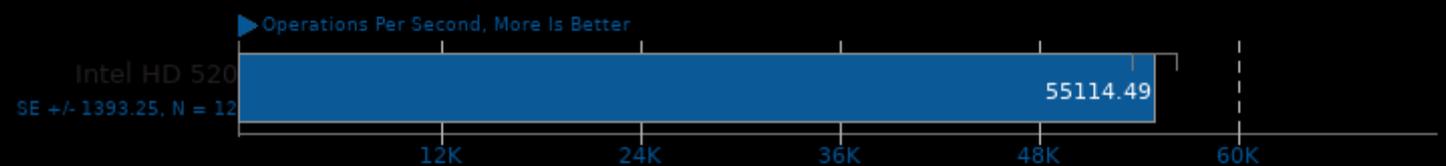
Test: Transformed Blit Linear - Size: 128x128



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

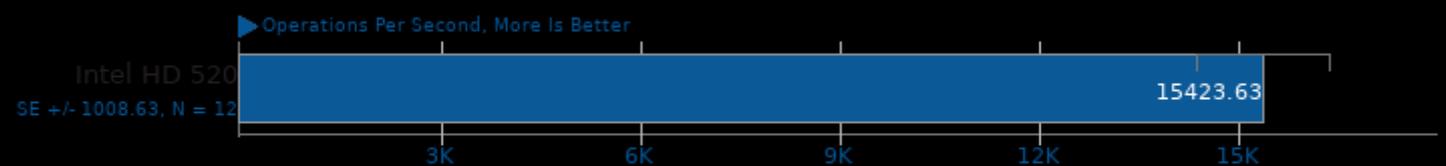
Test: Transformed Blit Linear - Size: 256x256



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

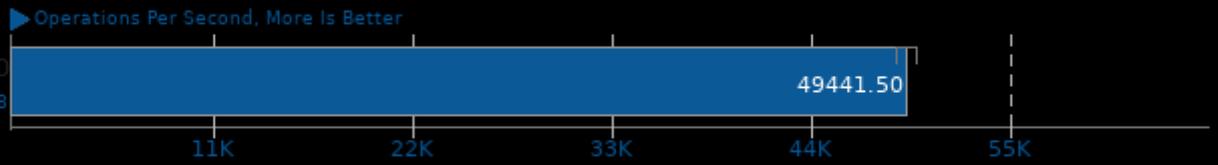
Test: Transformed Blit Linear - Size: 512x512



1. (CO) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

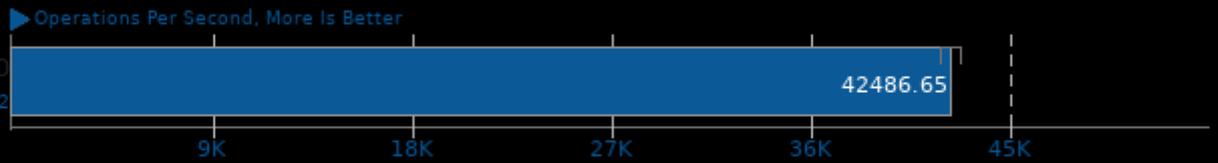
Test: Transformed Texture Paint - Size: 32x32



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

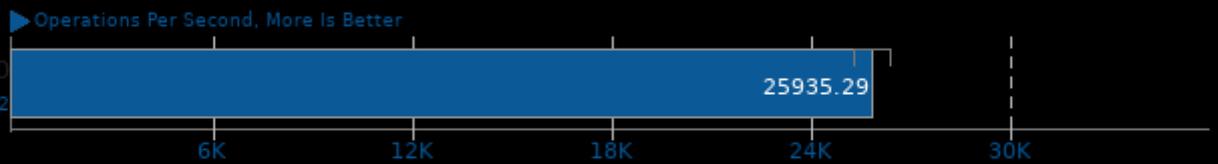
Test: Transformed Blit Bilinear - Size: 128x128



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

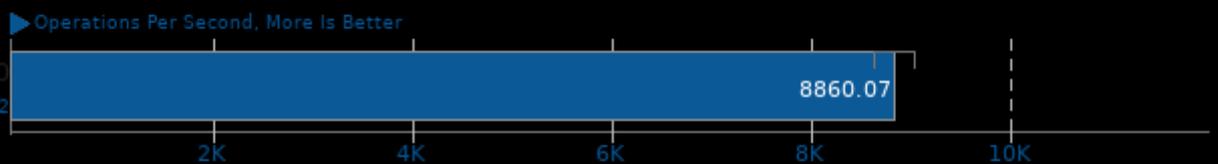
Test: Transformed Blit Bilinear - Size: 256x256



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

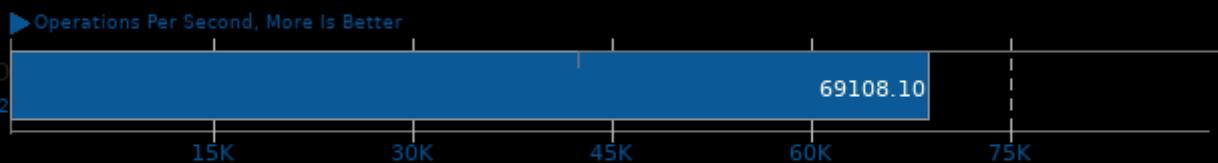
Test: Transformed Blit Bilinear - Size: 512x512



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Transformed Blit Linear - Size: 1024x1024



1. (C) gcc options: -fX11 -fXrender

### JXRenderMark 1.0.1

Test: Transformed Texture Paint - Size: 128x128



### JXRenderMark 1.0.1

Test: Transformed Texture Paint - Size: 256x256



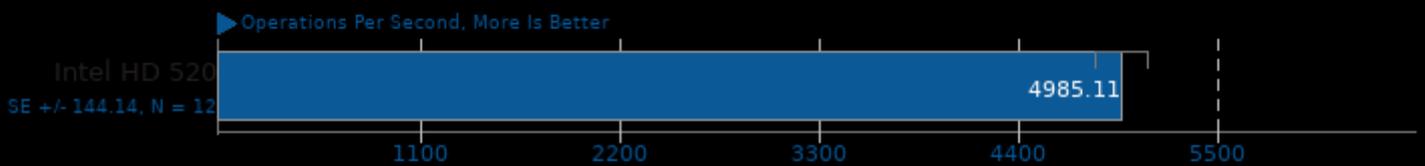
### JXRenderMark 1.0.1

Test: Transformed Texture Paint - Size: 512x512



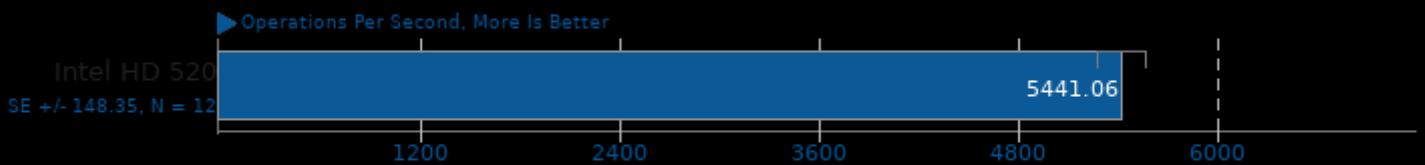
### JXRenderMark 1.0.1

Test: Transformed Blit Bilinear - Size: 1024x1024



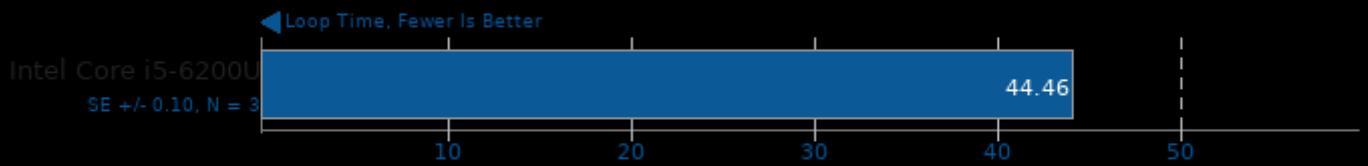
### JXRenderMark 1.0.1

Test: Transformed Texture Paint - Size: 1024x1024



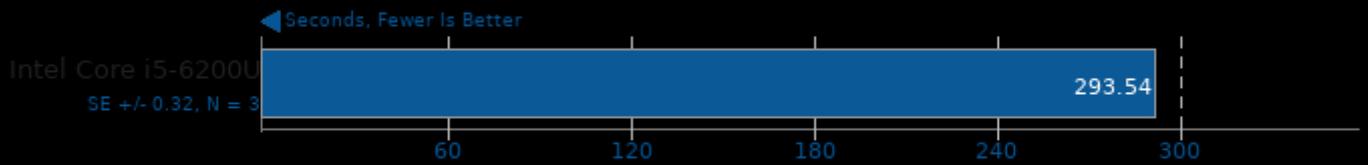
## LAMMPS Molecular Dynamics Simulator 1.0

Test: Rhodopsin Protein



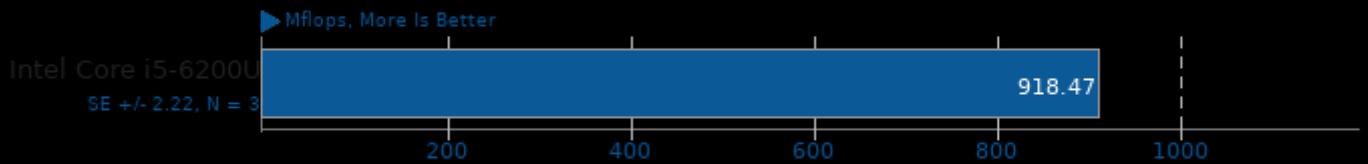
## LLVM Test Suite 6.0.0

Time To Run



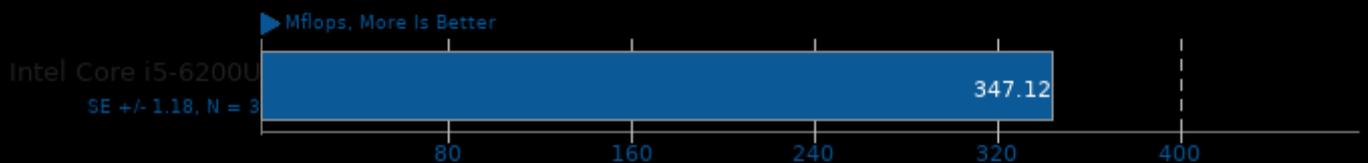
## LuajIT 2.1-git

Test: Composite



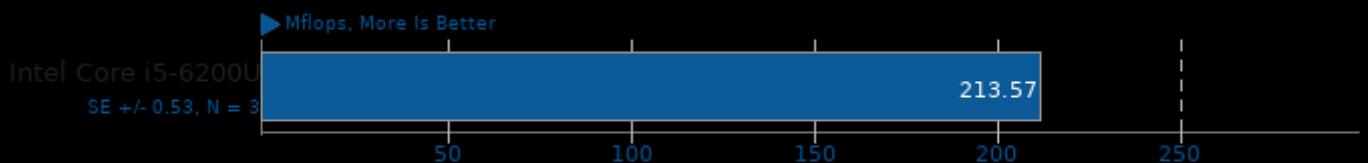
## LuajIT 2.1-git

Test: Monte Carlo



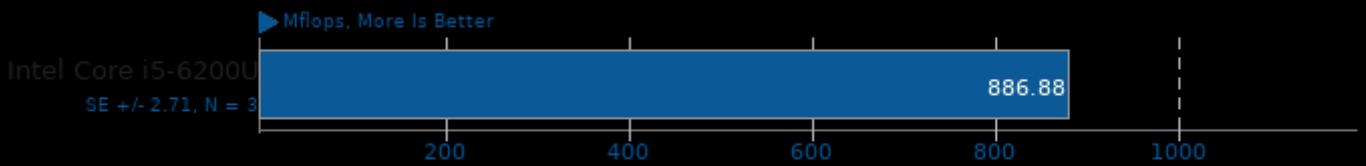
## LuajIT 2.1-git

Test: Fast Fourier Transform



### LuajIT 2.1-git

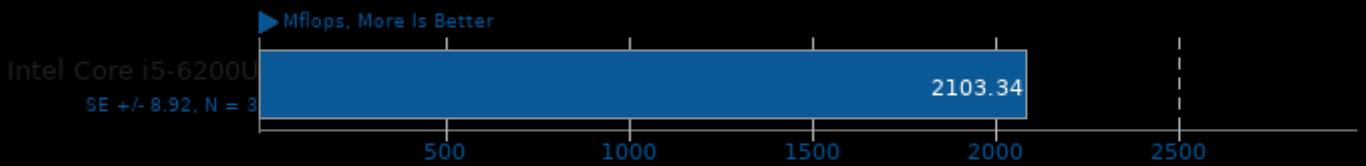
Test: Sparse Matrix Multiply



1. (CC) gcc options: -lm -ldl -O2 -fomit-frame-pointer -U\_FORTIFY\_SOURCE -fno-stack-protector

### LuajIT 2.1-git

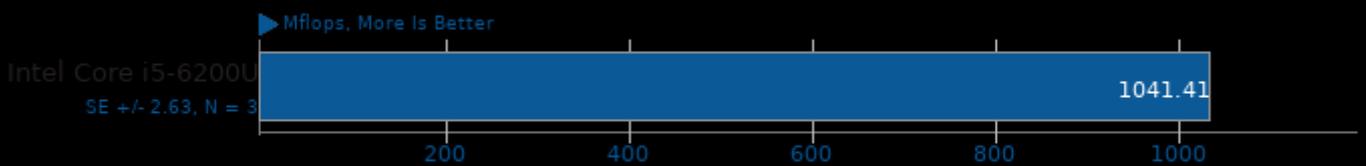
Test: Dense LU Matrix Factorization



1. (CC) gcc options: -lm -ldl -O2 -fomit-frame-pointer -U\_FORTIFY\_SOURCE -fno-stack-protector

### LuajIT 2.1-git

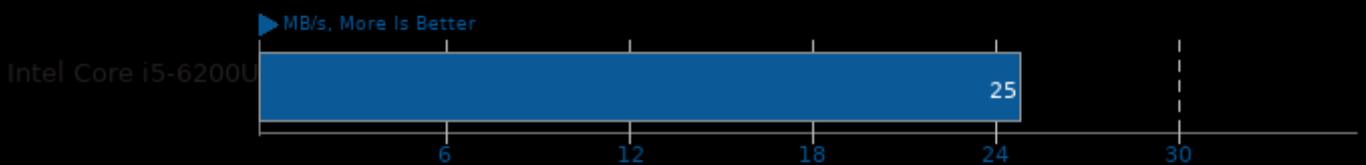
Test: Jacobi Successive Over-Relaxation



1. (CC) gcc options: -lm -ldl -O2 -fomit-frame-pointer -U\_FORTIFY\_SOURCE -fno-stack-protector

### Izbench 2017-08-08

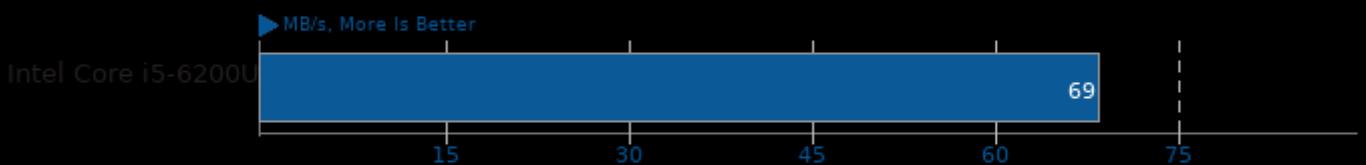
Test: XZ 0 - Process: Compression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### Izbench 2017-08-08

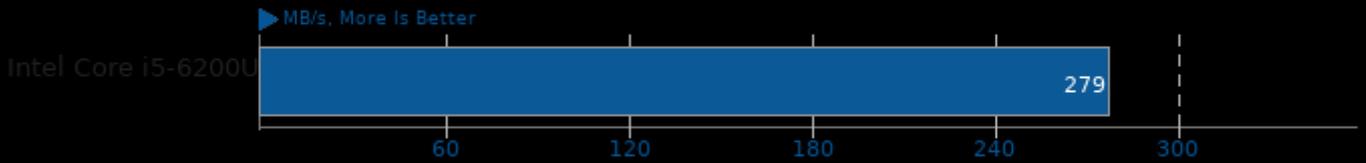
Test: XZ 0 - Process: Decompression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### Izbench 2017-08-08

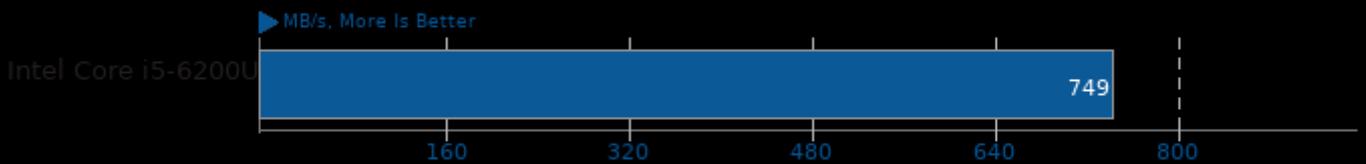
Test: Zstd 1 - Process: Compression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### Izbench 2017-08-08

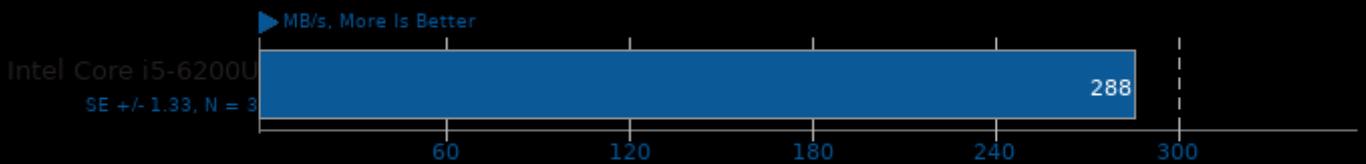
Test: Zstd 1 - Process: Decompression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### Izbench 2017-08-08

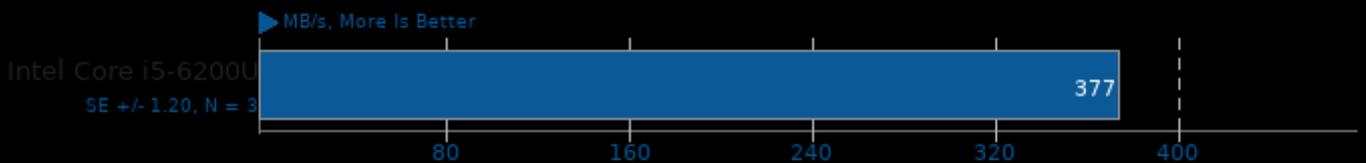
Test: Brotli 0 - Process: Compression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### Izbench 2017-08-08

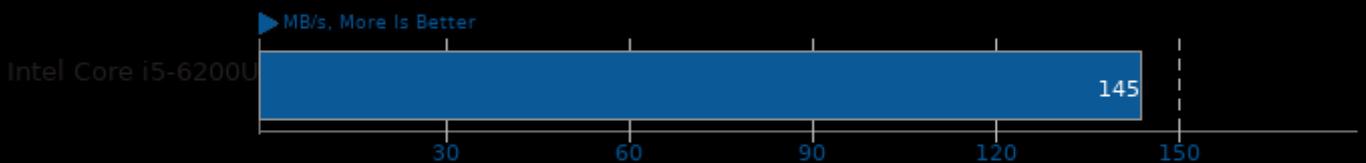
Test: Brotli 0 - Process: Decompression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### Izbench 2017-08-08

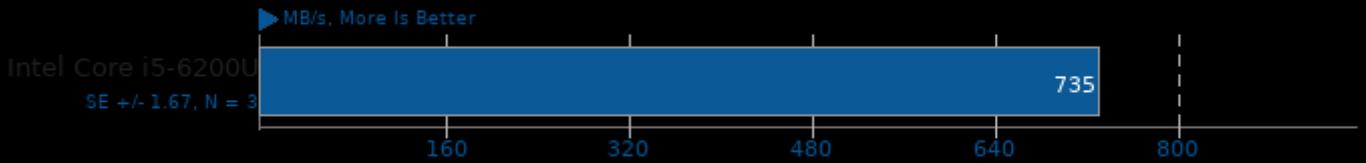
Test: Libdeflate 1 - Process: Compression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### Izbench 2017-08-08

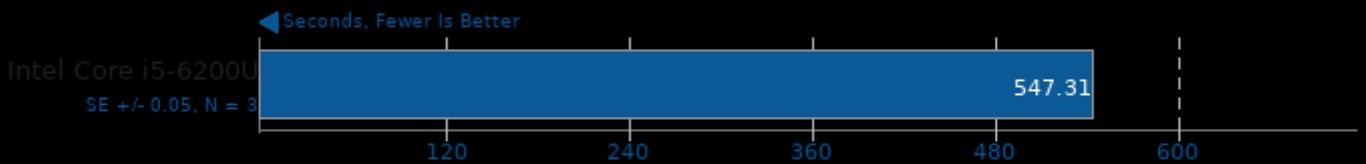
Test: Libdeflate 1 - Process: Decompression



1. (CXX) g++ options: -lrt -static -lpthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

### m-queens 1.2

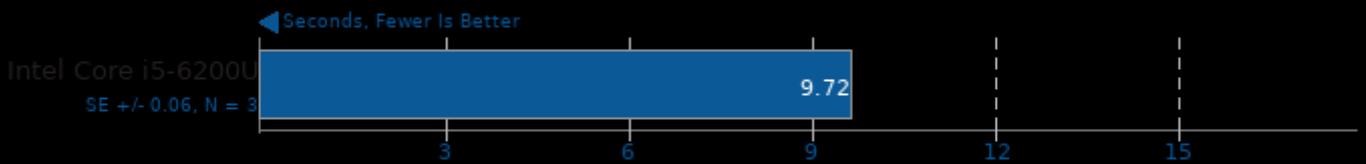
Time To Solve



1. (CXX) g++ options: -fopenmp -O2 -march=native

### Timed MAFFT Alignment 7.392

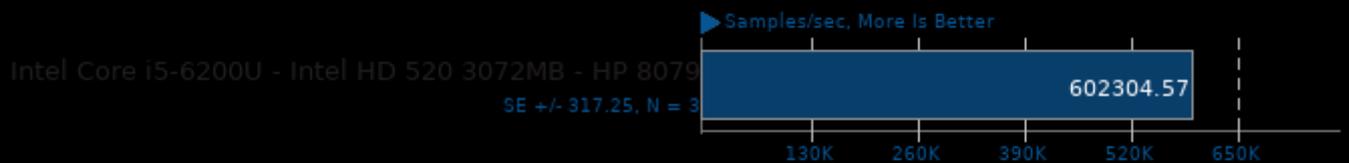
Multiple Sequence Alignment



1. (CC) gcc options: -std=c99 -O3 -lm -lpthread

### MandelbulbGPU 1.0pts1

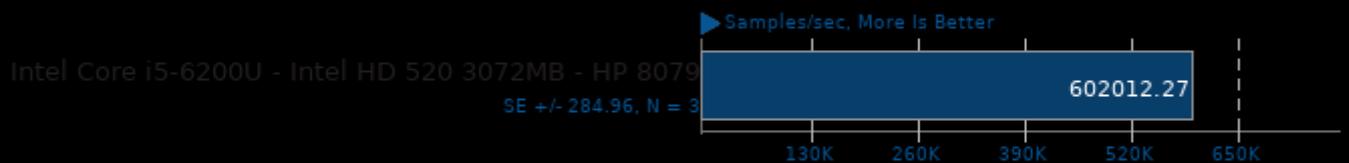
OpenCL Device: CPU



1. (CC) gcc options: -O3 -lm -ftree-vectorize -funroll-loops -lglut -lOpenCL -lGL

### MandelbulbGPU 1.0pts1

OpenCL Device: CPU+GPU



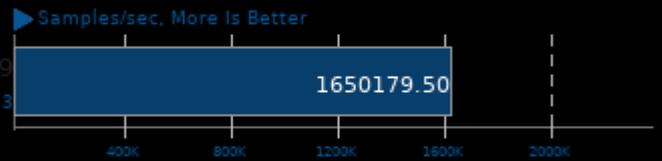
1. (CC) gcc options: -O3 -lm -ftree-vectorize -funroll-loops -lglut -lOpenCL -lGL

## MandelGPU 1.3pts1

OpenCL Device: CPU

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 471.23, N = 3



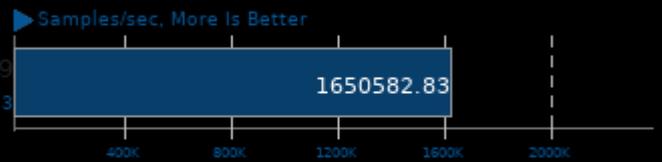
1. (CC) gcc options: -O3 -lm -ffree-vectorize -funroll-loops -lglut -lOpenCL -lGL

## MandelGPU 1.3pts1

OpenCL Device: CPU+GPU

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1050.79, N = 3



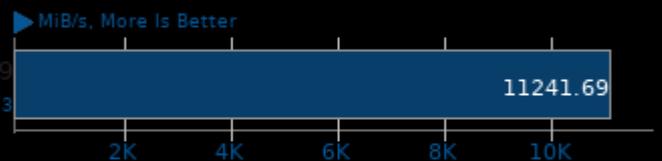
1. (CC) gcc options: -O3 -lm -ffree-vectorize -funroll-loops -lglut -lOpenCL -lGL

## MBW 2018-09-08

Test: Memory Copy - Array Size: 128 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 58.06, N = 3



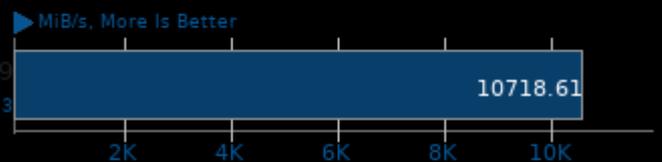
1. (CC) gcc options: -O3 -march=native

## MBW 2018-09-08

Test: Memory Copy - Array Size: 512 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 11.81, N = 3



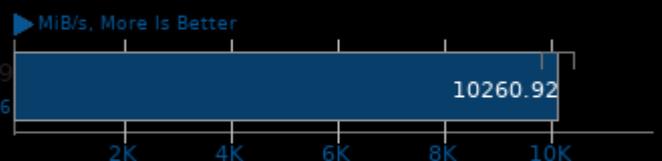
1. (CC) gcc options: -O3 -march=native

## MBW 2018-09-08

Test: Memory Copy - Array Size: 1024 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 287.04, N = 6



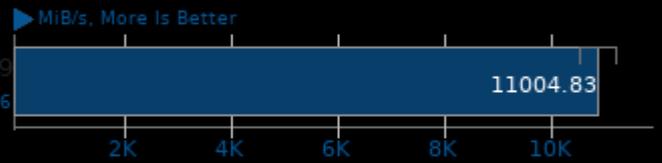
1. (CC) gcc options: -O3 -march=native

### MBW 2018-09-08

Test: Memory Copy - Array Size: 4096 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 357.35, N = 6



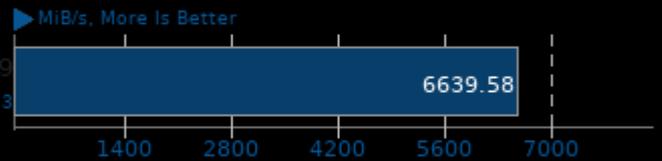
1. (CC) gcc options: -O3 -march=native

### MBW 2018-09-08

Test: Memory Copy, Fixed Block Size - Array Size: 128 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 31.94, N = 3



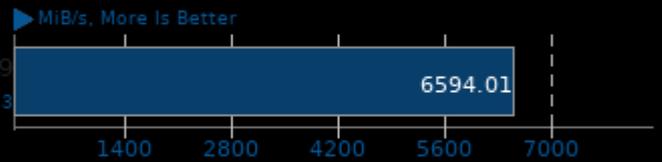
1. (CC) gcc options: -O3 -march=native

### MBW 2018-09-08

Test: Memory Copy, Fixed Block Size - Array Size: 512 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 10.61, N = 3



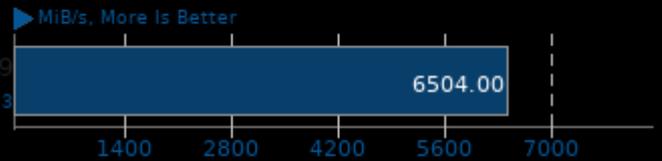
1. (CC) gcc options: -O3 -march=native

### MBW 2018-09-08

Test: Memory Copy, Fixed Block Size - Array Size: 1024 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 5.70, N = 3



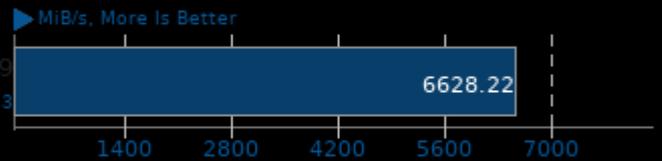
1. (CC) gcc options: -O3 -march=native

### MBW 2018-09-08

Test: Memory Copy, Fixed Block Size - Array Size: 4096 MiB

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 83.48, N = 3



1. (CC) gcc options: -O3 -march=native

## Memcached mcperf 1.5.10

Method: Add

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 260.16, N = 3



1, (CO) gcc options: -O2 -lm -rdynamic

## Memcached mcperf 1.5.10

Method: Get

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 228.09, N = 3



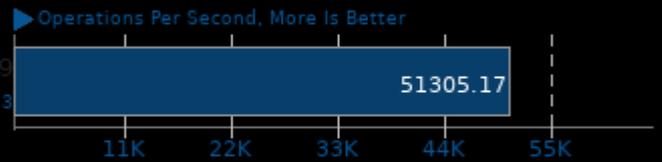
1, (CO) gcc options: -O2 -lm -rdynamic

## Memcached mcperf 1.5.10

Method: Set

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 179.96, N = 3



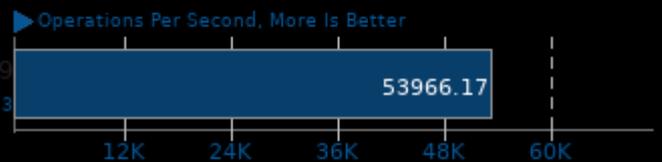
1, (CO) gcc options: -O2 -lm -rdynamic

## Memcached mcperf 1.5.10

Method: Append

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 411.03, N = 3



1, (CO) gcc options: -O2 -lm -rdynamic

## Memcached mcperf 1.5.10

Method: Delete

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 437.05, N = 3



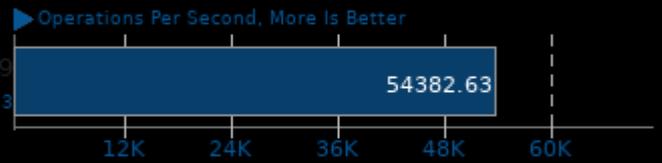
1, (CO) gcc options: -O2 -lm -rdynamic

### Memcached mcperf 1.5.10

Method: Prepend

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 101.50, N = 3



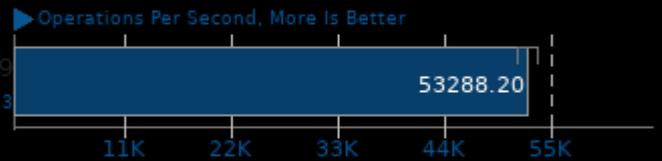
1. (ICC) gcc options: -O2 -lm -rdynamic

### Memcached mcperf 1.5.10

Method: Replace

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 954.63, N = 3



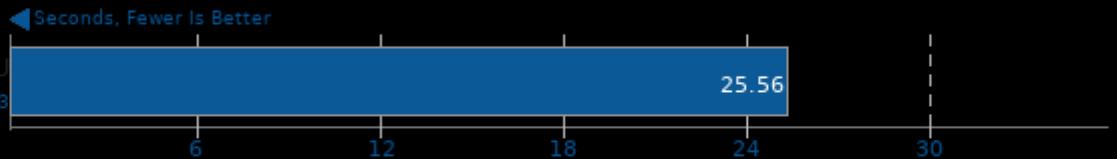
1. (ICC) gcc options: -O2 -lm -rdynamic

### Mencoder 1.3.0

AVI To LAVC

Intel Core i5-6200U

SE +/- 0.06, N = 3



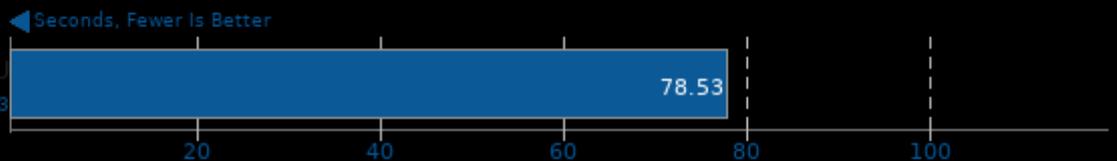
1. (ICC) gcc options: -ffast-math -fpie -pie -lrt -lpng -lz -ljpeg -lasound -ldl -lpthread -lsndio -lfreetype -lfontconfig -lbz2 -lmad -lvorbisenc -lvorbis -logg -lt

### Minion 1.8

Benchmark: Graceful

Intel Core i5-6200U

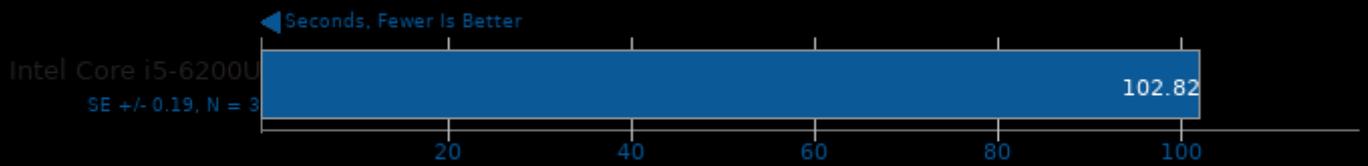
SE +/- 0.22, N = 3



1. (CXX) g++ options: -std=gnu++11 -O3 -fomit-frame-pointer -rdynamic

### Minion 1.8

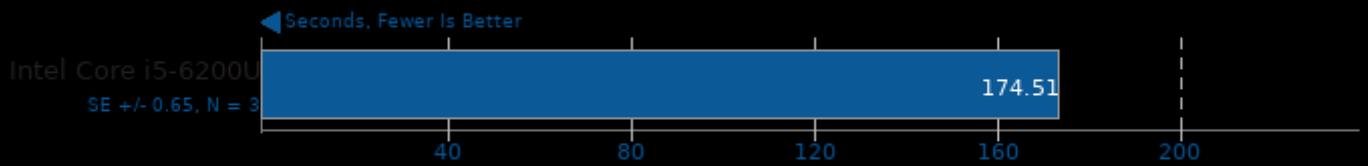
Benchmark: Solitaire



1. (CXX) g++ options: -std=gnu++11 -O3 -fomit-frame-pointer -rdynamic

### Minion 1.8

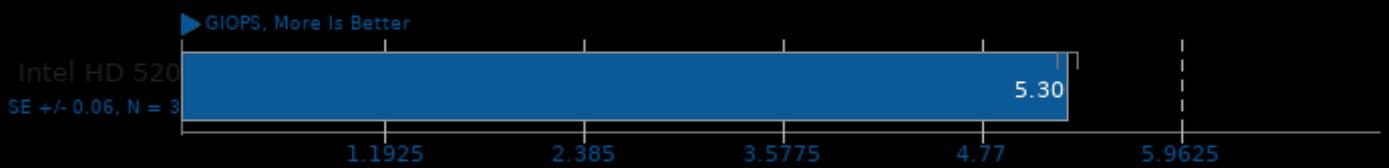
Benchmark: Quasigroup



1. (CXX) g++ options: -std=gnu++11 -O3 -fomit-frame-pointer -rdynamic

### Mixbench 2016-06-06

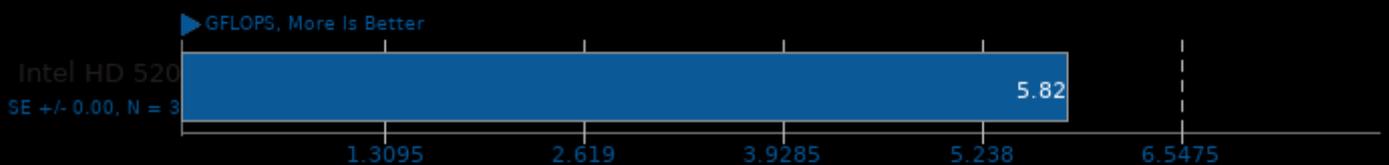
Benchmark: Integer



1. (CXX) g++ options: -lm -lstdc++ -lOpenCL -lrt -O2

### Mixbench 2016-06-06

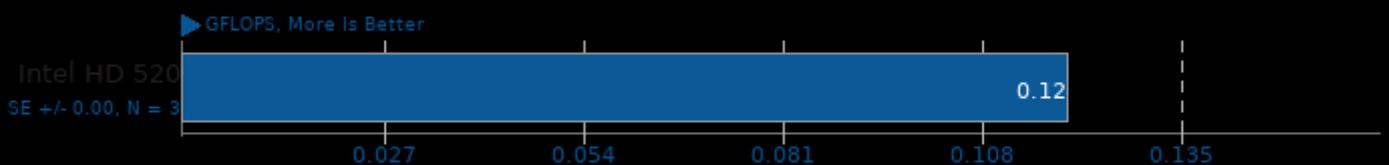
Benchmark: Double Precision



1. (CXX) g++ options: -lm -lstdc++ -lOpenCL -lrt -O2

### Mixbench 2016-06-06

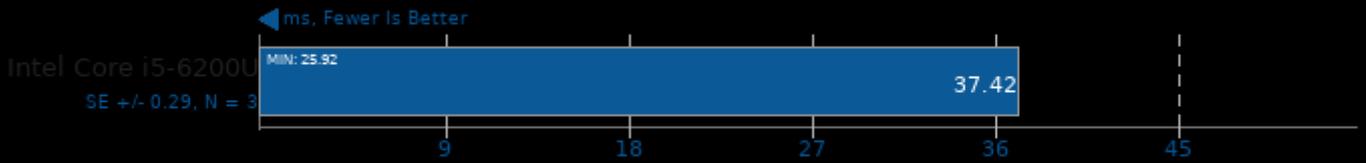
Benchmark: Single Precision



1. (CXX) g++ options: -lm -lstdc++ -lOpenCL -lrt -O2

### MKL-DNN 2019-04-16

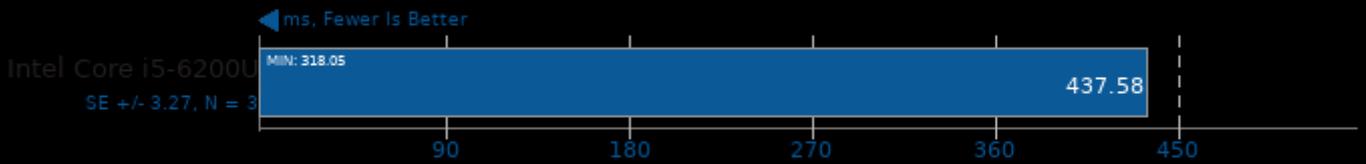
Harness: IP Batch 1D - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

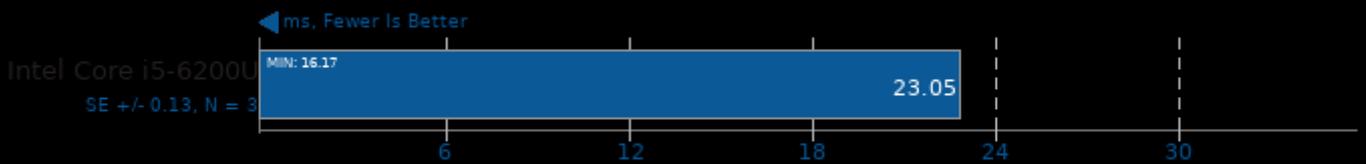
Harness: IP Batch All - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

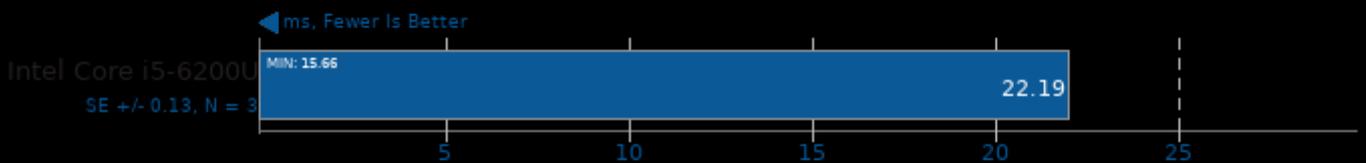
Harness: IP Batch 1D - Data Type: u8s8u8s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

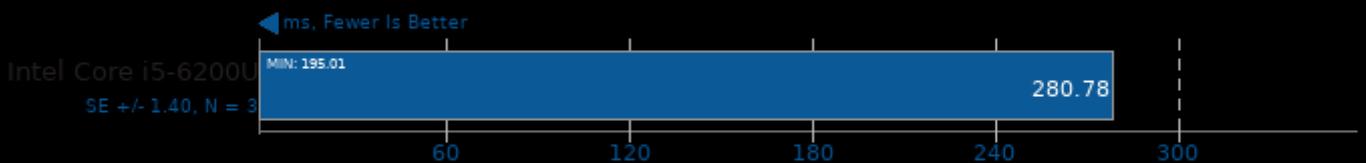
Harness: IP Batch 1D - Data Type: u8s8f32s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

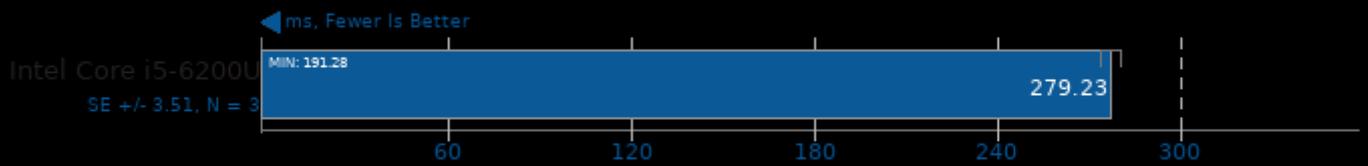
Harness: IP Batch All - Data Type: u8s8u8s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

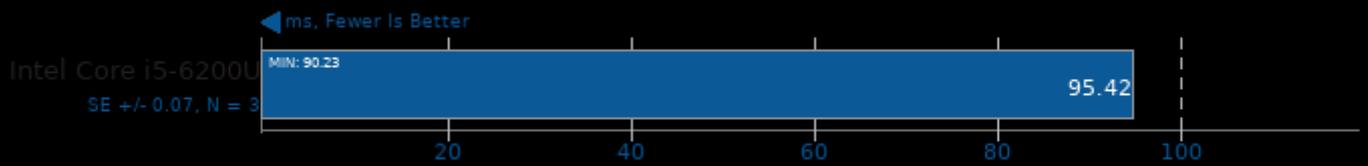
Harness: IP Batch All - Data Type: u8s8f32s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

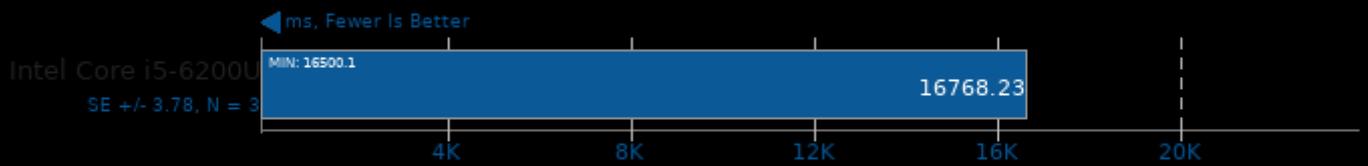
Harness: Convolution Batch conv\_3d - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

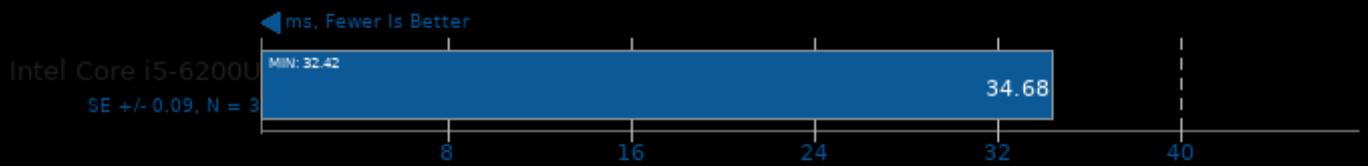
Harness: Convolution Batch conv\_all - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

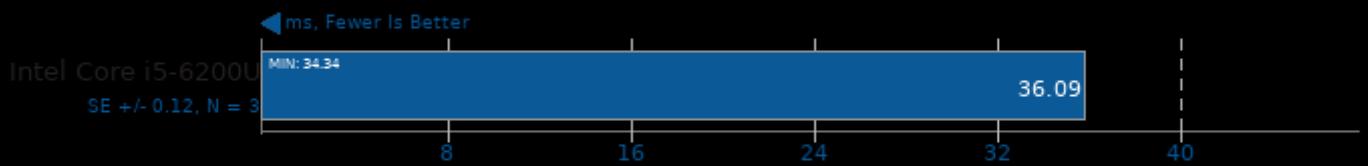
Harness: Deconvolution Batch deconv\_1d - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

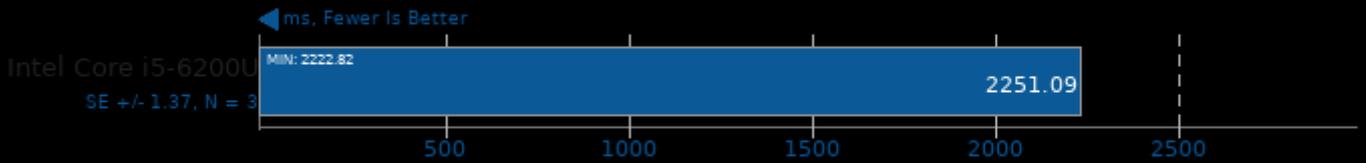
Harness: Deconvolution Batch deconv\_3d - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

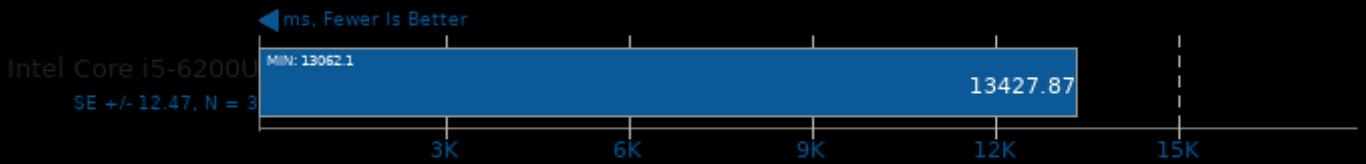
Harness: Convolution Batch conv\_alexnet - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

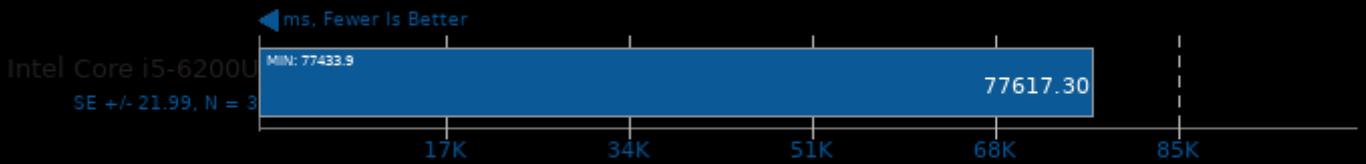
Harness: Deconvolution Batch deconv\_all - Data Type: f32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

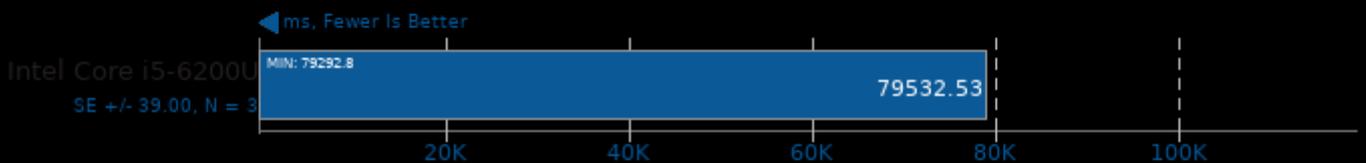
Harness: Convolution Batch conv\_3d - Data Type: u8s8u8s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

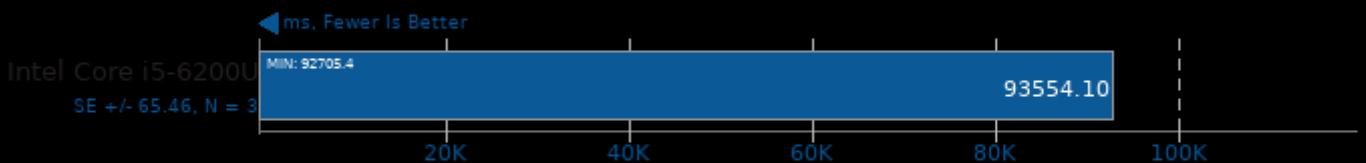
Harness: Convolution Batch conv\_3d - Data Type: u8s8f32s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

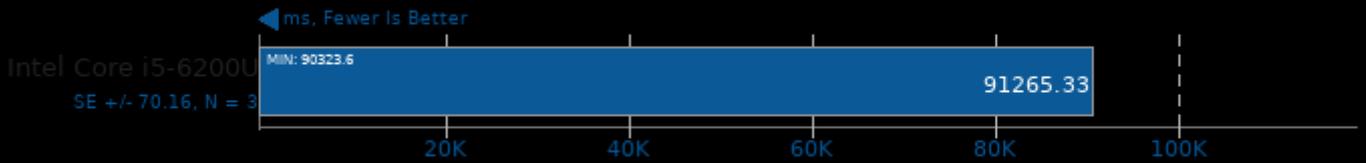
Harness: Convolution Batch conv\_all - Data Type: u8s8u8s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

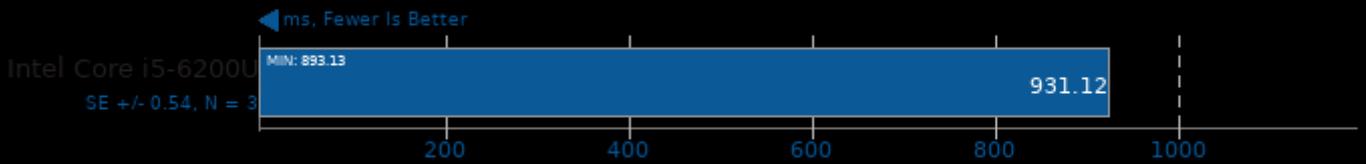
### MKL-DNN 2019-04-16

Harness: Convolution Batch conv\_all - Data Type: u8s8f32s32



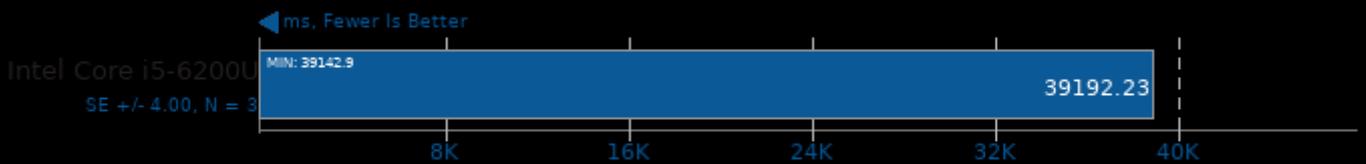
### MKL-DNN 2019-04-16

Harness: Convolution Batch conv\_googlenet\_v3 - Data Type: f32



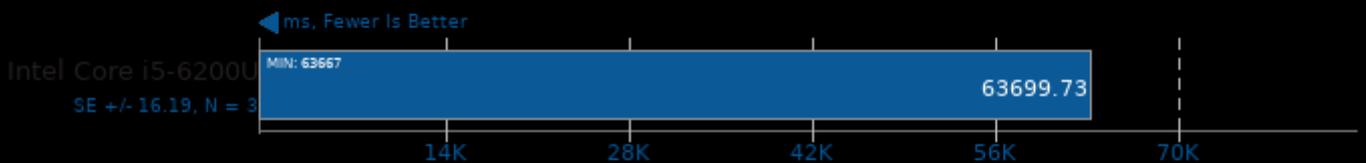
### MKL-DNN 2019-04-16

Harness: Deconvolution Batch deconv\_1d - Data Type: u8s8u8s32



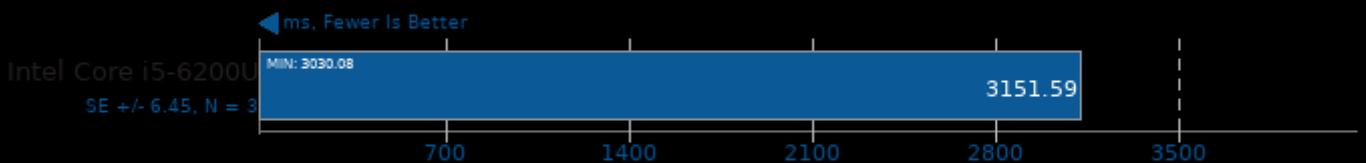
### MKL-DNN 2019-04-16

Harness: Deconvolution Batch deconv\_3d - Data Type: u8s8u8s32



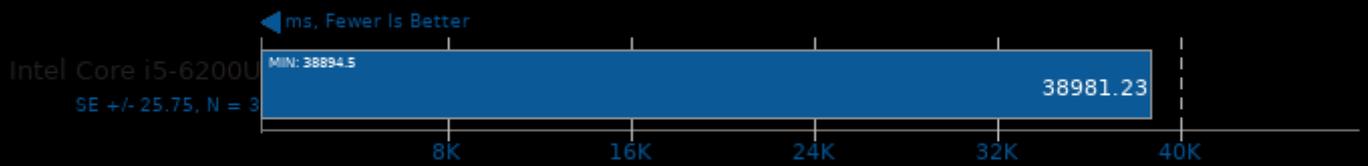
### MKL-DNN 2019-04-16

Harness: Convolution Batch conv\_alexnet - Data Type: u8s8u8s32



### MKL-DNN 2019-04-16

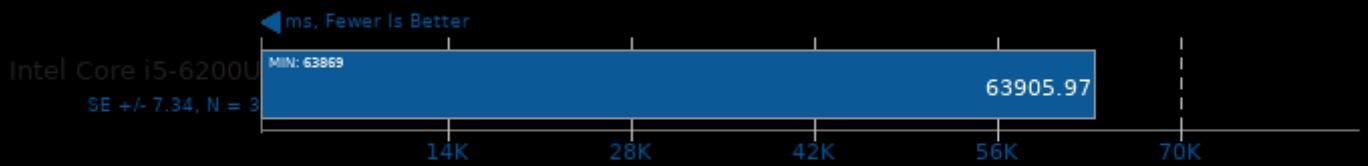
Harness: Deconvolution Batch deconv\_1d - Data Type: u8s8f32s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

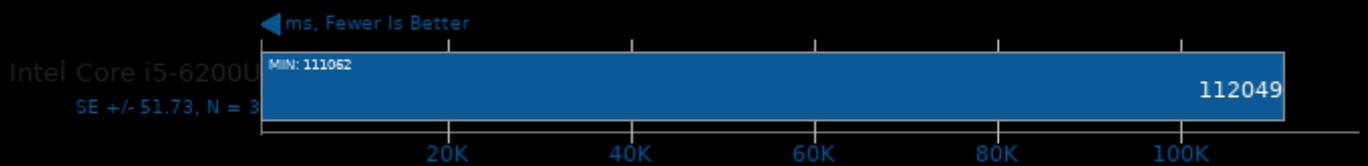
Harness: Deconvolution Batch deconv\_3d - Data Type: u8s8f32s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

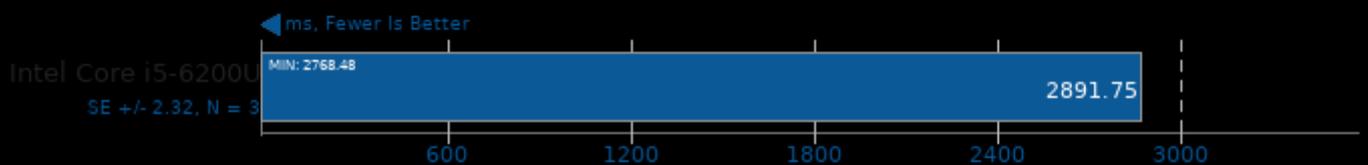
Harness: Deconvolution Batch deconv\_all - Data Type: u8s8u8s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

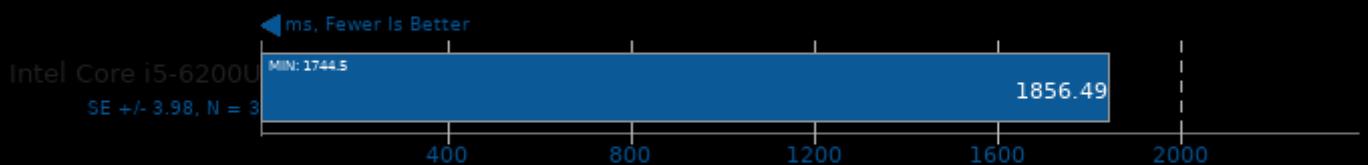
Harness: Convolution Batch conv\_alexnet - Data Type: u8s8f32s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

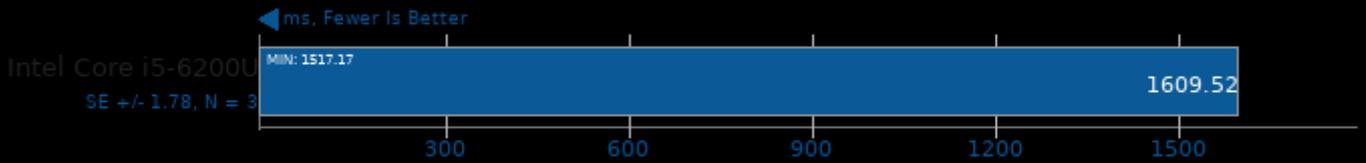
Harness: Convolution Batch conv\_googlenet\_v3 - Data Type: u8s8u8s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### MKL-DNN 2019-04-16

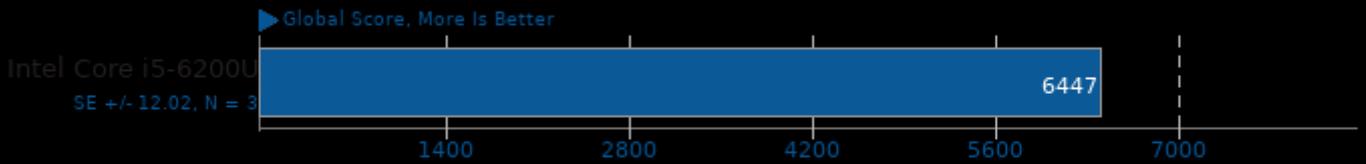
Harness: Convolution Batch conv\_googlenet\_v3 - Data Type: u8s8f32s32



1. (CXX) g++ options: -std=c++11 -march=native -mtune=native -fPIC -fopenmp -O3 -pie -lmklml\_intel -ldl

### GNU MPC 1.1.0

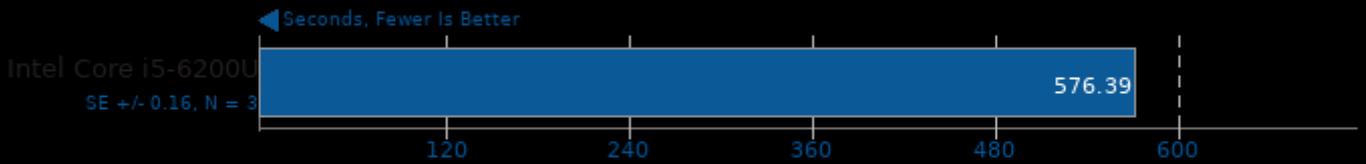
Multi-Precision Benchmark



1. (CC) gcc options: -lm -O2 -pedantic -fomit-frame-pointer -m64 -mtune=skylake -march=broadwell -MT -MD -MP -MF

### Timed MrBayes Analysis 3.1.2

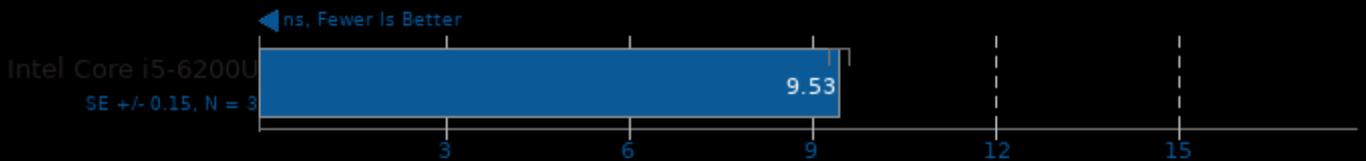
Primate Phylogeny Analysis



1. (CC) gcc options: -O3 -msse -mfpmath=sse -march=native -lm -pthread -lmpi

### Multichase Pointer Chaser

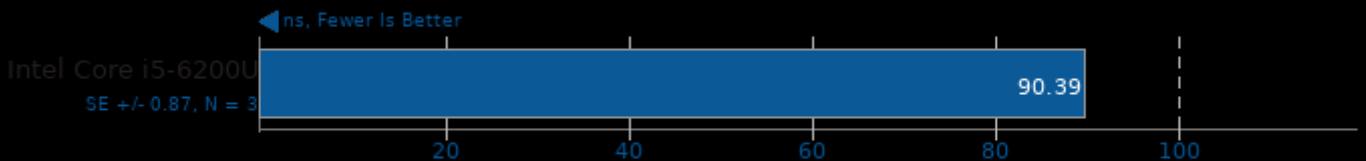
Test: 4MB Array, 64 Byte Stride



1. (CC) gcc options: -O2 -static -pthread -lrt

### Multichase Pointer Chaser

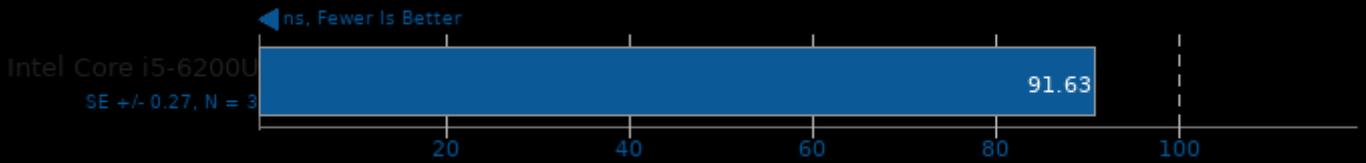
Test: 1GB Array, 256 Byte Stride



1. (CC) gcc options: -O2 -static -pthread -lrt

### Multichase Pointer Chaser

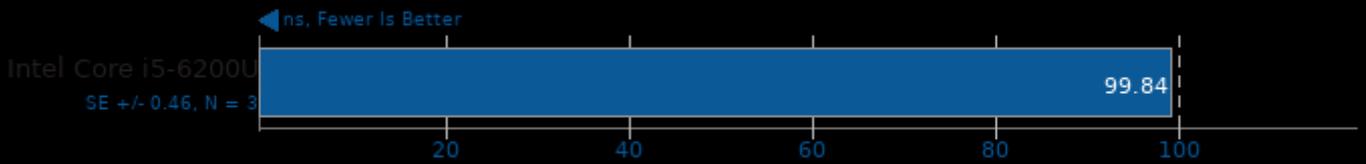
Test: 256MB Array, 256 Byte Stride



1. (CC) gcc options: -O2 -static -pthread -lrt

### Multichase Pointer Chaser

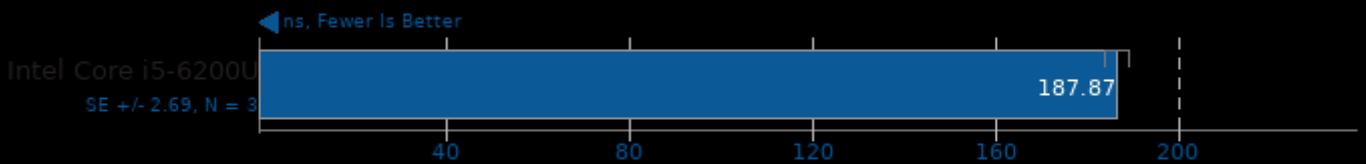
Test: 1GB Array, 256 Byte Stride, 2 Threads



1. (CC) gcc options: -O2 -static -pthread -lrt

### Multichase Pointer Chaser

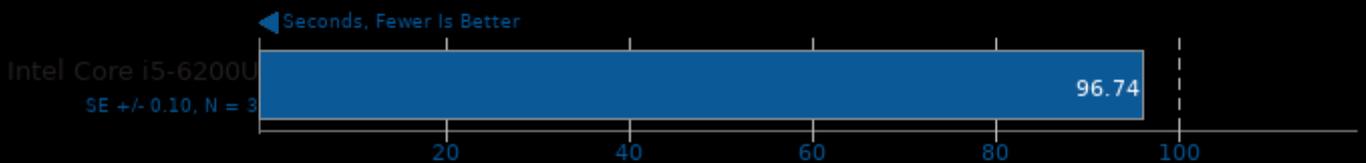
Test: 1GB Array, 256 Byte Stride, 4 Threads



1. (CC) gcc options: -O2 -static -pthread -lrt

### N-Queens 1.0

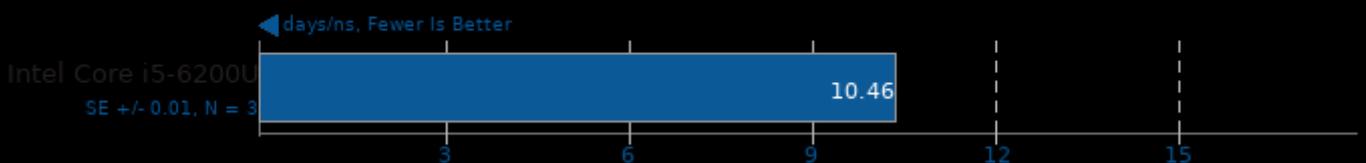
Elapsed Time



1. (CC) gcc options: -static -fopenmp -O3 -march=native

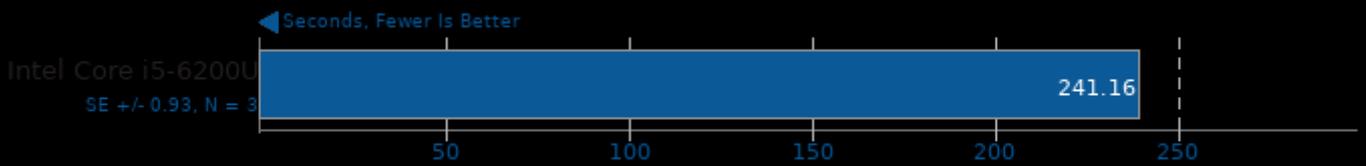
### NAMD 2.13b1

ATPase Simulation - 327,506 Atoms



## Open FMM Nero2D 2.0.2

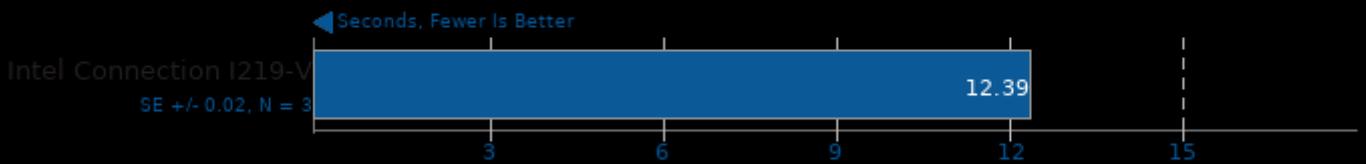
Total Time



1. (CXX) g++ options: -O2 -lfftw3 -llapack -lf77blas -latlas -lgfortran -lquadmath -lm -pthread -lmpi\_cxx -lmpi

## Loopback TCP Network Performance

Time To Transfer 10GB Via Loopback



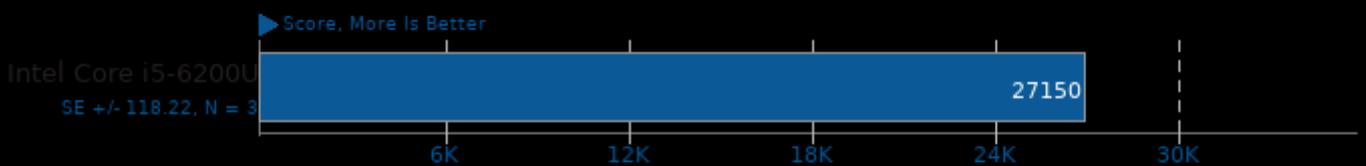
## NGINX Benchmark 1.9.9

Static Web Page Serving



1. (CC) gcc options: -pthread -lcrypt -lcrypto -lz -O3 -march=native

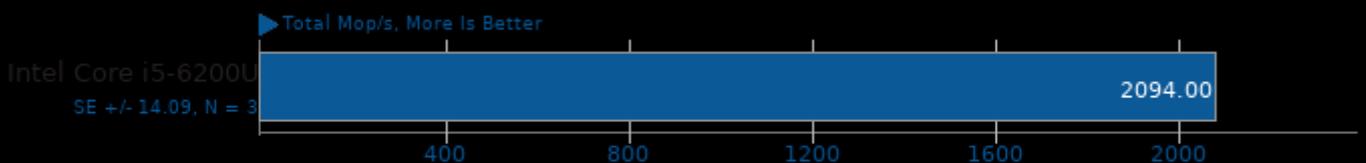
## Node.js Octane Benchmark



1. Node.js  
v8.10.0

## NAS Parallel Benchmarks 3.3.1

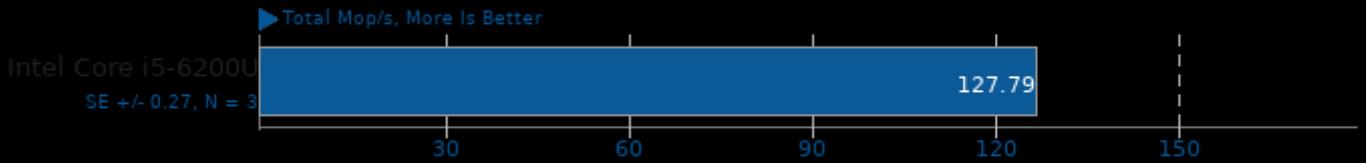
Test / Class: BT.A



1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi  
2. Open MPI 2.1.1

### NAS Parallel Benchmarks 3.3.1

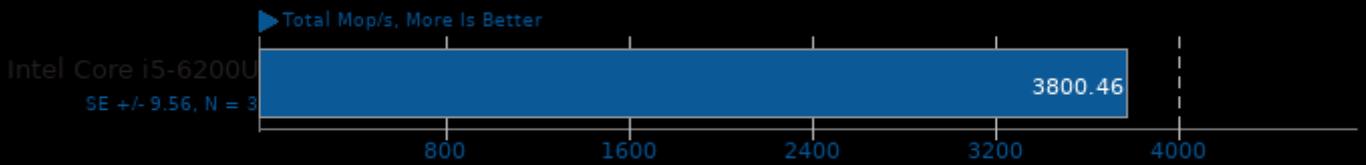
Test / Class: EP.C



1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi  
2. Open MPI 2.1.1

### NAS Parallel Benchmarks 3.3.1

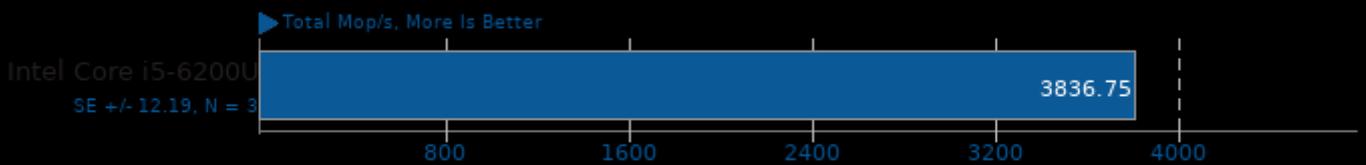
Test / Class: FT.A



1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi  
2. Open MPI 2.1.1

### NAS Parallel Benchmarks 3.3.1

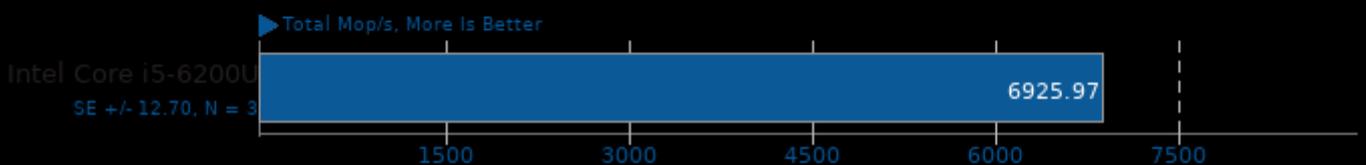
Test / Class: FT.B



1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi  
2. Open MPI 2.1.1

### NAS Parallel Benchmarks 3.3.1

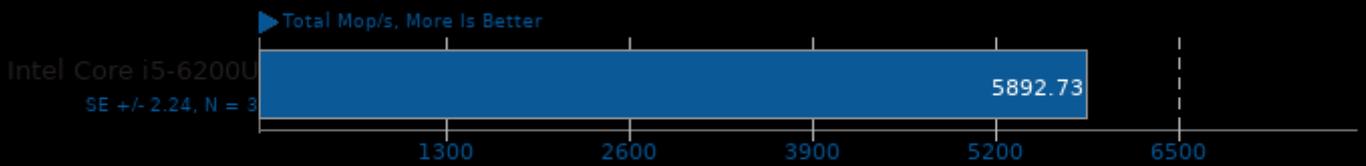
Test / Class: LU.A



1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi  
2. Open MPI 2.1.1

## NAS Parallel Benchmarks 3.3.1

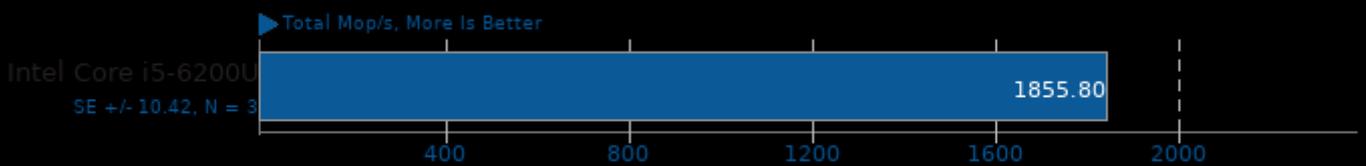
Test / Class: LU.C



1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpi fh -lmpi  
2. Open MPI 2.1.1

## NAS Parallel Benchmarks 3.3.1

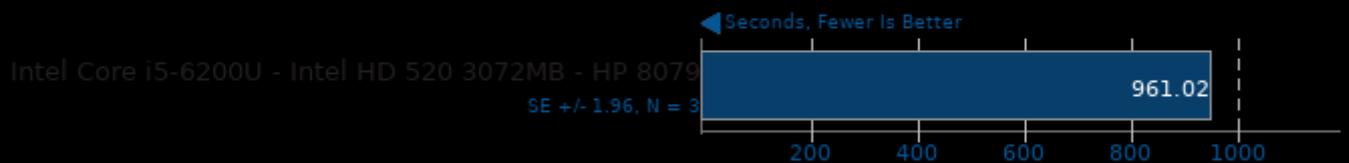
Test / Class: SP.A



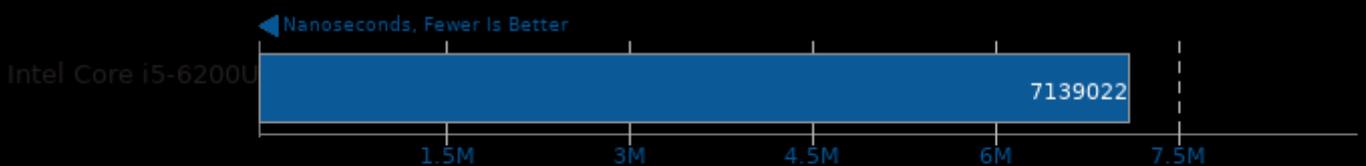
1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpi fh -lmpi  
2. Open MPI 2.1.1

## Numenta Anomaly Benchmark 2018-11-09

Time To Completion

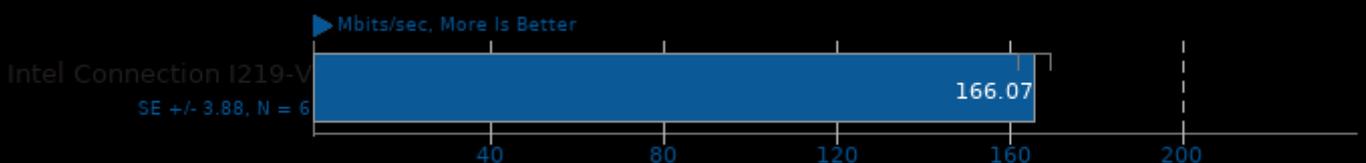


## Numpy Benchmark



## Nuttcp 8.1.4

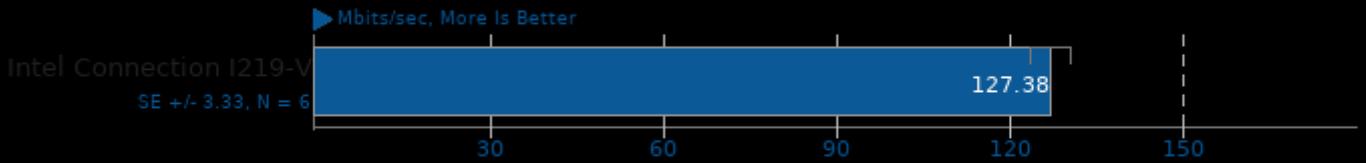
Test: 10G+ UDP - Server Address: 5.20.0.41



1. (CC) gcc options: -O3

### Nuttcp 8.1.4

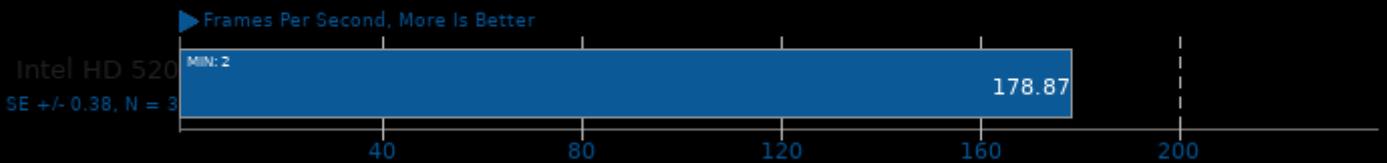
Test: TCP Transfer - Default - Server Address: 5.20.0.41



1, (CC) gcc options: -O3

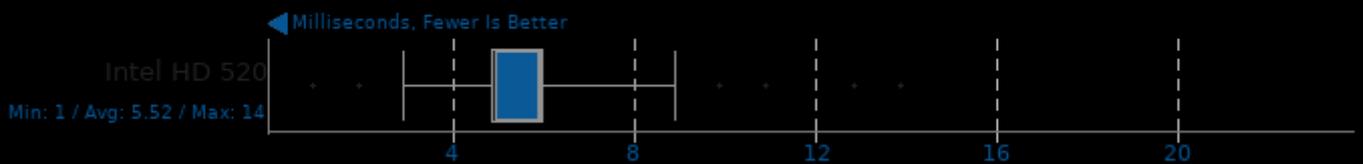
### OpenArena 0.8.8

Resolution: 800 x 600



### OpenArena 0.8.8

Resolution: 800 x 600 - Total Frame Time



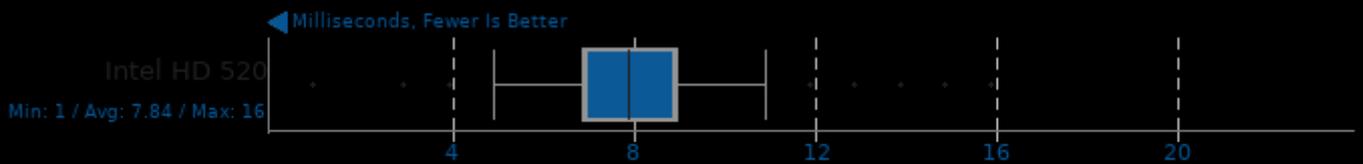
### OpenArena 0.8.8

Resolution: 1024 x 768



### OpenArena 0.8.8

Resolution: 1024 x 768 - Total Frame Time



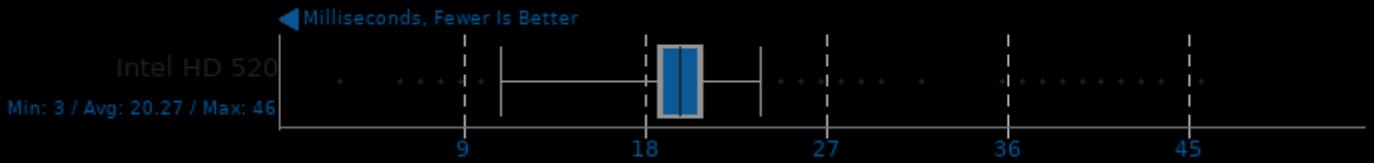
### OpenArena 0.8.8

Resolution: 1920 x 1080



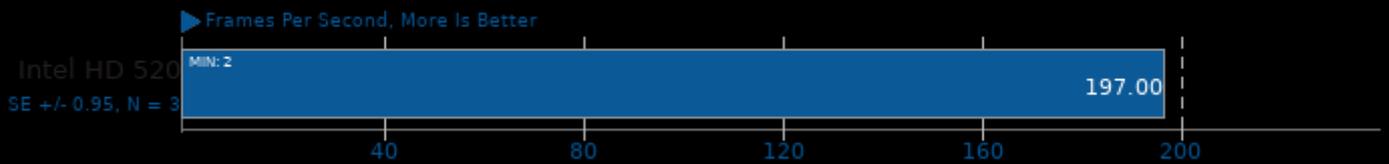
### OpenArena 0.8.8

Resolution: 1920 x 1080 - Total Frame Time



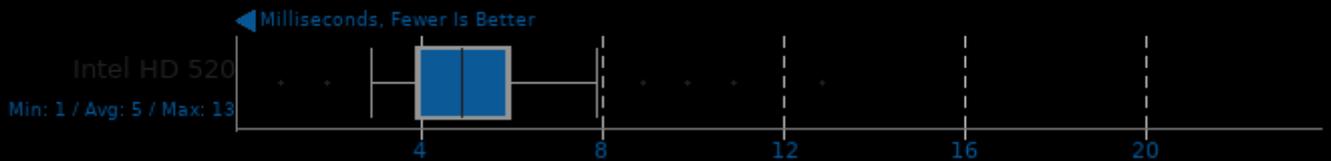
### OpenArena 0.8.8

Resolution: 2560 x 1440



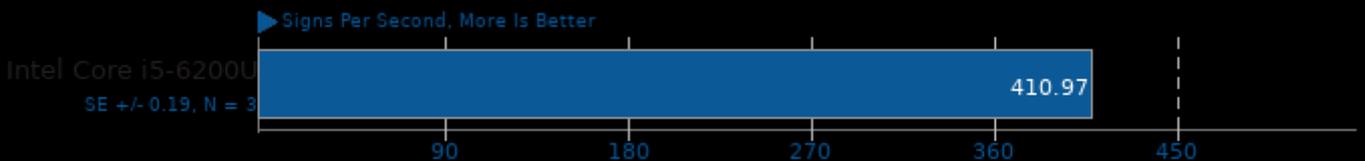
### OpenArena 0.8.8

Resolution: 2560 x 1440 - Total Frame Time



### OpenSSL 1.1.1

RSA 4096-bit Performance



1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl

### Optcarrot

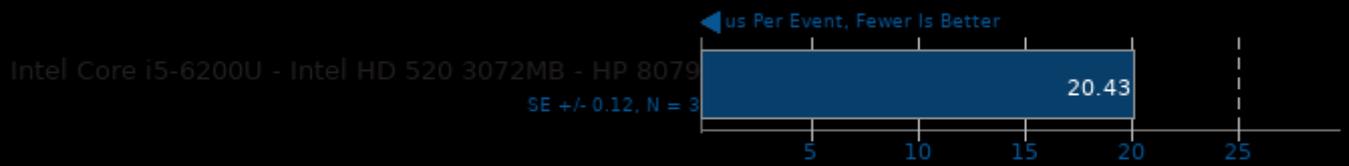
Optimized Benchmark



1. ruby 2.5.1p57 (2018-03-29 revision 63029) [x86\_64-linux-gnu]

## OSBench

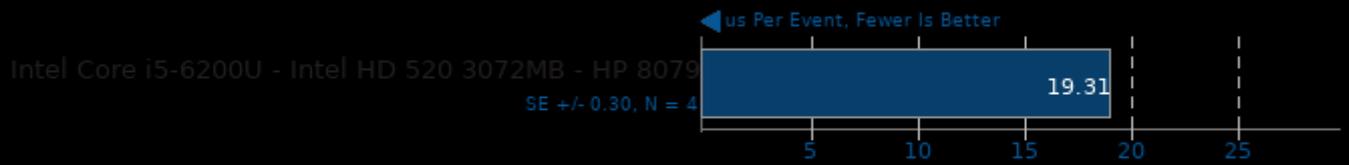
Test: Create Files



1, (CC) gcc options: -lm

## OSBench

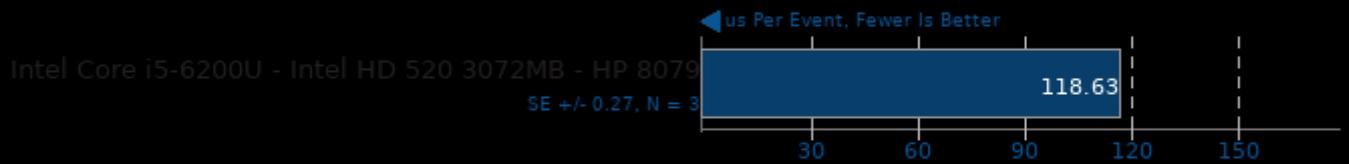
Test: Create Threads



1, (CC) gcc options: -lm

## OSBench

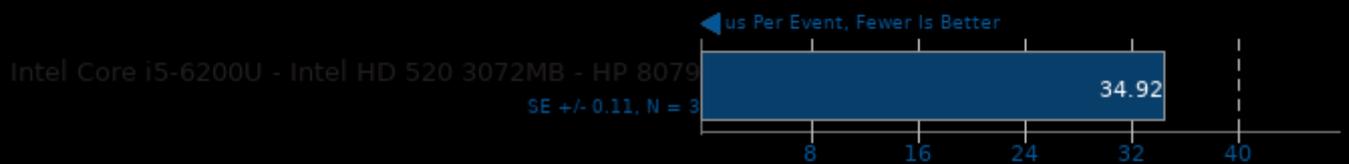
Test: Launch Programs



1, (CC) gcc options: -lm

## OSBench

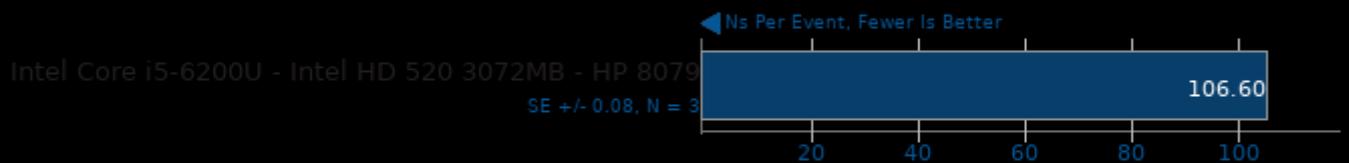
Test: Create Processes



1, (CC) gcc options: -lm

## OSBench

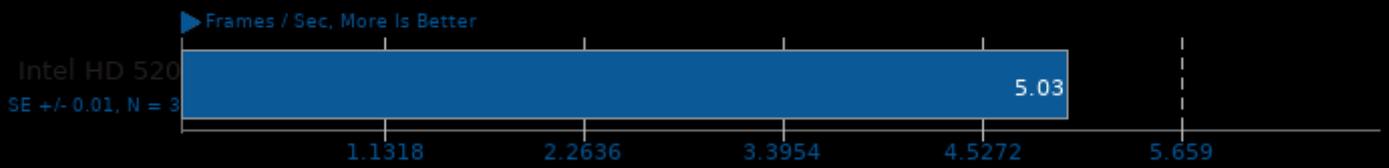
Test: Memory Allocations



1, (CC) gcc options: -lm

### ParaView 5.4.1

Test: Many Spheres - Resolution: 800 x 600



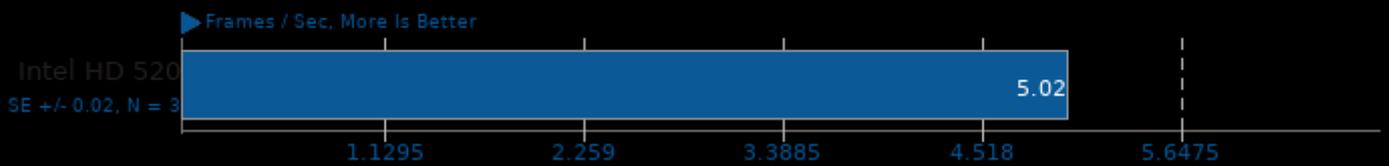
### ParaView 5.4.1

Test: Many Spheres - Resolution: 800 x 600



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1024 x 576



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1024 x 576



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1024 x 768



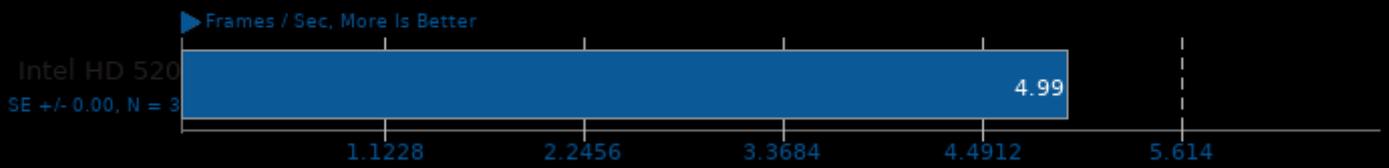
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1024 x 768



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1280 x 800



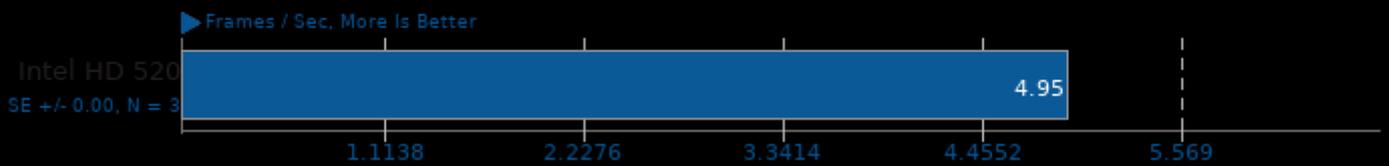
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1280 x 800



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1280 x 960



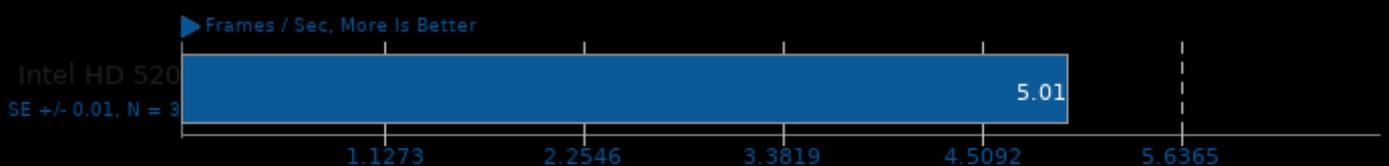
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1280 x 960



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1368 x 768



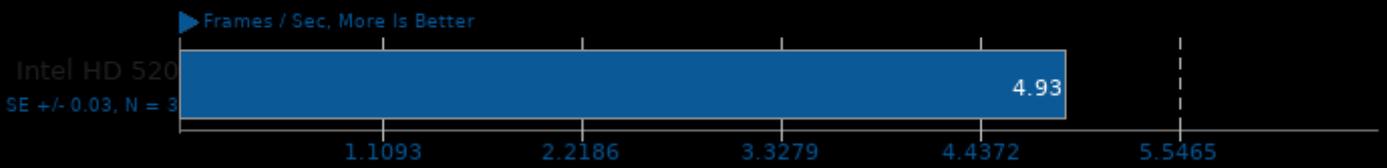
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1368 x 768



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1400 x 900



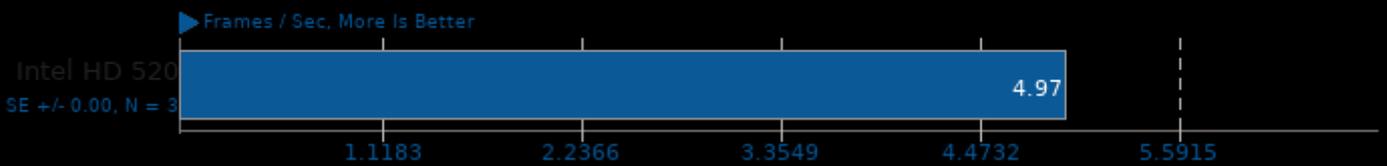
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1400 x 900



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1440 x 810



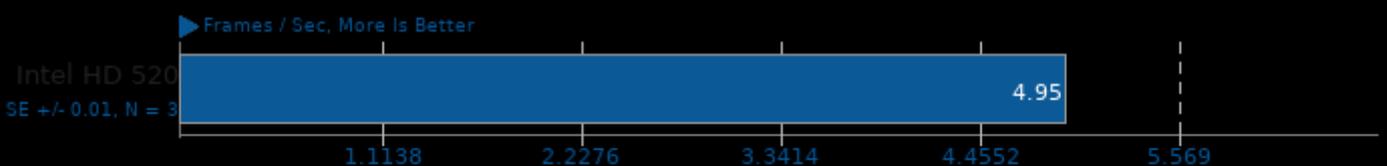
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1440 x 810



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1440 x 900



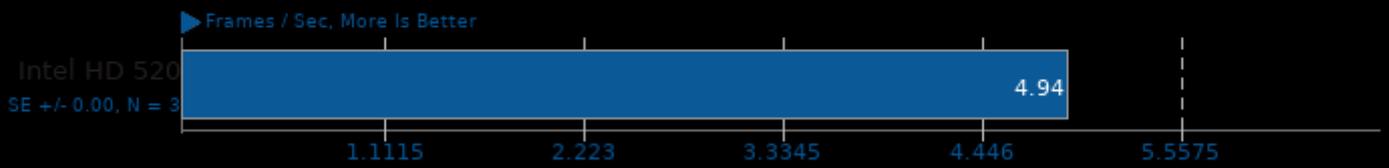
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1440 x 900



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1600 x 900



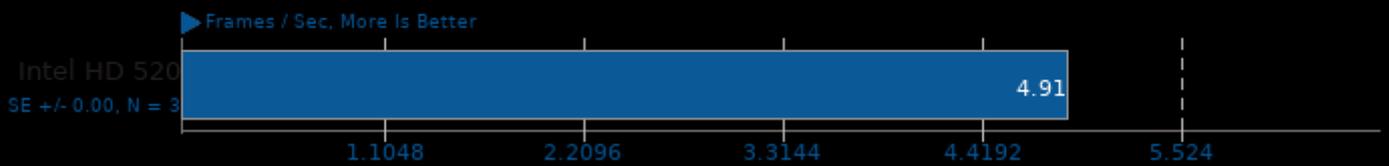
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1600 x 900



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1280 x 1024



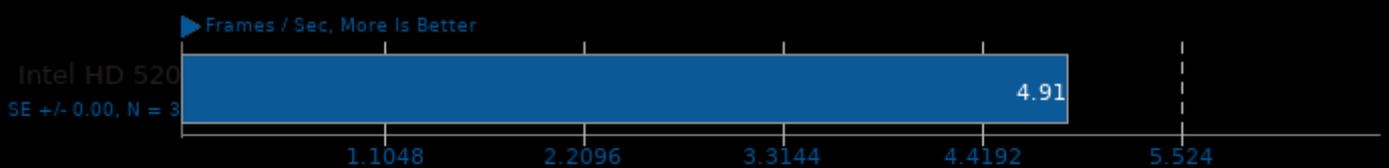
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1280 x 1024



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1400 x 1050



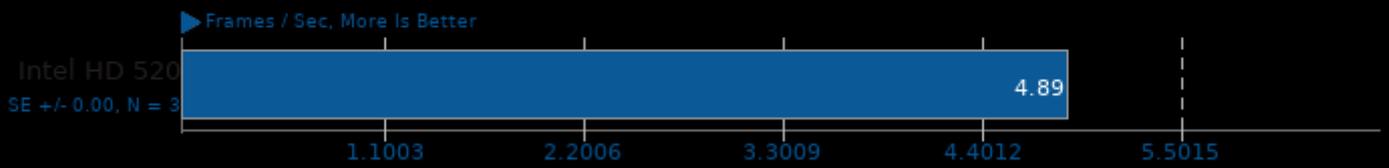
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1400 x 1050



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1600 x 1024



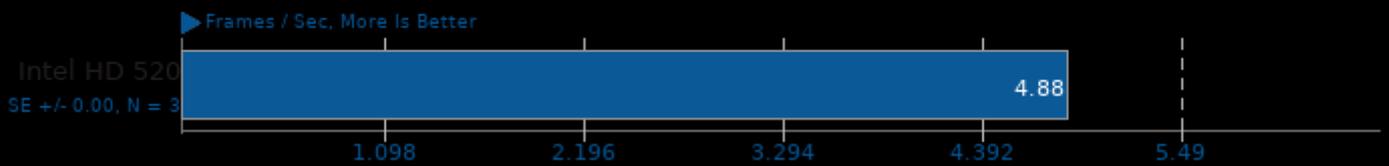
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1600 x 1024



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1680 x 1050



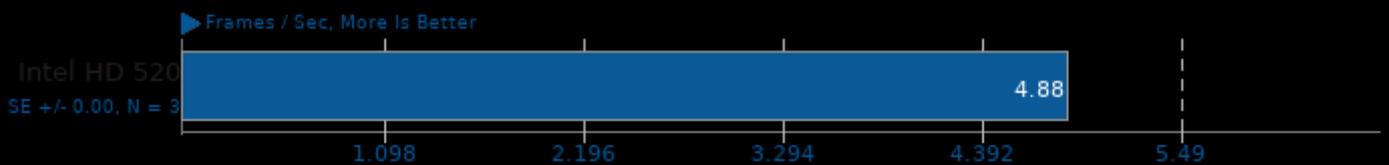
### ParaView 5.4.1

Test: Many Spheres - Resolution: 1680 x 1050



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1920 x 1080



### ParaView 5.4.1

Test: Many Spheres - Resolution: 1920 x 1080



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 800 x 600



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 800 x 600



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 800 x 600



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 800 x 600



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1024 x 576



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1024 x 576



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1024 x 768



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1024 x 768



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1280 x 800



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1280 x 800



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1280 x 960



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1280 x 960



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1368 x 768



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1368 x 768



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1400 x 900



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1400 x 900



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1440 x 810



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1440 x 810



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1440 x 900



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1440 x 900



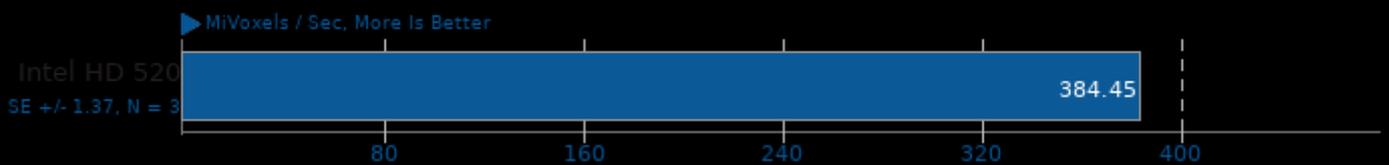
### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1600 x 900



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1600 x 900



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1024 x 576



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1024 x 576



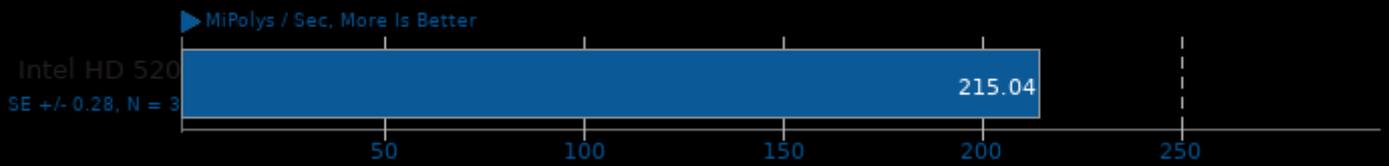
### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1024 x 768



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1024 x 768



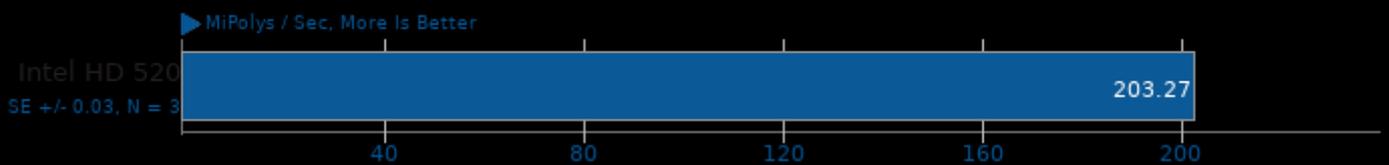
### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1280 x 800



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1280 x 800



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1280 x 960



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1280 x 960



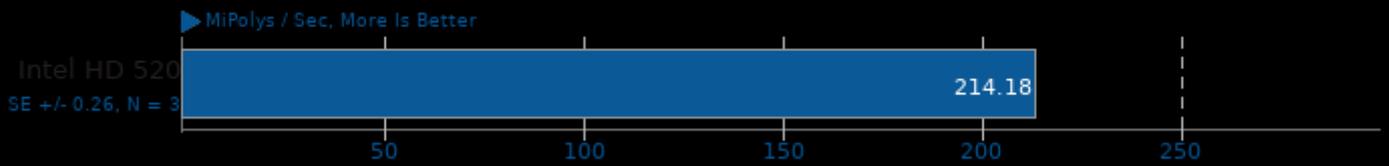
### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1368 x 768



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1368 x 768



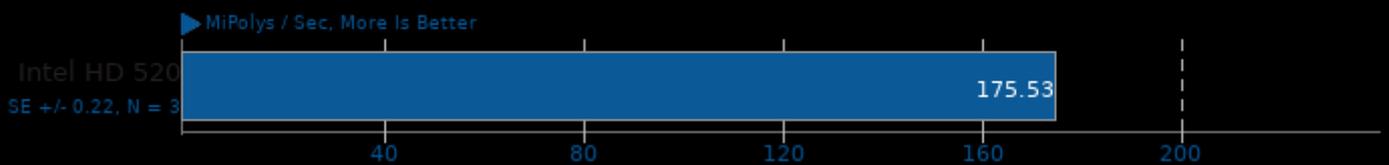
### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1400 x 900



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1400 x 900



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1440 x 810



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1440 x 810



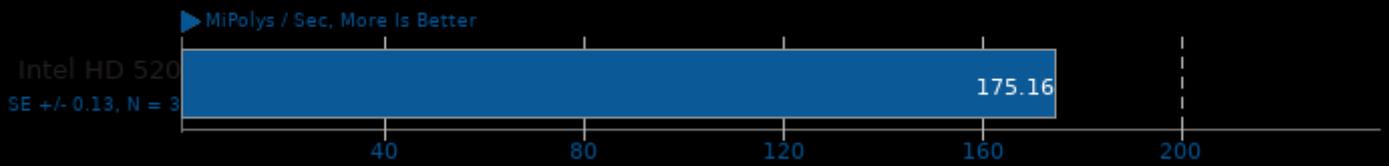
### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1440 x 900



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1440 x 900



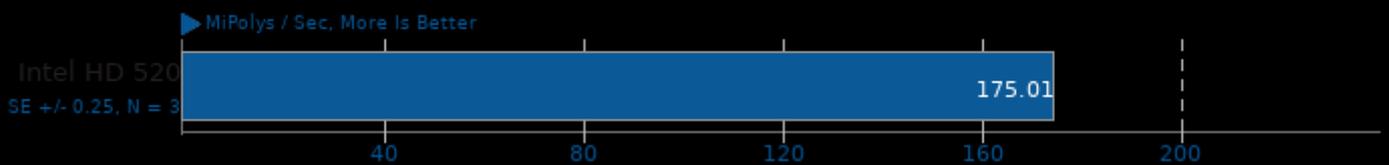
### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1600 x 900



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1600 x 900



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1280 x 1024



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1280 x 1024



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1400 x 1050



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1400 x 1050



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1600 x 1024



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1600 x 1024



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1680 x 1050



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1680 x 1050



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1920 x 1080



### ParaView 5.4.1

Test: Wavelet Volume - Resolution: 1920 x 1080



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1280 x 1024



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1280 x 1024



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1400 x 1050



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1400 x 1050



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1600 x 1024



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1600 x 1024



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1680 x 1050



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1680 x 1050



### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1920 x 1080



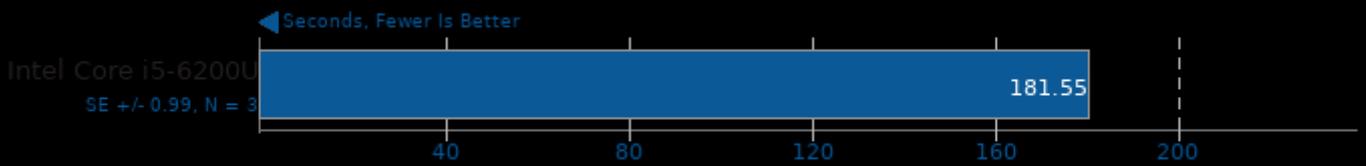
### ParaView 5.4.1

Test: Wavelet Contour - Resolution: 1920 x 1080



### Parboil 2.5

Test: OpenMP LBM

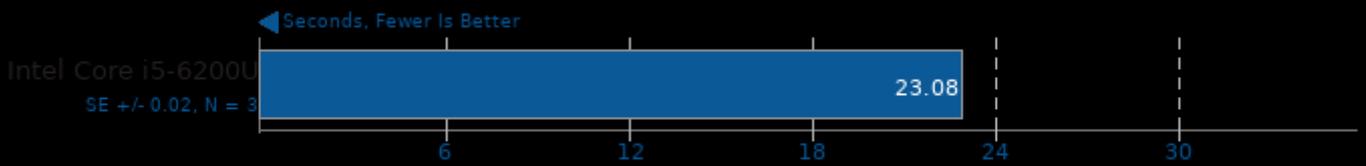


SE +/- 0.99, N = 3

1. (CXX) g++ options: -lm -lpthread -lgomp -O3 -ffast-math -fopenmp

### Parboil 2.5

Test: OpenMP CUTCP

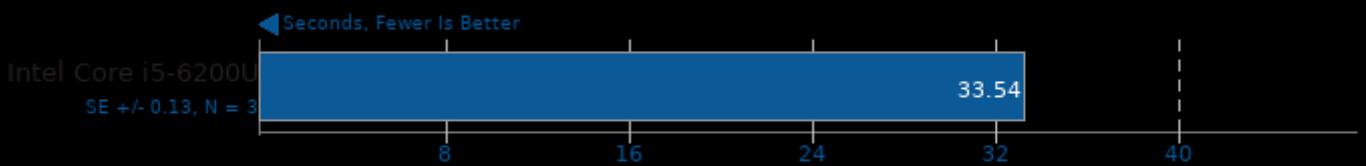


SE +/- 0.02, N = 3

1. (CXX) g++ options: -lm -lpthread -lgomp -O3 -ffast-math -fopenmp

### Parboil 2.5

Test: OpenMP Stencil

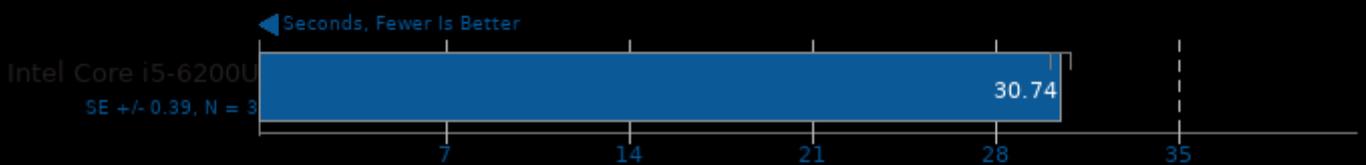


SE +/- 0.13, N = 3

1. (CXX) g++ options: -lm -lpthread -lgomp -O3 -ffast-math -fopenmp

### Parboil 2.5

Test: OpenMP MRI Gridding

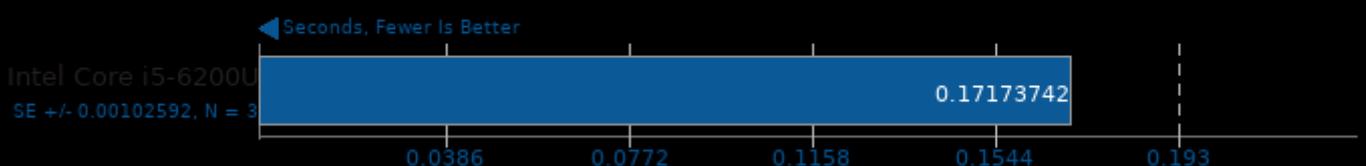


SE +/- 0.39, N = 3

1. (CXX) g++ options: -lm -lpthread -lgomp -O3 -ffast-math -fopenmp

### Perl Benchmarks

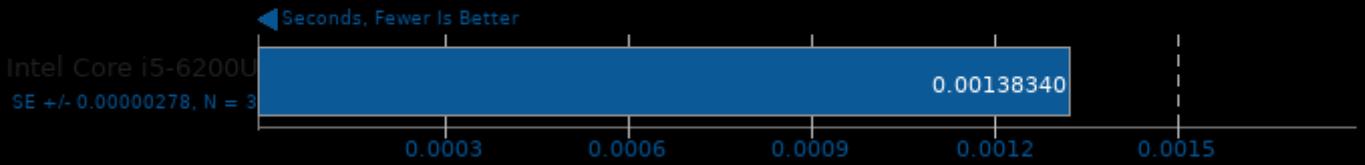
Test: Pod2html



SE +/- 0.00102592, N = 3

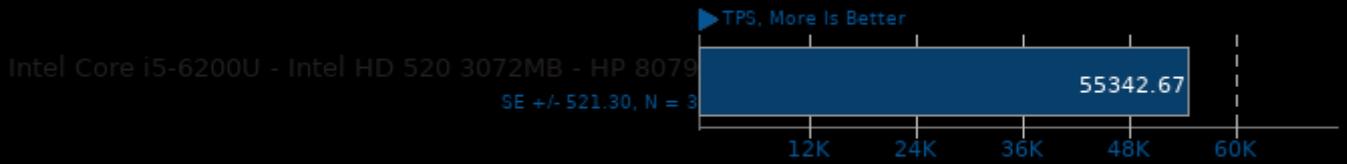
## Perl Benchmarks

Test: Interpreter



## PostgreSQL pgbench 10.3

Scaling: On-Disk - Test: Normal Load - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

## PostgreSQL pgbench 10.3

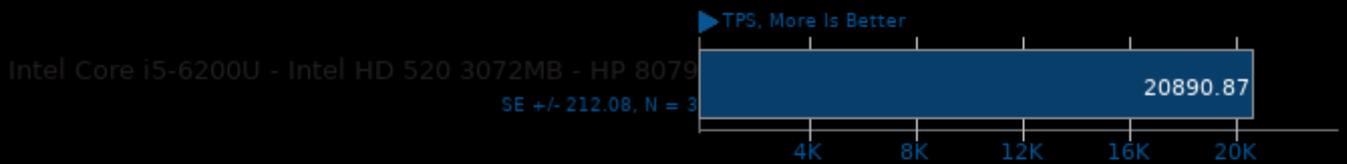
Scaling: On-Disk - Test: Normal Load - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

## PostgreSQL pgbench 10.3

Scaling: On-Disk - Test: Single Thread - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

## PostgreSQL pgbench 10.3

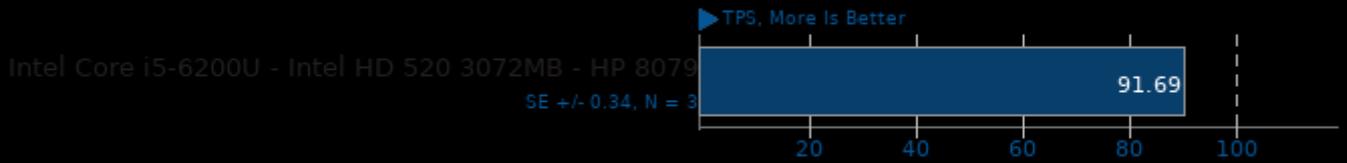
Scaling: Mostly RAM - Test: Normal Load - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

Scaling: On-Disk - Test: Single Thread - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

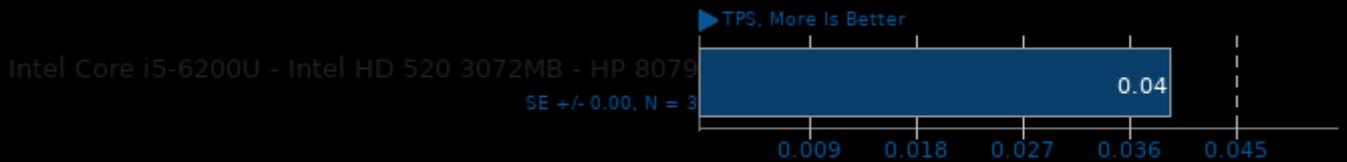
Scaling: Buffer Test - Test: Normal Load - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

Scaling: Mostly RAM - Test: Normal Load - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

Scaling: Buffer Test - Test: Normal Load - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

Scaling: Mostly RAM - Test: Single Thread - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

Scaling: On-Disk - Test: Heavy Contention - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

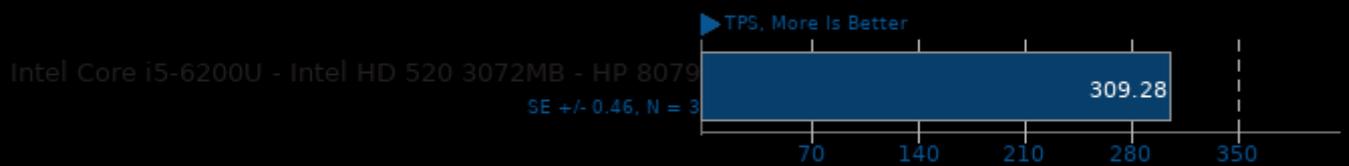
Scaling: Buffer Test - Test: Single Thread - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

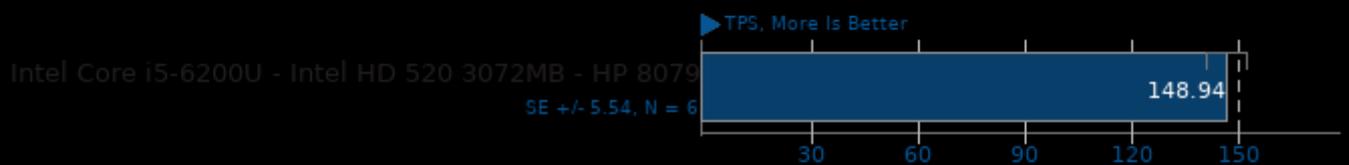
Scaling: On-Disk - Test: Heavy Contention - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

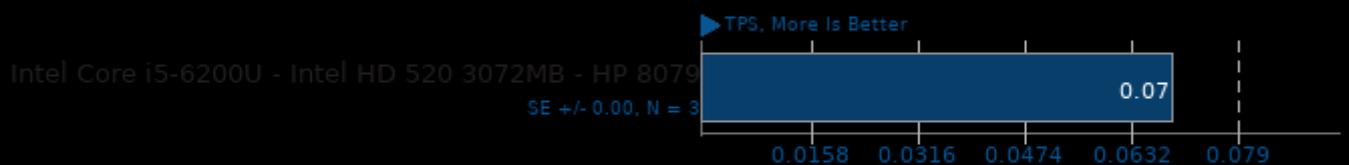
Scaling: Buffer Test - Test: Single Thread - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

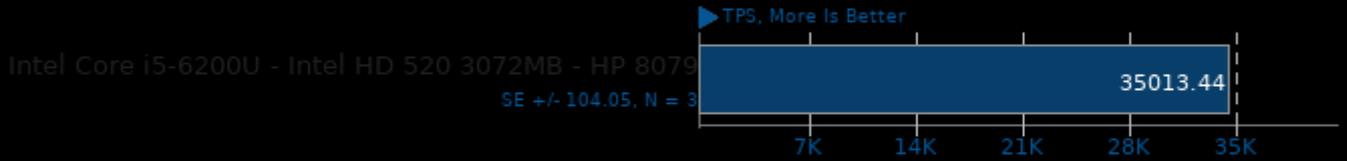
Scaling: Mostly RAM - Test: Heavy Contention - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

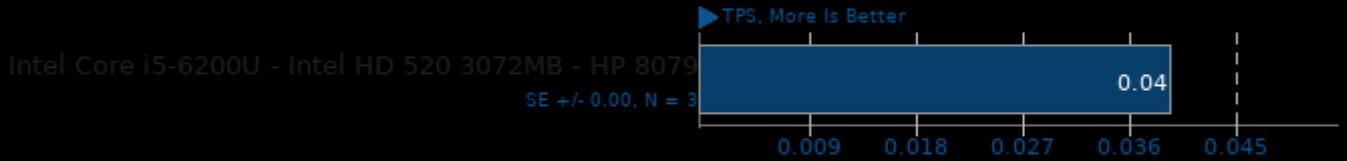
Scaling: Buffer Test - Test: Heavy Contention - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

Scaling: Mostly RAM - Test: Heavy Contention - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

### PostgreSQL pgbench 10.3

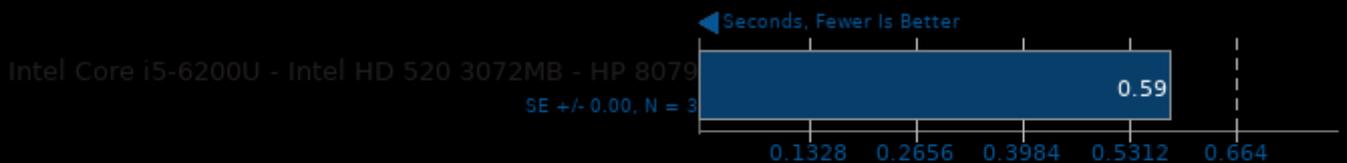
Scaling: Buffer Test - Test: Heavy Contention - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

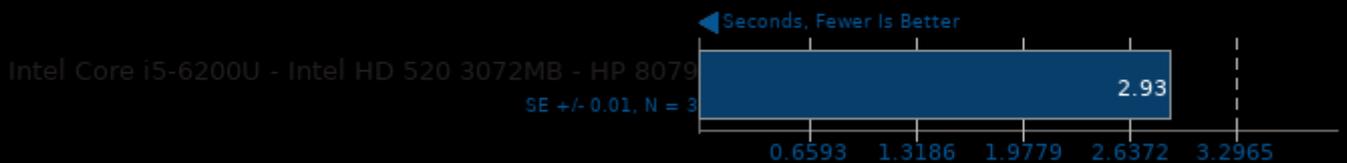
### PHP Micro Benchmarks

Test: Zend bench



### PHP Micro Benchmarks

Test: Zend micro\_bench

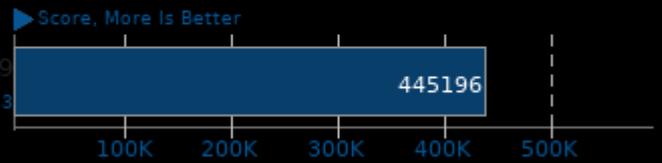


### PHPBench 0.8.1

PHP Benchmark Suite

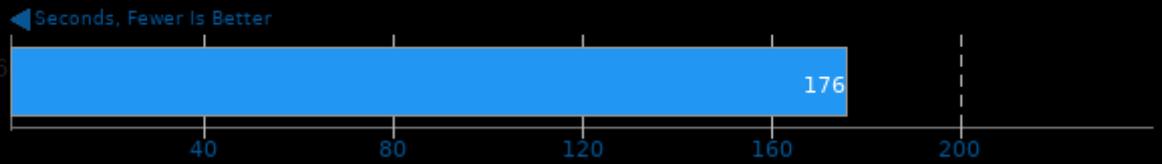
Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1088.59, N = 3



### Pjdfstest

SAMSUNG MZNLN256

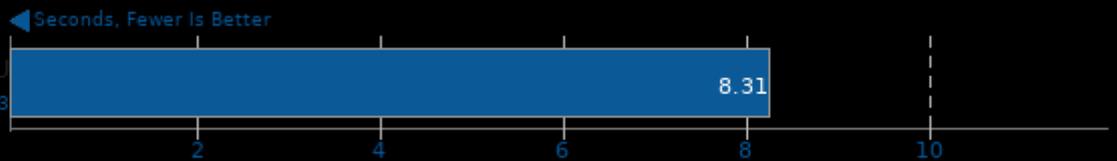


### PolyBench-C 4.2

Test: Covariance Computation

Intel Core i5-6200U

SE +/- 0.06, N = 3



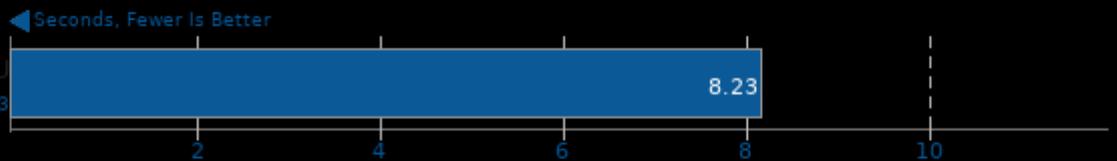
1. (CO) gcc options: -O3 -march=native

### PolyBench-C 4.2

Test: Correlation Computation

Intel Core i5-6200U

SE +/- 0.02, N = 3



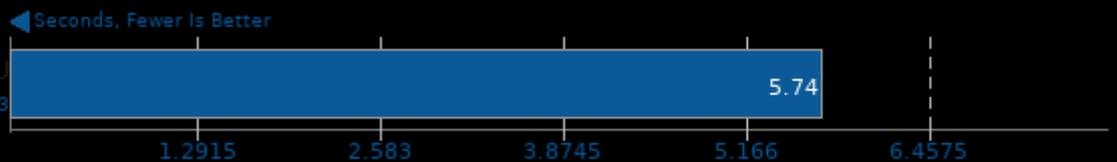
1. (CO) gcc options: -O3 -march=native

### PolyBench-C 4.2

Test: 3 Matrix Multiplications

Intel Core i5-6200U

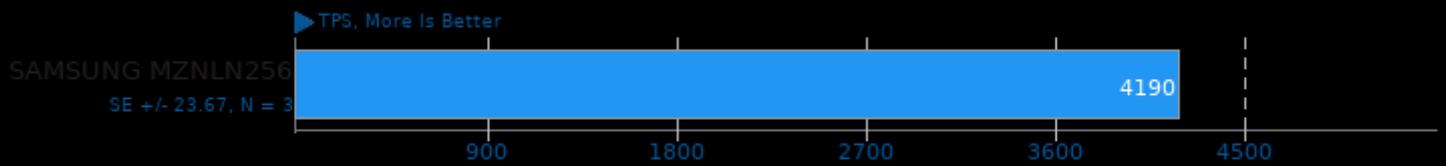
SE +/- 0.03, N = 3



1. (CO) gcc options: -O3 -march=native

## PostMark 1.51

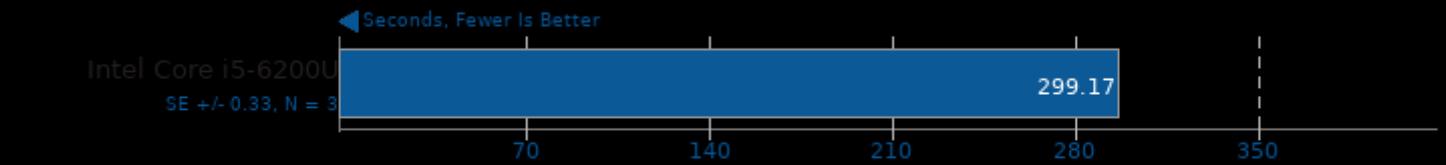
Disk Transaction Performance



1. (CC) gcc options: -O3

## POV-Ray 3.7.0.7

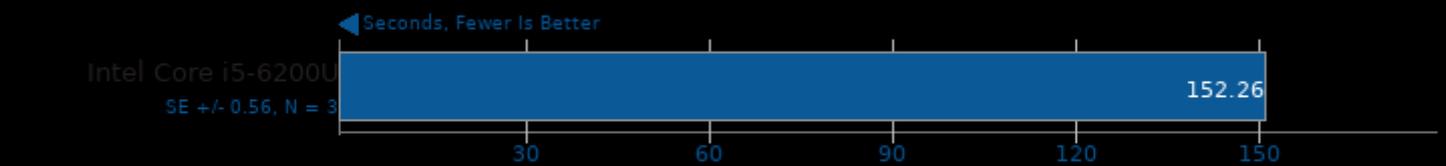
Trace Time



1. (CXX) g++ options: -pipe -O3 -ffast-math -march=native -pthread -fSDL -fSM -fICE -fX11 -fIlmImf -fImath -fHalf -fIex -fIexMath -fIlmThread -pthread -ltiff

## Primesieve 7.4

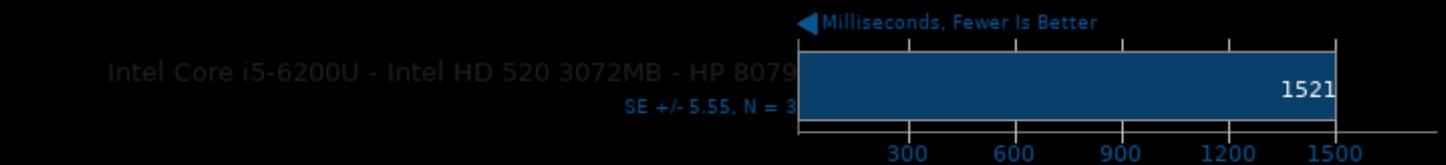
1e12 Prime Number Generation



1. (CXX) g++ options: -O3 -pthread

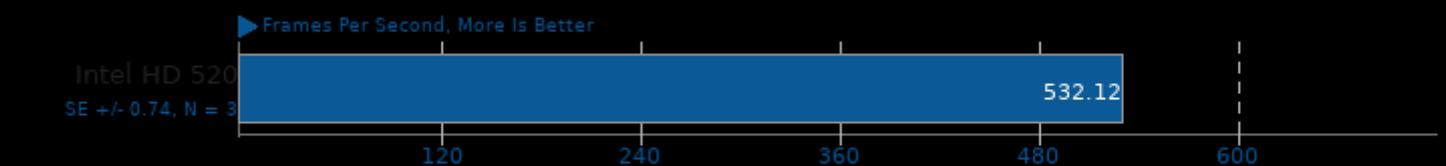
## PyBench 2018-02-16

Total For Average Test Times



## QGears2

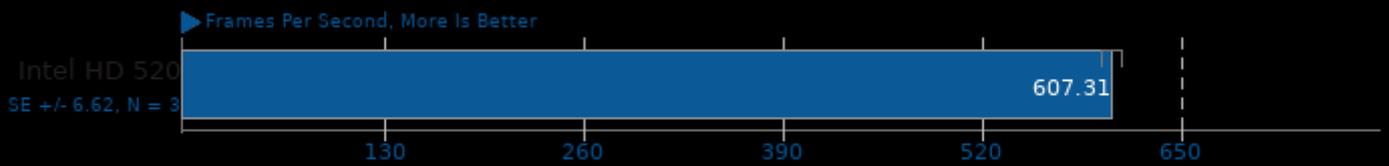
Rendering: OpenGL - Test: Text



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -pthread

## QGears2

Rendering: OpenGL - Test: Gears



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

## QGears2

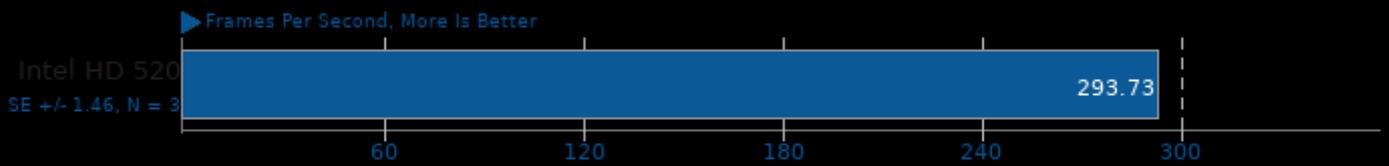
Rendering: OpenGL - Test: Image Scaling



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

## QGears2

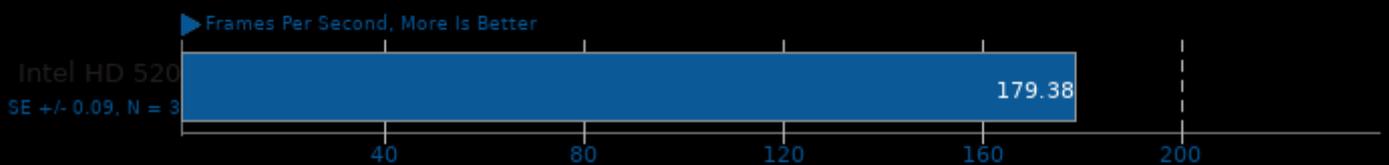
Rendering: CPU-based Raster - Test: Text



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

## QGears2

Rendering: CPU-based Raster - Test: Gears



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

## QGears2

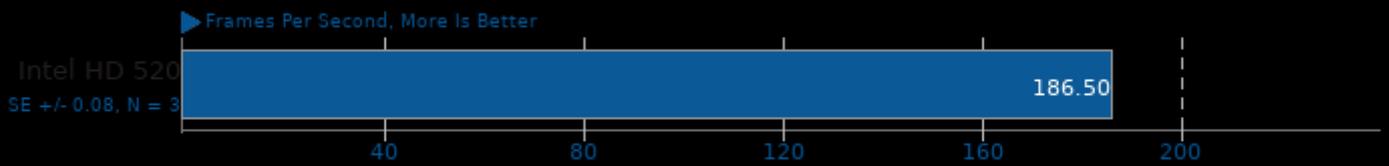
Rendering: XRender Extension - Test: Text



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

### QGears2

Rendering: XRender Extension - Test: Gears



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

### QGears2

Rendering: CPU-based Raster - Test: Image Scaling



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

### QGears2

Rendering: XRender Extension - Test: Image Scaling



1. (CXX) g++ options: -lQt5OpenGL -lQt5Widgets -lQt5Gui -lQt5Core -lGL -lpthread

### Qmlbench 2

Test: Fib10



1. (CXX) g++ options: -lQt5Gui -lQt5Core -lGL -lpthread

### Qmlbench 2

Test: Canvas Text Simple

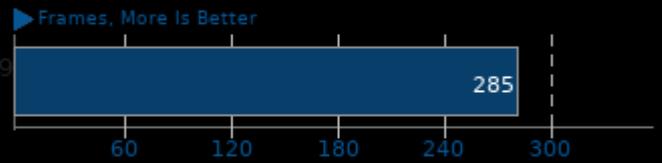


1. (CXX) g++ options: -lQt5Gui -lQt5Core -lGL -lpthread

## Qmlbench 2

Test: Creation Delegates Flow

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

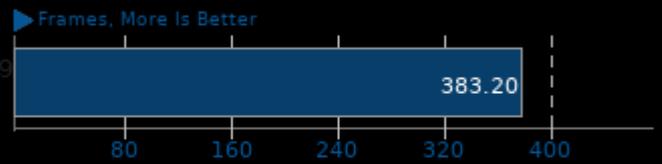


1. (CXX) g++ options: -lQt5Gui -lQt5Core -lGL -lpthread

## Qmlbench 2

Test: Moving Images Animations

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

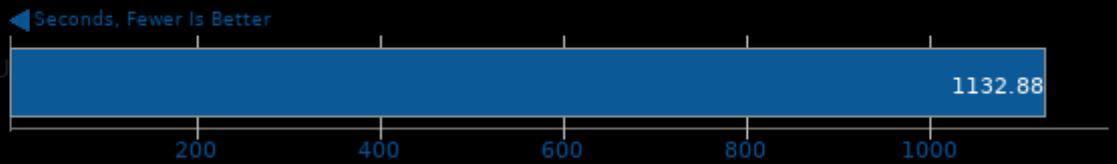


1. (CXX) g++ options: -lQt5Gui -lQt5Core -lGL -lpthread

## Radiance Benchmark 5.0

Test: Serial

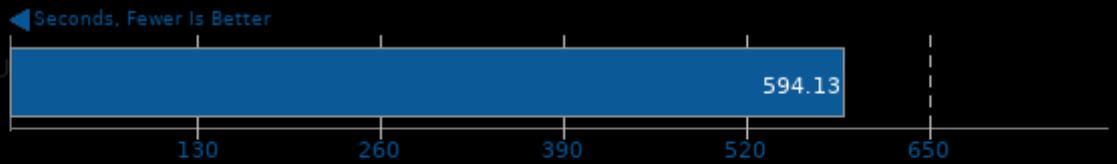
Intel Core i5-6200U



## Radiance Benchmark 5.0

Test: SMP Parallel

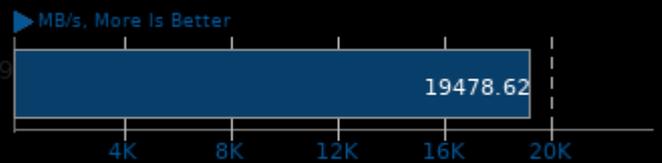
Intel Core i5-6200U



## RAMspeed SMP 3.5.0

Type: Add - Benchmark: Integer

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

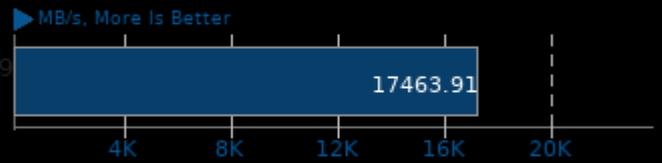


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Copy - Benchmark: Integer

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

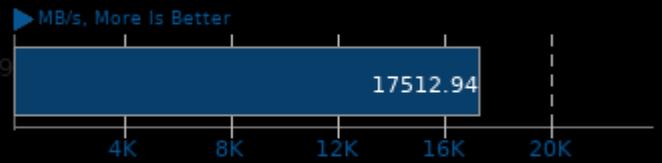


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Scale - Benchmark: Integer

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

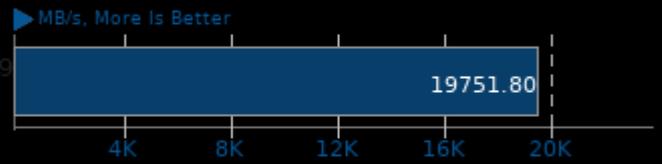


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Triad - Benchmark: Integer

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

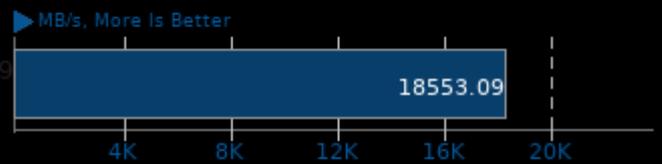


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Average - Benchmark: Integer

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

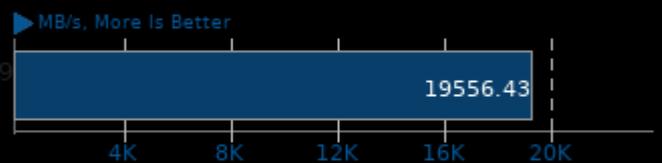


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Add - Benchmark: Floating Point

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

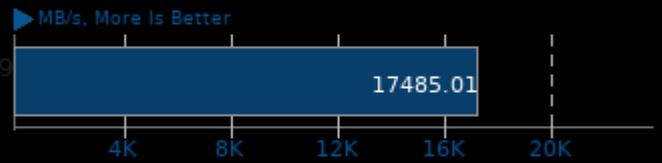


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Copy - Benchmark: Floating Point

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

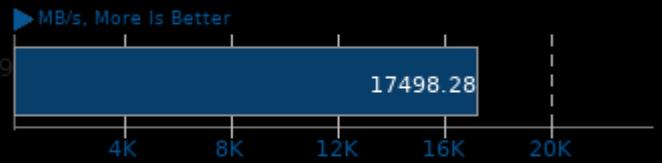


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Scale - Benchmark: Floating Point

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

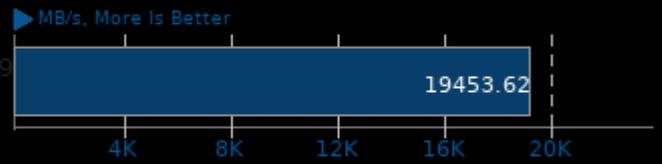


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Triad - Benchmark: Floating Point

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

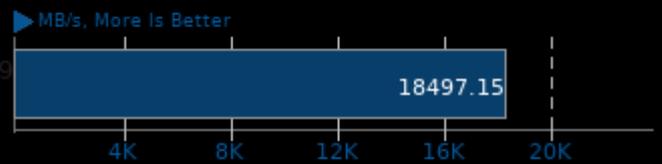


1. (CC) gcc options: -O3 -march=native

### RAMspeed SMP 3.5.0

Type: Average - Benchmark: Floating Point

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

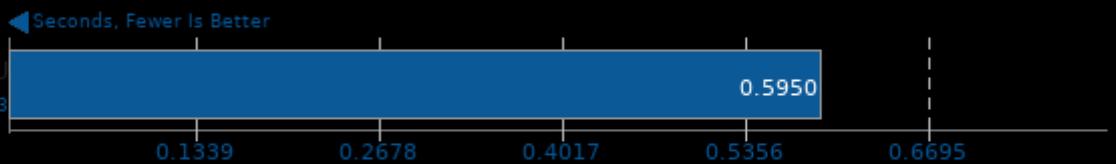


1. (CC) gcc options: -O3 -march=native

### R Benchmark

Intel Core i5-6200U

SE +/- 0.0025, N = 3



1. R scripting front-end version 3.4.4 (2018-03-15)

## Redis 4.0.8

Test: LPOP

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079  
SE +/- 83375.38, N = 6

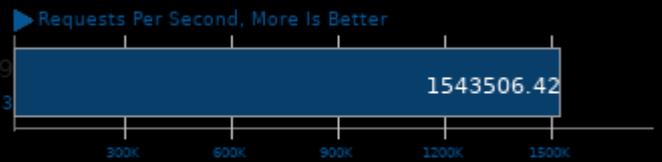


1. (CC) gcc options: -ggdb -rdynamic -lm -ldl -pthread

## Redis 4.0.8

Test: SADD

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079  
SE +/- 15129.58, N = 3



1. (CC) gcc options: -ggdb -rdynamic -lm -ldl -pthread

## Redis 4.0.8

Test: LPUSE

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079  
SE +/- 33761.61, N = 6



1. (CC) gcc options: -ggdb -rdynamic -lm -ldl -pthread

## Redis 4.0.8

Test: GET

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079  
SE +/- 79969.77, N = 6



1. (CC) gcc options: -ggdb -rdynamic -lm -ldl -pthread

## Redis 4.0.8

Test: SET

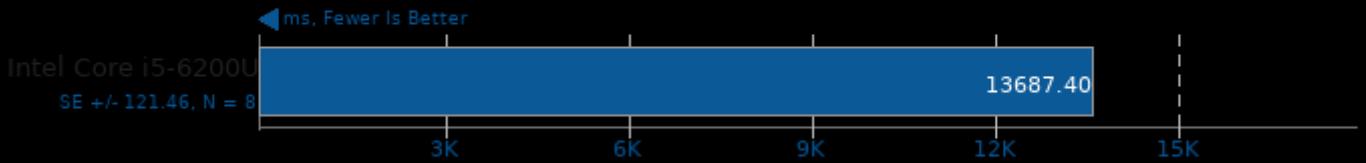
Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079  
SE +/- 38724.55, N = 6



1. (CC) gcc options: -ggdb -rdynamic -lm -ldl -pthread

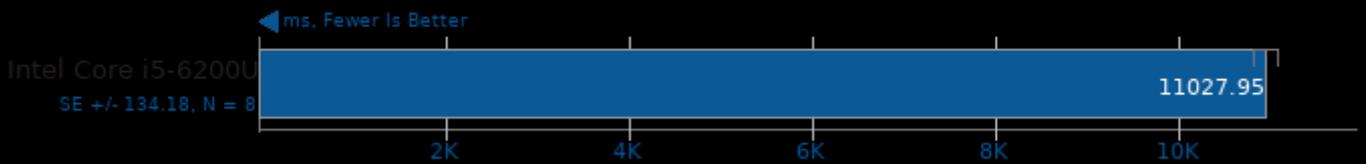
### Renaissance 0.9.0

Test: Scala Dotty



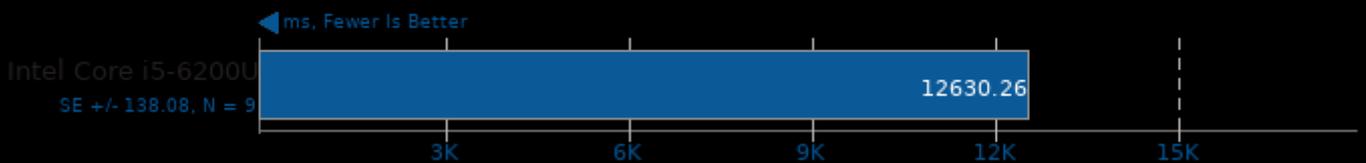
### Renaissance 0.9.0

Test: Twitter Finagle



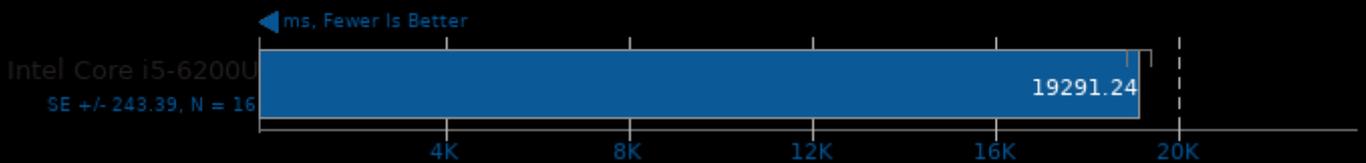
### Renaissance 0.9.0

Test: Apache Spark ALS



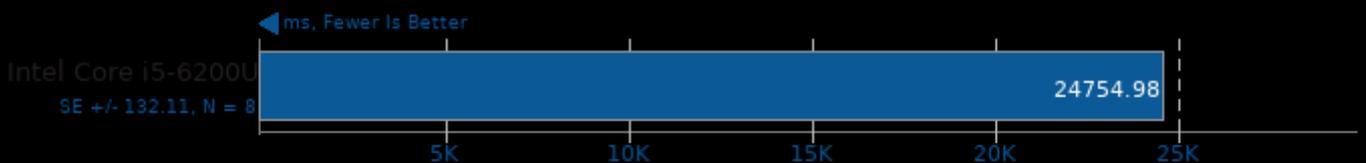
### Renaissance 0.9.0

Test: Apache Spark Bayes



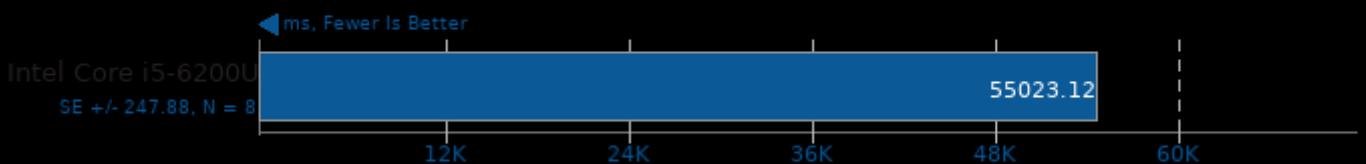
### Renaissance 0.9.0

Test: Savina Reactors.IO



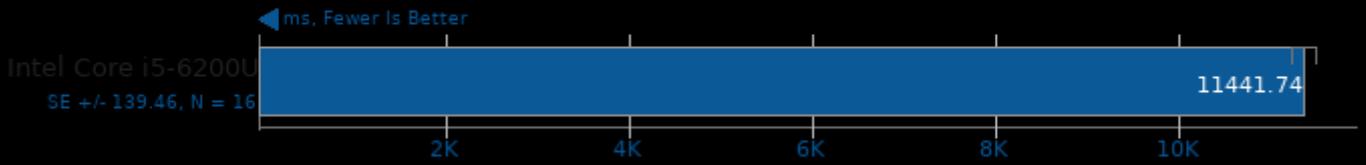
### Renaissance 0.9.0

Test: Apache Spark PageRank



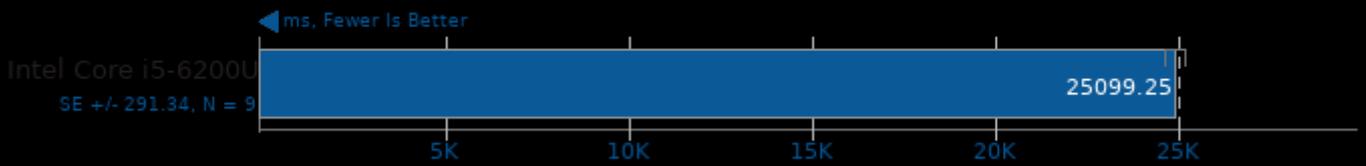
### Renaissance 0.9.0

Test: In-Memory Database Shootout



### Renaissance 0.9.0

Test: Akka Unbalanced Cobwebbed Tree



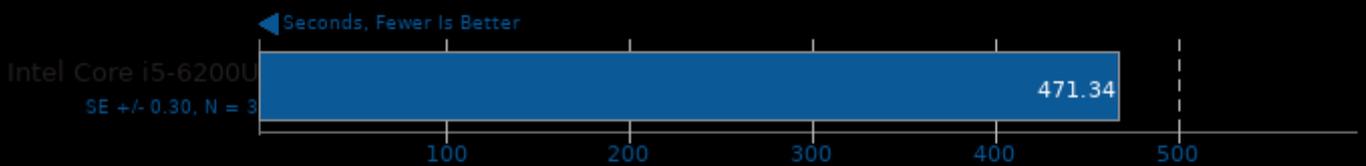
### Render Bench



1. (CO) gcc options: -lm -lX11 -lXext -lXrender -llmlib2

### Rodinia 2.4

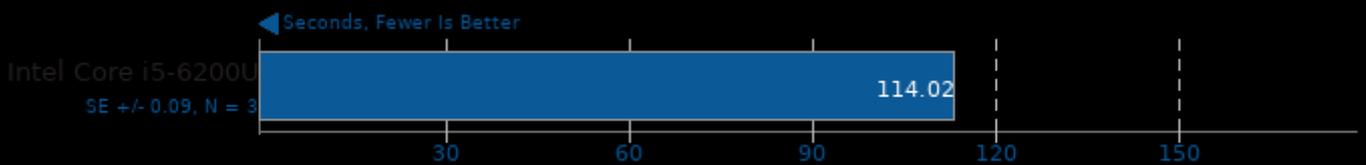
Test: OpenMP LavaMD



1. (CXX) g++ options: -O2 -lOpenCL

### Rodinia 2.4

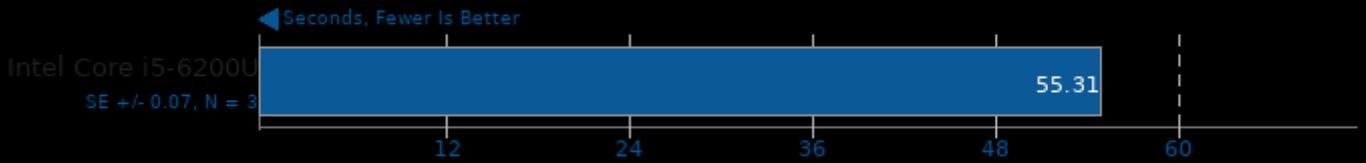
Test: OpenMP CFD Solver



1. (CXX) g++ options: -O2 -lOpenCL

## Rodinia 2.4

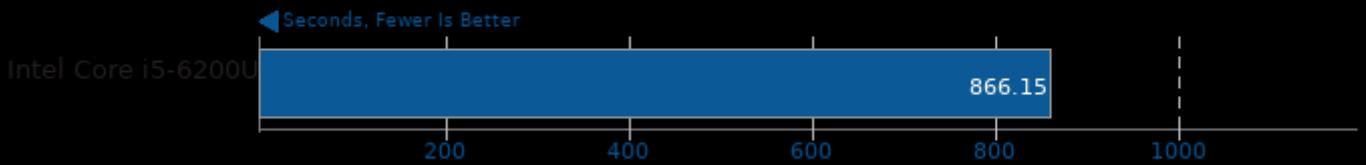
Test: OpenMP Streamcluster



1. (CXX) g++ options: -O2 -fOpenCL

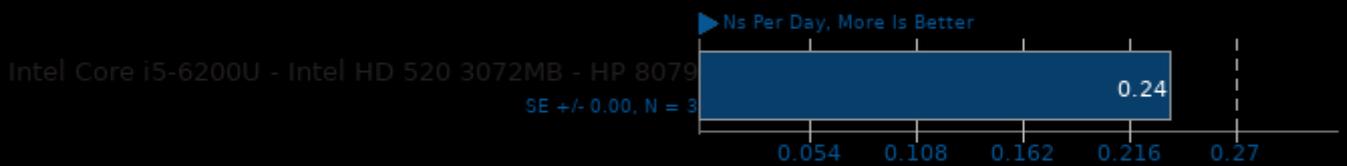
## CP2K Molecular Dynamics 6.1

Fayalite-FIST Data



## GROMACS 2018.3

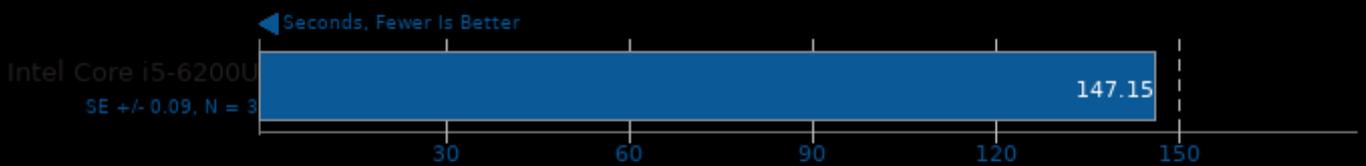
Water Benchmark



1. (CXX) g++ options: -march=core-avx2 -std=c++11 -O3 -funroll-all-loops -fopenmp -lrt -lpthread -lm

## Rust Mandelbrot

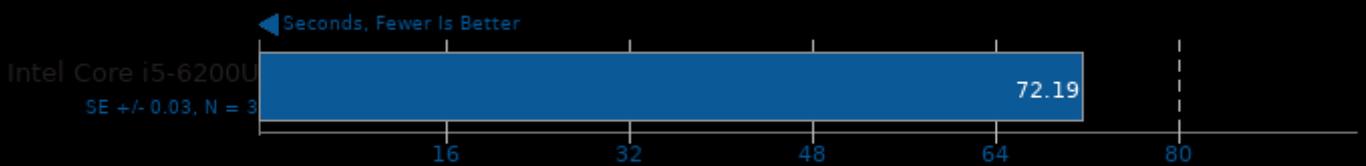
Time To Complete Serial/Parallel Mandelbrot



1. (CC) gcc options: -m64 -pie -nodefaultlibs -lutil -ldl -lrt -lpthread -lgcc\_s -lc -lm

## Rust Prime Benchmark

Prime Number Test To 200,000,000



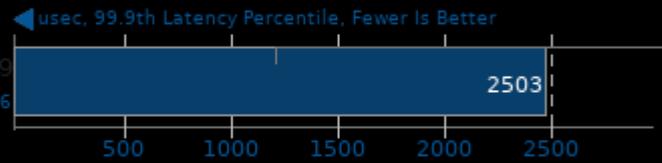
1. (CC) gcc options: -m64 -pie -nodefaultlibs -ldl -lrt -lpthread -lgcc\_s -lc -lm -lutil

## Schbench

Message Threads: 2 - Workers Per Message Thread: 2

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1269.96, N = 6



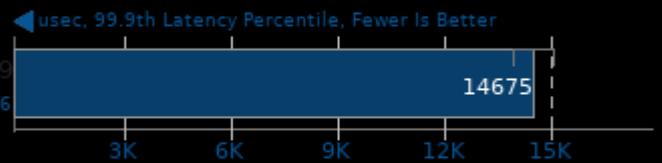
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 2 - Workers Per Message Thread: 4

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 544.13, N = 6



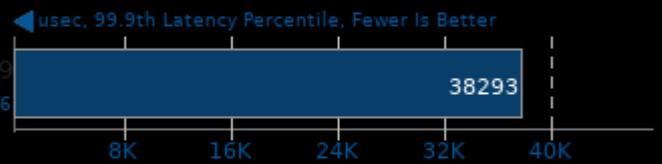
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 2 - Workers Per Message Thread: 6

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 518.01, N = 6



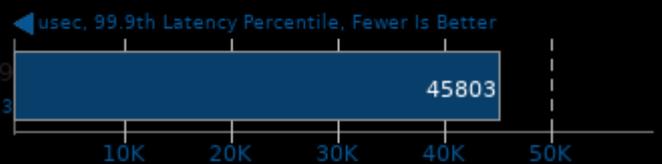
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 2 - Workers Per Message Thread: 8

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 307.67, N = 3



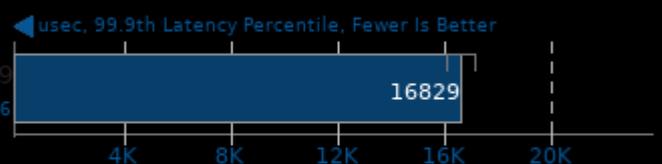
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 4 - Workers Per Message Thread: 2

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 511.37, N = 6



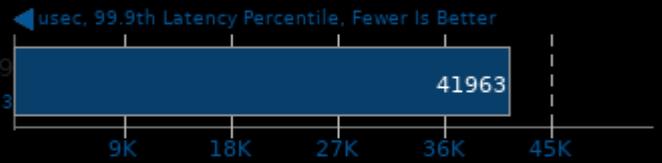
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 4 - Workers Per Message Thread: 4

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 758.46, N = 3



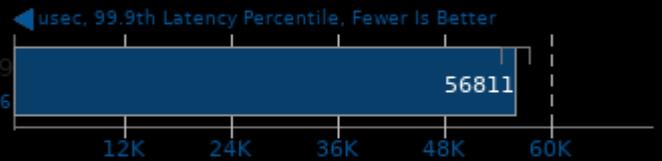
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 4 - Workers Per Message Thread: 6

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1517.64, N = 6



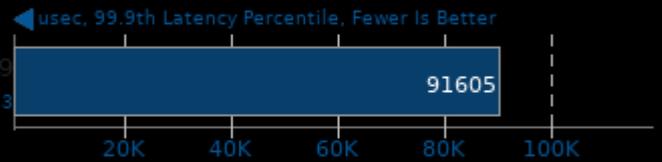
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 4 - Workers Per Message Thread: 8

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 426.67, N = 3



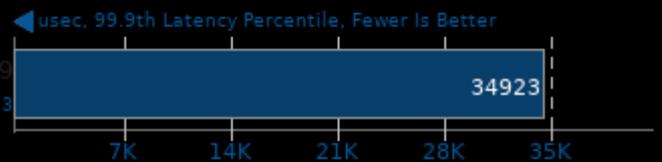
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 6 - Workers Per Message Thread: 2

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 451.54, N = 3



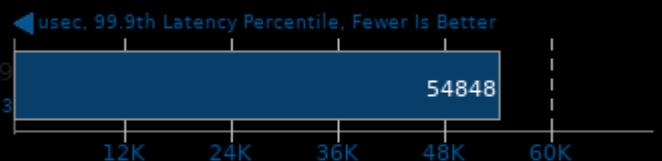
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 6 - Workers Per Message Thread: 4

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 677.31, N = 3



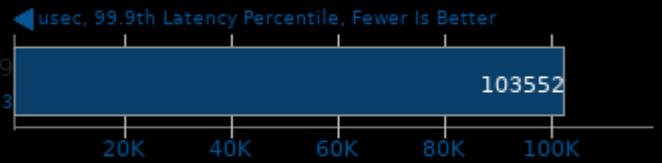
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 6 - Workers Per Message Thread: 6

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 512.00, N = 3



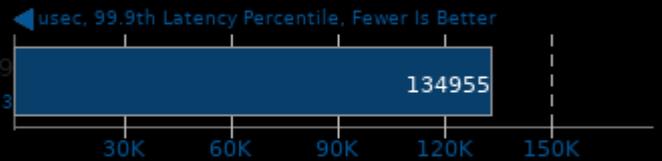
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 6 - Workers Per Message Thread: 8

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 2090.67, N = 3



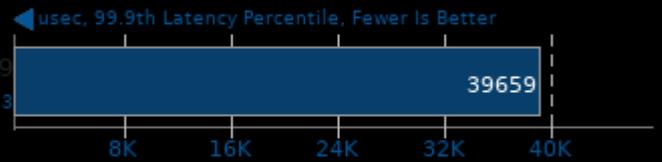
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 8 - Workers Per Message Thread: 2

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 628.52, N = 3



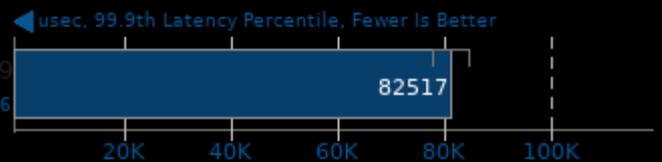
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 8 - Workers Per Message Thread: 4

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 3429.77, N = 6



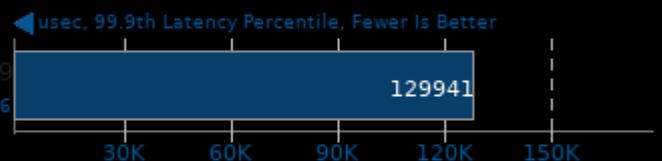
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 8 - Workers Per Message Thread: 6

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1964.82, N = 6



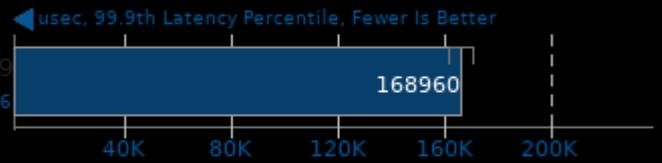
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 8 - Workers Per Message Thread: 8

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 4534.89, N = 6



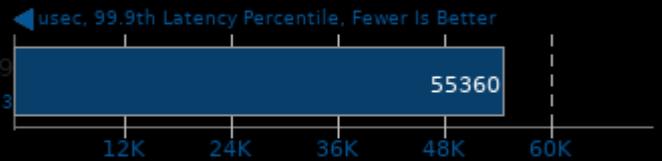
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 16 - Workers Per Message Thread: 2

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 517.31, N = 3



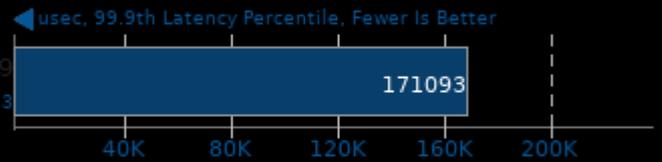
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 16 - Workers Per Message Thread: 4

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1516.92, N = 3



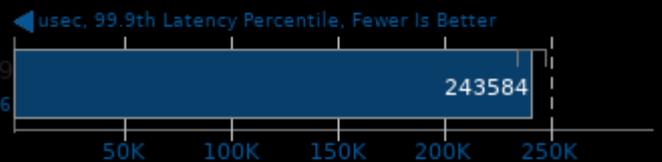
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 16 - Workers Per Message Thread: 6

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 6556.72, N = 6



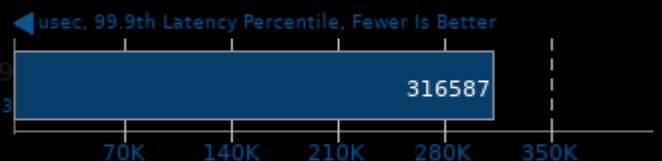
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 16 - Workers Per Message Thread: 8

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 3256.11, N = 3



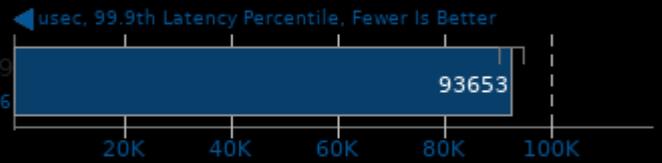
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 2 - Workers Per Message Thread: 16

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 2121.01, N = 6



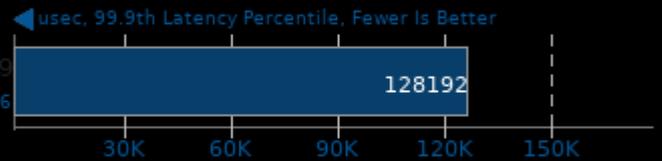
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 2 - Workers Per Message Thread: 24

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 1965.75, N = 6



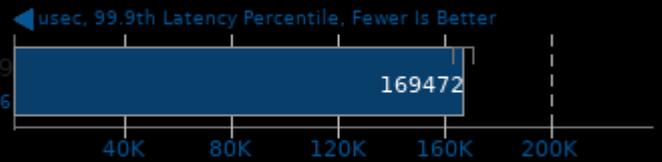
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 2 - Workers Per Message Thread: 32

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 4011.39, N = 6



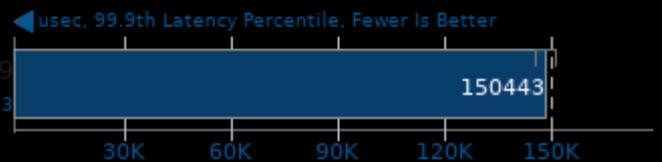
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 32 - Workers Per Message Thread: 2

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 3019.40, N = 3



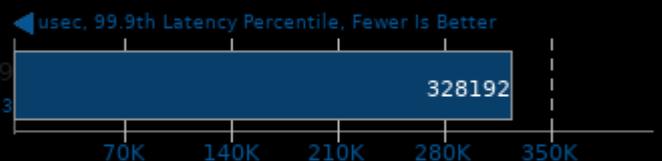
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 32 - Workers Per Message Thread: 4

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 4463.51, N = 3



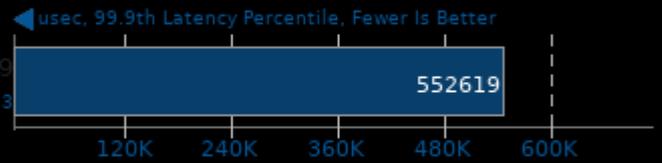
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 32 - Workers Per Message Thread: 6

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 9630.20, N = 3



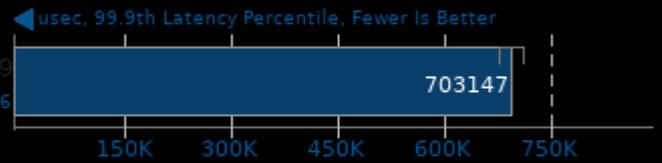
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 32 - Workers Per Message Thread: 8

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 17612.93, N = 6



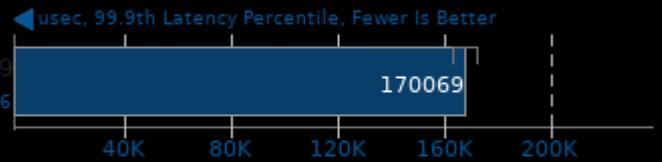
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 4 - Workers Per Message Thread: 16

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 4385.83, N = 6



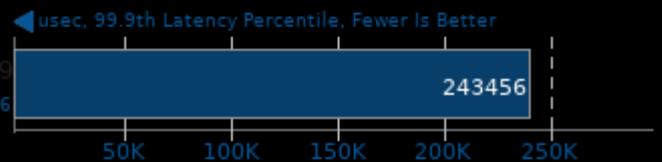
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 4 - Workers Per Message Thread: 24

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 3838.29, N = 6



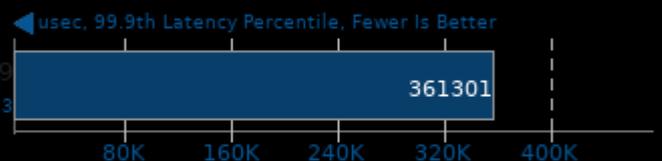
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 4 - Workers Per Message Thread: 32

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 5680.92, N = 3



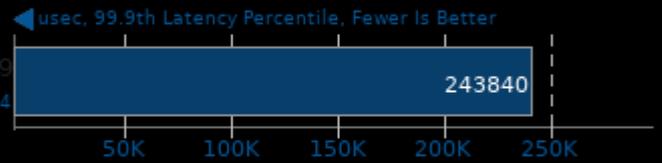
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 6 - Workers Per Message Thread: 16

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 4033.52, N = 4



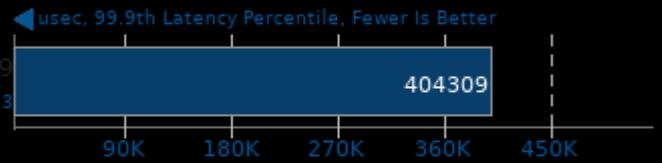
1, (CC) gcc options: -O2 -lpthread

## Schbench

Message Threads: 6 - Workers Per Message Thread: 24

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 2793.93, N = 3



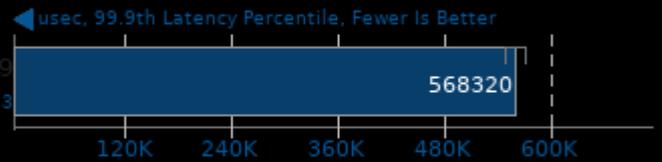
1, (CC) gcc options: -O2 -lpthread

## Schbench

Message Threads: 6 - Workers Per Message Thread: 32

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 11279.50, N = 3



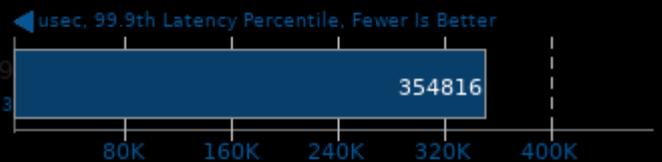
1, (CC) gcc options: -O2 -lpthread

## Schbench

Message Threads: 8 - Workers Per Message Thread: 16

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 5701.39, N = 3



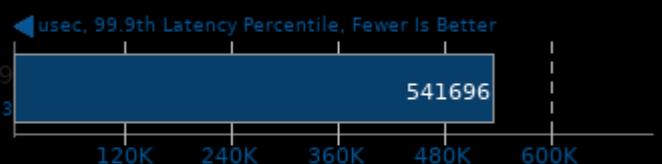
1, (CC) gcc options: -O2 -lpthread

## Schbench

Message Threads: 8 - Workers Per Message Thread: 24

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 10240.00, N = 3



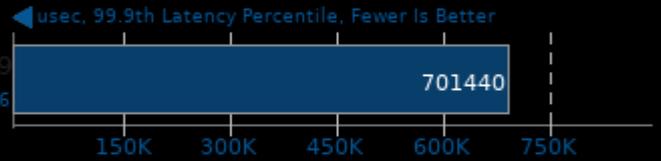
1, (CC) gcc options: -O2 -lpthread

## Schbench

Message Threads: 8 - Workers Per Message Thread: 32

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 10965.25, N = 6



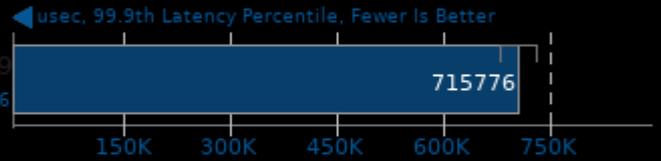
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 16 - Workers Per Message Thread: 16

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 26524.04, N = 6



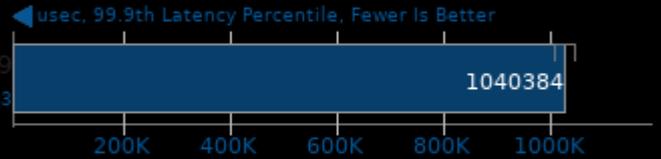
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 16 - Workers Per Message Thread: 24

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 18039.07, N = 3



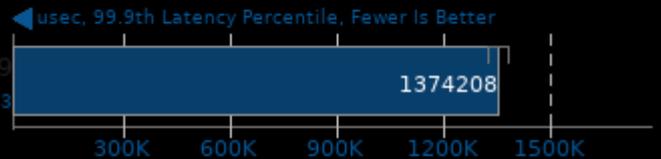
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 16 - Workers Per Message Thread: 32

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 27272.51, N = 3



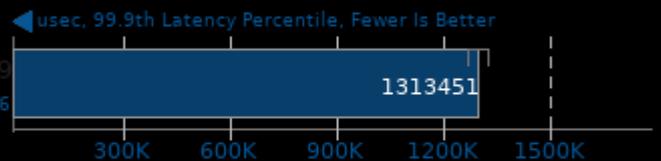
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 32 - Workers Per Message Thread: 16

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 29354.67, N = 6



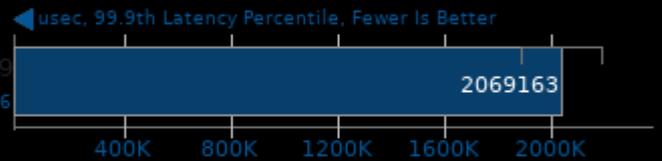
1, (CO) gcc options: -O2 -lpthread

## Schbench

Message Threads: 32 - Workers Per Message Thread: 24

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 151774.78, N = 6



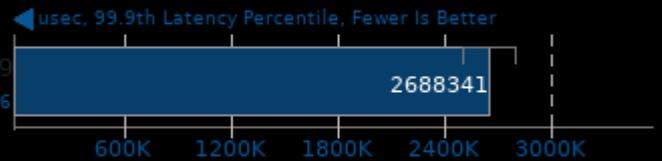
1, (CC) gcc options: -O2 -lpthread

## Schbench

Message Threads: 32 - Workers Per Message Thread: 32

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 147253.59, N = 6

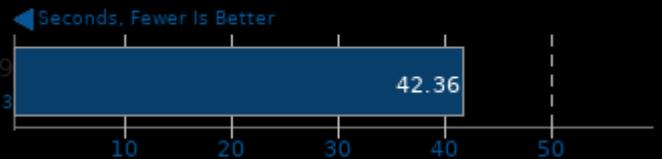


1, (CC) gcc options: -O2 -lpthread

## Scikit-Learn 0.17.1

Intel Core i5-6200U - Intel HD 520 3072MB - HP 8079

SE +/- 0.11, N = 3

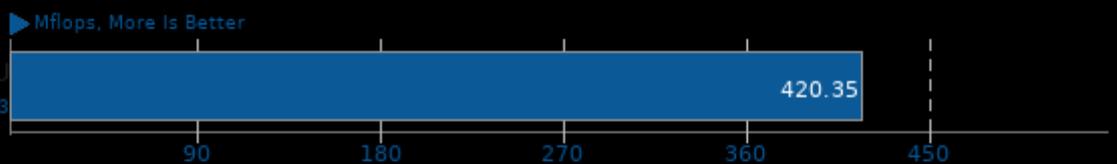


## SciMark 2.0

Computational Test: Composite

Intel Core i5-6200U

SE +/- 1.07, N = 3



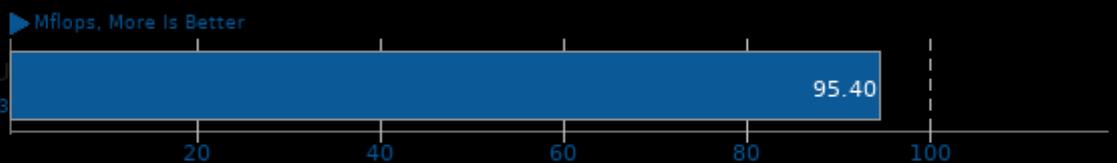
1, (CC) gcc options: -lm

## SciMark 2.0

Computational Test: Monte Carlo

Intel Core i5-6200U

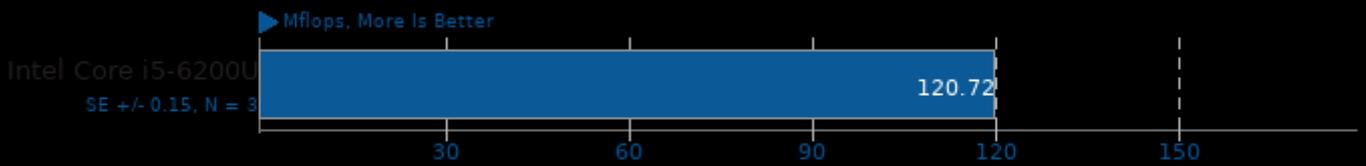
SE +/- 0.34, N = 3



1, (CC) gcc options: -lm

### SciMark 2.0

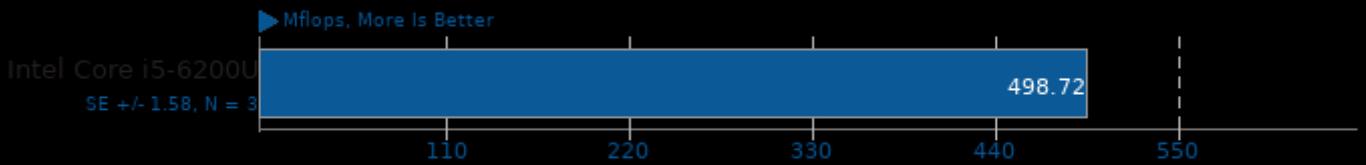
Computational Test: Fast Fourier Transform



1, (CC) gcc options: -lm

### SciMark 2.0

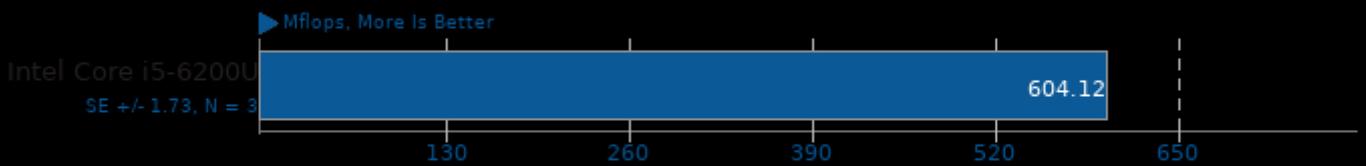
Computational Test: Sparse Matrix Multiply



1, (CC) gcc options: -lm

### SciMark 2.0

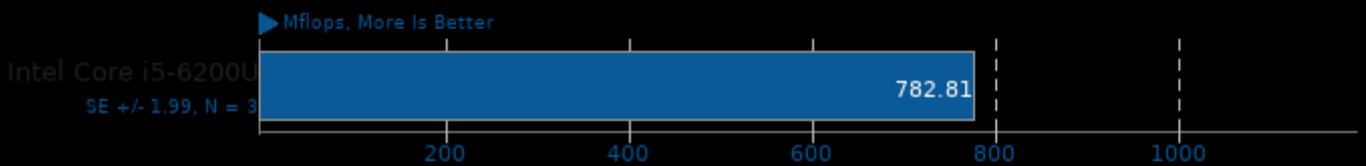
Computational Test: Dense LU Matrix Factorization



1, (CC) gcc options: -lm

### SciMark 2.0

Computational Test: Jacobi Successive Over-Relaxation



1, (CC) gcc options: -lm

### SHOC Scalable Heterogeneous Computing 2015-11-10

Target: OpenCL - Benchmark: Triad



1, (CXX) g++ options: -O2 -lSHOCCommonMPI -lSHOCCommonOpenCL -lSHOCCommon -lOpenCL -lrt -pthread -lmpi\_cxx -lmpi

### SHOC Scalable Heterogeneous Computing 2015-11-10

Target: OpenCL - Benchmark: FFT SP



1. (CXX) g++ options: -O2 -ISHOCCommonMPI -ISHOCCommonOpenCL -ISHOCCommon -lOpenCL -lrt -pthread -lmpi\_cxx -lmpi

### SHOC Scalable Heterogeneous Computing 2015-11-10

Target: OpenCL - Benchmark: MD5 Hash



1. (CXX) g++ options: -O2 -ISHOCCommonMPI -ISHOCCommonOpenCL -ISHOCCommon -lOpenCL -lrt -pthread -lmpi\_cxx -lmpi

### SHOC Scalable Heterogeneous Computing 2015-11-10

Target: OpenCL - Benchmark: Max SP Flops



1. (CXX) g++ options: -O2 -ISHOCCommonMPI -ISHOCCommonOpenCL -ISHOCCommon -lOpenCL -lrt -pthread -lmpi\_cxx -lmpi

### SHOC Scalable Heterogeneous Computing 2015-11-10

Target: OpenCL - Benchmark: Bus Speed Download



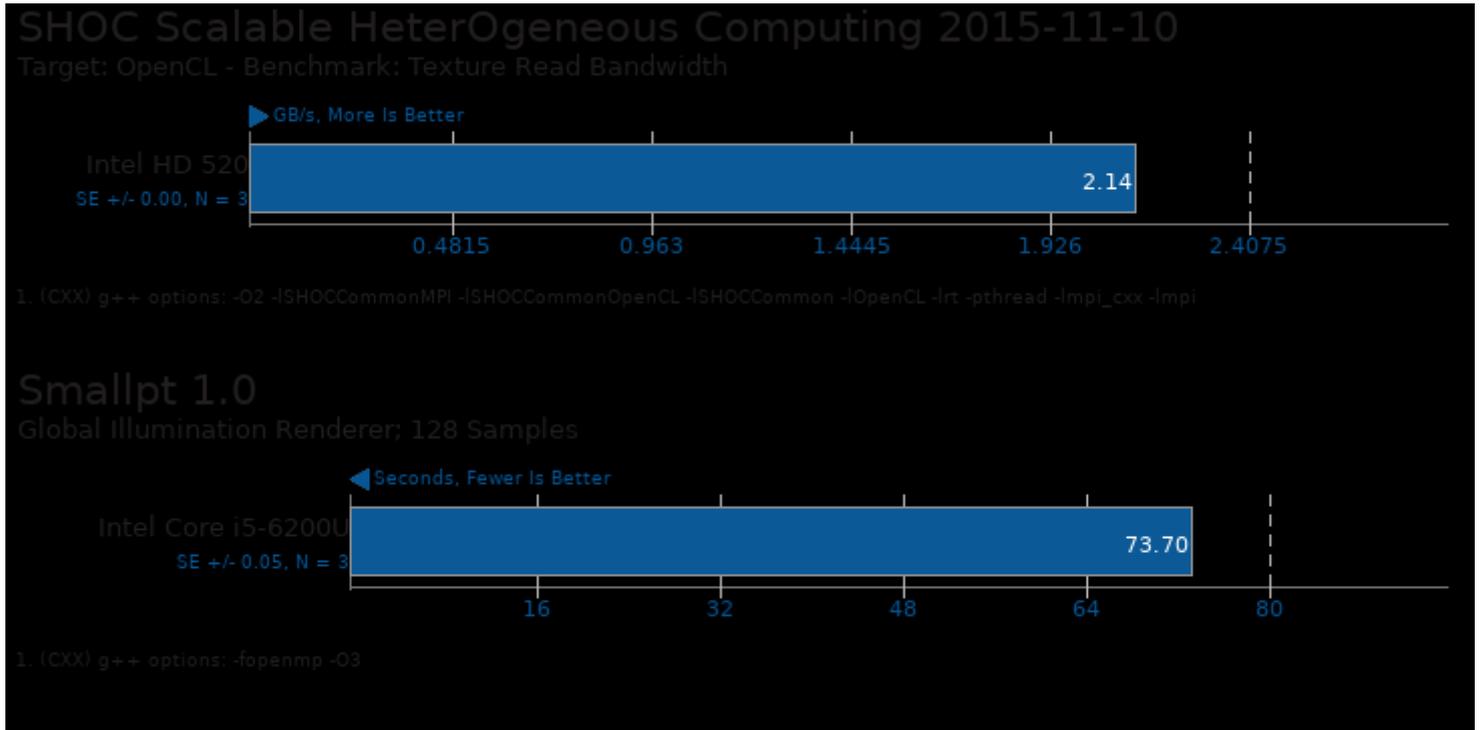
1. (CXX) g++ options: -O2 -ISHOCCommonMPI -ISHOCCommonOpenCL -ISHOCCommon -lOpenCL -lrt -pthread -lmpi\_cxx -lmpi

### SHOC Scalable Heterogeneous Computing 2015-11-10

Target: OpenCL - Benchmark: Bus Speed Readback



1. (CXX) g++ options: -O2 -ISHOCCommonMPI -ISHOCCommonOpenCL -ISHOCCommon -lOpenCL -lrt -pthread -lmpi\_cxx -lmpi



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 07:50.