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TESSERACT-768p

Intel Core i7-4600U testing with a Dell 0PRPKP (A22 BIOS) and Intel HD 4400 HSW GT2 2GB on ManjaroLinux 21.2.6 via the Phoronix Test Suite.

Test Systems:

Latitude-E7240/16GB-DDR3L-1866CL13/Intel-HD-4400

Processor: Intel Core i7-4600U @ 2.70GHz (2 Cores / 4 Threads), Motherboard: Dell 0PRPKP (A22 BIOS), Chipset: Intel Haswell-ULT DRAM, Memory: 16GB, Disk: 1024GB SAMSUNG MZMTE1T0, Graphics: Intel HD 4400 HSW GT2 2GB (1100MHz), Audio: Intel Haswell-ULT HD Audio, Network: Intel I218-LM + Intel 7260

OS: ManjaroLinux 21.2.6, Kernel: 5.17.8-lqx1-1-lqx (x86_64), Desktop: KDE Plasma 5.24.5, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 22.2.0-devel (git-6b1e73c700), OpenCL: OpenCL 2.0 beignet 1.4 (git-419c0417) + OpenCL 2.1 LINUX + OpenCL 1.1 Mesa 22.2.0-devel (git-6b1e73c700), Vulkan: 1.3.211, Compiler: GCC 12.1.0 + Clang 15.0.0, File-System: btrfs, Screen Resolution: 1366x768

Kernel Notes: i915.enable_rc6=0 - Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0x26

Graphics Notes: SNA

Security Notes: itbl_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbd: Mitigation of Microcode + tsx_async_abort: Not affected

Latitude-E7240/16GB-DDR3L-1866CL13/Intel-HD-4400-1

Processor: Intel Core i7-4600U @ 2.70GHz (2 Cores / 4 Threads), Motherboard: Dell 0PRPKP (A22 BIOS), Chipset: Intel Haswell-ULT DRAM, Memory: 16GB, Disk: 1024GB SAMSUNG MZMTE1T0, Graphics: Intel HD 4400 HSW GT2 2GB (1100MHz), Audio: Intel Haswell-ULT HD Audio, Network: Intel I218-LM + Intel 7260

OS: ManjaroLinux 21.2.6, Kernel: 5.17.9-lqx1-1-lqx (x86_64), Desktop: KDE Plasma 5.24.5, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 22.2.0-devel (git-6b1e73c700), OpenCL: OpenCL 2.0 beignet 1.4 (git-419c0417) + OpenCL 2.1 LINUX + OpenCL 1.1 Mesa 22.2.0-devel (git-6b1e73c700), Vulkan: 1.3.211, Compiler: GCC 12.1.0 + Clang 15.0.0, File-System: btrfs, Screen Resolution: 1366x768

Kernel Notes: i915.enable_rc6=0 - Transparent Huge Pages: madvise

Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-werror --enable-cxa_atexit --enable-bootstrap --enable-cet=auto --enable-checking=release --enable-clocale-gnu --enable-default-pie --enable-default-ssp --enable-gnu-indirect-function --enable-gnu-unique-object --enable-languages=c,c++,ada,fortran,go,lto,objc,obj-c++ --enable-link-serialization=1 --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-build-config=bootstrap-lto --with-linker-hash-style=gnu

Disk Notes: BFQ / discard=async,relatime,rw,space_cache=v2,ssd,subvol=@home,subvolid=257 / Block Size: 4096

Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0x26

Graphics Notes: SNA

Python Notes: Python 3.10.4

Security Notes: itbl_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbd: Mitigation of Microcode + tsx_async_abort: Not affected

	Latitude-E7240/16GB-DDR3L-1866CL13/Intel-HD-4400-1	Latitude-E7240/16GB-DDR3L-1866CL13/Intel-HD-4400-0
Tesseract - 800 x 600 (FPS)	93.35569	89.46318
Normalized	100%	95.83%
Standard Deviation	2.9%	5.8%
Tesseract - 1024 x 768 (FPS)	73.18361	61.76744
Normalized	100%	84.4%
Standard Deviation	1.9%	3.3%
Tesseract - 1366 x 768 (FPS)	65.43104	53.71348
Normalized	100%	82.09%
Standard Deviation	2.4%	2.3%
vkpeak - fp32-scalar (GFLOPS)		205.12
Standard Deviation		0.2%
vkpeak - fp32-vec4 (GFLOPS)		269.98
Standard Deviation		0.5%
vkpeak - fp64-scalar (GFLOPS)		72.87
Standard Deviation		0.1%
vkpeak - fp64-vec4 (GFLOPS)		76
Standard Deviation		0%
vkpeak - int32-scalar (GIPS)		42.52
Standard Deviation		0%
vkpeak - int32-vec4 (GIPS)		43.5

Standard Deviation	0%
Waifu2x-NCNN Vulkan - 2x - 3 - No (sec)	13.867
Standard Deviation	2%
Waifu2x-NCNN Vulkan - 2x - 3 - Yes (sec)	8.935
Standard Deviation	20.4%
cl-mem - Copy (GB/s)	85.4
Standard Deviation	0.6%
cl-mem - Read (GB/s)	85.7
Standard Deviation	0.6%
cl-mem - Write (GB/s)	88.0
Standard Deviation	2.7%
Unigine Tropics - 800 x 600 - Windowed (FPS)	30.2856
Standard Deviation	2.4%
Unigine Tropics - 1024 x 768 - Windowed (FPS)	24.1018
Standard Deviation	0.3%
Unigine Tropics - 800 x 600 -Fullscreen (FPS)	30.5123
Standard Deviation	0.4%
Unigine Tropics - 1024 x 768 -Fullscreen (FPS)	25.0041
Standard Deviation	0.6%
GL-vs-VK - Static Scene - OpenGL - No (Frame Time - ms)	233.314655
Standard Deviation	0.9%
GL-vs-VK - Static Scene - OpenGL - No (FPS)	4.286282
Standard Deviation	0.9%
GL-vs-VK - Static Scene - Vulkan - No (Frame Time - ms)	195.004835
Standard Deviation	1.7%
GL-vs-VK - Static Scene - Vulkan - No (FPS)	5.129032
Standard Deviation	1.7%
GL-vs-VK - Static Scene - OpenGL - Yes (Frame Time - ms)	198.826721
Standard Deviation	2.9%
GL-vs-VK - Static Scene - OpenGL - Yes (FPS)	5.033703
Standard Deviation	3.1%
GL-vs-VK - Static Scene - Vulkan - Yes (Frame Time - ms)	150.399714
Standard Deviation	4.1%
GL-vs-VK - Static Scene - Vulkan - Yes (FPS)	6.660461
Standard Deviation	4.5%
GL-vs-VK - Shadow Mapping - OpenGL - No (Frame Time - ms)	26.136618
Standard Deviation	2.6%
GL-vs-VK - Shadow Mapping - OpenGL - No (FPS)	38.285675
Standard Deviation	2.7%
GL-vs-VK - Shadow Mapping - Vulkan - No (Frame Time - ms)	34.631808
Standard Deviation	1.7%
GL-vs-VK - Shadow Mapping - Vulkan - No (FPS)	28.880594
Standard Deviation	1.7%
GL-vs-VK - Shadow Mapping - Vulkan - Yes (Frame Time - ms)	34.118427
Standard Deviation	0.1%
GL-vs-VK - Shadow Mapping - Vulkan - Yes (FPS)	29.309686
Standard Deviation	0.1%

GL-vs-VK - T.W.D.L - OpenGL - No (Frame Time - ms)	34.832126
Standard Deviation	2.4%
GL-vs-VK - T.W.D.L - OpenGL - No (FPS)	28.724611
Standard Deviation	2.5%
GL-vs-VK - T.W.D.L - Vulkan - No (Frame Time - ms)	29.735817
Standard Deviation	1.6%
GL-vs-VK - T.W.D.L - Vulkan - No (FPS)	33.635082
Standard Deviation	1.6%
GL-vs-VK - T.W.D.L - Vulkan - Yes (Frame Time - ms)	24.490965
Standard Deviation	3.6%
GL-vs-VK - T.W.D.L - Vulkan - Yes (FPS)	40.883237
Standard Deviation	3.8%
Rodinia - OpenMP LavaMD (sec)	2057
Standard Deviation	0.5%
Rodinia - OpenCL Myocyte (sec)	5.773
Standard Deviation	1.5%
Rodinia - OpenMP HotSpot3D (sec)	221.101
Standard Deviation	2%
Rodinia - OpenMP Leukocyte (sec)	646.276
Standard Deviation	0.6%
Rodinia - OpenMP CFD Solver (sec)	146.173
Standard Deviation	1.3%
Rodinia - O.S (sec)	43.910
Standard Deviation	1.9%
FinanceBench - Repo OpenMP (ms)	224478
Standard Deviation	1.4%
FinanceBench - Bonds OpenMP (ms)	312613
Standard Deviation	1.7%
FinanceBench - Monte-Carlo OpenCL (ms)	2409
Standard Deviation	0.5%
FinanceBench - B.S.O (ms)	50.599400
Standard Deviation	6.6%
ASTC Encoder - Medium (sec)	8.3751
Standard Deviation	5%
ASTC Encoder - Thorough (sec)	64.8501
Standard Deviation	2.2%
ASTC Encoder - Exhaustive (sec)	586.7770
Standard Deviation	0.2%
cpeak - Kernel Latency (us)	24.95
Standard Deviation	0.4%
cpeak - S.P.F (GFLOPS)	215.26
Standard Deviation	0%
cpeak - G.M.B (GBPS)	22.91
Standard Deviation	0.4%
cpeak - T.B.e (GBPS)	12.35
Standard Deviation	0.5%
cpeak - T.B.e (GBPS)	18.46
Standard Deviation	0.1%
Xsbench (Lookups/s)	586081
Standard Deviation	0.6%
NeatBench - All (FPS)	3.25
Standard Deviation	0.5%
NeatBench - CPU (FPS)	3.41

	Standard Deviation	1.7%
Selenium - ARES-6 - Firefox (ms)		49.31
	Standard Deviation	0.8%
Selenium - Kraken - Firefox (ms)		1603
	Standard Deviation	0.2%
Selenium - Octane - Firefox (Geometric Mean)		18696
	Standard Deviation	3.9%
Selenium - Basemark - Firefox (Overall Score)		415.8
Selenium - Jetstream - Firefox (Score)		140.36
	Standard Deviation	0.3%
Selenium - CanvasMark - Firefox (Score)		13072
Selenium - MotionMark - Firefox (Score)		135.29
	Standard Deviation	1.7%
Selenium - StyleBench - Firefox (Runs / Minute)		63.7
	Standard Deviation	0.2%
Selenium - Jetstream 2 - Firefox (Score)		74.147
	Standard Deviation	1.3%
Selenium - Maze Solver - Firefox (sec)		5.0
	Standard Deviation	1.2%
Selenium - Speedometer - Firefox (Runs/min)		88.4
	Standard Deviation	0.6%
Selenium - ARES-6 - Google Chrome (ms)		28.71
	Standard Deviation	0.8%
Selenium - Kraken - Google Chrome (ms)		1134
	Standard Deviation	0.1%
Selenium - Octane - Google Chrome (Geometric		32559
	Standard Deviation	0.2%
Selenium - PSPDFKit WASM - Firefox (Score)		3731
	Standard Deviation	0.9%
Selenium - WebXPRT - Google Chrome (Score)		166
	Standard Deviation	0.3%
Selenium - Basemark - Google Chrome (Overall		476.31
Selenium - Jetstream - Google Chrome (Score)		172.58
	Standard Deviation	0.1%
Selenium - CanvasMark - Google Chrome (Score)		12035
	Standard Deviation	2.3%
Selenium - MotionMark - Google Chrome (Score)		264.29
	Standard Deviation	9.2%
Selenium - StyleBench - Google Chrome (Runs /		22.3
	Standard Deviation	0.7%
Selenium - Jetstream 2 - Google Chrome (Score)		98.496
	Standard Deviation	0.5%
Selenium - Maze Solver - Google Chrome (sec)		3.8
	Standard Deviation	1.5%
Selenium - Speedometer - Google Chrome (Runs/min)		83.3
	Standard Deviation	0.6%
Selenium - W.i - Firefox (ms)		42.8
	Standard Deviation	0.6%
Selenium - W.c - Firefox (ms)		832.5
	Standard Deviation	0.2%
Selenium - W.i - Google Chrome (ms)		59.44
	Standard Deviation	0.9%
Selenium - W.c - Google Chrome (ms)		587.38

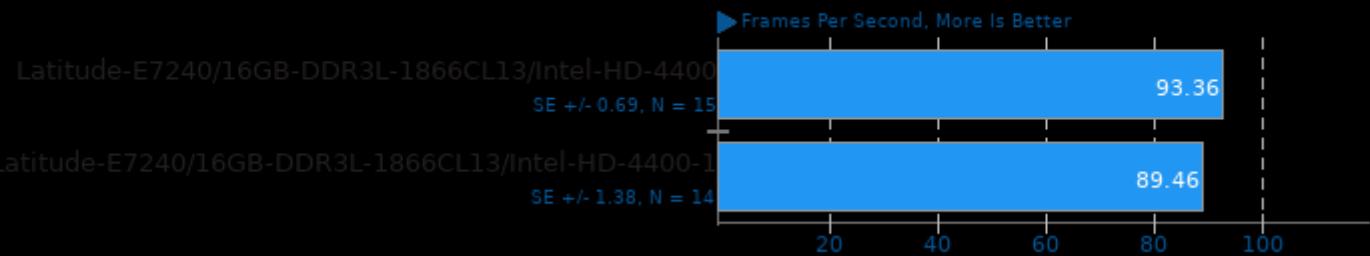
Standard Deviation	0.8%
SQLite - 1 (sec)	227.534
Standard Deviation	1.5%
SQLite - 8 (sec)	581.168
Standard Deviation	8.5%
BlogBench - Read (Final Score)	837030
Standard Deviation	1.5%
BlogBench - Write (Final Score)	504
Standard Deviation	6.8%
Dbench - 1 (MB/s)	40.8482
Standard Deviation	0.5%
PostMark - D.T.P (TPS)	3846
Standard Deviation	0%
RAMspeed SMP - Add - Integer (MB/s)	17276
Standard Deviation	0.9%
RAMspeed SMP - Copy - Integer (MB/s)	15654
Standard Deviation	0.3%
RAMspeed SMP - Scale - Integer (MB/s)	15448
Standard Deviation	0.3%
RAMspeed SMP - Triad - Integer (MB/s)	16647
Standard Deviation	0.1%
RAMspeed SMP - Average - Integer (MB/s)	16125
Standard Deviation	0.3%
RAMspeed SMP - Add - Floating Point (MB/s)	16556
Standard Deviation	0.4%
RAMspeed SMP - Copy - Floating Point (MB/s)	15632
Standard Deviation	0.3%
RAMspeed SMP - Scale - Floating Point (MB/s)	15392
Standard Deviation	0.4%
RAMspeed SMP - Triad - Floating Point (MB/s)	16295
Standard Deviation	0.3%
RAMspeed SMP - Average - Floating Point (MB/s)	15960
Standard Deviation	0.4%
Stream - Copy (MB/s)	23882
Standard Deviation	0.1%
Stream - Scale (MB/s)	15206
Standard Deviation	0.6%
Stream - Triad (MB/s)	16272
Standard Deviation	0.8%
Stream - Add (MB/s)	16343
Standard Deviation	0.5%
Tinymembench - Standard Memcpy (MB/s)	11024
Standard Deviation	1.1%
Tinymembench - Standard Memset (MB/s)	22513
Standard Deviation	1.2%
GNU MPC - M.P.B (Global Score)	6657
Standard Deviation	1.1%
CacheBench - Read (MB/s)	2778
Standard Deviation	0.2%
CacheBench - Write (MB/s)	22697
Standard Deviation	0.1%
CacheBench - R.M.W (MB/s)	34895
Standard Deviation	1.1%

Zstd Compression - 3 - Compression Speed (MB/s)	645.4
Standard Deviation	1.3%
Zstd Compression - 3 - D.S (MB/s)	2902
Standard Deviation	1.2%
Zstd Compression - 8 - Compression Speed (MB/s)	121.2
Standard Deviation	1.7%
Zstd Compression - 8 - D.S (MB/s)	2883
Standard Deviation	2.3%
Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	514.7
Standard Deviation	2.2%
Zstd Compression - 3, Long Mode - D.S (MB/s)	3075
Standard Deviation	1.7%
SciMark - Composite (Mflops)	479.25
Standard Deviation	0.6%
SciMark - Monte Carlo (Mflops)	108.62
Standard Deviation	0.4%
SciMark - F.F.T (Mflops)	159.82
Standard Deviation	0.4%
SciMark - S.M.M (Mflops)	515.90
Standard Deviation	1.4%
SciMark - D.L.M.F (Mflops)	653.02
Standard Deviation	1%
SciMark - J.S.O.R (Mflops)	958.91
Standard Deviation	0.4%
x264 - H.2.V.E (FPS)	14.42
Standard Deviation	3.4%
C-Ray - Total Time - 4.1.R.P.P (sec)	577.524
Standard Deviation	0.7%
Parallel BZIP2 Compression - F.1.0.R.a.m.i.C (sec)	60.331
Standard Deviation	2.5%
Rust Prime Benchmark - P.N.T.T.2.0.0 (sec)	96.047
Standard Deviation	0.7%
Smallpt - G.I.R.1.S (sec)	83.181
Standard Deviation	1.1%
FLAC Audio Encoding - WAV To FLAC (sec)	22.794
Standard Deviation	0.3%
LAME MP3 Encoding - WAV To MP3 (sec)	11.498
Standard Deviation	0.2%
Perl Benchmarks - Pod2html (sec)	0.15849177
Standard Deviation	2.2%
Perl Benchmarks - Interpreter (sec)	0.00138903
Standard Deviation	0.3%
System BZIP2 Decompression (sec)	12.153
Standard Deviation	0.7%
System GZIP Decompression (sec)	3.887
Standard Deviation	1.4%
System XZ Decompression (sec)	4.734
Standard Deviation	0.3%
OpenJPEG - N.C.P.M (ms)	100153
Standard Deviation	3.1%
OpenSSL - SHA256 (byte/s)	404972717
Standard Deviation	0.3%

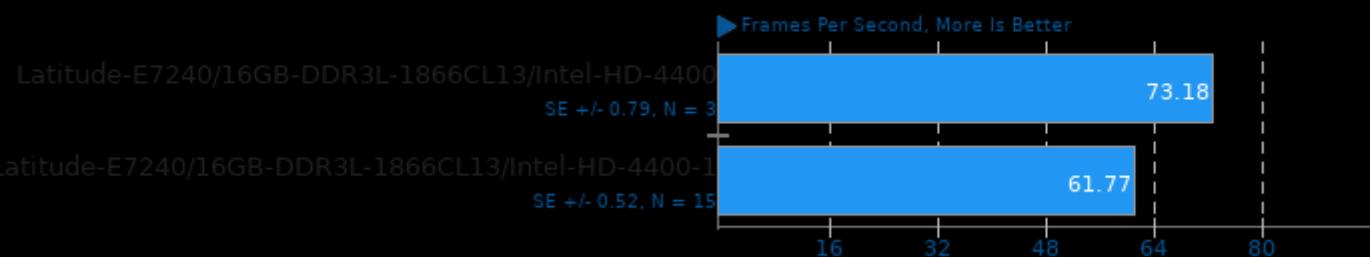
CppPerformanceBenchmarks - Atol (sec)	85.998
Standard Deviation	0.2%
CppPerformanceBenchmarks - Ctype (sec)	41.897
Standard Deviation	0.4%
CppPerformanceBenchmarks - Math Library (sec)	448.292
Standard Deviation	2.5%
CppPerformanceBenchmarks - Rand Numbers (sec)	1245
Standard Deviation	0.1%
CppPerformanceBenchmarks - Stepanov Vector (sec)	94.905
Standard Deviation	0.2%
CppPerformanceBenchmarks - Function Objects (sec)	16.055
Standard Deviation	0.1%
CppPerformanceBenchmarks - S.A (sec)	36.244
Standard Deviation	0.1%
SQLite Speedtest - Timed Time - Size 1,000 (sec)	107.529
Standard Deviation	0.3%
GIMP - resize (sec)	25.747
Standard Deviation	0.3%
GIMP - rotate (sec)	22.269
Standard Deviation	0.2%
GIMP - auto-levels (sec)	25.273
Standard Deviation	0.3%
GIMP - unsharp-mask (sec)	28.156
Standard Deviation	1.1%
ctx_clock - C.S.T (Clocks)	1032
Standard Deviation	0%
Sysbench - RAM / Memory (MiB/sec)	11044
Standard Deviation	4.9%
Sysbench - CPU (Events/sec)	2672
Standard Deviation	1.5%
PyBench - T.F.A.T.T (Milliseconds)	1405
Standard Deviation	0.5%
nginx - 1 (Req/sec)	25359
Standard Deviation	2.4%
nginx - 20 (Req/sec)	52989
Standard Deviation	2.5%
Apache HTTP Server - 1 (Req/sec)	8463
Standard Deviation	1.5%
Apache HTTP Server - 20 (Req/sec)	13797
Standard Deviation	2.3%
PHPBench - P.B.S (Score)	464188
Standard Deviation	0.5%
RAR Compression - L.S.T.A.T.R (sec)	99.267
Standard Deviation	3.1%

Tesseract 2014-05-12

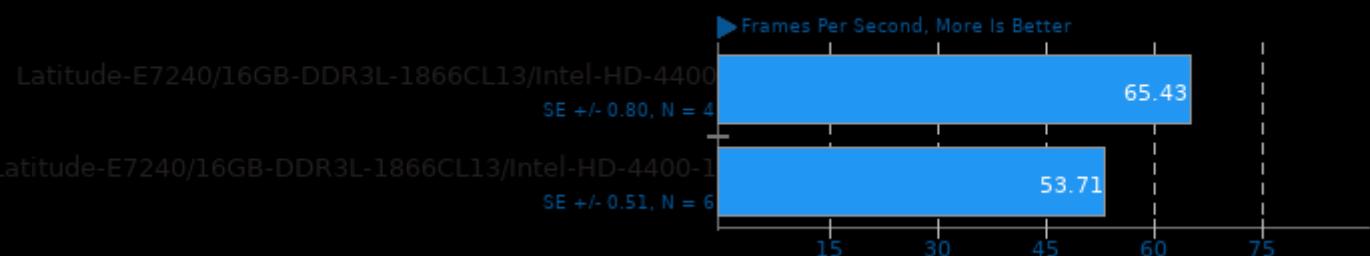
Resolution: 800 x 600

**Tesseract 2014-05-12**

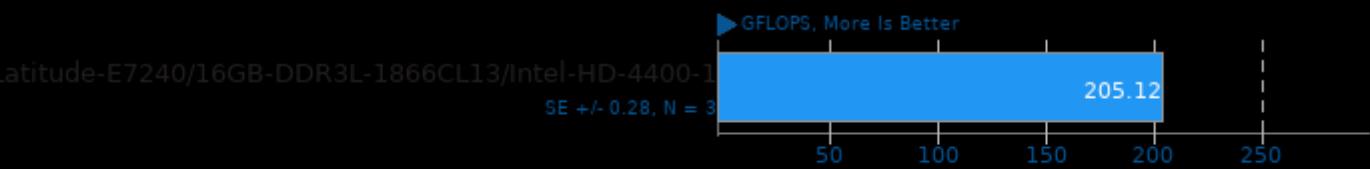
Resolution: 1024 x 768

**Tesseract 2014-05-12**

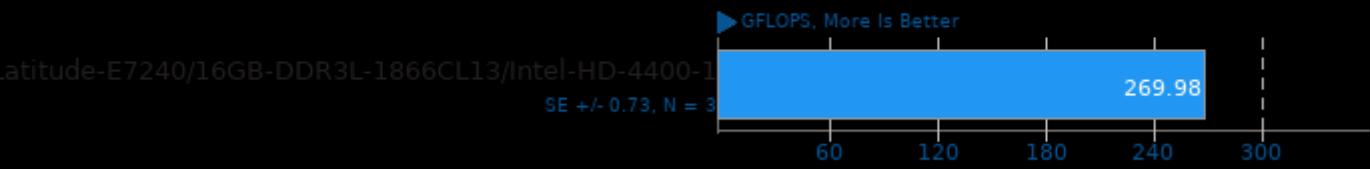
Resolution: 1366 x 768

**vkpeak 20210424**

fp32-scalar

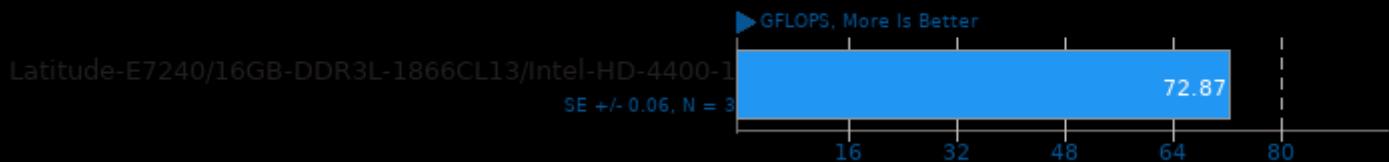
**vkpeak 20210424**

fp32-vec4



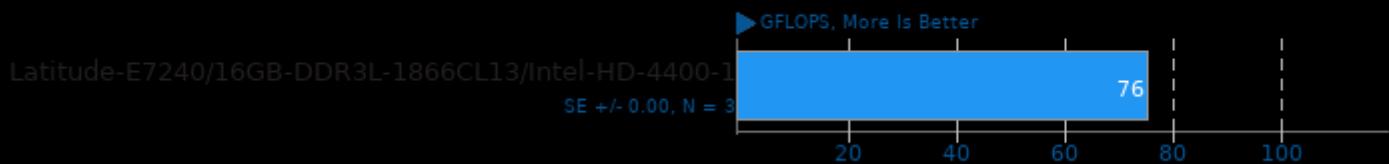
vkpeak 20210424

fp64-scalar



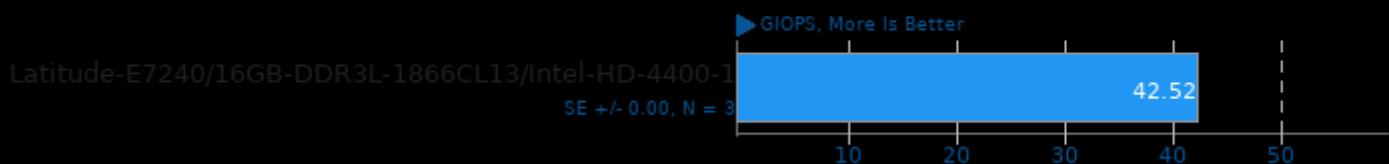
vkpeak 20210424

fp64-vec4



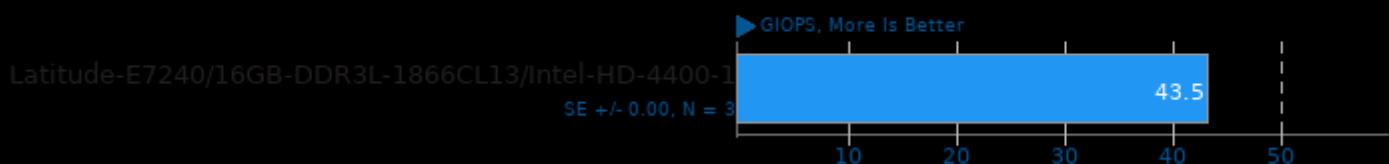
vkpeak 20210424

int32-scalar



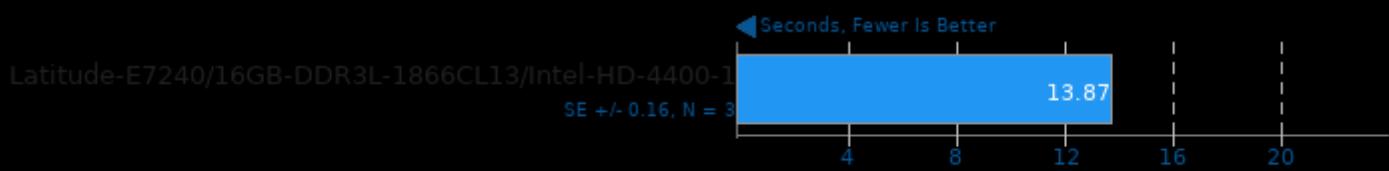
vkpeak 20210424

int32-vec4



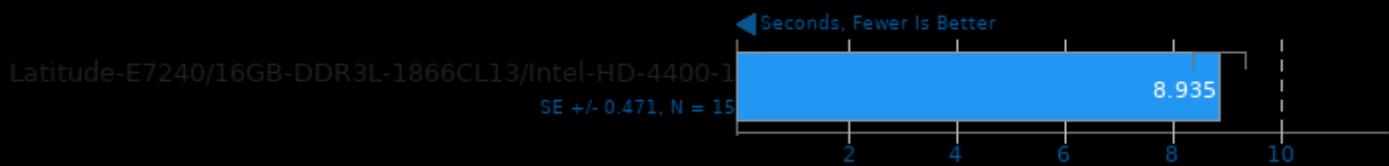
Waifu2x-NCNN Vulkan 20200818

Scale: 2x - Denoise: 3 - TAA: No



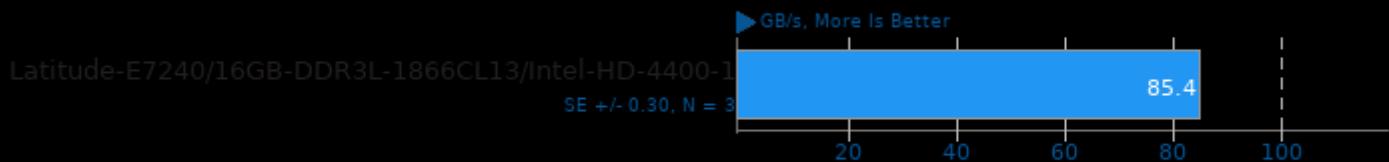
Waifu2x-NCNN Vulkan 20200818

Scale: 2x - Denoise: 3 - TAA: Yes



cl-mem 2017-01-13

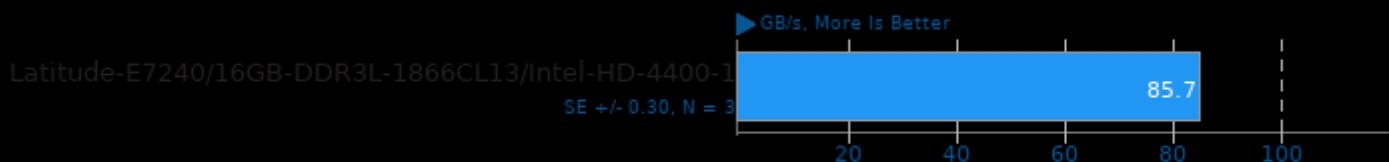
Benchmark: Copy



1. (CC) gcc options: -O2 -fno -IOpenCL

cl-mem 2017-01-13

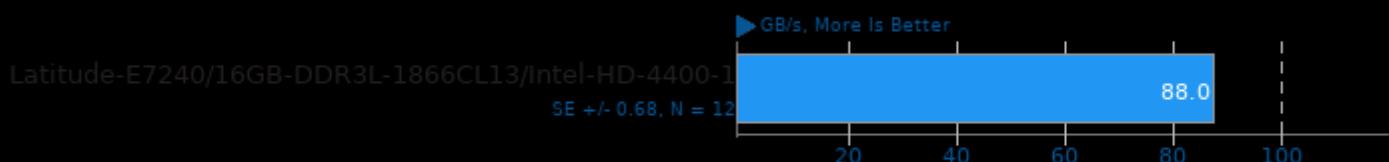
Benchmark: Read



1. (CC) gcc options: -O2 -fno -IOpenCL

cl-mem 2017-01-13

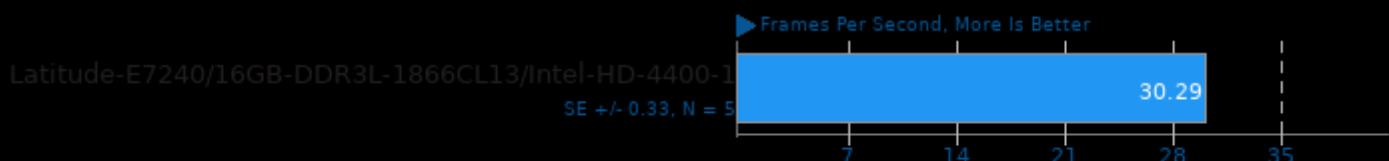
Benchmark: Write



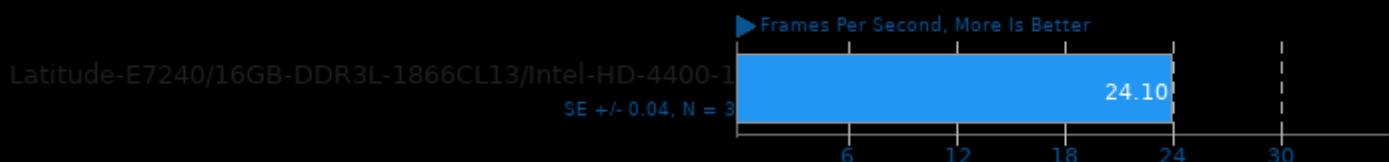
1. (CC) gcc options: -O2 -fno -IOpenCL

Unigine Tropics 1.3

Resolution: 800 x 600 - Mode: Windowed

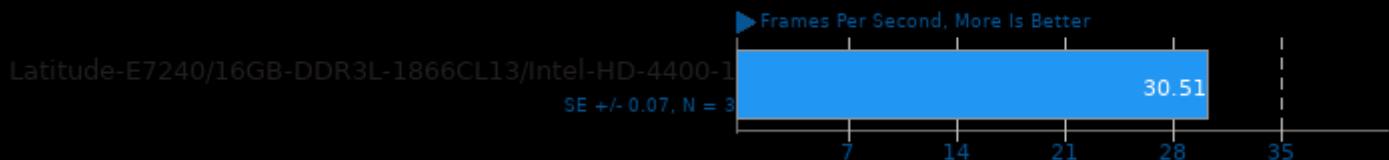
**Unigine Tropics 1.3**

Resolution: 1024 x 768 - Mode: Windowed



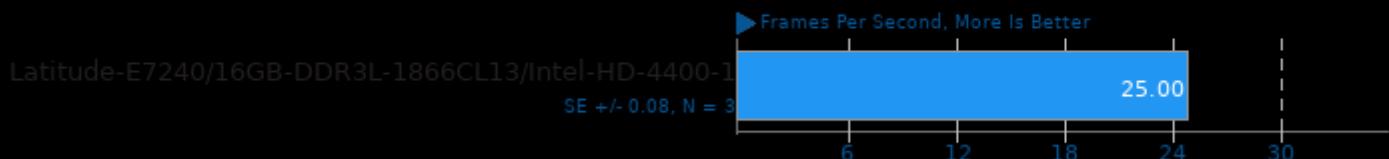
Unigine Tropics 1.3

Resolution: 800 x 600 - Mode: Fullscreen



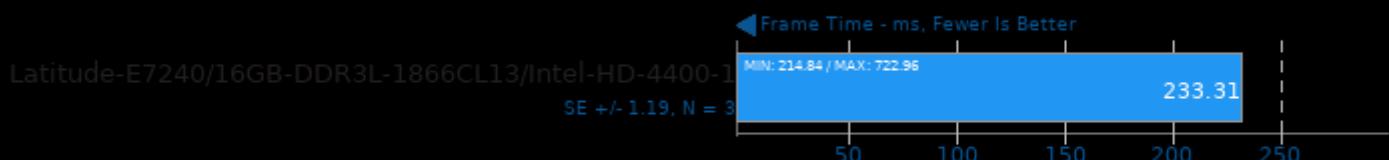
Unigine Tropics 1.3

Resolution: 1024 x 768 - Mode: Fullscreen



GL-vs-VK 2017-06-05

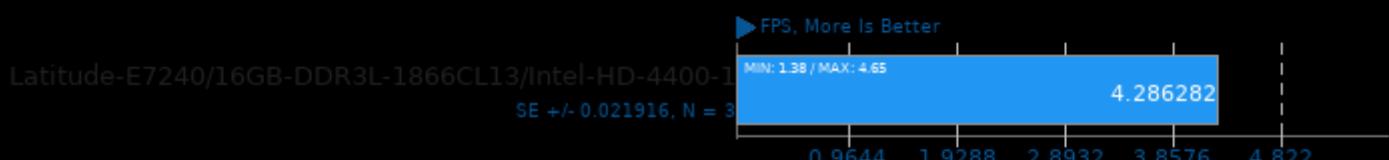
Test: Static Scene - API: OpenGL - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

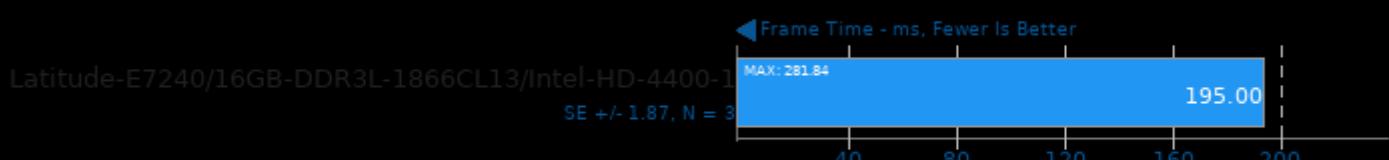
Test: Static Scene - API: OpenGL - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

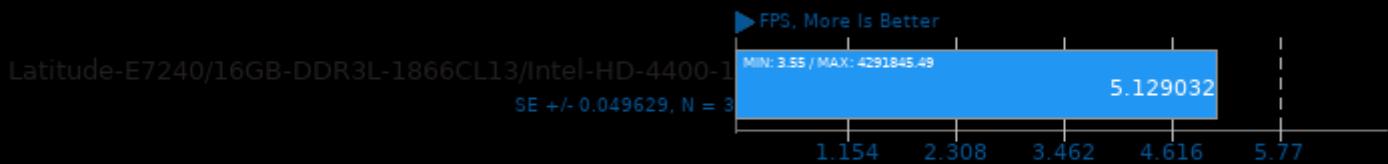
Test: Static Scene - API: Vulkan - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

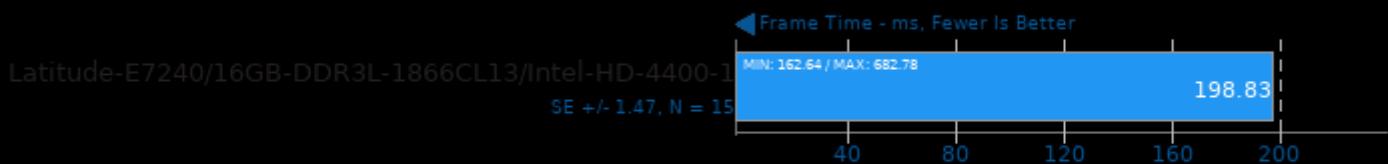
Test: Static Scene - API: Vulkan - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

Test: Static Scene - API: OpenGL - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

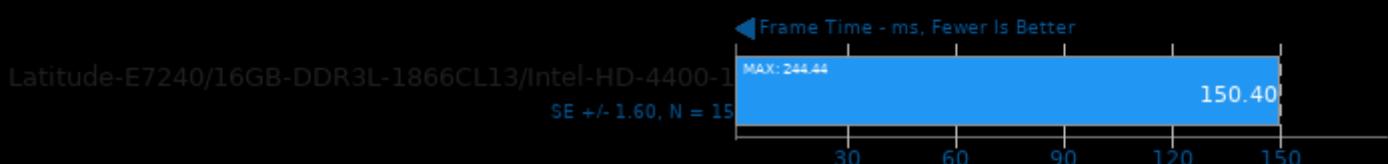
Test: Static Scene - API: OpenGL - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

Test: Static Scene - API: Vulkan - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

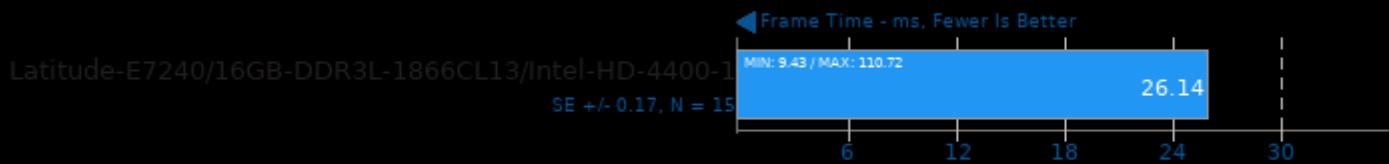
Test: Static Scene - API: Vulkan - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

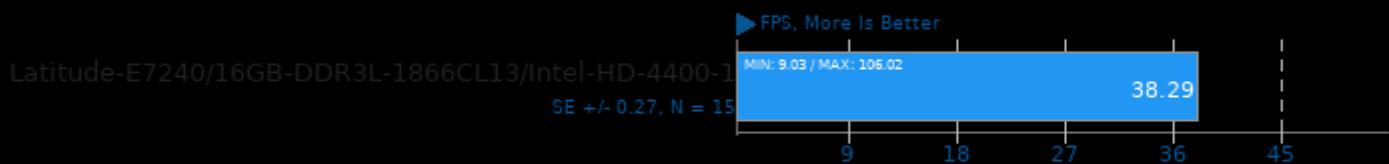
Test: Shadow Mapping - API: OpenGL - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

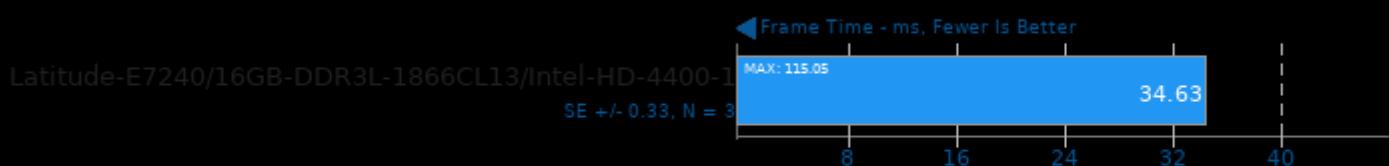
Test: Shadow Mapping - API: OpenGL - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

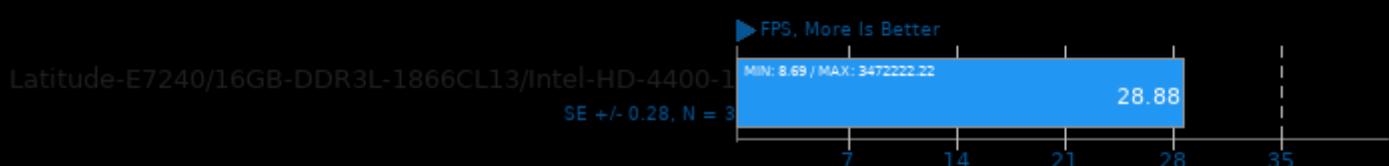
Test: Shadow Mapping - API: Vulkan - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

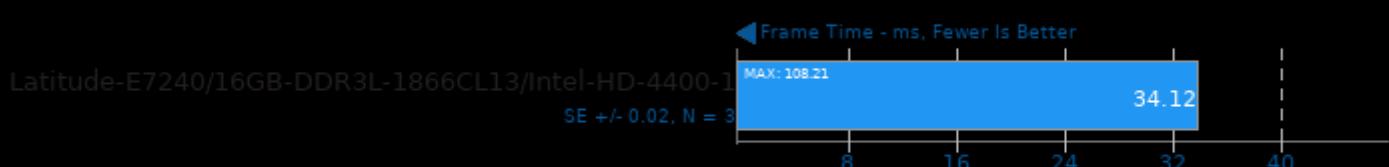
Test: Shadow Mapping - API: Vulkan - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

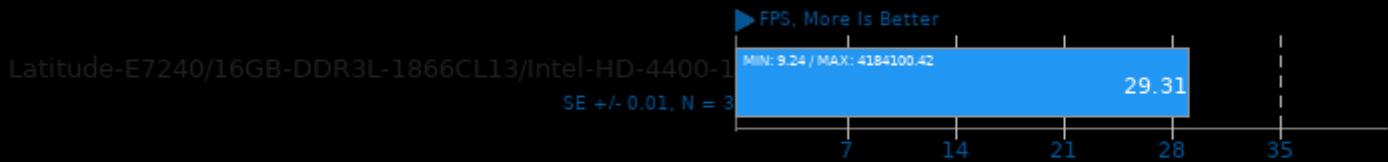
Test: Shadow Mapping - API: Vulkan - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

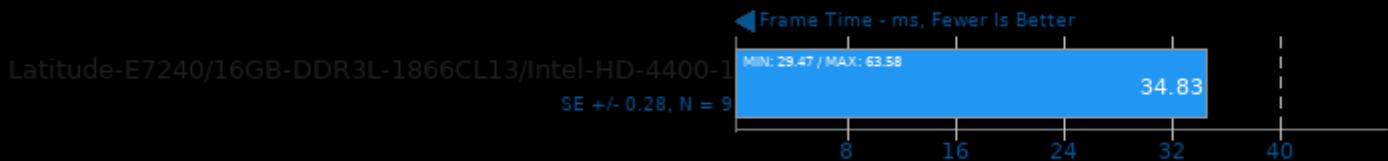
Test: Shadow Mapping - API: Vulkan - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

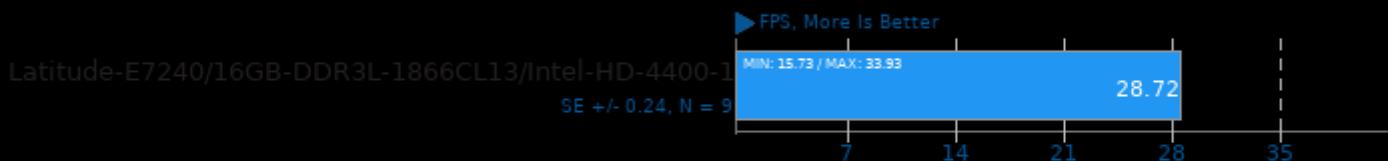
Test: Terrain With Dynamic LoD - API: OpenGL - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

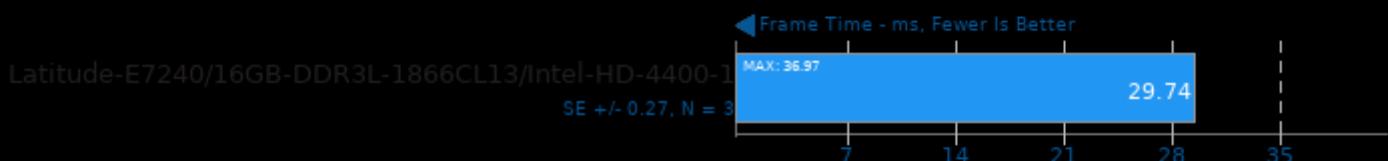
Test: Terrain With Dynamic LoD - API: OpenGL - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

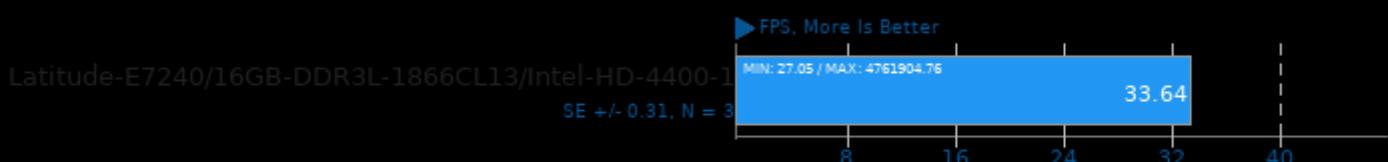
Test: Terrain With Dynamic LoD - API: Vulkan - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

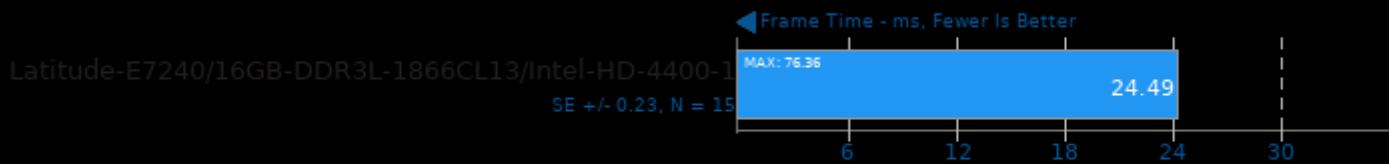
Test: Terrain With Dynamic LoD - API: Vulkan - Multi-Threaded: No



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

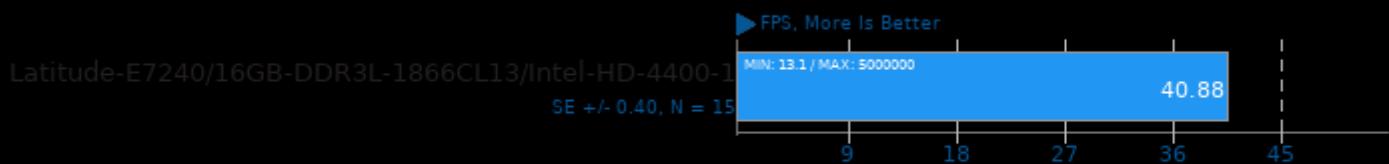
Test: Terrain With Dynamic LoD - API: Vulkan - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

GL-vs-VK 2017-06-05

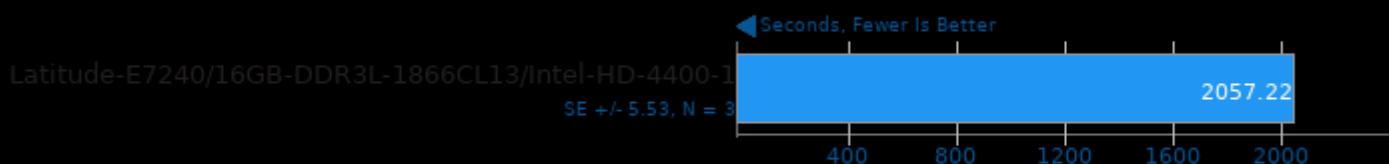
Test: Terrain With Dynamic LoD - API: Vulkan - Multi-Threaded: Yes



1. (CXX) g++ options: -rdynamic

Rodinia 3.1

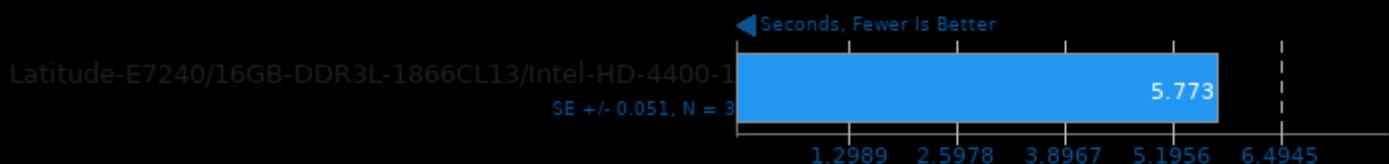
Test: OpenMP LavaMD



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

Rodinia 3.1

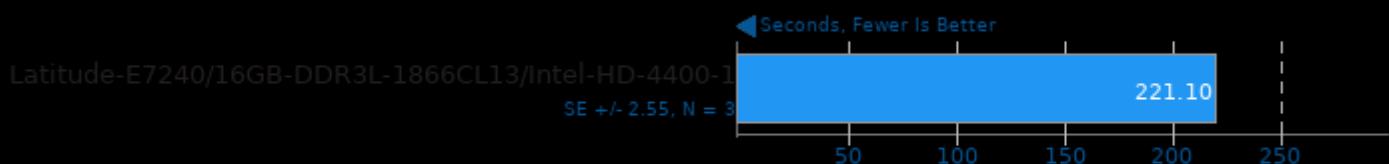
Test: OpenCL Myocyte



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

Rodinia 3.1

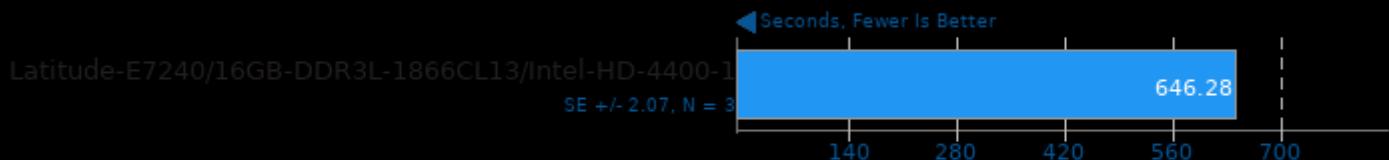
Test: OpenMP HotSpot3D



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

Rodinia 3.1

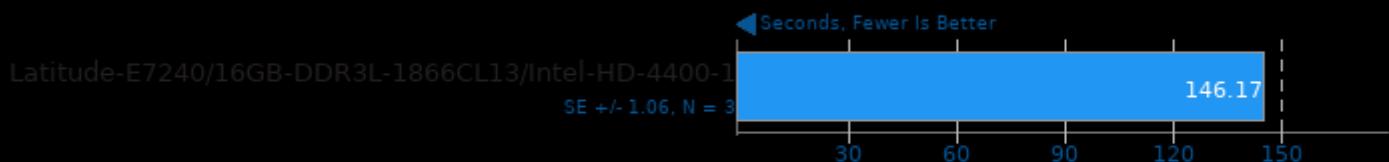
Test: OpenMP Leukocyte



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

Rodinia 3.1

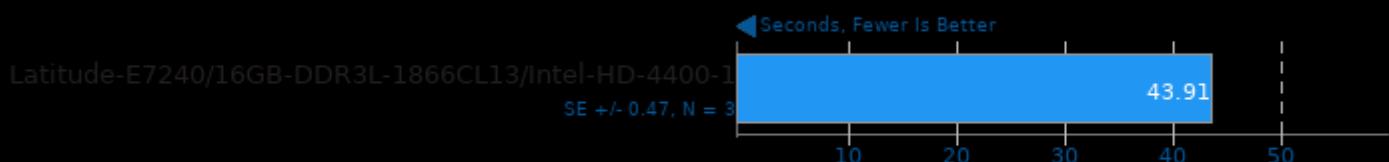
Test: OpenMP CFD Solver



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

Rodinia 3.1

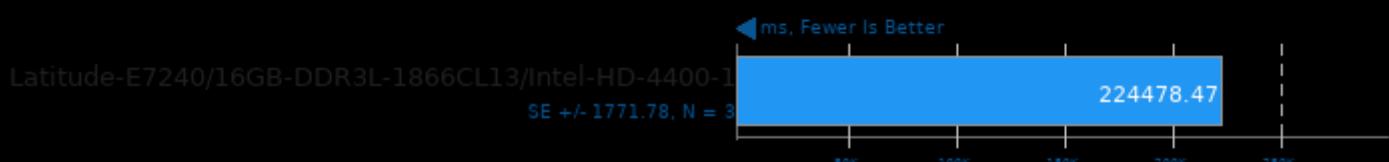
Test: OpenMP Streamcluster



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

FinanceBench 2016-07-25

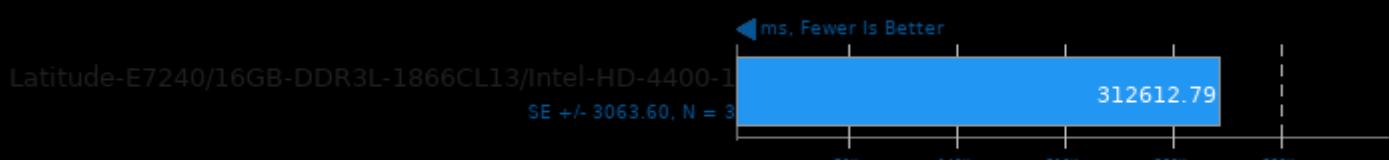
Benchmark: Repo OpenMP



1. (CXX) g++ options: -O3 -march=native -fopenmp

FinanceBench 2016-07-25

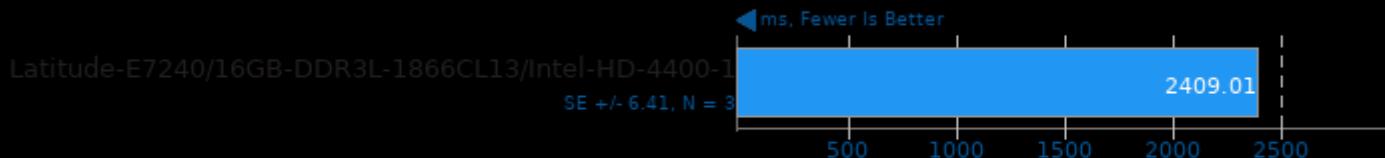
Benchmark: Bonds OpenMP



1. (CXX) g++ options: -O3 -march=native -fopenmp

FinanceBench 2016-07-25

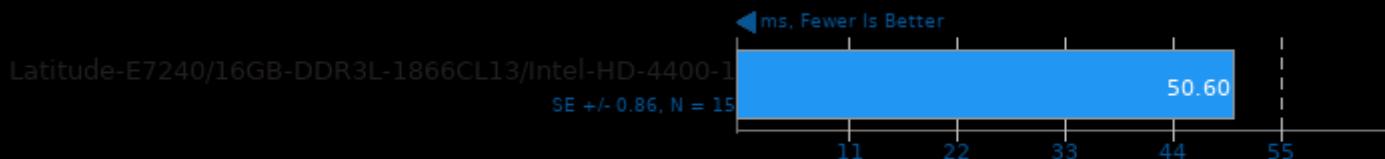
Benchmark: Monte-Carlo OpenCL



1. (CXX) g++ options: -O3 -march=native -fopenmp

FinanceBench 2016-07-25

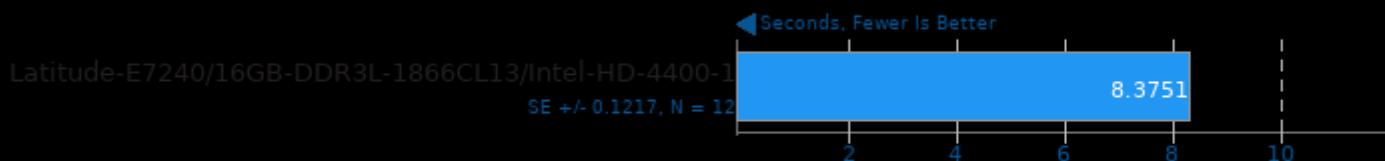
Benchmark: Black-Scholes OpenCL



1. (CXX) g++ options: -O3 -march=native -fopenmp

ASTC Encoder 3.2

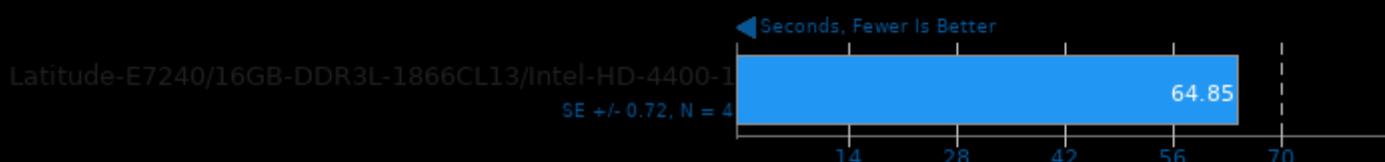
Preset: Medium



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

ASTC Encoder 3.2

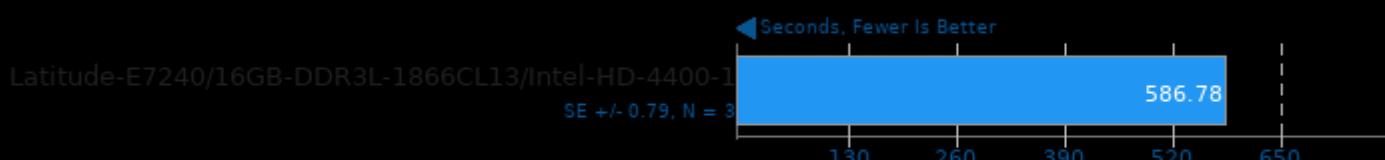
Preset: Thorough



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

ASTC Encoder 3.2

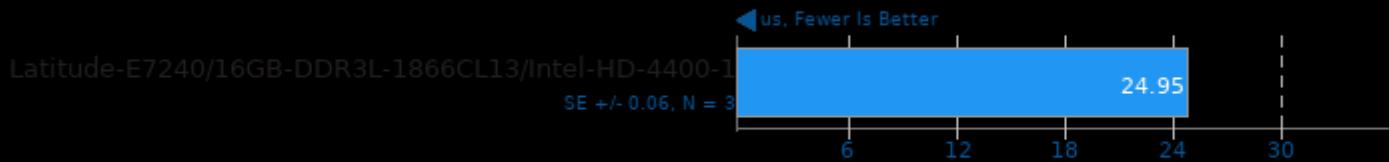
Preset: Exhaustive



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

clpeak

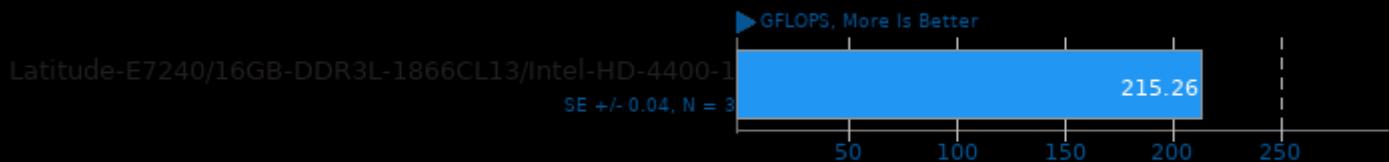
OpenCL Test: Kernel Latency



1. (CXX) g++ options: -O3 -rdynamic -lOpenCL

clpeak

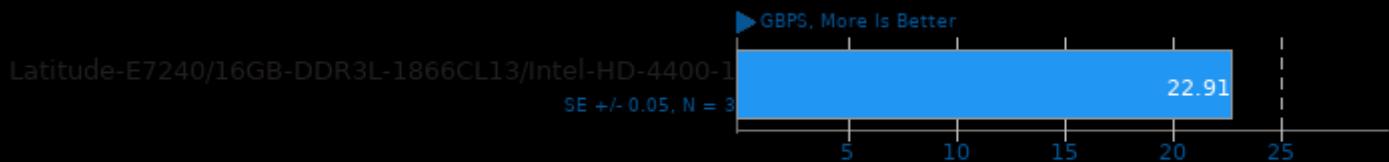
OpenCL Test: Single-Precision Float



1. (CXX) g++ options: -O3 -rdynamic -lOpenCL

clpeak

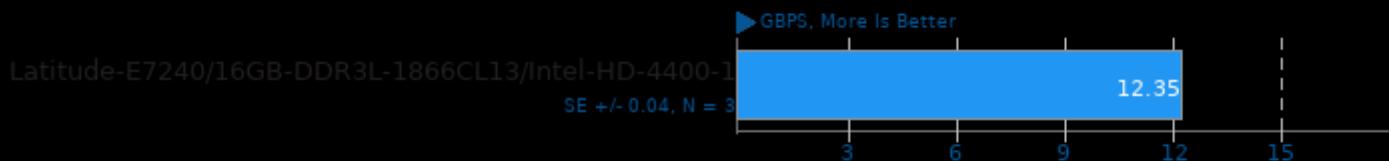
OpenCL Test: Global Memory Bandwidth



1. (CXX) g++ options: -O3 -rdynamic -lOpenCL

clpeak

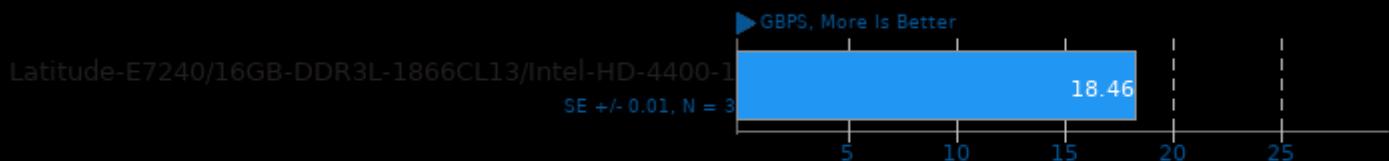
OpenCL Test: Transfer Bandwidth enqueueReadBuffer



1. (CXX) g++ options: -O3 -rdynamic -lOpenCL

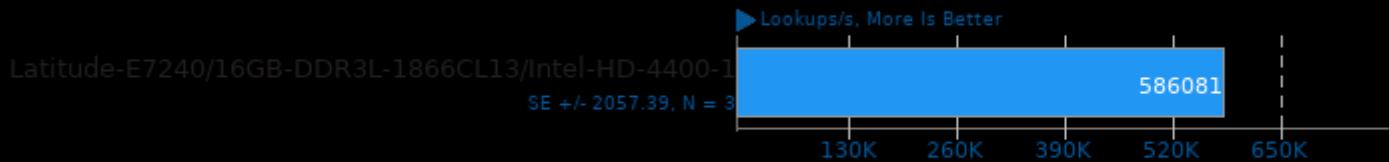
clpeak

OpenCL Test: Transfer Bandwidth enqueueWriteBuffer



1. (CXX) g++ options: -O3 -rdynamic -lOpenCL

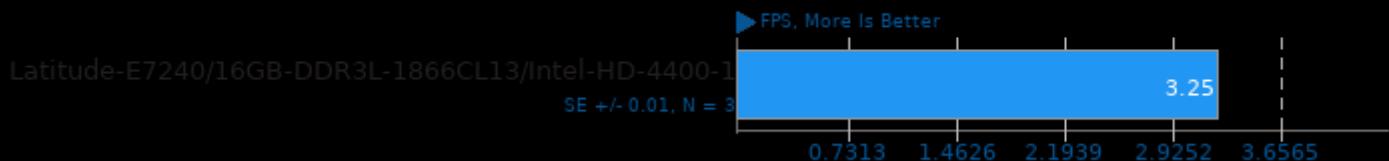
Xsbench 2017-07-06



1. (CC) gcc options: -std=gnu99 -fopenmp -O3 -lm

NeatBench 5

Acceleration: All



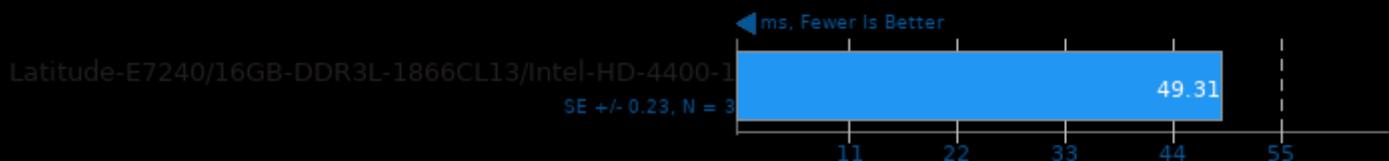
NeatBench 5

Acceleration: CPU



Selenium

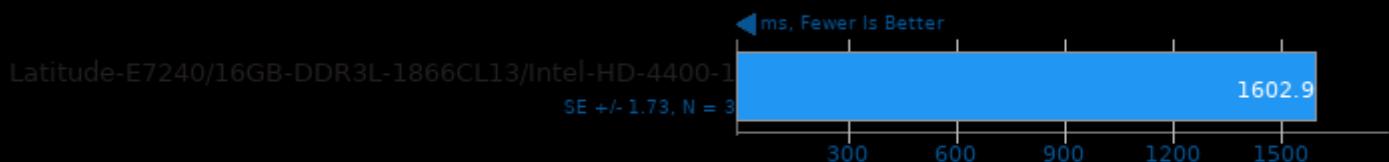
Benchmark: ARES-6 - Browser: Firefox



1. firefox 100.0.1

Selenium

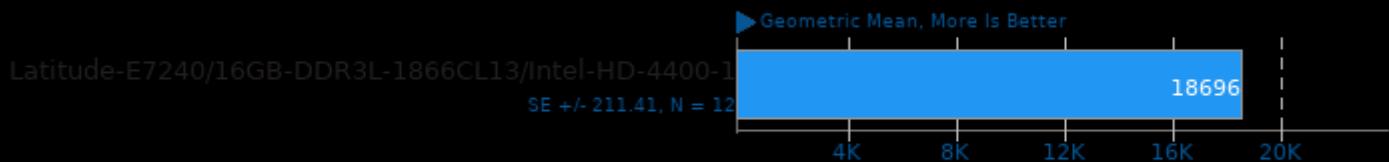
Benchmark: Kraken - Browser: Firefox



1. firefox 100.0.1

Selenium

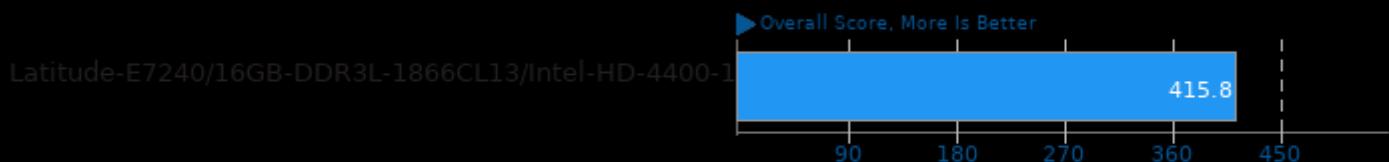
Benchmark: Octane - Browser: Firefox



1. firefox 100.0.1

Selenium

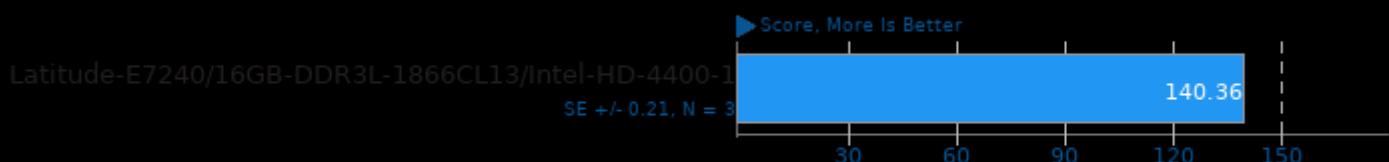
Benchmark: Basemark - Browser: Firefox



1. firefox 100.0.1

Selenium

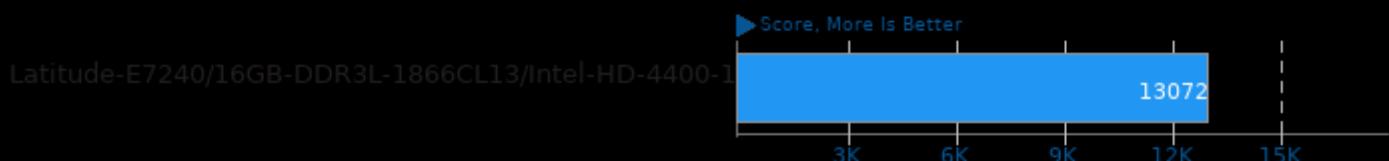
Benchmark: Jetstream - Browser: Firefox



1. firefox 100.0.1

Selenium

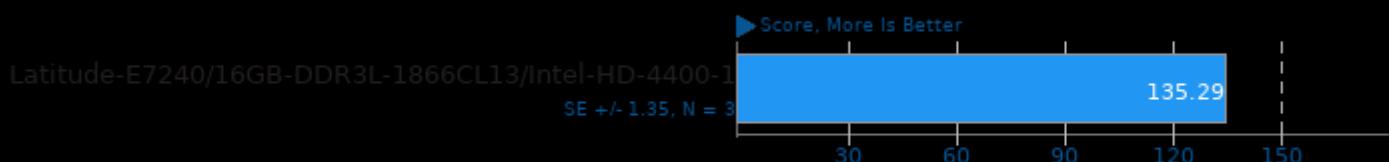
Benchmark: CanvasMark - Browser: Firefox



1. firefox 100.0.1

Selenium

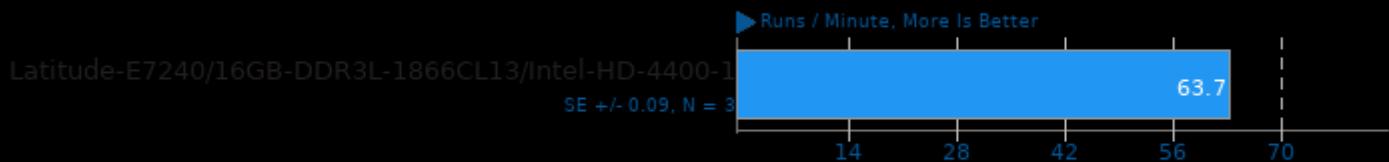
Benchmark: MotionMark - Browser: Firefox



1. firefox 100.0.1

Selenium

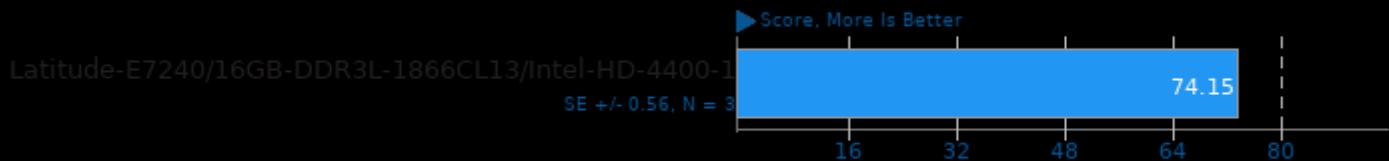
Benchmark: StyleBench - Browser: Firefox



1. firefox 100.0.1

Selenium

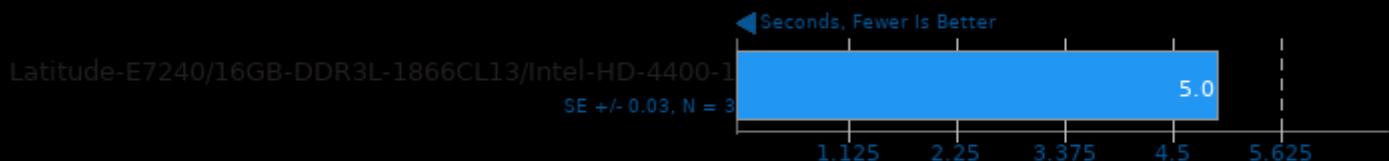
Benchmark: Jetstream 2 - Browser: Firefox



1. firefox 100.0.1

Selenium

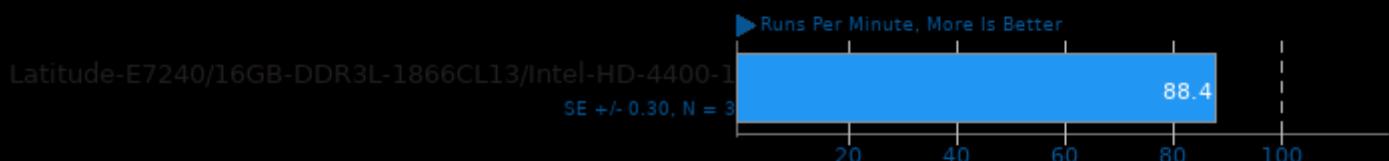
Benchmark: Maze Solver - Browser: Firefox



1. firefox 100.0.1

Selenium

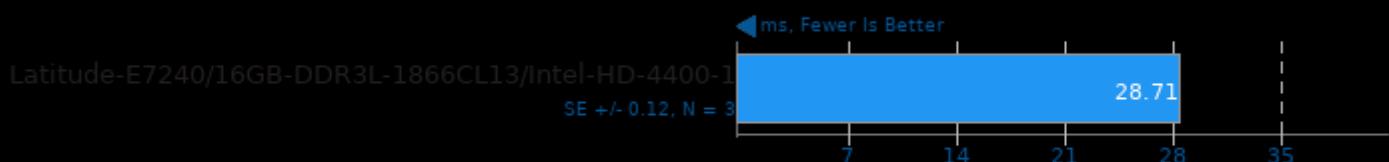
Benchmark: Speedometer - Browser: Firefox



1. firefox 100.0.1

Selenium

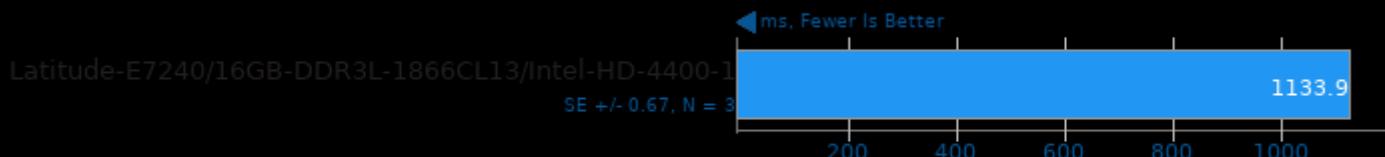
Benchmark: ARES-6 - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

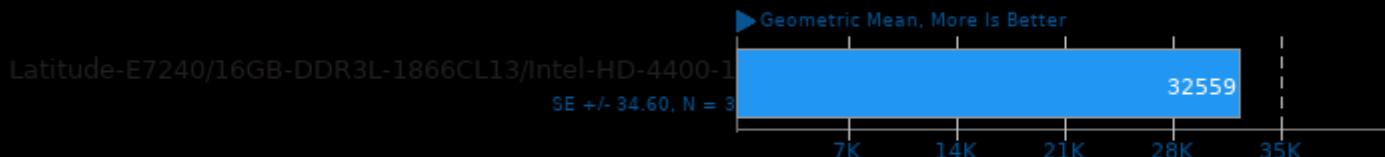
Benchmark: Kraken - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

Benchmark: Octane - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

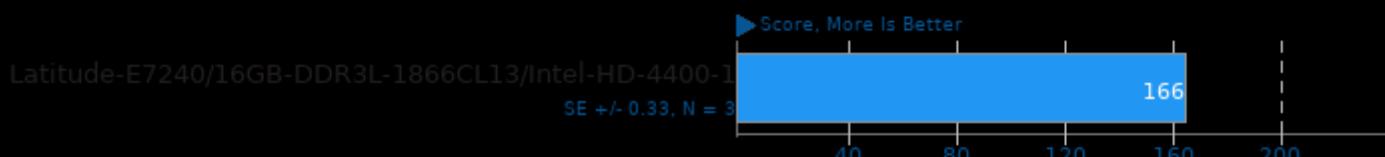
Benchmark: PSPDFKit WASM - Browser: Firefox



1. firefox 100.0.1

Selenium

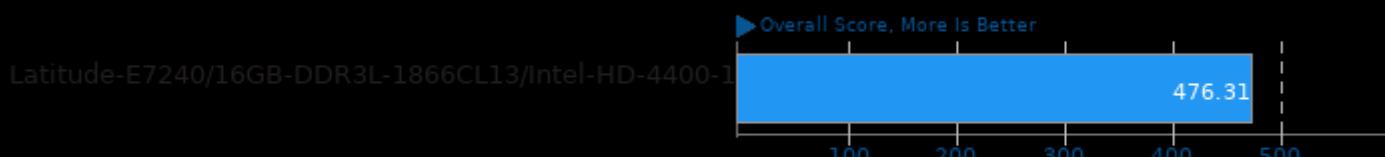
Benchmark: WebXPRT - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

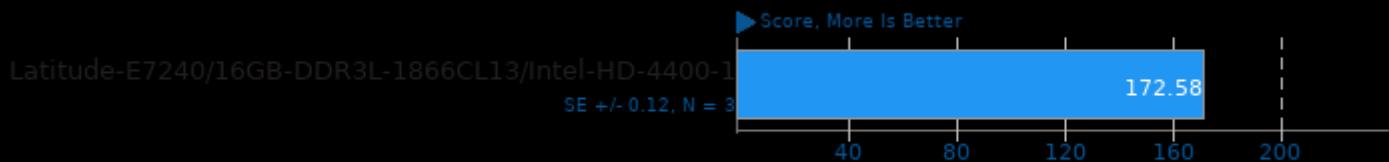
Benchmark: Basemark - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

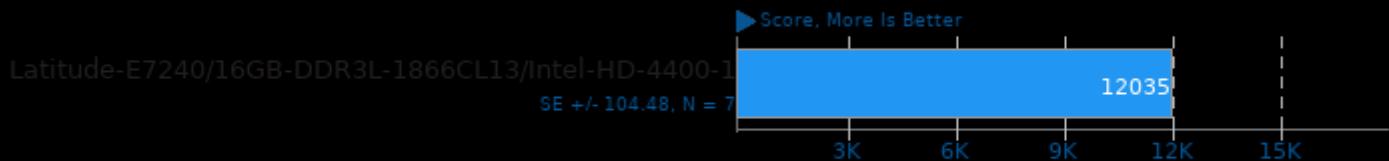
Benchmark: Jetstream - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

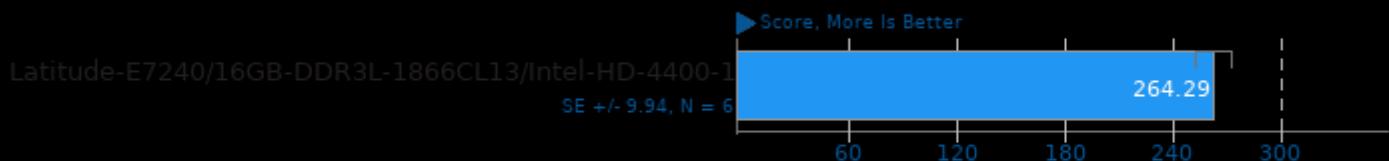
Benchmark: CanvasMark - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

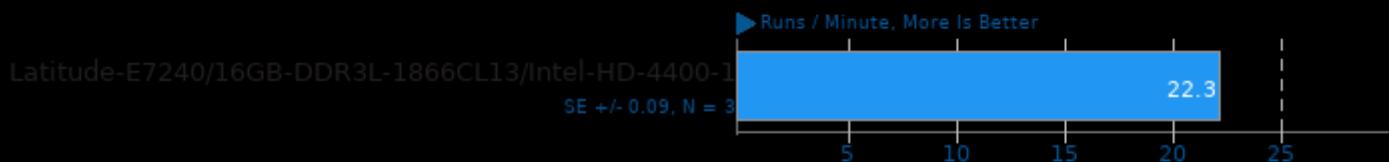
Benchmark: MotionMark - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

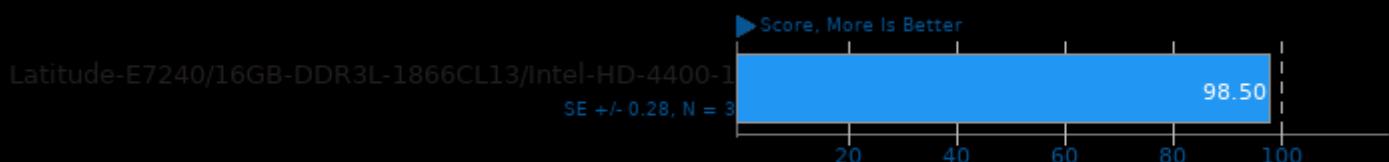
Benchmark: StyleBench - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

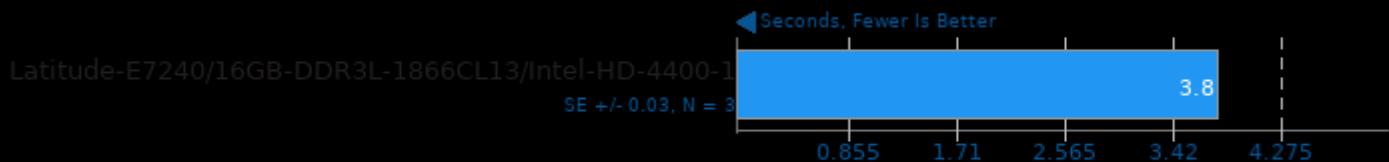
Benchmark: Jetstream 2 - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

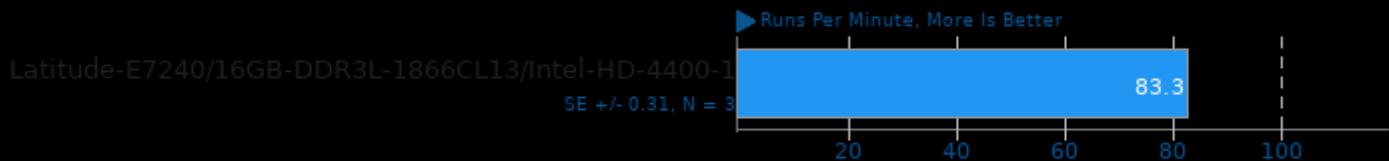
Benchmark: Maze Solver - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

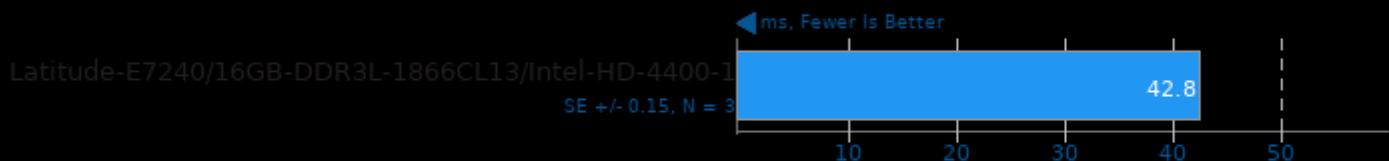
Benchmark: Speedometer - Browser: Google Chrome



1. chrome 101.0.4951.64

Selenium

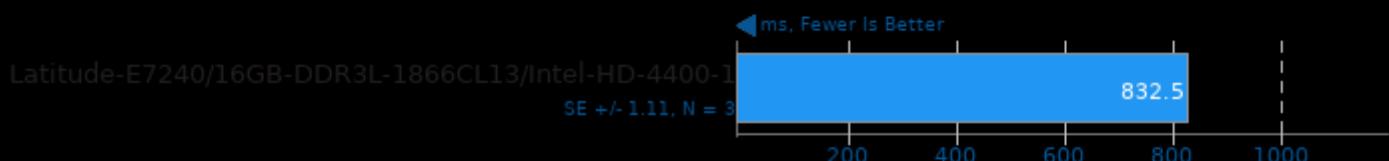
Benchmark: WASM imageConvolute - Browser: Firefox



1. firefox 100.0.1

Selenium

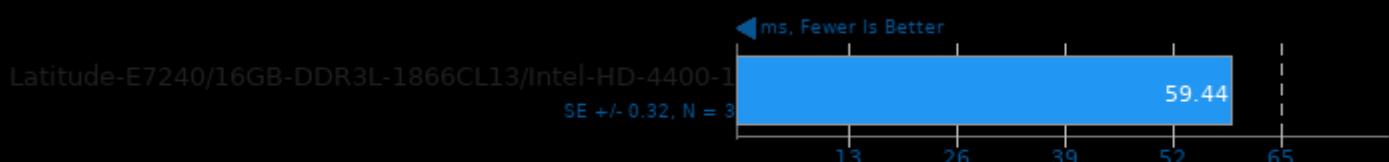
Benchmark: WASM collisionDetection - Browser: Firefox



1. firefox 100.0.1

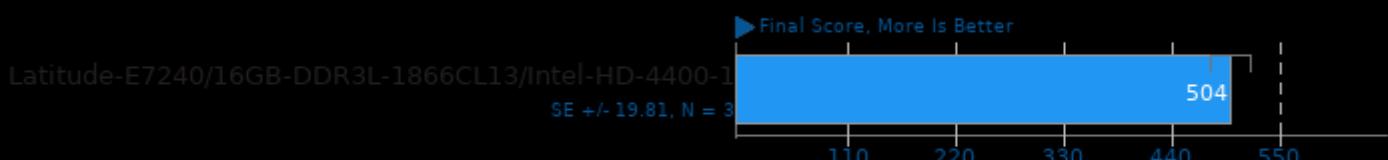
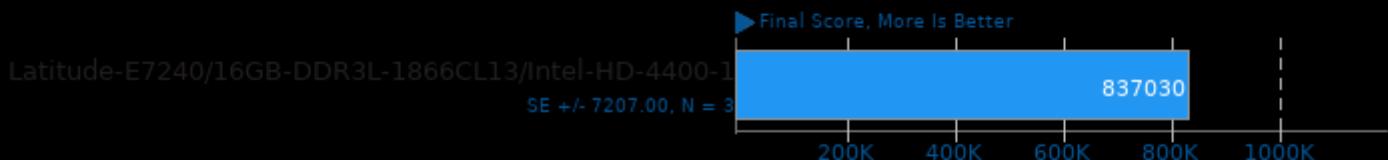
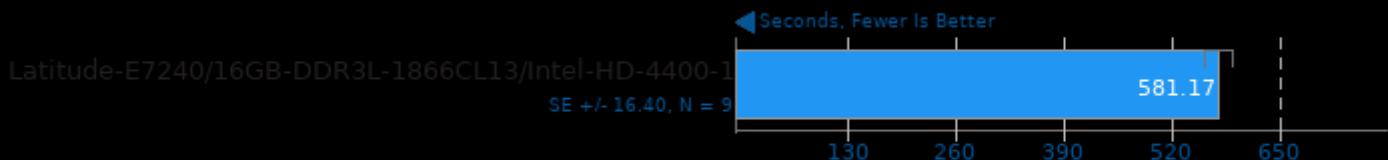
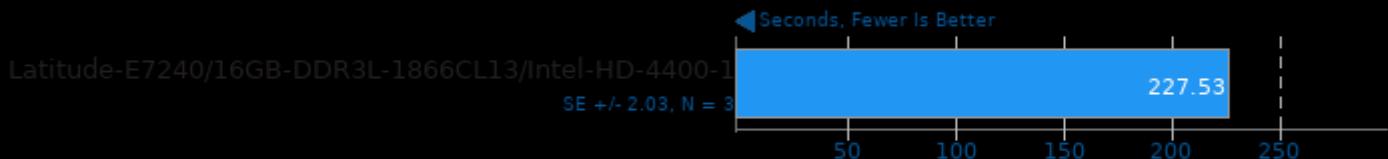
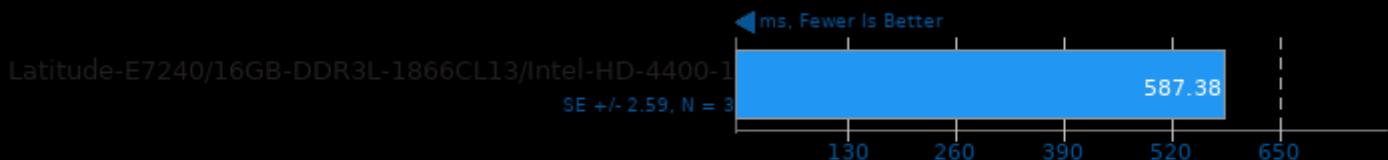
Selenium

Benchmark: WASM imageConvolute - Browser: Google Chrome



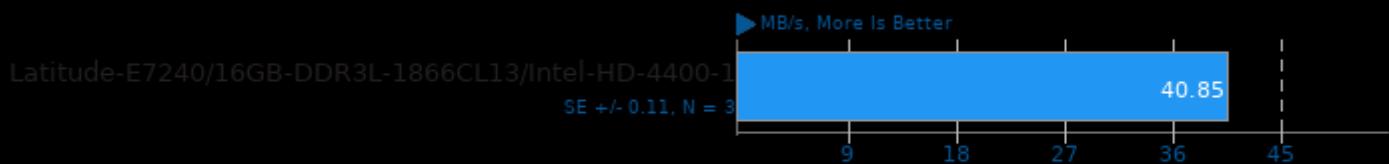
1. chrome 101.0.4951.64

Selenium



Dbench 4.0

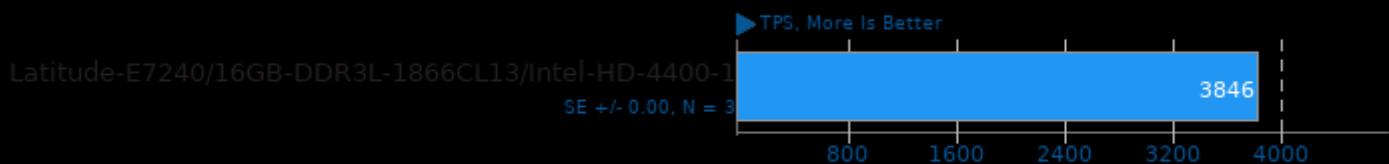
Client Count: 1



1. (CC) gcc options: -lpopt -O2

PostMark 1.51

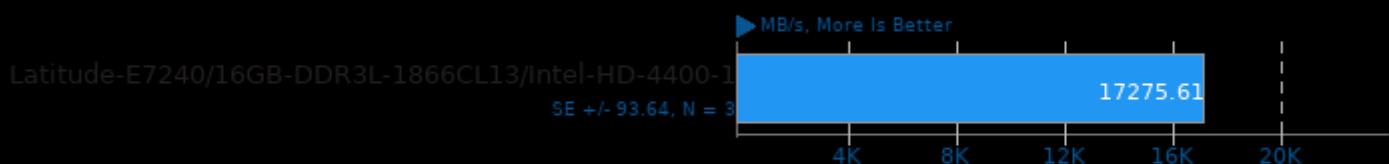
Disk Transaction Performance



1. (CC) gcc options: -O3

RAMspeed SMP 3.5.0

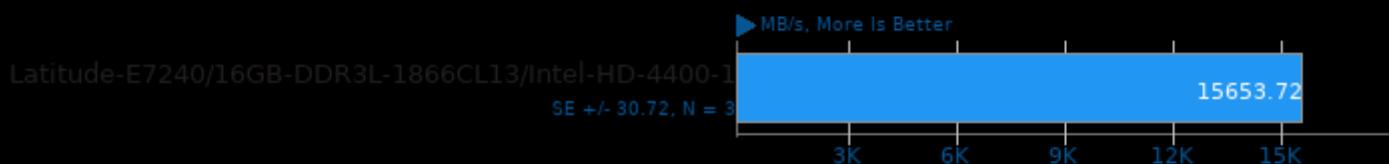
Type: Add - Benchmark: Integer



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

RAMspeed SMP 3.5.0

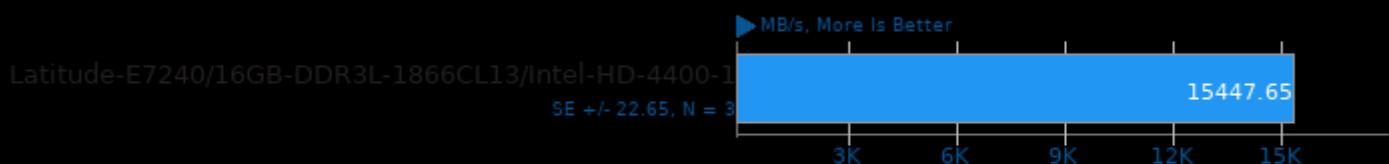
Type: Copy - Benchmark: Integer



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

RAMspeed SMP 3.5.0

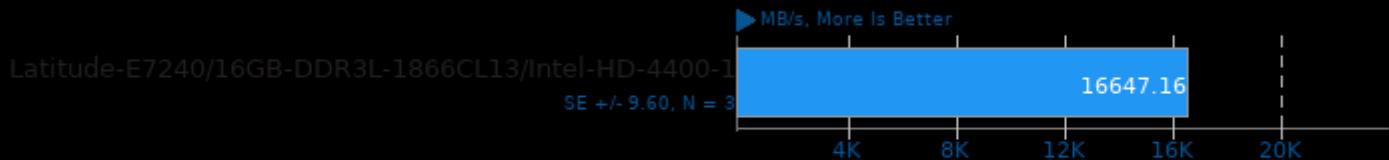
Type: Scale - Benchmark: Integer



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

RAMspeed SMP 3.5.0

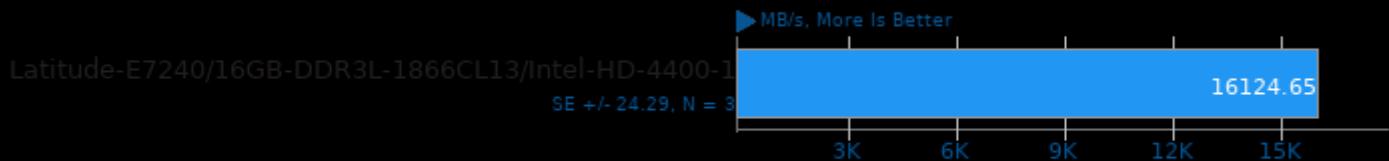
Type: Triad - Benchmark: Integer



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

RAMspeed SMP 3.5.0

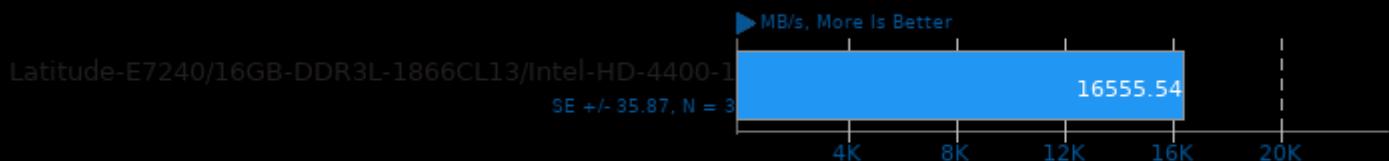
Type: Average - Benchmark: Integer



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

RAMspeed SMP 3.5.0

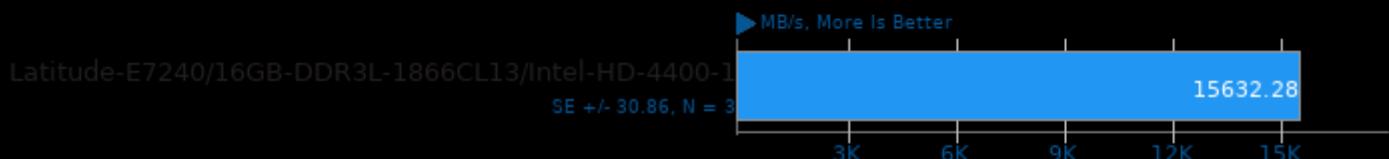
Type: Add - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

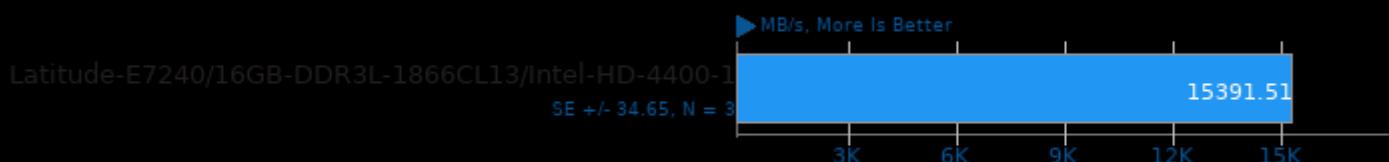
Type: Copy - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

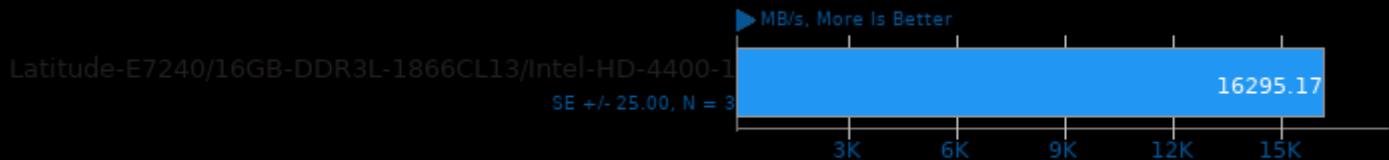
Type: Scale - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

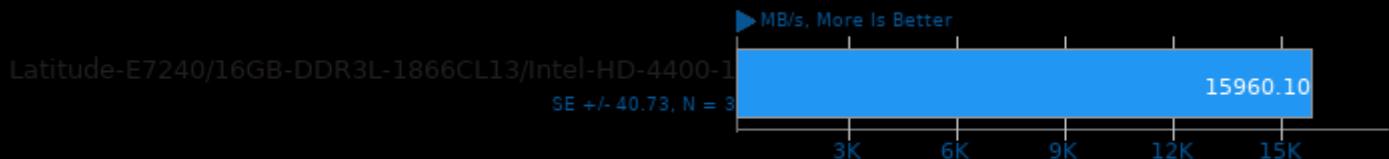
Type: Triad - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

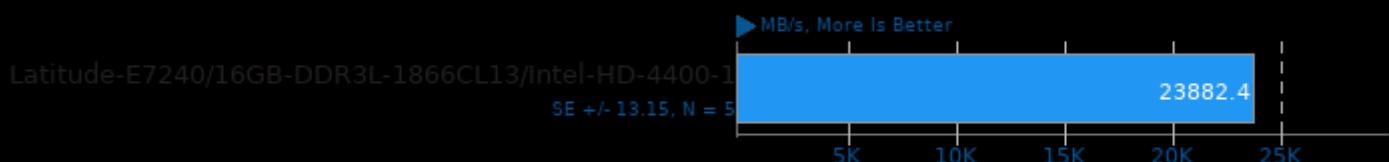
Type: Average - Benchmark: Floating Point



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

Stream 2013-01-17

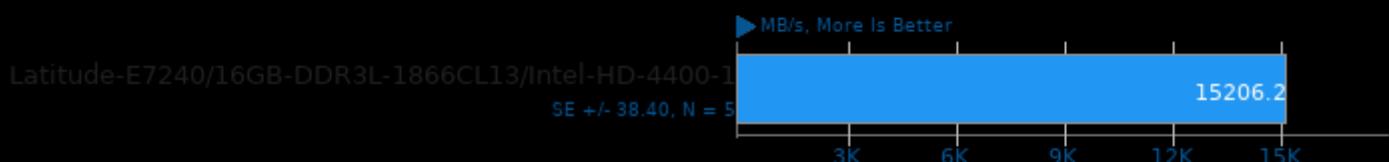
Type: Copy



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

Stream 2013-01-17

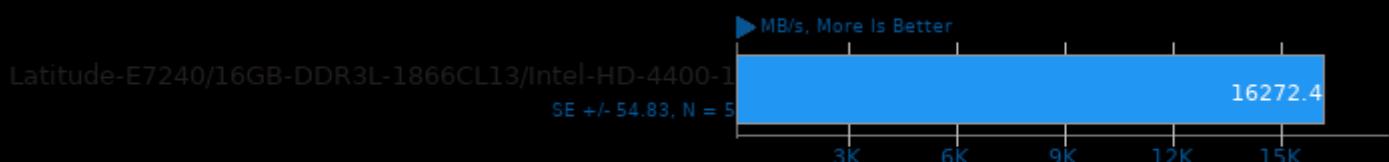
Type: Scale



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

Stream 2013-01-17

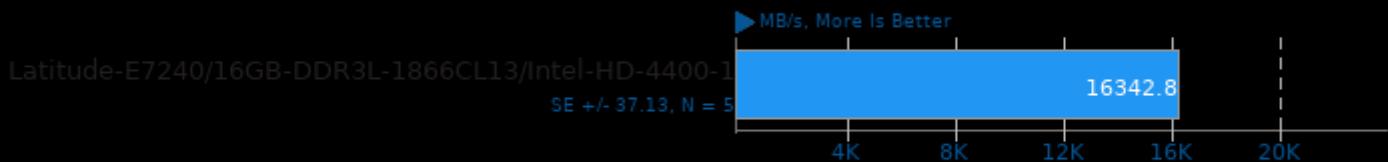
Type: Triad



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

Stream 2013-01-17

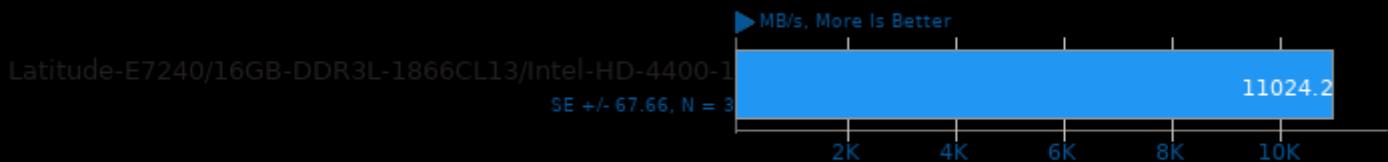
Type: Add



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

Tinymembench 2018-05-28

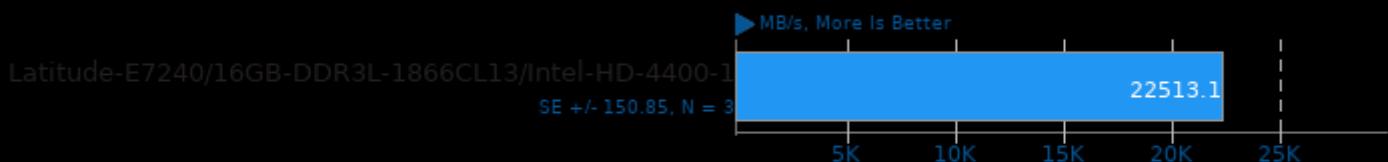
Standard Memcpy



1. (CC) gcc options: -O2 -lm

Tinymembench 2018-05-28

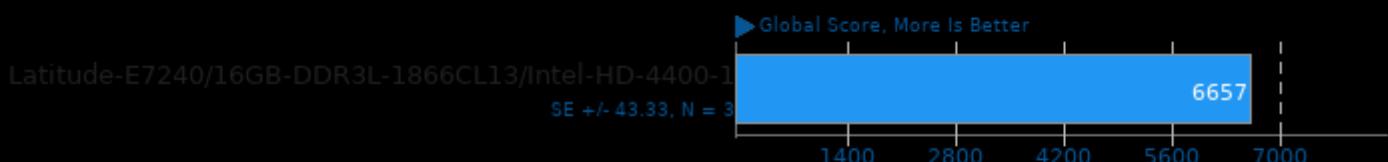
Standard Memset



1. (CC) gcc options: -O2 -lm

GNU MPC 1.1.0

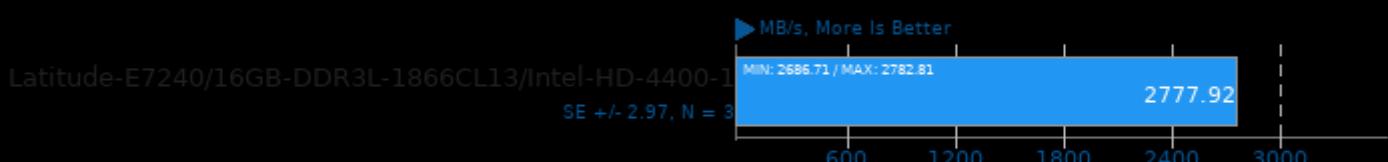
Multi-Precision Benchmark



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

CacheBench

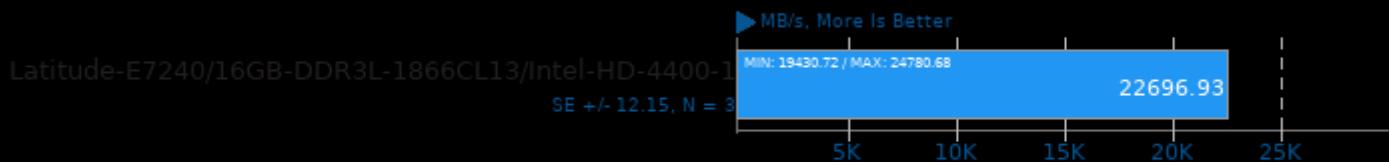
Test: Read



1. (CC) gcc options: -lrt

CacheBench

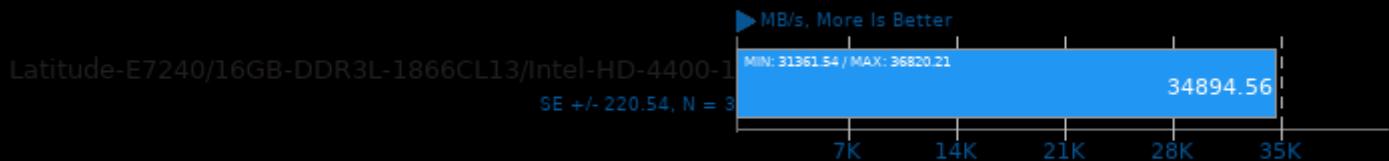
Test: Write



1. (CC) gcc options: -lrt

CacheBench

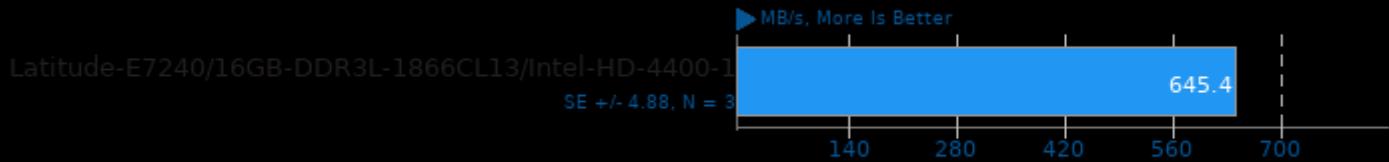
Test: Read / Modify / Write



1. (CC) gcc options: -lrt

Zstd Compression 1.5.0

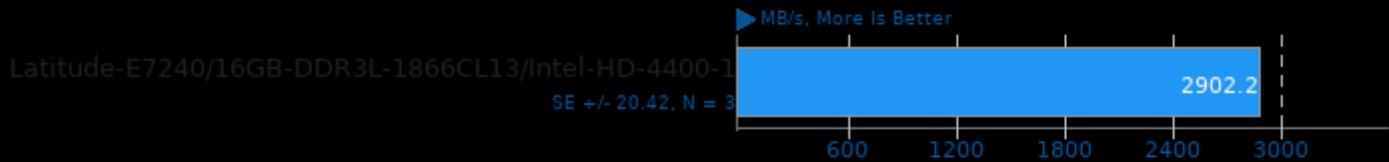
Compression Level: 3 - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4

Zstd Compression 1.5.0

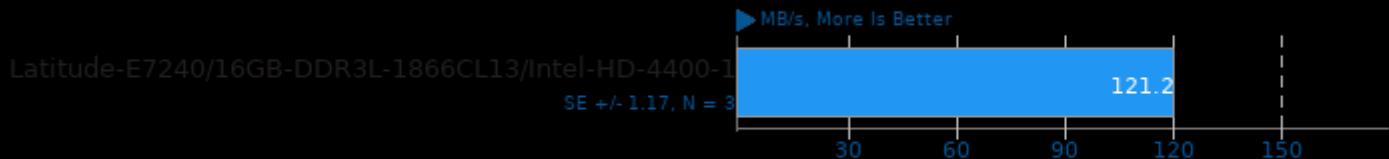
Compression Level: 3 - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4

Zstd Compression 1.5.0

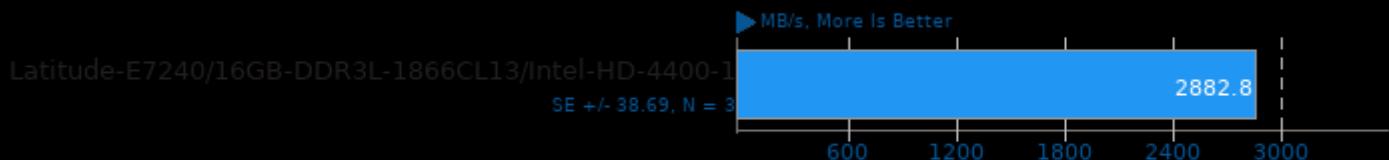
Compression Level: 8 - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4

Zstd Compression 1.5.0

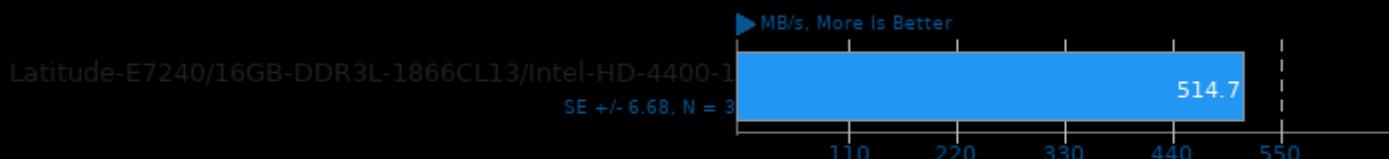
Compression Level: 8 - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma -llz4

Zstd Compression 1.5.0

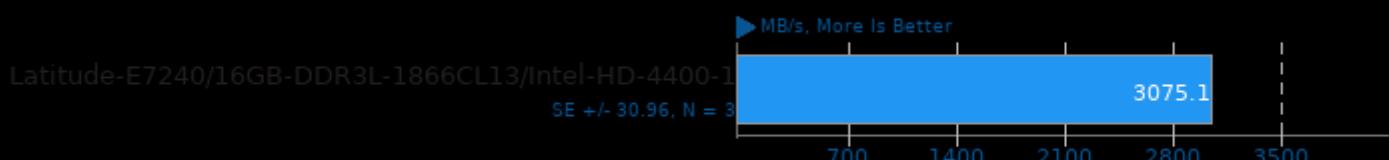
Compression Level: 3, Long Mode - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma -llz4

Zstd Compression 1.5.0

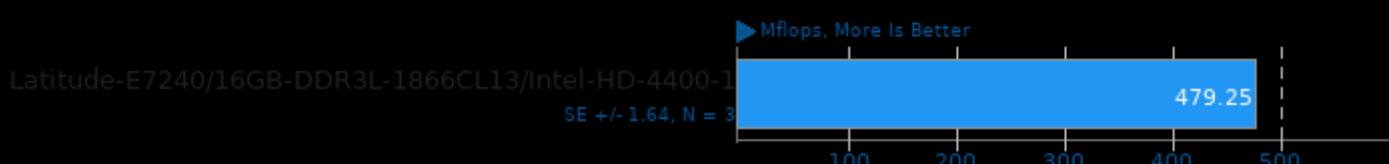
Compression Level: 3, Long Mode - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma -llz4

SciMark 2.0

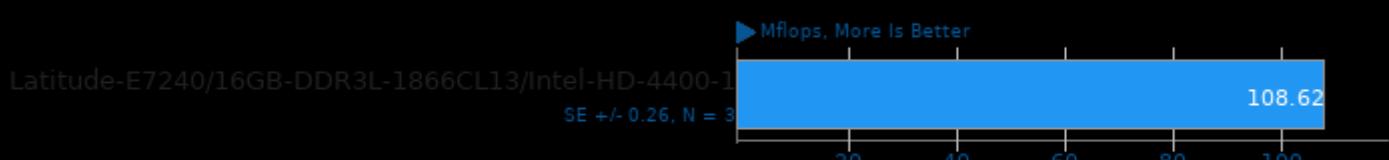
Computational Test: Composite



1. (CC) gcc options: -lm

SciMark 2.0

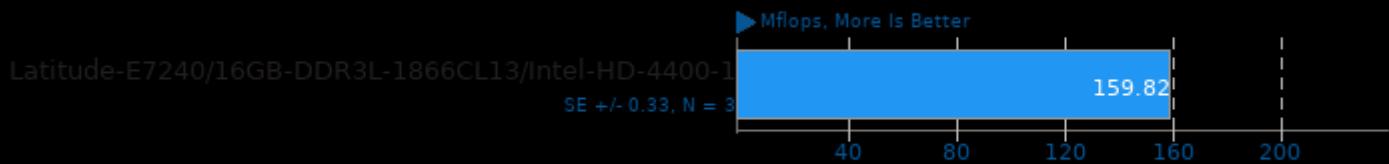
Computational Test: Monte Carlo



1. (CC) gcc options: -lm

SciMark 2.0

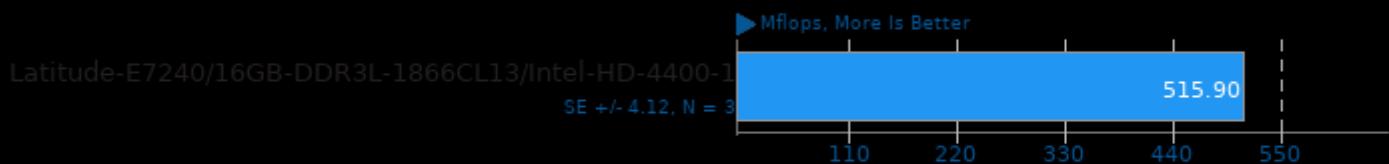
Computational Test: Fast Fourier Transform



1. (CC) gcc options: -lm

SciMark 2.0

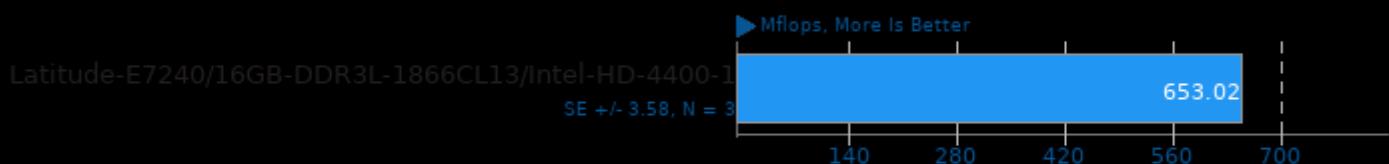
Computational Test: Sparse Matrix Multiply



1. (CC) gcc options: -lm

SciMark 2.0

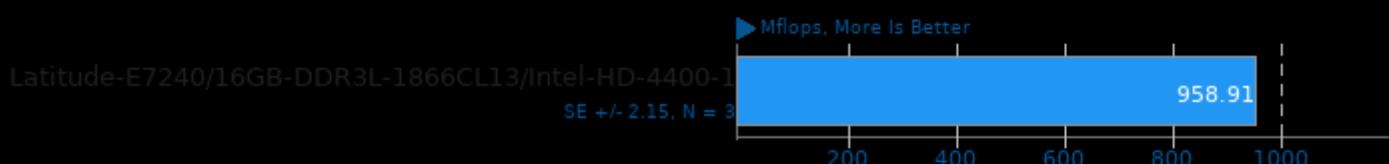
Computational Test: Dense LU Matrix Factorization



1. (CC) gcc options: -lm

SciMark 2.0

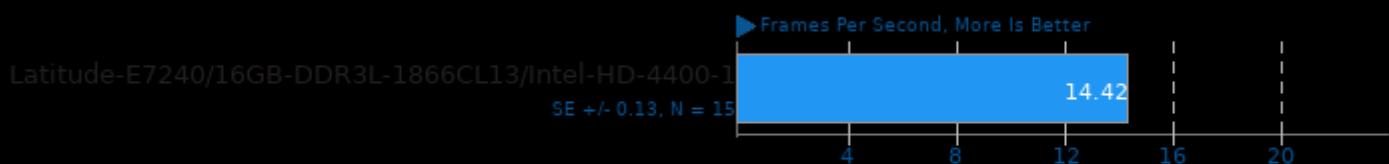
Computational Test: Jacobi Successive Over-Relaxation



1. (CC) gcc options: -lm

x264 2019-12-17

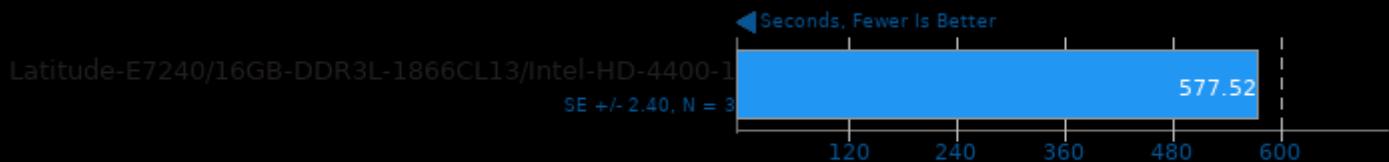
H.264 Video Encoding



1. (CC) gcc options: -ldl -lsmash -lfmsm2 -lswscale -lavutil -m64 -lm -lpthread -O3 -ffast-math -std=gnu99 -fPIC -fomit-frame-pointer -fno-tree-vectorize

C-Ray 1.1

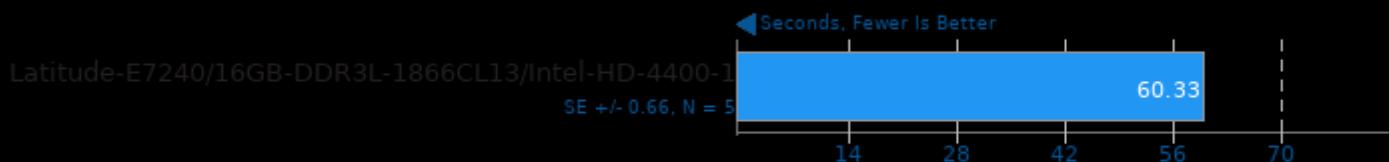
Total Time - 4K, 16 Rays Per Pixel



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

Parallel BZIP2 Compression 1.1.13

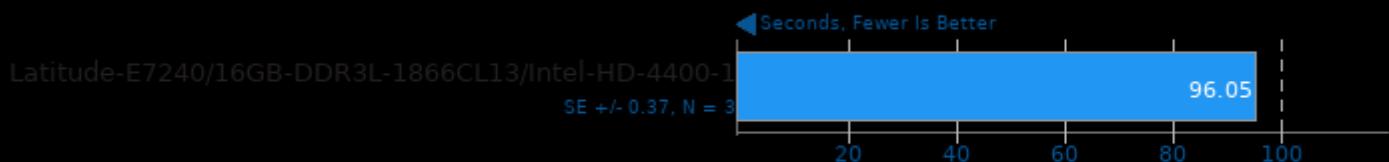
FreeBSD-13.0-RELEASE-amd64-memstick.img Compression



1. (CXX) g++ options: -O2 -pthread -lbz2 -lpthread

Rust Prime Benchmark

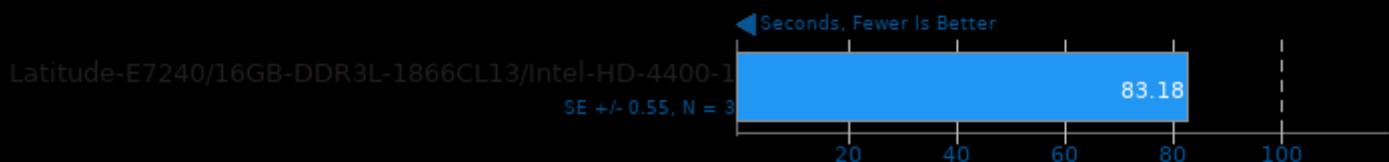
Prime Number Test To 200,000,000



1. (CC) gcc options: -m64 -lgcc_s -util -lrt -lpthread -lm -ldl -lc -pie -nodefaultlibs

Smallpt 1.0

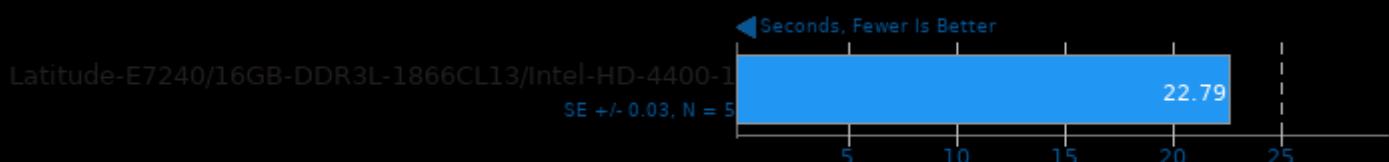
Global Illumination Renderer; 128 Samples



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

FLAC Audio Encoding 1.3.3

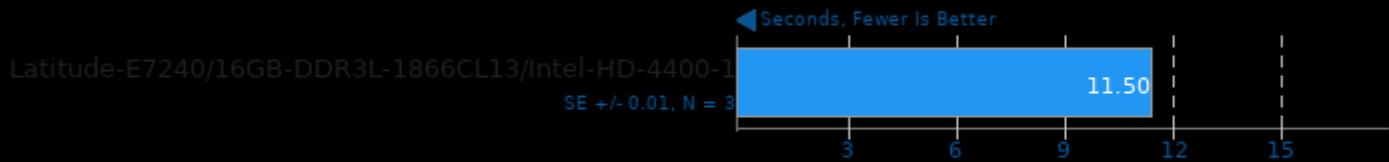
WAV To FLAC



1. (CXX) g++ options: -fvisibility=hidden -logg -lm

LAME MP3 Encoding 3.100

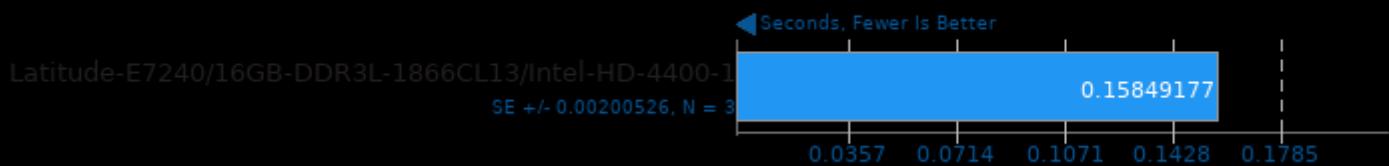
WAV To MP3



1. (CC) gcc options: -O3 -ffast-math -funroll-loops -fschedule-insns2 -fbranch-count-reg -fforce-addr -pipe -fincrusts -fim

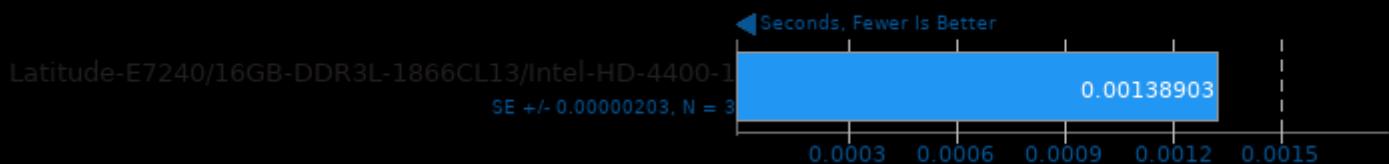
Perl Benchmarks

Test: Pod2html

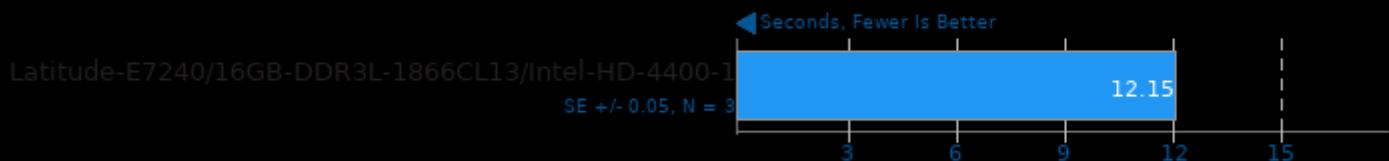


Perl Benchmarks

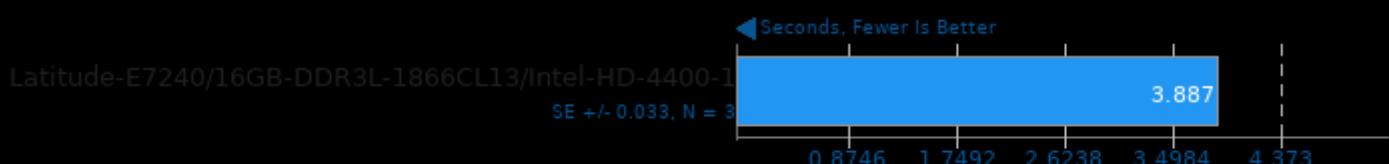
Test: Interpreter



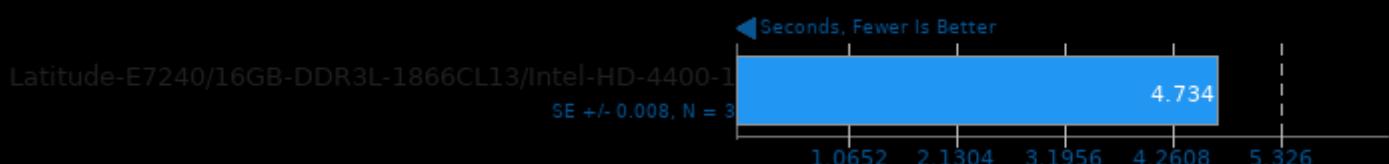
System BZIP2 Decompression



System GZIP Decompression

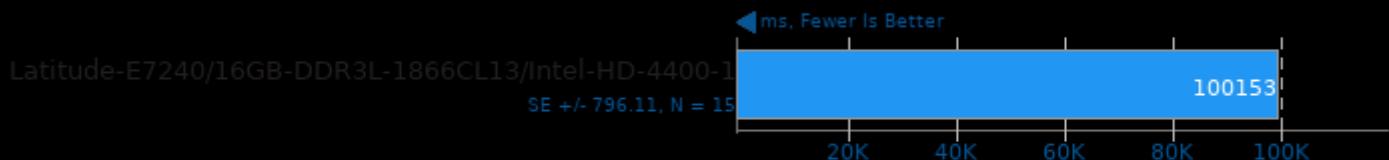


System XZ Decompression



OpenJPEG 2.4

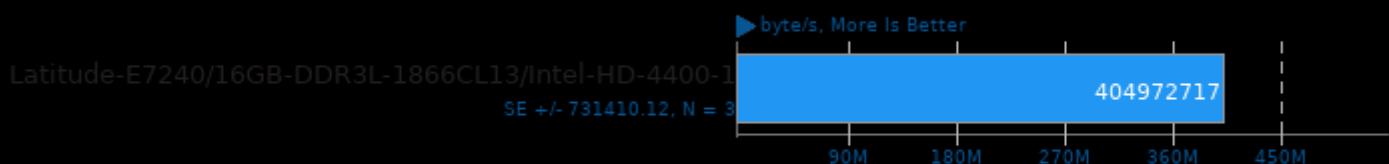
Encode: NASA Curiosity Panorama M34



1. (CXX) g++ options: -rdynamic

OpenSSL 3.0

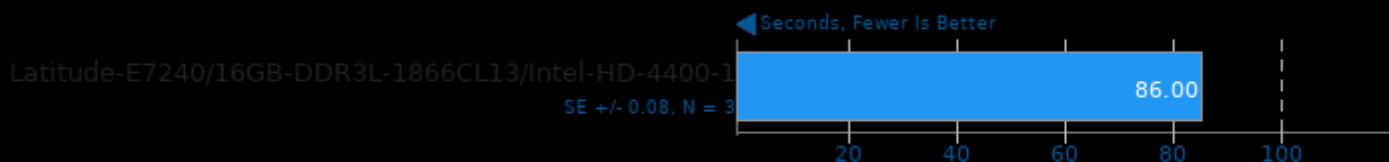
Algorithm: SHA256



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

CppPerformanceBenchmarks 9

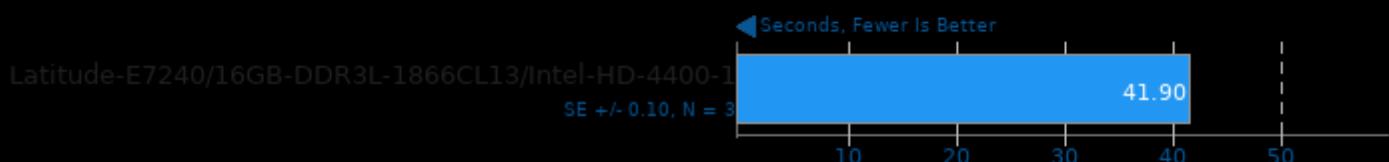
Test: Atol



1. (CXX) g++ options: -std=c++11 -O3

CppPerformanceBenchmarks 9

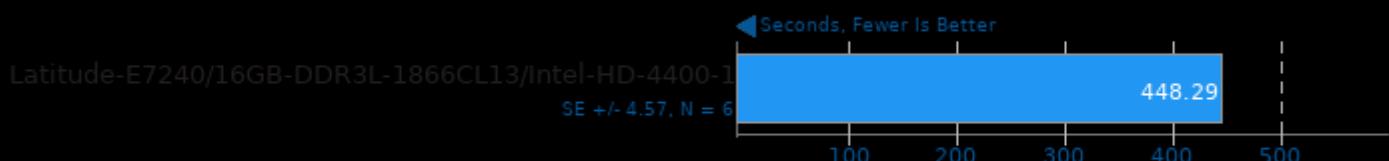
Test: CType



1. (CXX) g++ options: -std=c++11 -O3

CppPerformanceBenchmarks 9

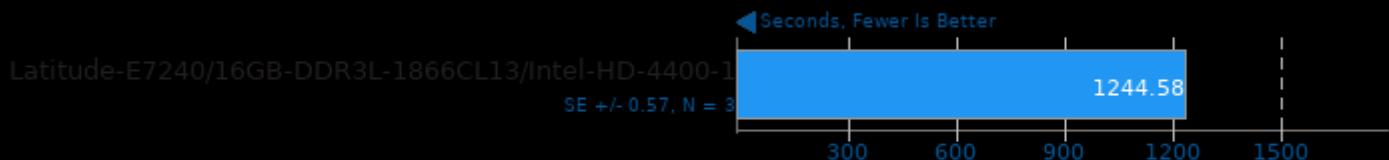
Test: Math Library



1. (CXX) g++ options: -std=c++11 -O3

CppPerformanceBenchmarks 9

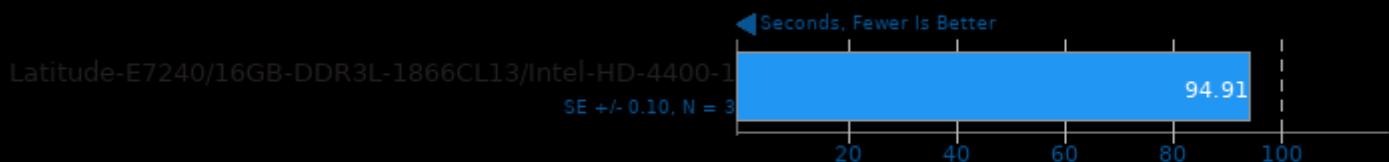
Test: Random Numbers



1. (CXX) g++ options: -std=c++11 -O3

CppPerformanceBenchmarks 9

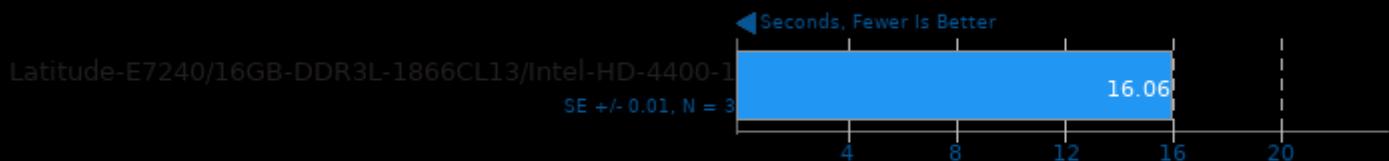
Test: Stepanov Vector



1. (CXX) g++ options: -std=c++11 -O3

CppPerformanceBenchmarks 9

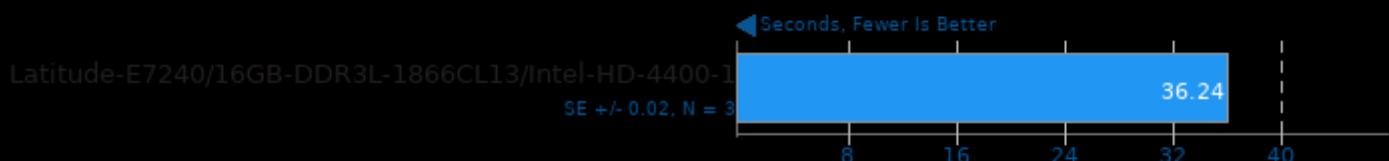
Test: Function Objects



1. (CXX) g++ options: -std=c++11 -O3

CppPerformanceBenchmarks 9

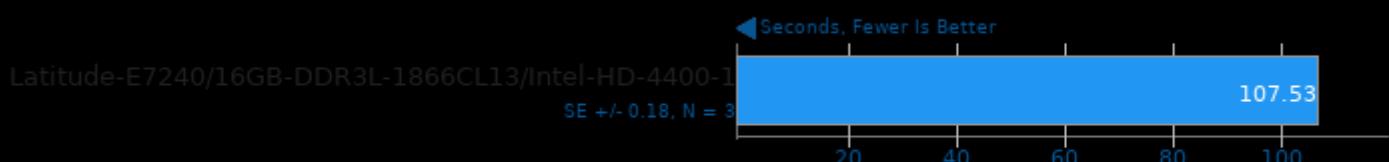
Test: Stepanov Abstraction



1. (CXX) g++ options: -std=c++11 -O3

SQLite Speedtest 3.30

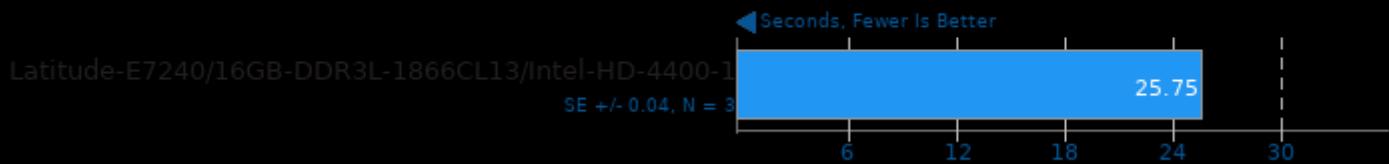
Timed Time - Size 1,000



1. (CC) gcc options: -O2 -fz

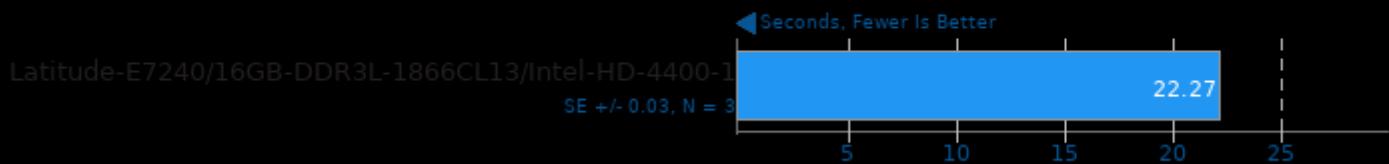
GIMP 2.10.30

Test: resize



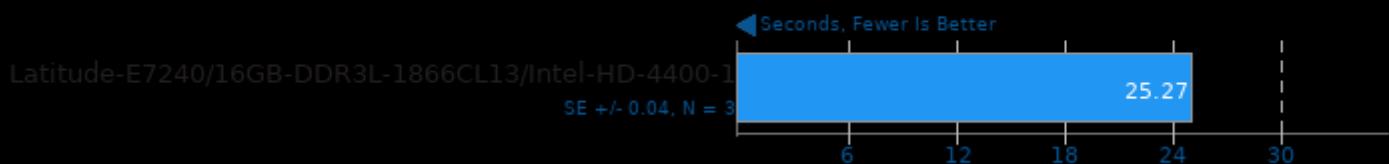
GIMP 2.10.30

Test: rotate



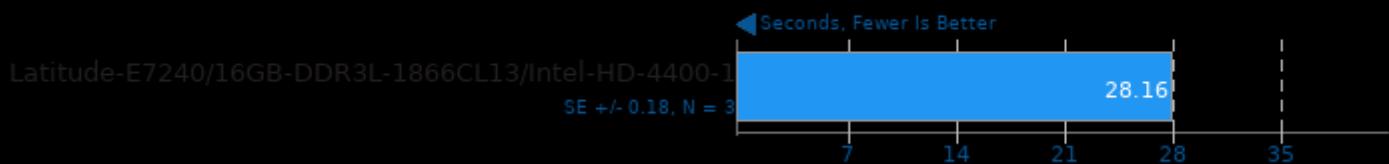
GIMP 2.10.30

Test: auto-levels



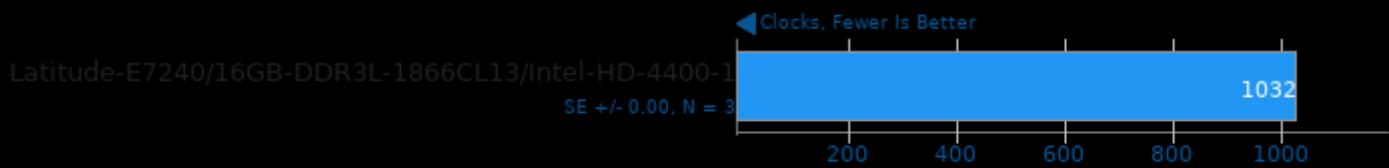
GIMP 2.10.30

Test: unsharp-mask



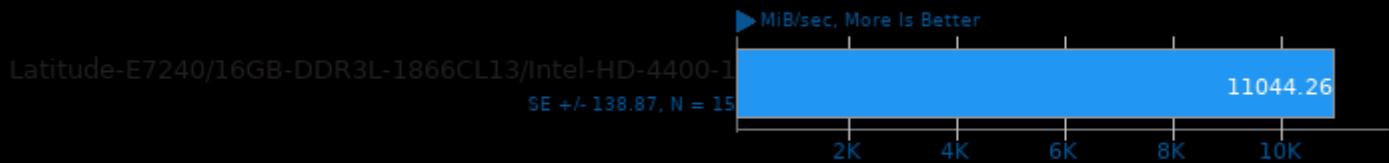
ctx_clock

Context Switch Time



Sysbench 1.0.20

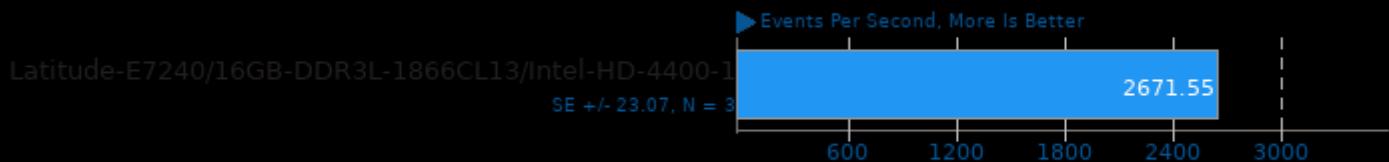
Test: RAM / Memory



1. (CC) gcc options: -O2 -funroll-loops -rdynamic -ldl -lao -lm

Sysbench 1.0.20

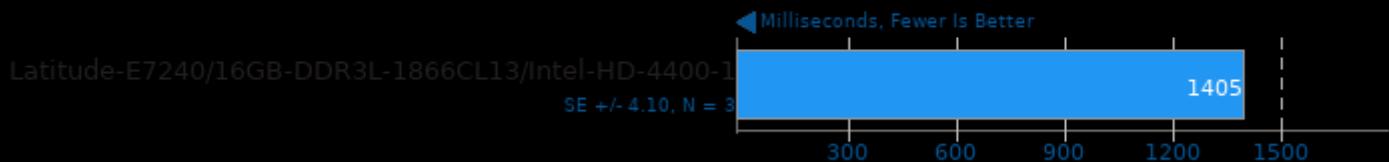
Test: CPU



1. (CC) gcc options: -O2 -funroll-loops -rdynamic -ldl -latio -lm

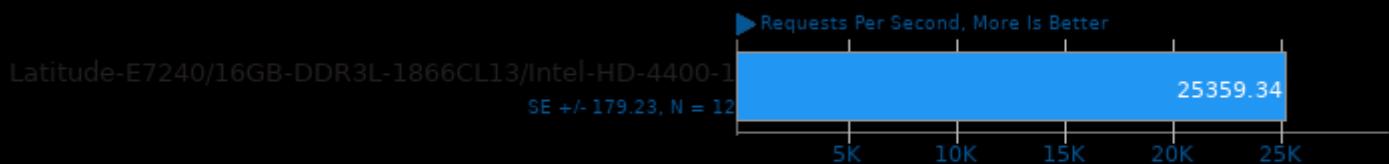
PyBench 2018-02-16

Total For Average Test Times



nginx 1.21.1

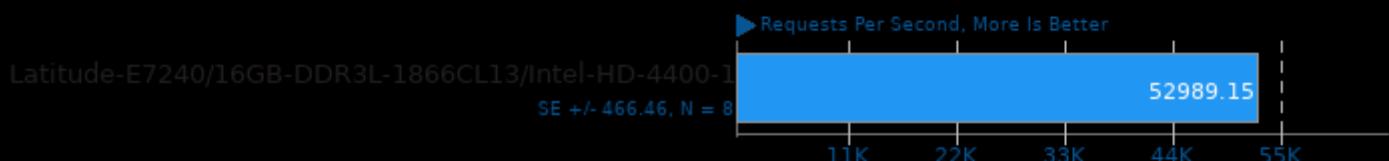
Concurrent Requests: 1



1. (CC) gcc options: -m64 -fsplit-stack

nginx 1.21.1

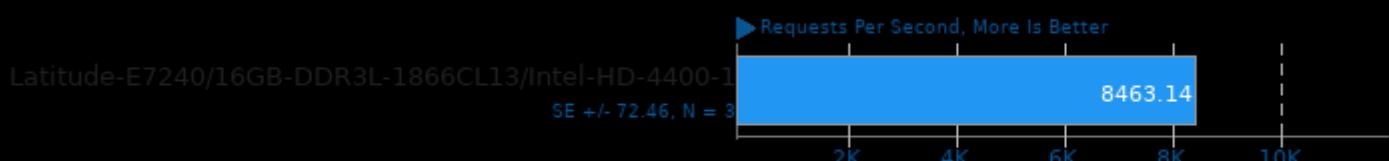
Concurrent Requests: 20



1. (CC) gcc options: -m64 -fsplit-stack

Apache HTTP Server 2.4.48

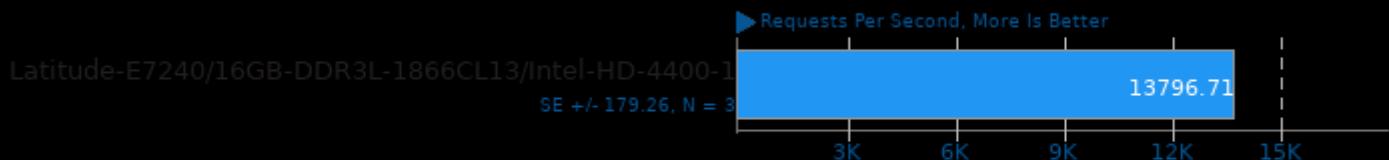
Concurrent Requests: 1



1. (CC) gcc options: -m64 -fsplit-stack

Apache HTTP Server 2.4.48

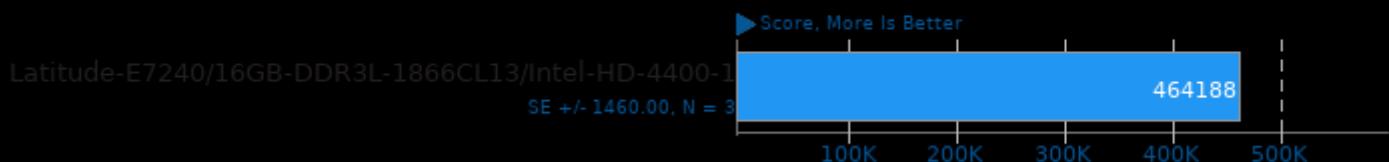
Concurrent Requests: 20



1. (CC) gcc options: -m64 -fsplit-stack

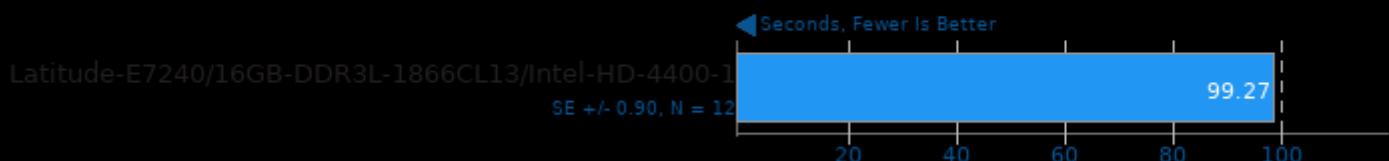
PHPBench 0.8.1

PHP Benchmark Suite

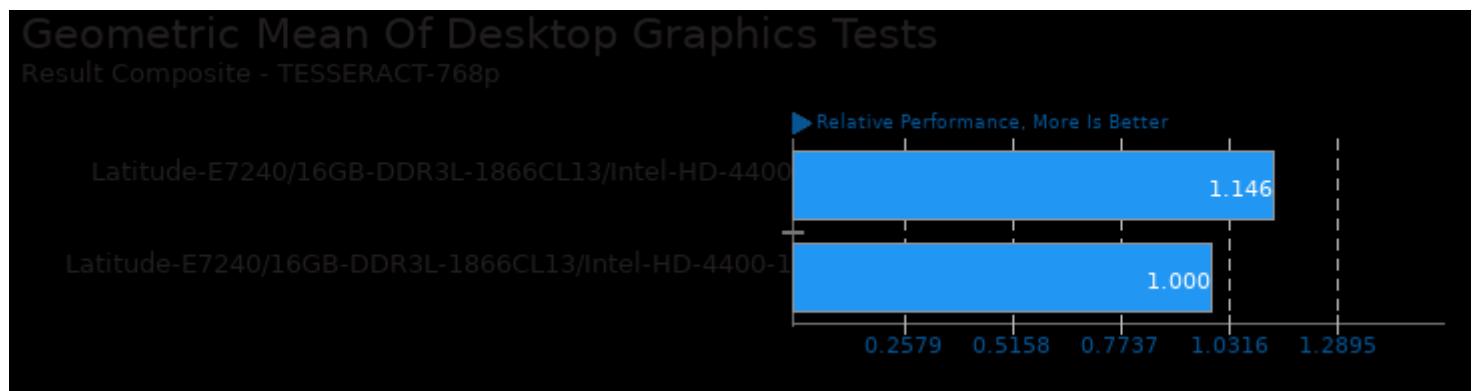


RAR Compression 6.0.2

Linux Source Tree Archiving To RAR



These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/tesseract and pts/glmark2

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 09:03.