



www.phoronix-test-suite.com

Ryzen 5 5500U Linux Ubuntu

AMD Ryzen 5 5500U testing with a LENOVO LNVNB161216 (GLCN22WW BIOS) and AMD Lucienne 2GB on Ubuntu 21.04 via the Phoronix Test Suite.

Test Systems:

Ryzen 5 5500U

Processor: AMD Ryzen 5 5500U @ 2.10GHz (6 Cores / 12 Threads), Motherboard: LENOVO LNVNB161216 (GLCN22WW BIOS), Chipset: AMD Renoir Root Complex, Memory: 6GB, Disk: 256GB SAMSUNG MZALQ256HBJD-00BL2, Graphics: AMD Lucienne 2GB (1800/400MHz), Audio: AMD Device 1637, Network: Qualcomm Atheros QCA6174 802.11ac

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11 + Wayland, OpenGL: 4.6 Mesa 21.0.1 (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: GCC 10.3.0, File-System: ext4, Screen Resolution: 1920x1080

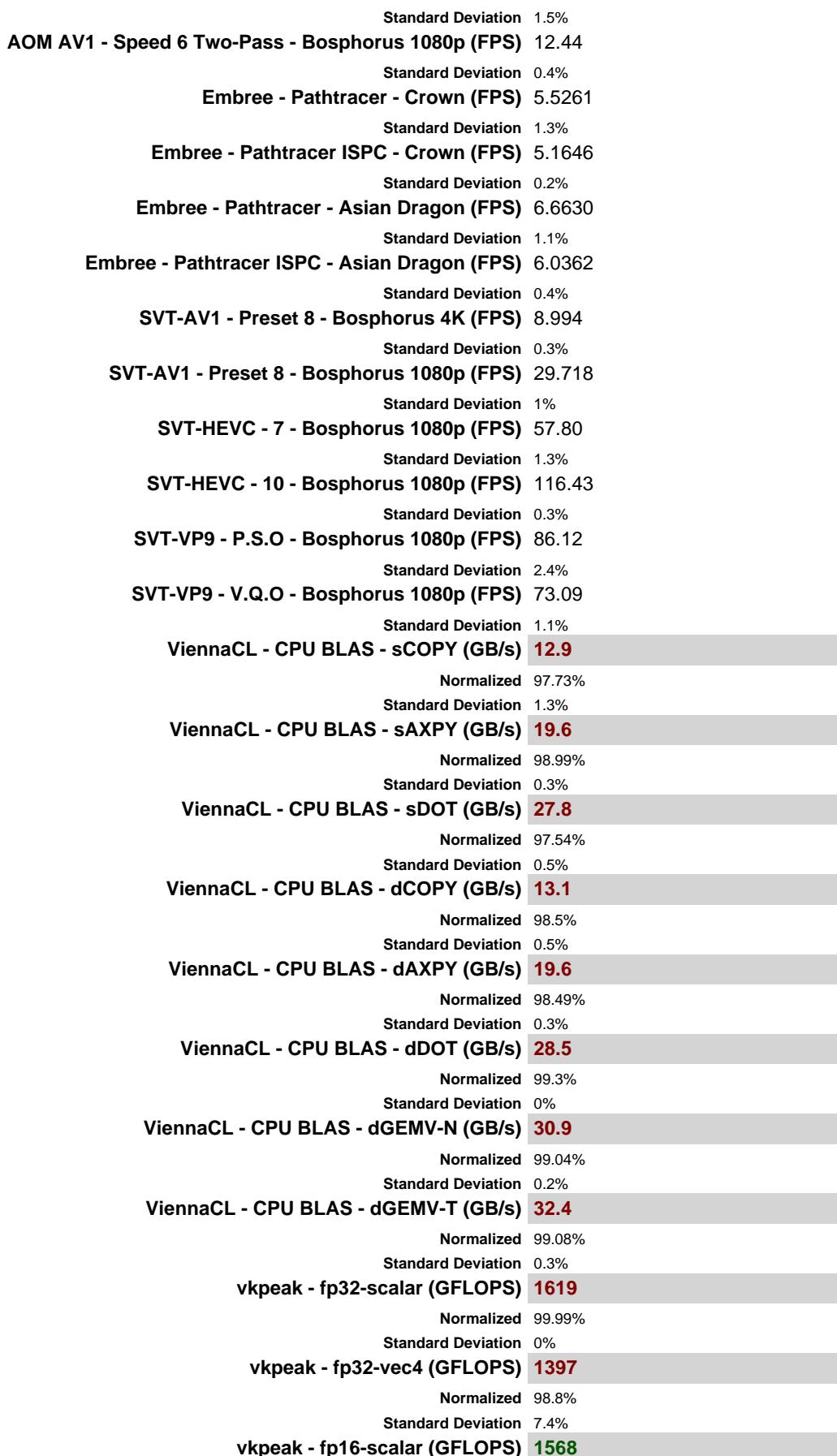
Kernel Notes: Transparent Huge Pages: madvise

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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++,m2      --enable-libphobos-checking=release      --enable-libstdcxx-debug
--enable-libstdcxx-time=yes      --enable-link-mutex      --enable-multiarch      --enable-multilib      --enable-nls      --enable-objc-gc=auto
--enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr,
hsa      --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-build-config=bootstrap-lto-lean      --with-default-libstdcxx-abi=new      --with-gcc-major-version-only      --with-multilib-list=m32,m64,mx32
--with-target-system-zlib=auto      --with-tune=generic      --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq schedutil (Boost: Enabled) - CPU Microcode: 0x8608102
Graphics Notes: GLAMOR
Python Notes: Python 3.9.4
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and
seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional IBRS_FW
STIBP: conditional RSB filling + srbs: Not affected + tsx_async_abort: Not affected
```

Ryzen 5 5500U

srsRAN - PHY_DL_Test (eNb Mb/s)	196.3
Standard Deviation	0.4%
dav1d - Chimera 1080p (FPS)	311.30
Standard Deviation	0.4%
dav1d - Summer Nature 4K (FPS)	90.15
Standard Deviation	0.1%
dav1d - C.1.1.b (FPS)	212.13
Standard Deviation	0.4%
OSPray - San Miguel - SciVis (FPS)	7.79
Standard Deviation	0.4%
OSPray - NASA Streamlines - SciVis (FPS)	9.93
Standard Deviation	2.3%
OSPray - NASA Streamlines - Path Tracer (FPS)	1.92
Standard Deviation	0.2%
ParaView - Wavelet Volume - 1920 x 1080 (Frames / Sec)	71.06
Standard Deviation	0.9%
ParaView - Wavelet Contour - 1920 x 1080 (Frames / Sec)	63.53
Standard Deviation	0.3%
Tesseract - 1920 x 1080 (FPS)	133.4074
Standard Deviation	1.9%
Warsow - 1920 x 1080 (FPS)	144.6
Standard Deviation	0%
Xonotic - 1920 x 1080 - Low (FPS)	266.2957851
Standard Deviation	0.6%
Xonotic - 1920 x 1080 - High (FPS)	195.1862361
Standard Deviation	0.2%
Xonotic - 1920 x 1080 - Ultra (FPS)	169.5765001
Standard Deviation	0.5%
Xonotic - 1920 x 1080 - Ultimate (FPS)	137.4418798
Standard Deviation	0.6%
AOM AV1 - Speed 0 Two-Pass - Bosphorus 4K (FPS)	0.08
Standard Deviation	0%
AOM AV1 - Speed 6 Realtime - Bosphorus 4K (FPS)	8.48
Standard Deviation	0.6%
AOM AV1 - Speed 6 Two-Pass - Bosphorus 4K (FPS)	3.95
Standard Deviation	0.3%
AOM AV1 - Speed 4 Two-Pass - Bosphorus 1080p (FPS)	4.81
Standard Deviation	0.2%
AOM AV1 - Speed 6 Realtime - Bosphorus 1080p (FPS)	15.58



vkpeak - fp16-vec4 (GFLOPS)	1528	Normalized 99.93%
		Standard Deviation 0%
vkpeak - fp64-scalar (GFLOPS)	67.12	Normalized 100%
		Standard Deviation 0.1%
vkpeak - fp64-vec4 (GFLOPS)	66.94	Normalized 99.72%
		Standard Deviation 0.3%
ViennaCL - CPU BLAS - dGEMM-NN (GFLOPs/s)	23.6	Normalized 99.79%
		Standard Deviation 0.2%
ViennaCL - CPU BLAS - dGEMM-NT (GFLOPs/s)	22.5	Normalized 97.93%
		Standard Deviation 4.3%
ViennaCL - CPU BLAS - dGEMM-TN (GFLOPs/s)	24.6	Normalized 95.74%
		Standard Deviation 5.1%
ViennaCL - CPU BLAS - dGEMM-TT (GFLOPs/s)	23.9	Normalized 97.62%
		Standard Deviation 1.6%
vkpeak - int32-scalar (GIOPS)	323.74	Normalized 97.55%
		Standard Deviation 0.5%
vkpeak - int32-vec4 (GIOPS)	323.48	Normalized 99.99%
		Standard Deviation 0%
vkpeak - int16-scalar (GIOPS)	808.16	Normalized 99.99%
		Standard Deviation 0%
vkpeak - int16-vec4 (GIOPS)	806.49	Normalized 99.91%
		Standard Deviation 0.2%
Xmrig - Monero - 1M (H/s)	1329	Normalized 99.83%
		Standard Deviation 0.2%
Xmrig - Wownero - 1M (H/s)	2178	Normalized 99.99%
		Standard Deviation 0%
Chia Blockchain VDF - Square Plain C++ (IPS)	155933	Normalized 99.91%
		Standard Deviation 0.1%
Chia Blockchain VDF - S.A.O (IPS)	152900	Normalized 99.99%
		Standard Deviation 0.4%
OpenVKL - vklBenchmark (Items / Sec)	67	Normalized 99.83%
		Standard Deviation 0.6%
Coremark - CoreMark Size 666 - I.P.S (Iterations/Sec)	232571	Normalized 99.99%
		Standard Deviation 2.4%
SecureMark - SecureMark-TLS (marks)	210965	Normalized 99.99%
		Standard Deviation 1.3%
LZ4 Compression - 3 - Compression Speed (MB/s)	55.23	Normalized 99.99%
		Standard Deviation 0.5%
LZ4 Compression - 3 - D.S (MB/s)	6715	Normalized 99.99%
		Standard Deviation 0.7%
LZ4 Compression - 9 - Compression Speed (MB/s)	54.41	Normalized 99.99%
		Standard Deviation 2.1%

LZ4 Compression - 9 - D.S (MB/s)	6770
Standard Deviation	0.6%
Zstd Compression - 19 - Compression Speed (MB/s)	18
Standard Deviation	0.3%
Zstd Compression - 19 - D.S (MB/s)	2441
Standard Deviation	0.4%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	15.6
Standard Deviation	0.2%
Zstd Compression - 19, Long Mode - D.S (MB/s)	2570
Standard Deviation	0.2%
libjpeg-turbo tjbench - D.T (Megapixels/sec)	204.755176
Standard Deviation	0.2%
QuantLib (MFLOPS)	2321
Standard Deviation	2.4%
LuaRadio - F.B.t.B.F.F (MiB/s)	392.7
Standard Deviation	1.1%
LuaRadio - F.D.F (MiB/s)	343.2
Standard Deviation	0.4%
LuaRadio - Hilbert Transform (MiB/s)	97.2
Standard Deviation	0%
LuaRadio - Complex Phase (MiB/s)	552.0
Standard Deviation	1%
ParaView - Wavelet Contour - 1920 x 1080 (MiPolys / Sec)	662.028
Standard Deviation	0.3%
ParaView - Wavelet Volume - 1920 x 1080 (MiVoxels / Sec)	1137
Standard Deviation	0.9%
EtcPak - DXT1 (Mpx/s)	1273
Standard Deviation	0.1%
EtcPak - ETC1 (Mpx/s)	291.801
Standard Deviation	0.2%
EtcPak - ETC2 (Mpx/s)	170.684
Standard Deviation	0.1%
Crafty - Elapsed Time (Nodes/s)	7794588
Standard Deviation	0.7%
Stockfish - Total Time (Nodes/s)	13635389
Standard Deviation	2.5%
asmFish - 1.H.M.2.D (Nodes/s)	15125590
Standard Deviation	0.6%
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein	4.255
Standard Deviation	1.1%
PJSIP - INVITE (Responses/sec)	3181
Standard Deviation	0.2%
PJSIP - OPTIONS, Stateful (Responses/sec)	4888
Standard Deviation	0.8%
PJSIP - OPTIONS, Stateless (Responses/sec)	57323
Standard Deviation	2.2%
srsRAN - OFDM_Test (Samples / Second)	120633333
Standard Deviation	1%
Numpy Benchmark (Score)	290.57
Standard Deviation	0.2%
srsRAN - PHY_DL_Test (UE Mb/s)	84.9
Standard Deviation	0.5%
WebP Image Encode - Q.1.L (Encode Time - sec)	21.356
Standard Deviation	2.3%

WebP Image Encode - Q.1.H.C (Encode Time - sec)	7.776
Standard Deviation	1%
TensorFlow Lite - SqueezeNet (us)	324756
Standard Deviation	1.9%
TensorFlow Lite - Inception V4 (us)	4891517
Standard Deviation	0.3%
TensorFlow Lite - NASNet Mobile (us)	274104
Standard Deviation	0.9%
TensorFlow Lite - Mobilenet Float (us)	222677
Standard Deviation	0.9%
TensorFlow Lite - Mobilenet Quant (us)	226864
Standard Deviation	0.9%
TensorFlow Lite - I.R.V (us)	4405400
Standard Deviation	0.3%
RealSR-NCNN - 4x - No (sec)	77.542
Standard Deviation	0.2%
Waifu2x-NCNN Vulkan - 2x - 3 - No (sec)	4.028
Standard Deviation	0.6%
Waifu2x-NCNN Vulkan - 2x - 3 - Yes (sec)	26.868
Standard Deviation	0.3%
WireGuard + Linux Networking Stack Stress Test (sec)	224.775
Standard Deviation	1%
Timed MrBayes Analysis - P.P.A (sec)	140.714
Standard Deviation	0.6%
libavif avifenc - 6 (sec)	17.883
Standard Deviation	0.8%
libavif avifenc - 10 (sec)	4.508
Standard Deviation	0.9%
libavif avifenc - 6, Lossless (sec)	102.971
Standard Deviation	0.4%
libavif avifenc - 10, Lossless (sec)	7.577
Standard Deviation	0.4%
Timed FFmpeg Compilation - Time To Compile (sec)	92.111
Standard Deviation	0.6%
Timed Godot Game Engine Compilation - Time To Compile (sec)	238.604
Standard Deviation	0.1%
Timed Linux Kernel Compilation - Time To Compile (sec)	153.030
Standard Deviation	0.5%
Timed Mesa Compilation - Time To Compile (sec)	95.598
Standard Deviation	0.3%
Timed PHP Compilation - Time To Compile (sec)	90.808
Standard Deviation	0.2%
Build2 - Time To Compile (sec)	246.439
Standard Deviation	0.3%
YafaRay - T.T.F.S.S (sec)	255.736
Standard Deviation	0.5%
Timed Erlang/OTP Compilation - Time To Compile (sec)	155.001
Standard Deviation	0.1%
Timed Wasmer Compilation - Time To Compile (sec)	118.008
Standard Deviation	0.4%
FLAC Audio Encoding - WAV To FLAC (sec)	8.417
Standard Deviation	0.9%
LAME MP3 Encoding - WAV To MP3 (sec)	7.826

	Standard Deviation	0.5%
Opus Codec Encoding - WAV To Opus Encode (sec)	7.670	
	Standard Deviation	0.5%
Ngspice - C2670 (sec)	182.818	
	Standard Deviation	0.6%
Ngspice - C7552 (sec)	308.731	
	Standard Deviation	0.7%
WebP2 Image Encode - Q.1.C.E.5 (sec)	21.917	
	Standard Deviation	2.5%
ASTC Encoder - Medium (sec)	7.1135	
	Standard Deviation	0.4%
ASTC Encoder - Thorough (sec)	26.5118	
	Standard Deviation	2.4%
ASTC Encoder - Exhaustive (sec)	225.6701	
	Standard Deviation	0.1%
Darktable - Boat - CPU-only (sec)	11.533	
	Standard Deviation	1.3%
Darktable - Masskrug - CPU-only (sec)	12.736	
	Standard Deviation	0.5%
Darktable - Server Room - CPU-only (sec)	11.261	
	Standard Deviation	0.9%
GIMP - resize (sec)	9.519	
	Standard Deviation	1.8%
GIMP - rotate (sec)	12.629	
	Standard Deviation	0.7%
GIMP - auto-levels (sec)	13.177	
	Standard Deviation	0.9%
GIMP - unsharp-mask (sec)	16.194	
	Standard Deviation	0.8%
Hugin - P.P.A.S.T (sec)	58.844	
	Standard Deviation	0.3%
OCRMyPDF - P.6.P.P.D (sec)	28.886	
	Standard Deviation	1.1%
GNU Octave Benchmark (sec)	10.306	
	Standard Deviation	0.9%
OpenSCAD - Pistol (sec)	118.406	
	Standard Deviation	0.8%
OpenSCAD - Retro Car (sec)	5.497	
	Standard Deviation	1.3%
OpenSCAD - Mini-ITX Case (sec)	53.689	
	Standard Deviation	0.5%
OpenSCAD - P.M.S (sec)	10.303	
	Standard Deviation	0.5%

srsRAN 21.04

Test: PHY_DL_Test



1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

dav1d 0.9.0

Video Input: Chimera 1080p



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

dav1d 0.9.0

Video Input: Summer Nature 4K



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

dav1d 0.9.0

Video Input: Chimera 1080p 10-bit



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

OSPray 1.8.5

Demo: San Miguel - Renderer: SciVis



OSPray 1.8.5

Demo: NASA Streamlines - Renderer: SciVis



OSPray 1.8.5

Demo: NASA Streamlines - Renderer: Path Tracer



ParaView 5.9

Test: Wavelet Volume - Resolution: 1920 x 1080



ParaView 5.9

Test: Wavelet Contour - Resolution: 1920 x 1080



Tesseract 2014-05-12

Resolution: 1920 x 1080



Warsow 2.5 Beta

Resolution: 1920 x 1080



Xonotic 0.8.2

Resolution: 1920 x 1080 - Effects Quality: Low



Xonotic 0.8.2

Resolution: 1920 x 1080 - Effects Quality: High



Xonotic 0.8.2

Resolution: 1920 x 1080 - Effects Quality: Ultra



Xonotic 0.8.2

Resolution: 1920 x 1080 - Effects Quality: Ultimate



AOM AV1 3.1

Encoder Mode: Speed 0 Two-Pass - Input: Bosphorus 4K



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -fno-plt -fthread

AOM AV1 3.1

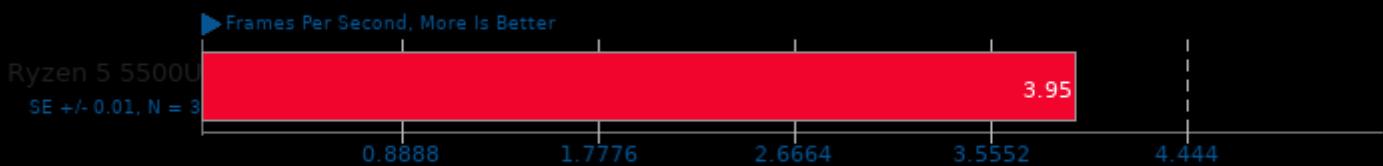
Encoder Mode: Speed 6 Realtime - Input: Bosphorus 4K



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

AOM AV1 3.1

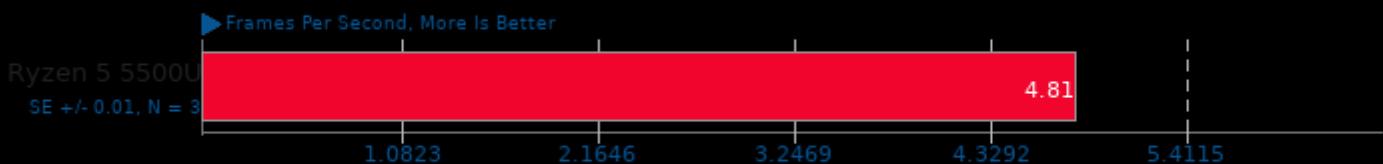
Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 4K



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

AOM AV1 3.1

Encoder Mode: Speed 4 Two-Pass - Input: Bosphorus 1080p



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

AOM AV1 3.1

Encoder Mode: Speed 6 Realtime - Input: Bosphorus 1080p



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

AOM AV1 3.1

Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 1080p



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

Embree 3.13

Binary: Pathtracer - Model: Crown



Embree 3.13

Binary: Pathtracer ISPC - Model: Crown



Embree 3.13

Binary: Pathtracer - Model: Asian Dragon



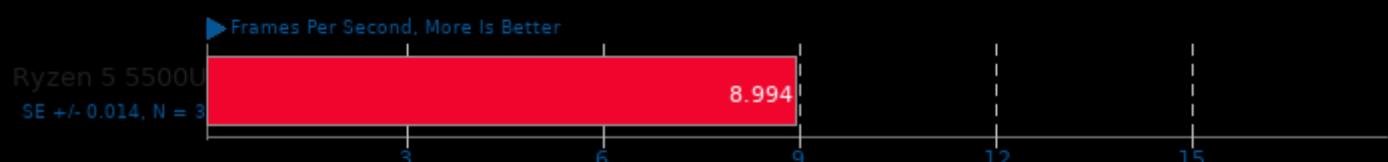
Embree 3.13

Binary: Pathtracer ISPC - Model: Asian Dragon



SVT-AV1 0.8.7

Encoder Mode: Preset 8 - Input: Bosphorus 4K



1. (CXX) g++ options: -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq -pie

SVT-AV1 0.8.7

Encoder Mode: Preset 8 - Input: Bosphorus 1080p



1. (CXX) g++ options: -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq -pie

SVT-HEVC 1.5.0

Tuning: 7 - Input: Bosphorus 1080p



1. (CC) gcc options: -fPIE -fPIC -O3 -O2 -pie -rdynamic -lpthread -lrt

SVT-HEVC 1.5.0

Tuning: 10 - Input: Bosphorus 1080p



1. (CC) gcc options: -fPIE -fPIC -O3 -O2 -pie -rdynamic -lpthread -lrt

SVT-VP9 0.3

Tuning: PSNR/SSIM Optimized - Input: Bosphorus 1080p



1. (CC) gcc options: -O3 -fcommon -fPIE -fPIC -fvisibility=hidden -pie -rdynamic -lpthread -lrt -lm

SVT-VP9 0.3

Tuning: Visual Quality Optimized - Input: Bosphorus 1080p



1. (CC) gcc options: -O3 -fcommon -fPIE -fPIC -fvisibility=hidden -pie -rdynamic -lpthread -lrt -lm

ViennaCL 1.7.1

Test: CPU BLAS - sCOPY



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

ViennaCL 1.7.1

Test: CPU BLAS - sAXPY



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

ViennaCL 1.7.1

Test: CPU BLAS - sDOT



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

ViennaCL 1.7.1

Test: CPU BLAS - dCOPY



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

ViennaCL 1.7.1

Test: CPU BLAS - dAXPY



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

ViennaCL 1.7.1

Test: CPU BLAS - dDOT



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

ViennaCL 1.7.1

Test: CPU BLAS - dGEMV-N



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

ViennaCL 1.7.1

Test: CPU BLAS - dGEMV-T



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

vkpeak 20210424

fp32-scalar



vkpeak 20210424

fp32-vec4



vkpeak 20210424

fp16-scalar



vkpeak 20210424

fp16-vec4



vkpeak 20210424

fp64-scalar



vkpeak 20210424

fp64-vec4



ViennaCL 1.7.1

Test: CPU BLAS - dGEMM-NN



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

ViennaCL 1.7.1

Test: CPU BLAS - dGEMM-NT



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

ViennaCL 1.7.1

Test: CPU BLAS - dGEMM-TN



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

ViennaCL 1.7.1

Test: CPU BLAS - dGEMM-TT



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

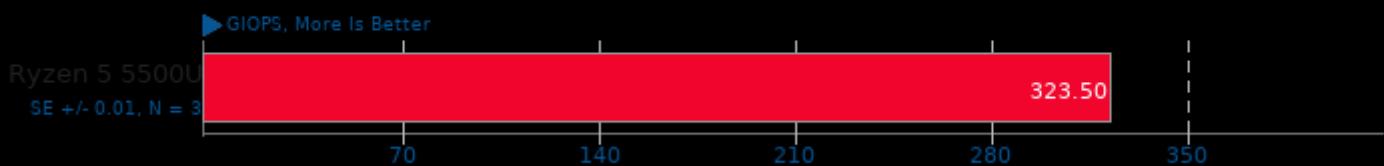
vkpeak 20210424

int32-scalar



vkpeak 20210424

int32-vec4



vkpeak 20210424

int16-scalar



vkpeak 20210424

int16-vec4



Xmrig 6.12.1

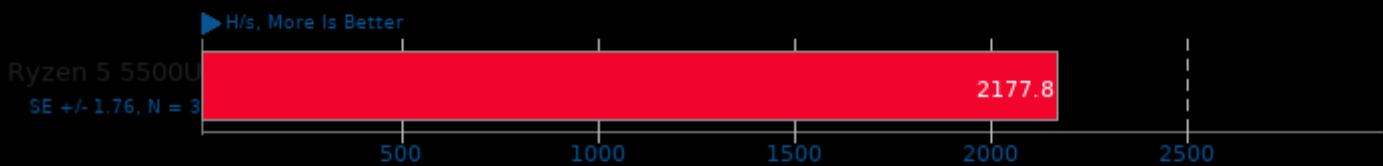
Variant: Monero - Hash Count: 1M



1. (CXX) g++ options: -fexceptions -fno-rtti -maes -O3 -Ofast -static-libgcc -static-libstdc++ -rdynamic -lssl -lcrypto -luv -lpthread -lrt -ldl -lhwloc

Xmrig 6.12.1

Variant: Wownero - Hash Count: 1M



1. (CXX) g++ options: -fexceptions -fno-rtti -maes -O3 -Ofast -static-libgcc -static-libstdc++ -rdynamic -lssl -lcrypto -luv -lpthread -lrt -ldl -lhwloc

Chia Blockchain VDF 1.0.1

Test: Square Plain C++



1. (CXX) g++ options: -fno-pie -lgmpxx -lgmp -lboost_system -pthread

Chia Blockchain VDF 1.0.1

Test: Square Assembly Optimized



1. (CXX) g++ options: -fno-pie -lgmpxx -lgmp -lboost_system -pthread

OpenVKL 0.9

Benchmark: vklBenchmark



Coremark 1.0

CoreMark Size 666 - Iterations Per Second



1. (CC) gcc options: -O2 -fomit-frame-pointer

SecureMark 1.0.4

Benchmark: SecureMark-TLS



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

LZ4 Compression 1.9.3

Compression Level: 3 - Compression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

Compression Level: 3 - Decompression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

Compression Level: 9 - Compression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

Compression Level: 9 - Decompression Speed



1. (CC) gcc options: -O3

Zstd Compression 1.5.0

Compression Level: 19 - Compression Speed



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

Zstd Compression 1.5.0

Compression Level: 19 - Decompression Speed



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

Zstd Compression 1.5.0

Compression Level: 19, Long Mode - Compression Speed



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

Zstd Compression 1.5.0

Compression Level: 19, Long Mode - Decompression Speed



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

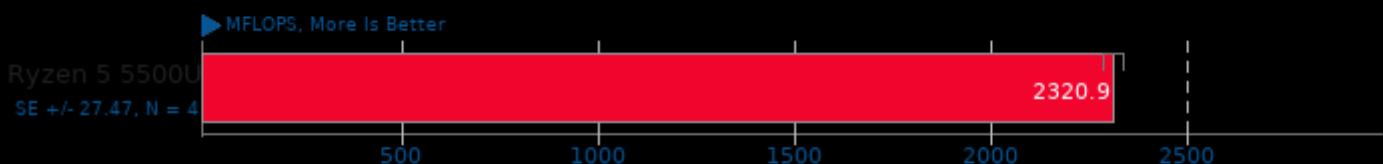
libjpeg-turbo tjbench 2.1.0

Test: Decompression Throughput



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

QuantLib 1.21



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

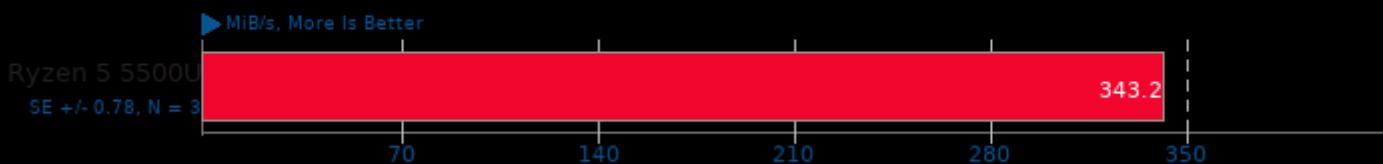
LuaRadio 0.9.1

Test: Five Back to Back FIR Filters



LuaRadio 0.9.1

Test: FM Deemphasis Filter



LuaRadio 0.9.1

Test: Hilbert Transform



LuaRadio 0.9.1

Test: Complex Phase



ParaView 5.9

Test: Wavelet Contour - Resolution: 1920 x 1080



ParaView 5.9

Test: Wavelet Volume - Resolution: 1920 x 1080



EtcPak 0.7

Configuration: DXT1



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

EtcPak 0.7

Configuration: ETC1



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

EtcPak 0.7

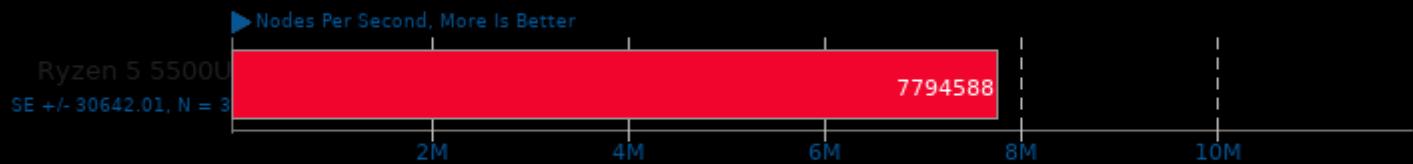
Configuration: ETC2



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

Crafty 25.2

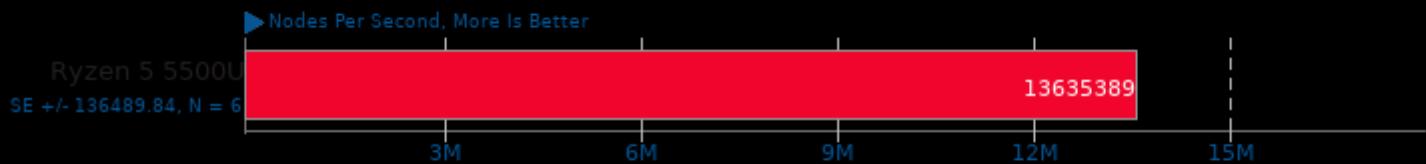
Elapsed Time



1. (CC) gcc options: -pthread -lstdc++ -fprofile-use -lm

Stockfish 13

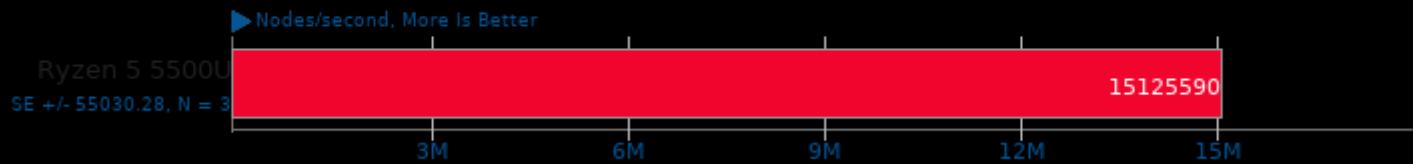
Total Time



1. (CXX) g++ options: -lgcov -m64 -lpthread -fno-exceptions -std=c++17 -fprofile-use -fno-peel-loops -fno-tracer -pedantic -O3 -msse -msse3 -mpopcnt -

asmFish 2018-07-23

1024 Hash Memory, 26 Depth



LAMMPS Molecular Dynamics Simulator 29Oct2020

Model: Rhodopsin Protein



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

PJSIP 2.11

Method: INVITE



1. (CC) gcc options: -fSDL2 -lavformat -lavcodec -lswscale -lavutil -stdc++ -lssl -lcrypto -luuid -lm -lrt -pthread -lasound -O2

PJSIP 2.11

Method: OPTIONS, Stateful



1. (CC) gcc options: -fSDL2 -lavformat -lavcodec -lswscale -lavutil -stdc++ -lssl -lcrypto -luuid -lm -lrt -pthread -lasound -O2

PJSIP 2.11

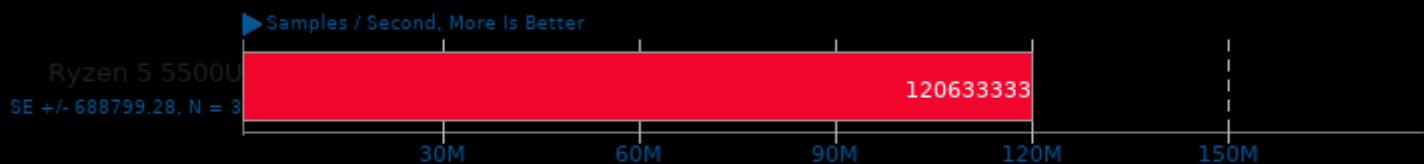
Method: OPTIONS, Stateless



1. (CC) gcc options: -fSDL2 -lavformat -lavcodec -lswscale -lavutil -stdc++ -lssl -lcrypto -luuid -lm -lrt -pthread -lasound -O2

SrsRAN 21.04

Test: OFDM_Test



1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

Numpy Benchmark



SrsRAN 21.04

Test: PHY_DL_Test



1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

WebP Image Encode 1.1

Encode Settings: Quality 100, Lossless



1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff

WebP Image Encode 1.1

Encode Settings: Quality 100, Highest Compression



1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff

TensorFlow Lite 2020-08-23

Model: SqueezeNet



TensorFlow Lite 2020-08-23

Model: Inception V4



TensorFlow Lite 2020-08-23

Model: NASNet Mobile



TensorFlow Lite 2020-08-23

Model: Mobilenet Float



TensorFlow Lite 2020-08-23

Model: Mobilenet Quant



TensorFlow Lite 2020-08-23

Model: Inception ResNet V2



Realsr-NCNN 20200818

Scale: 4x - TAA: No

**Waifu2x-NCNN Vulkan 20200818**

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

**Waifu2x-NCNN Vulkan 20200818**

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

**WireGuard + Linux Networking Stack Stress Test****Timed MrBayes Analysis 3.2.7**

Primate Phylogeny Analysis



1. (CC) gcc options: -mmmx -msse -msse2 -msse3 -msse3 -msse4.1 -msse4.2 -msse4a -msha -maes -mavx -mfma -mavx2 -mrdrnd -mbmi -mbmi2 -madx

libavif avifenc 0.9.0

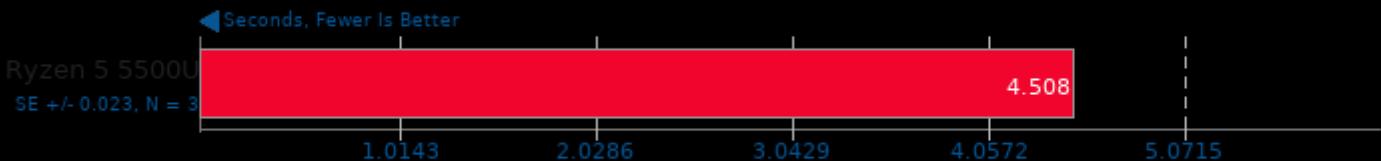
Encoder Speed: 6



1. (CXX) g++ options: -O3 -fPIC -lm

libavif avifenc 0.9.0

Encoder Speed: 10



1. (CXX) g++ options: -O3 -fPIC -lm

libavif avifenc 0.9.0

Encoder Speed: 6, Lossless



1. (CXX) g++ options: -O3 -fPIC -lm

libavif avifenc 0.9.0

Encoder Speed: 10, Lossless



1. (CXX) g++ options: -O3 -fPIC -lm

Timed FFmpeg Compilation 4.2.2

Time To Compile



Timed Godot Game Engine Compilation 3.2.3

Time To Compile



Timed Linux Kernel Compilation 5.10.20

Time To Compile



Timed Mesa Compilation 21.0

Time To Compile



Timed PHP Compilation 7.4.2

Time To Compile



Build2 0.13

Time To Compile



YafaRay 3.4.1

Total Time For Sample Scene



1. (CXX) g++ options: -std=c++11 -O3 -ffast-math -rdynamic -ldl -lmath -lxml -lex -lHalf -lz -lilmThread -lxml2 -lfreetype -lpthread

Timed Erlang/OTP Compilation 23.2

Time To Compile



Timed Wasmer Compilation 1.0.2

Time To Compile



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

FLAC Audio Encoding 1.3.2

WAV To FLAC



1. (CXX) g++ options: -O2 -fvisibility=hidden -log -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 -Incurse -lm

Opus Codec Encoding 1.3.1

WAV To Opus Encode



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

Ngspice 34

Circuit: C2670



1. (CC) gcc options: -O0 -fopenmp -lm -lstdc++ -fftw3 -lXaw -lXmu -lXt -lXext -lX11 -lXft -lfontconfig -lXrender -lfreetype -lSM -ICE

Ngspice 34

Circuit: C7552



1. (CC) gcc options: -O0 -fopenmp -lm -lstdc++ -fftw3 -lXaw -lXmu -lXt -lXext -lX11 -lXft -lfontconfig -lXrender -lfreetype -lSM -ICE

WebP2 Image Encode 20210126

Encode Settings: Quality 100, Compression Effort 5



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -rdynamic -lOpenGL -lGLX -lGLU -lglut -lXmu -lXi -lpthread -ljpeg

ASTC Encoder 2.4

Preset: Medium



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

ASTC Encoder 2.4

Preset: Thorough



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

ASTC Encoder 2.4

Preset: Exhaustive



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

Darktable 3.4.1

Test: Boat - Acceleration: CPU-only



Darktable 3.4.1

Test: Masskrug - Acceleration: CPU-only



Darktable 3.4.1

Test: Server Room - Acceleration: CPU-only



GIMP 2.10.22

Test: resize

**GIMP 2.10.22**

Test: rotate

**GIMP 2.10.22**

Test: auto-levels

**GIMP 2.10.22**

Test: unsharp-mask

**Hugin**

Panorama Photo Assistant + Stitching Time

**OCRMyPDF 10.3.1+dfsg**

Processing 60 Page PDF Document



GNU Octave Benchmark 6.1.1~hg.2021.01.26



OpenSCAD

Render: Pistol



1. OpenSCAD version 2021.01

OpenSCAD

Render: Retro Car



1. OpenSCAD version 2021.01

OpenSCAD

Render: Mini-ITX Case



1. OpenSCAD version 2021.01

OpenSCAD

Render: Projector Mount Swivel



1. OpenSCAD version 2021.01

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 13:17.