

www.phoronix-test-suite.com

webp2 adlp

Intel Core i7-1280P testing with a MSI MS-14C6 (E14C6IMS.115 BIOS) and MSI Intel ADL GT2 14GB on Ubuntu 22.10 via the Phoronix Test Suite.

Automated Executive Summary

Intel Core i7-1280P had the most wins, coming in first place for 63% of the tests.

Based on the geometric mean of all complete results, the fastest (B) was 1.015x the speed of the slowest (Intel Core i7-1280P). D was 0.999x the speed of B, C was 0.998x the speed of D, Intel Core i7-1280P was 0.988x the speed of C.

Test Systems:

Intel Core i7-1280P

B

webp2 adlp

C

D

Processor: Intel Core i7-1280P @ 4.80GHz (14 Cores / 20 Threads), Motherboard: MSI MS-14C6 (E14C6IMS.115 BIOS), Chipset: Intel Alder Lake PCH, Memory: 16GB, Disk: 1024GB Micron_3400_MTFDKBA1T0TFH, Graphics: MSI Intel ADL GT2 14GB (1450MHz), Audio: Realtek ALC274, Network: Intel Alder Lake-P PCH CNVi WiFi

OS: Ubuntu 22.10, Kernel: 5.15.0-27-generic (x86_64), Desktop: GNOME Shell, Display Server: X Server + Wayland, OpenGL: 4.6 Mesa 22.1.7, Vulkan: 1.3.211, Compiler: GCC 12.2.0, File-System: ext4, Screen Resolution: 1920x1080

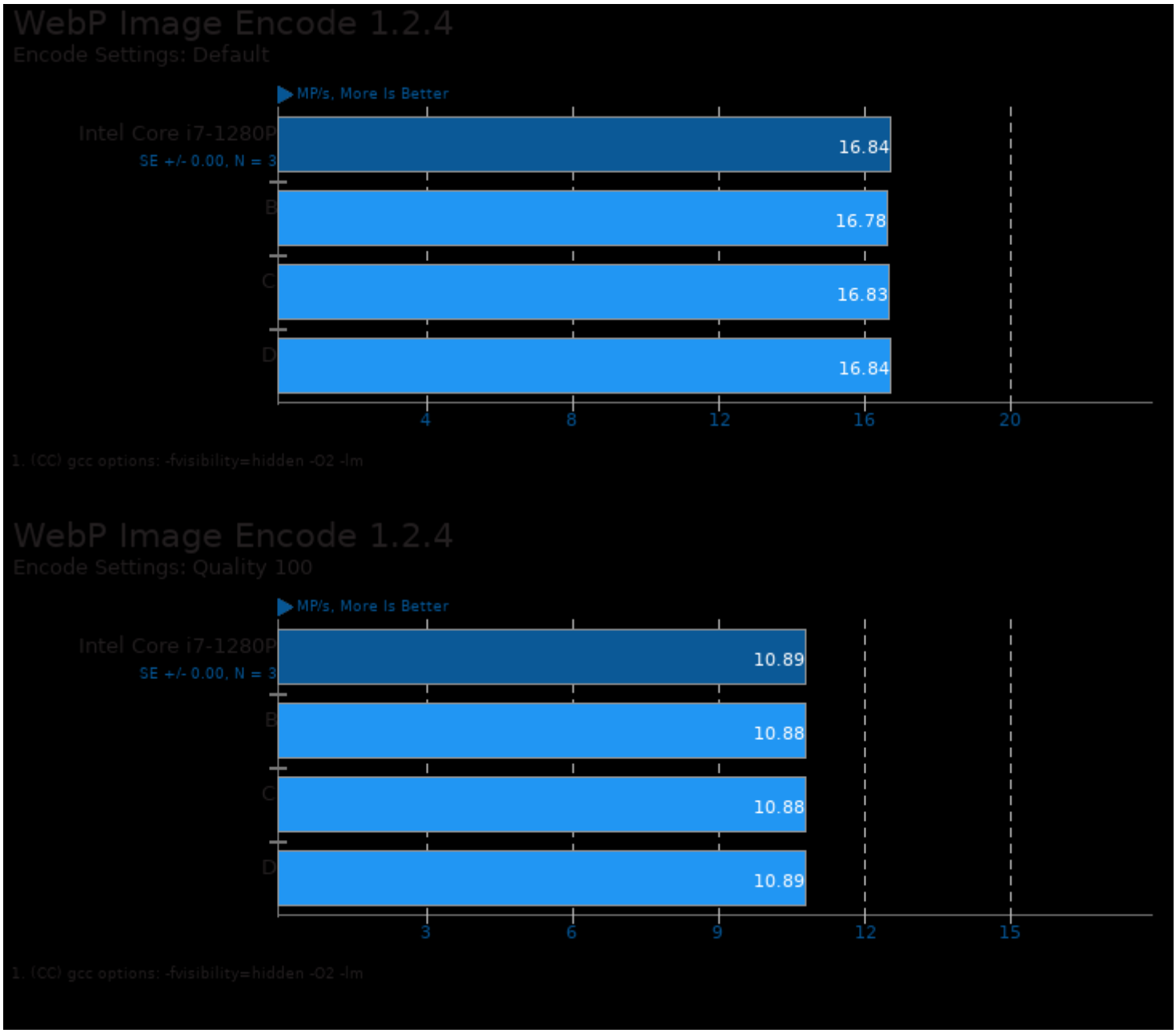
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-cet --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-defaulted --enable-offload-targets=nvptx-none=/build/gcc-12-Wbc0TK/gcc-12-12.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-12-Wbc0TK/gcc-12-12.2.0/debian/tmp-gcn/usr --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave (EPP: balance_performance) - CPU Microcode: 0x421 - Thermald 2.5.0
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 Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	Intel Core	B	C	D
WebP Image Encode - Default (MP/s)	**16.84**	**16.78**	16.83	**16.84**
Normalized	100%	99.64%	99.94%	100%
Standard Deviation	0%			
WebP Image Encode - Quality 100 (MP/s)	**10.89**	**10.88**	**10.88**	**10.89**
Normalized	100%	99.91%	99.91%	100%
Standard Deviation	0.1%			
WebP Image Encode - Q.1.L (MP/s)	**1.53**	**1.54**	**1.53**	**1.54**
Normalized	99.35%	100%	99.35%	100%
Standard Deviation	0.2%			
WebP Image Encode - Q.1.H.C (MP/s)	3.33	3.33	3.33	3.33
Standard Deviation	0%			
WebP Image Encode - Q.1.L.H.C	0.61	0.61	0.61	0.61
Standard Deviation	0%			
WebP2 Image Encode - Default (MP/s)	6.92	**7.01**	**6.86**	6.94
Normalized	98.72%	100%	97.86%	99%
Standard Deviation	0.5%			
WebP2 Image Encode - Q.7.C.E.7 (MP/s)	0.09	0.09	0.09	0.09
Standard Deviation	1.3%			
WebP2 Image Encode - Q.9.C.E.7 (MP/s)	0.04	0.04	0.04	0.04
Standard Deviation	0.5%			
WebP2 Image Encode - Q.1.C.E.5 (MP/s)	**3.10**	**3.57**	3.56	3.56
Normalized	86.83%	100%	99.72%	99.72%
Standard Deviation	6.1%			
WebP2 Image Encode - Q.1.L.C (MP/s)	0.01	0.01	0.01	0.01

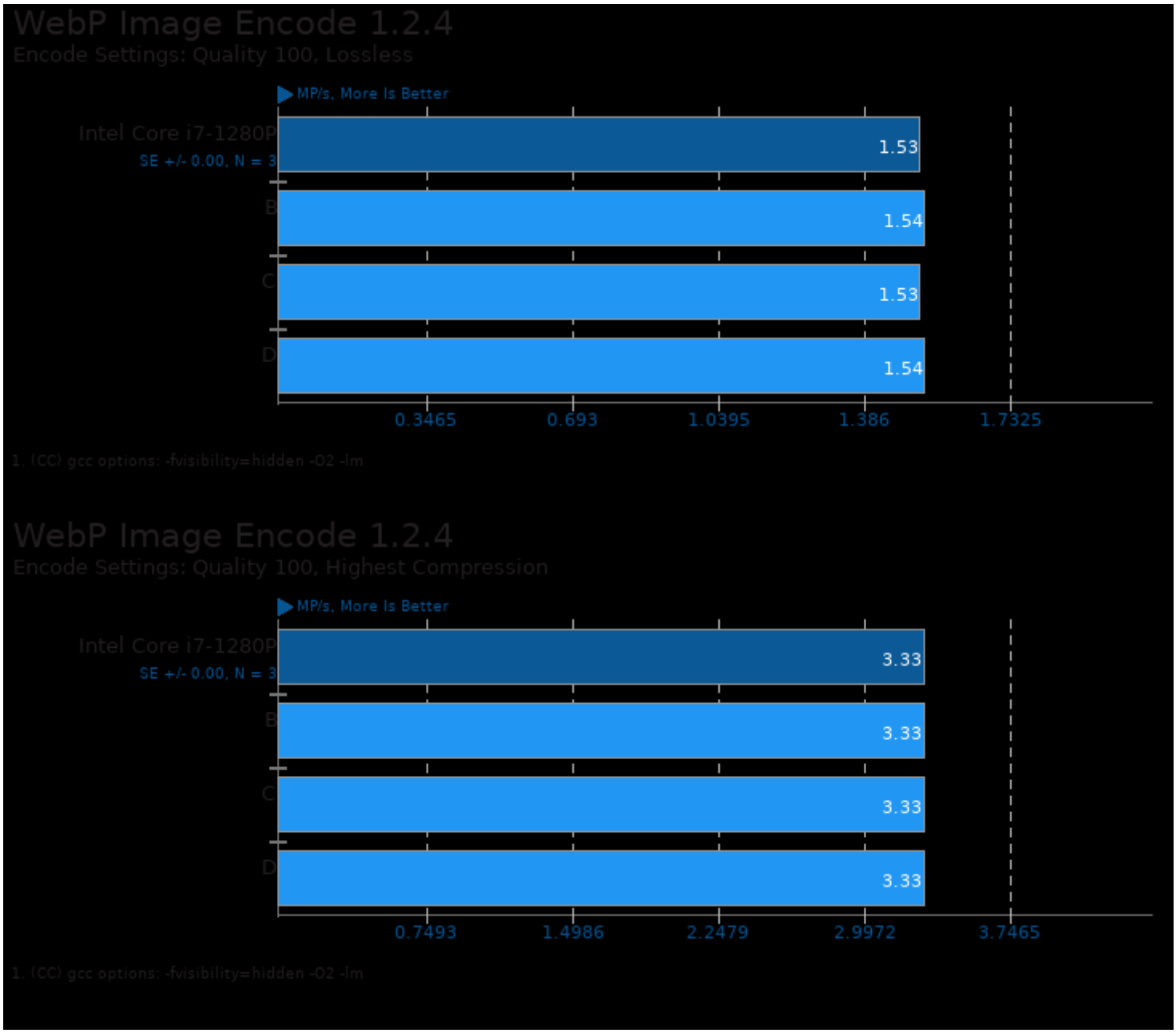
webp2 adlp

Standard Deviation	0.6%			
FLAC Audio Encoding - WAV To FLAC (sec)	16.511	**16.413**	16.566	**16.573**
Normalized	99.41%	100%	99.08%	99.03%
Standard Deviation	1.1%			

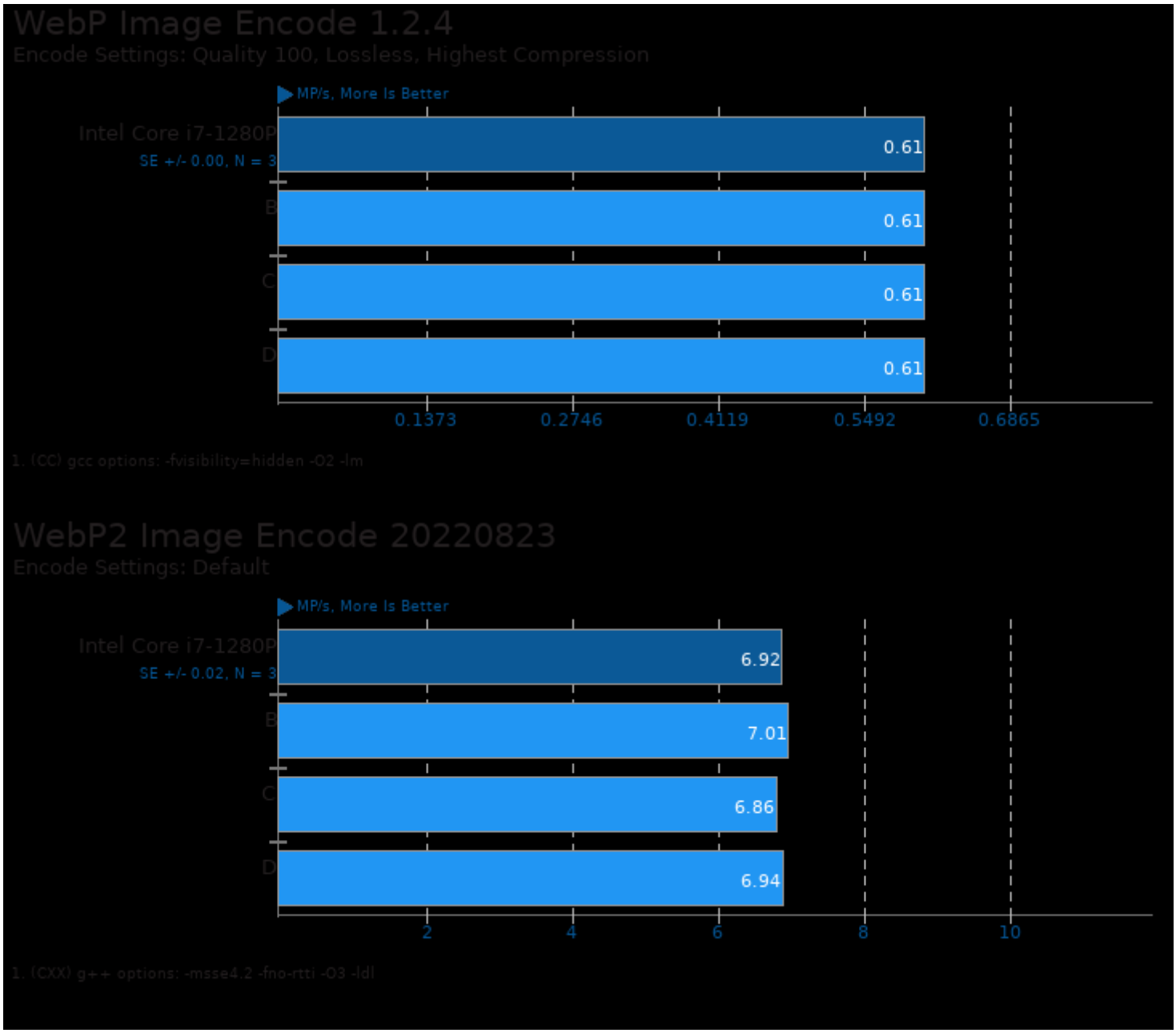
webp2 adlp


WebP Image Encode 1.2.4
Encode Settings: Default
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
16.84
16.78
16.83
16.84
4
8
12
16
20
1. (CC) gcc options: -fvisibility=hidden -O2 -lm
WebP Image Encode 1.2.4
Encode Settings: Quality 100
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
10.89
10.88
10.88
10.89
3
6
9
12
15
1. (CC) gcc options: -fvisibility=hidden -O2 -lm

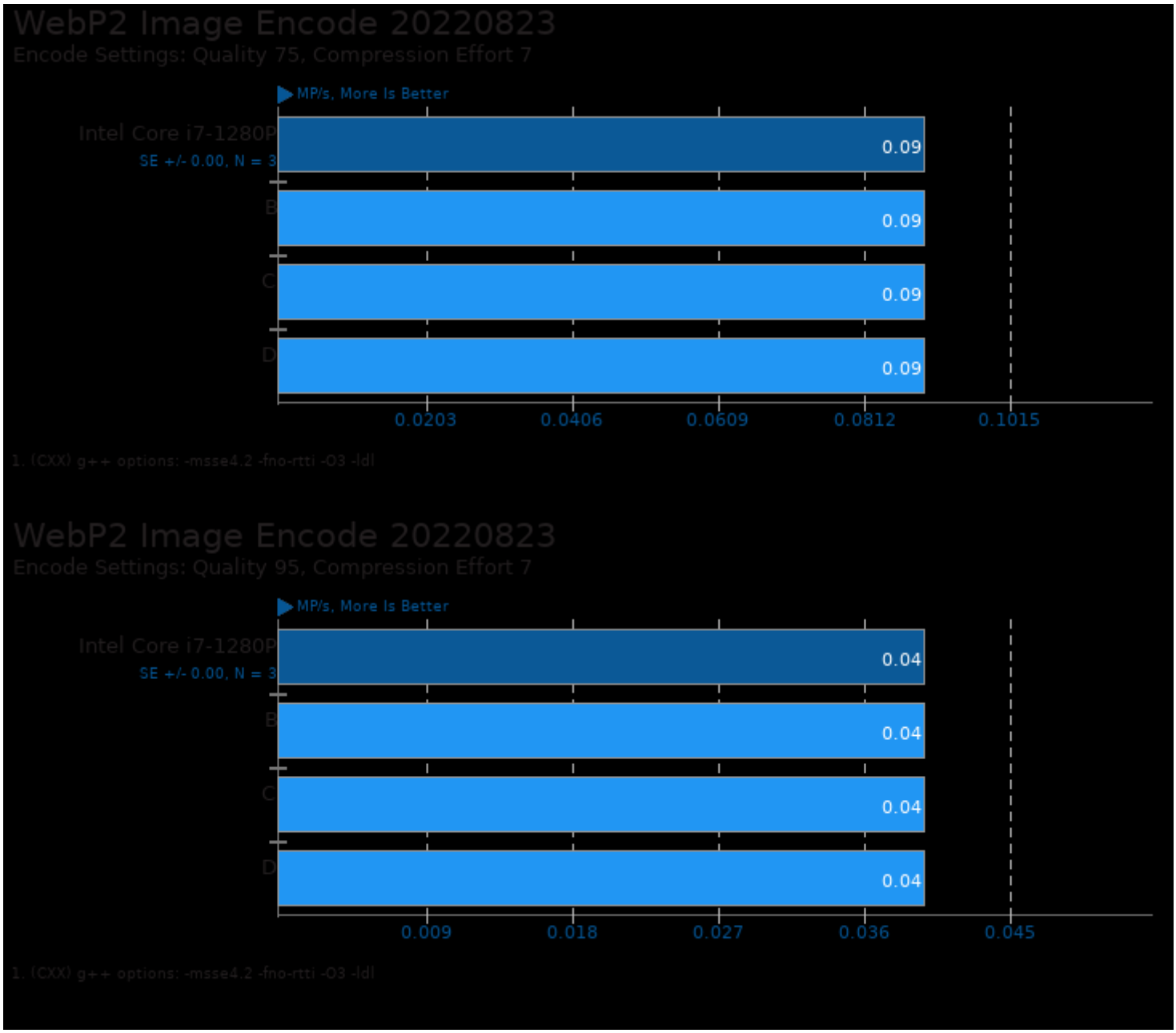
webp2 adlp


WebP Image Encode 1.2.4
Encode Settings: Quality 100, Lossless
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
1.53
1.54
1.53
1.54
0.3465
0.693
1.0395
1.386
1.7325
1. (CC) gcc options: -fvisibility=hidden -O2 -lm
WebP Image Encode 1.2.4
Encode Settings: Quality 100, Highest Compression
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
3.33
3.33
3.33
3.33
0.7493
1.4986
2.2479
2.9972
3.7465
1. (CC) gcc options: -fvisibility=hidden -O2 -lm

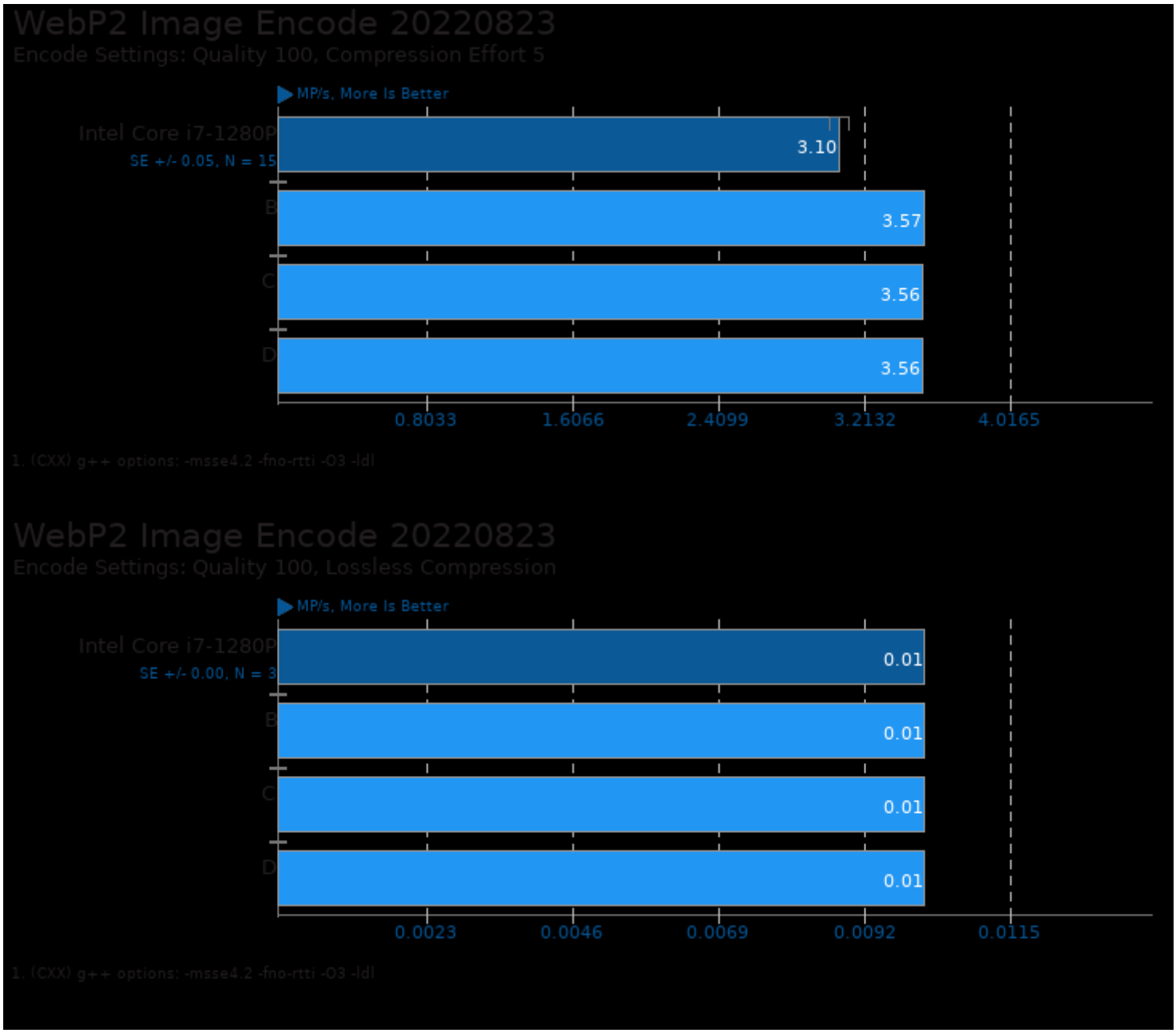
webp2 adlp


WebP Image Encode 1.2.4
Encode Settings: Quality 100, Lossless, Highest Compression
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
0.61
0.61
0.61
0.61
0.1373
0.2746
0.4119
0.5492
0.6865
1. (CC) gcc options: -fvisibility=hidden -O2 -lm
WebP2 Image Encode 20220823
Encode Settings: Default
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.02, N = 3
6.92
7.01
6.86
6.94
2
4
6
8
10
1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl

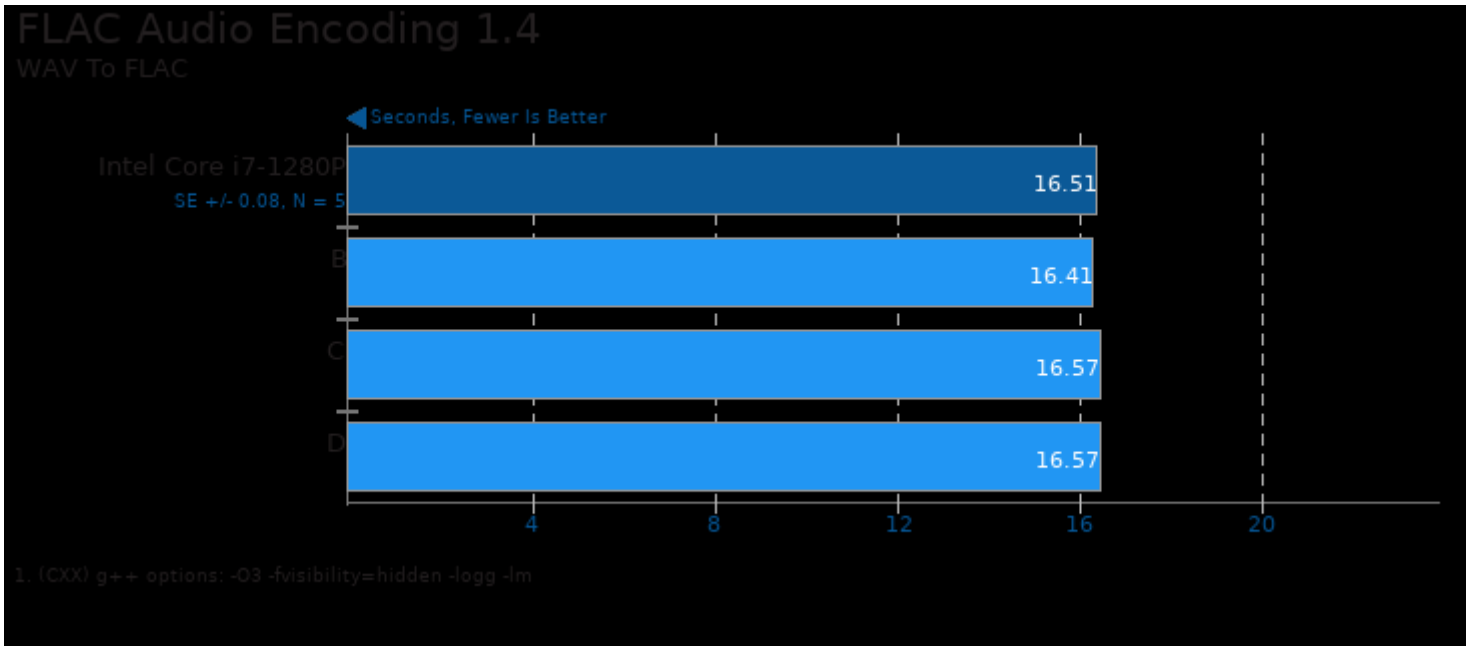
webp2 adlp


WebP2 Image Encode 20220823
Encode Settings: Quality 75, Compression Effort 7
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
0.09
0.09
0.09
0.09
0.0203
0.0406
0.0609
0.0812
0.1015
1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl
WebP2 Image Encode 20220823
Encode Settings: Quality 95, Compression Effort 7
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
0.04
0.04
0.04
0.04
0.009
0.018
0.027
0.036
0.045
1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl

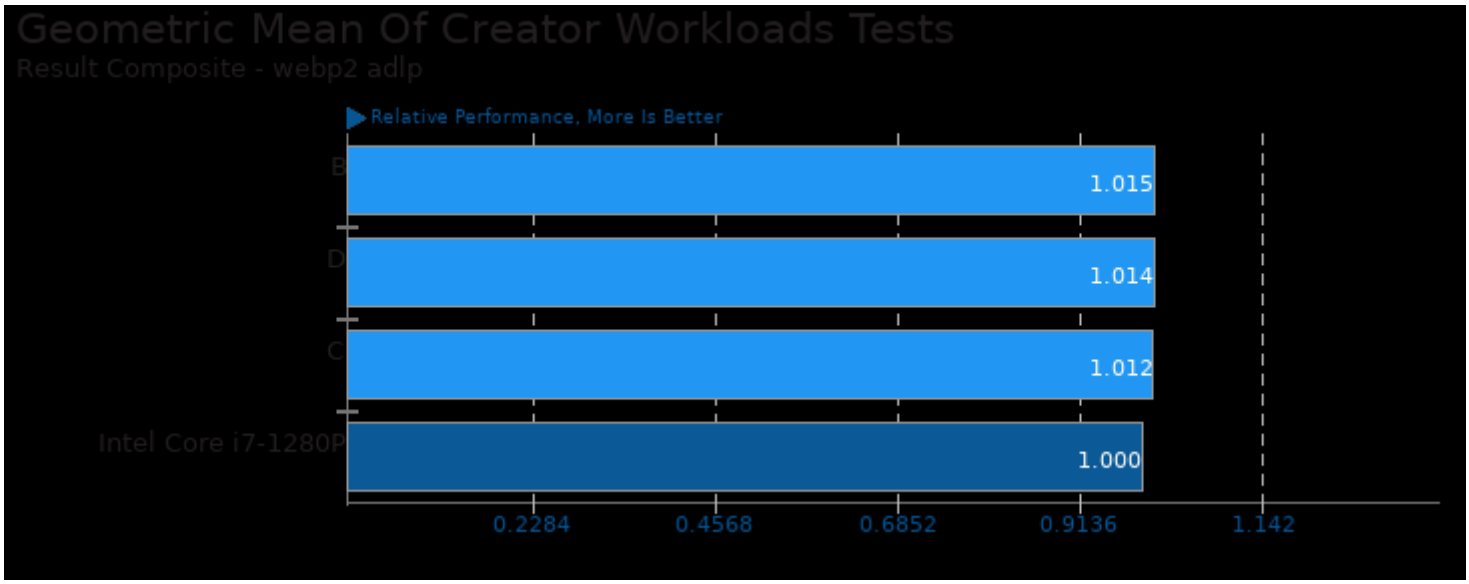
webp2 adlp


WebP2 Image Encode 20220823
Encode Settings: Quality 100, Compression Effort 5
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.05, N = 15
3.10
3.57
3.56
3.56
0.8033
1.6066
2.4099
3.2132
4.0165
1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl
WebP2 Image Encode 20220823
Encode Settings: Quality 100, Lossless Compression
MP/s, More Is Better
Intel Core i7-1280P
SE +/- 0.00, N = 3
0.01
0.01
0.01
0.01
0.0023
0.0046
0.0069
0.0092
0.0115
1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl

webp2 adlp


FLAC Audio Encoding 1.4
WAV To FLAC
Seconds, Fewer Is Better
Intel Core i7-1280P
SE +/- 0.08, N = 5
16.51
16.41
16.57
16.57
4
8
12
16
20
1. (CXX) g++ options: -O3 -fvisibility=hidden -logg -lm

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



Geometric mean based upon tests: pts/encode-flac, pts/webp and pts/webp2



Geometric mean based upon tests: pts/webp and pts/webp2

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 04:05.