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## 7700K Intel JPEG XL

Intel Core i7-7700K testing with a MSI Z270-A PRO (MS-7A71) v1.0 (1.60 BIOS) and MSI Intel HD 630 on Ubuntu 20.04 via the Phoronix Test Suite.

### Automated Executive Summary

*1 had the most wins, coming in first place for 66% of the tests.*

*Based on the geometric mean of all complete results, the fastest (3) was 1.002x the speed of the slowest (2). 1 was 0.999x the speed of 3 and 2 was 0.999x the speed of 1.*

### Test Systems:

1

2

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### 3

Processor: Intel Core i7-7700K @ 4.50GHz (4 Cores / 8 Threads), Motherboard: MSI Z270-A PRO (MS-7A71) v1.0 (1.60 BIOS), Chipset: Intel Xeon E3-1200 v6/7th + Z270, Memory: 16GB, Disk: 256GB Samsung SSD 850, Graphics: MSI Intel HD 630 (1150MHz), Audio: Realtek ALC892, Monitor: LG Ultra HD, Network: Realtek RTL8111/8168/8411

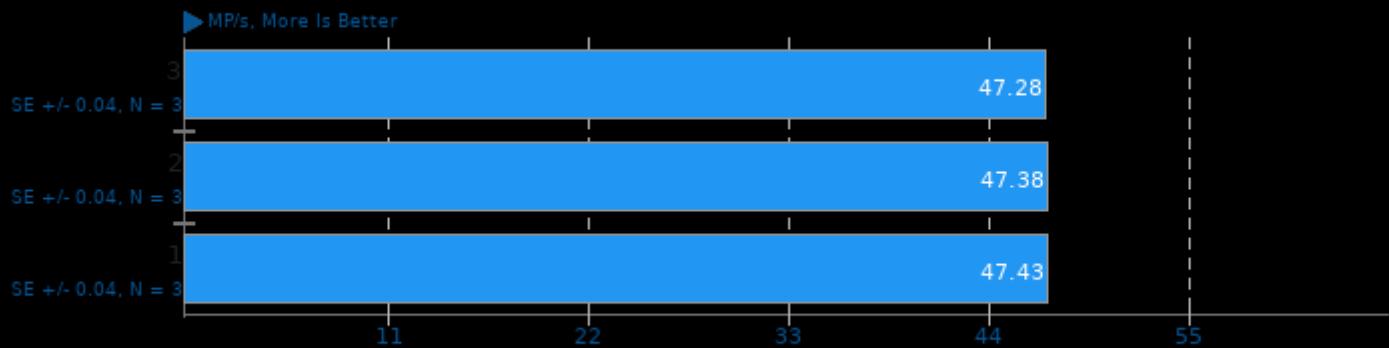
OS: Ubuntu 20.04, Kernel: 5.9.0-050900rc8daily20201011-generic (x86\_64) 20201010, Display Server: X Server 1.20.8, OpenCL: OpenCL 2.1, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise  
 Compiler Notes: --build=x86\_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale-gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/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-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 - CPU Microcode: 0xde - ThermalD 1.9.1  
 Security Notes: iflb\_multithit 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 and seccomp + spectre\_v1: Mitigation of usercopy/swaps barriers and \_\_user pointer sanitization + spectre\_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS\_FW STIBP: conditional RSB filling + srbs: Mitigation of Microcode + tsx\_async\_abort: Mitigation of Clear buffers; SMT vulnerable

	1	2	3
<b>JPEG XL - PNG - 5 (MP/s)</b>	<b>47.43</b>	47.38	<b>47.28</b>
Normalized	100%	99.89%	99.68%
Standard Deviation	0.1%	0.2%	0.2%
<b>JPEG XL - PNG - 7 (MP/s)</b>	<b>8.32</b>	8.31	<b>8.30</b>
Normalized	100%	99.88%	99.76%
Standard Deviation	0.5%	0.6%	0.1%
<b>JPEG XL - PNG - 8 (MP/s)</b>	0.77	0.77	0.77
Normalized	0%	0%	0%
Standard Deviation	0%	0%	0%
<b>JPEG XL - JPEG - 5 (MP/s)</b>	<b>55.20</b>	<b>54.59</b>	54.88
Normalized	100%	98.89%	99.42%
Standard Deviation	0.5%	1.2%	2.2%
<b>JPEG XL - JPEG - 7 (MP/s)</b>	<b>54.32</b>	54.65	<b>55.15</b>
Normalized	98.5%	99.09%	100%
Standard Deviation	1.6%	2.6%	0.5%
<b>JPEG XL - JPEG - 8 (MP/s)</b>	<b>25.84</b>	<b>25.88</b>	<b>25.88</b>
Normalized	99.85%	100%	100%
Standard Deviation	0.1%	0.1%	0%

## JPEG XL 0.3.1

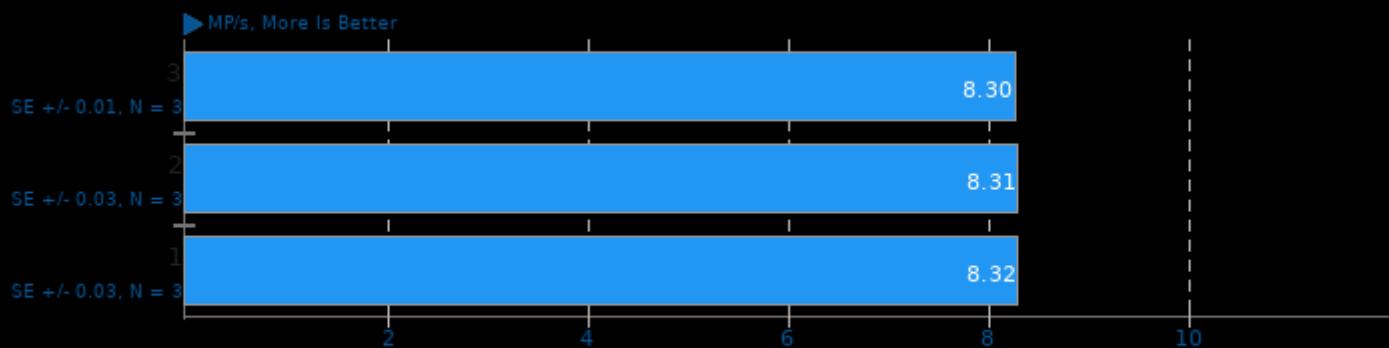
Input: PNG - Encode Speed: 5



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

## JPEG XL 0.3.1

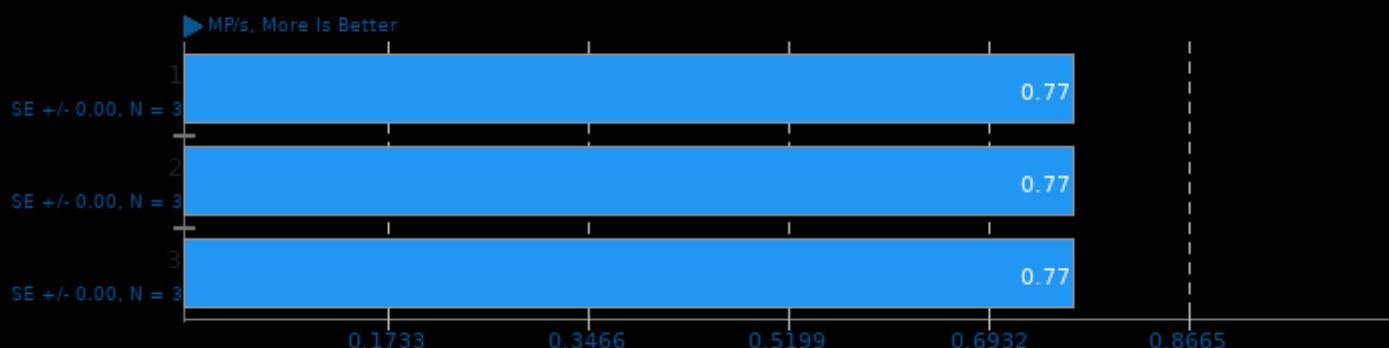
Input: PNG - Encode Speed: 7



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

## JPEG XL 0.3.1

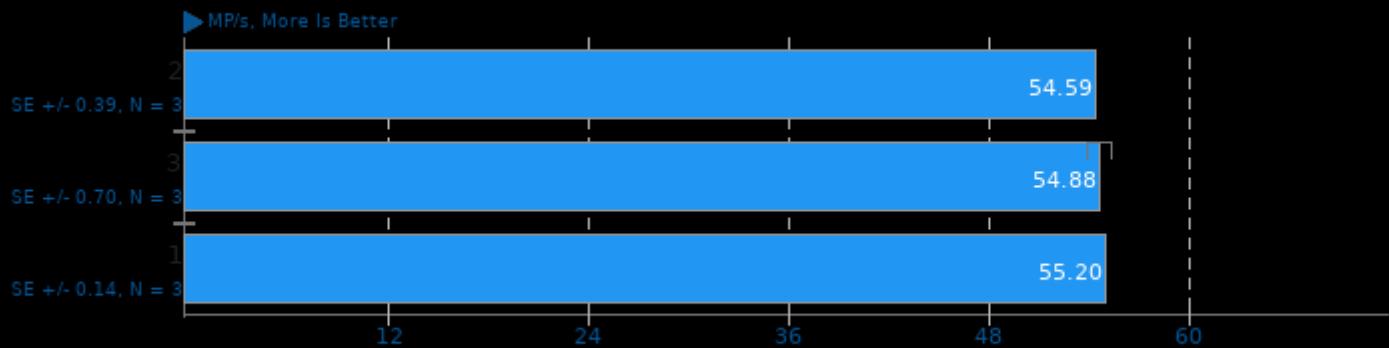
Input: PNG - Encode Speed: 8



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

## JPEG XL 0.3.1

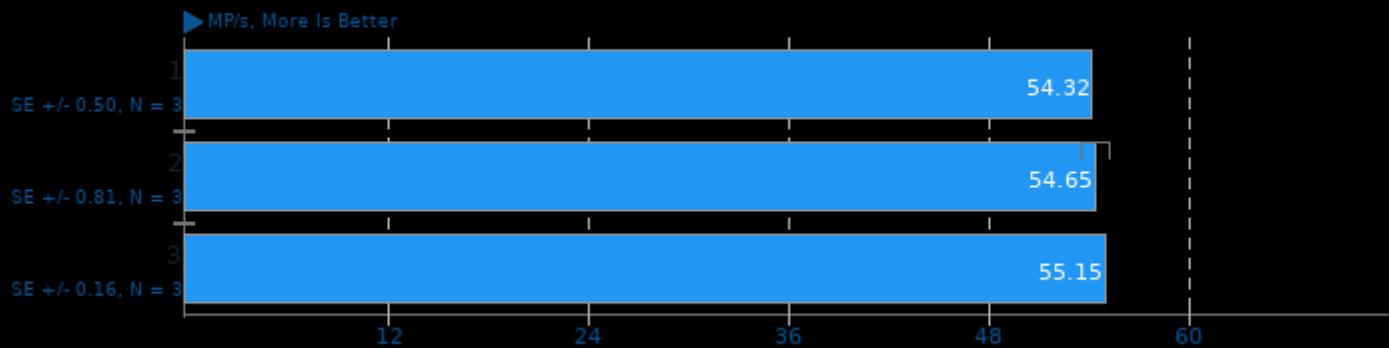
Input: JPEG - Encode Speed: 5



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

## JPEG XL 0.3.1

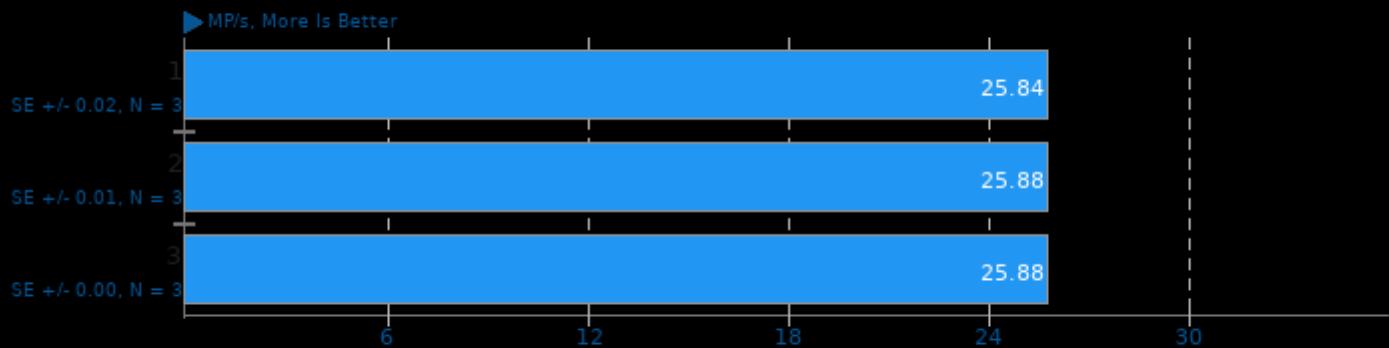
Input: JPEG - Encode Speed: 7



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

## JPEG XL 0.3.1

Input: JPEG - Encode Speed: 8



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 05:27.