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8565u rav1e 0.4 + more

Intel Core i7-8565U testing with a Dell 0K7W76 (1.0.0 BIOS) and Intel UHD 620 3GB on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

2 had the most wins, coming in first place for 50% of the tests.

Based on the geometric mean of all complete results, the fastest (1) was 1.012x the speed of the slowest (3). 2 was 1x the speed of 1 and 3 was 0.988x the speed of 2.

Test Systems:

1

2

3

Processor: Intel Core i7-8565U @ 4.60GHz (4 Cores / 8 Threads), Motherboard: Dell 0KTW76 (1.0.0 BIOS), Chipset: Intel Cannon Point-LP, Memory: 16GB, Disk: SK hynix PC401 NVMe 256GB, Graphics: Intel UHD 620 3GB (1150MHz), Audio: Realtek ALC3271, Network: Qualcomm Atheros QCA6174 802.11ac

OS: Ubuntu 20.10, Kernel: 5.8.0-33-generic (x86_64), Desktop: GNOME Shell 3.38.1, Display Server: X Server 1.20.9, Display Driver: modesetting 1.20.9, OpenGL: 4.6 Mesa 20.2.1, Vulkan: 1.2.145, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-JvwpWM/gcc-10-10.2.0/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-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

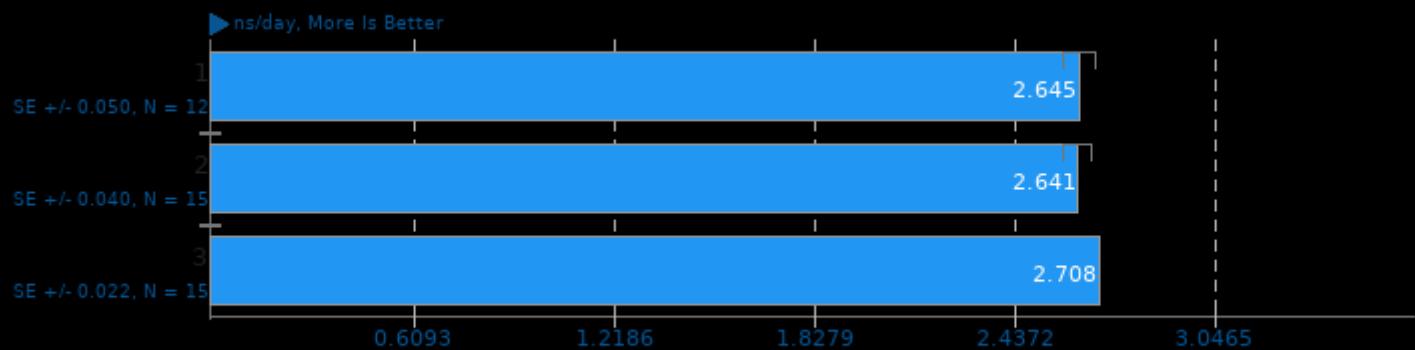
Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0xde - Thermald 2.3

Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Not affected + mds: Vulnerable; SMT vulnerable + meltdown: Not affected + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable + tsx_async_abort: Not affected

	1	2	3
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)	2.645	2.641	2.708
Normalized	97.67%	97.53%	100%
Standard Deviation	6.5%	5.9%	3.1%
rav1e - 1 (FPS)	0.323	0.316	0.311
Normalized	100%	97.83%	96.28%
Standard Deviation	3.3%	3%	0.7%
rav1e - 5 (FPS)	0.951	0.931	0.902
Normalized	100%	97.9%	94.85%
Standard Deviation	2.7%	2.8%	2.9%
rav1e - 6 (FPS)	1.229	1.204	1.148
Normalized	100%	97.97%	93.41%
Standard Deviation	3.8%	4.1%	8.9%
rav1e - 10 (FPS)	2.621	2.661	2.576
Normalized	98.5%	100%	96.81%
Standard Deviation	2.8%	2.3%	3.2%
Mobile Neural Network - SqueezeNetV1.0	10.698	10.679	10.784
Normalized	99.82%	100%	99.03%
Standard Deviation	0.1%	0.5%	2.1%
Mobile Neural Network - resnet-v2-50 (ms)	54.752	54.647	55.025
Normalized	99.81%	100%	99.31%
Standard Deviation	16.9%	16.9%	15.6%
Mobile Neural Network - MobileNetV2_224	6.002	5.974	5.960
Normalized	99.3%	99.77%	100%
Standard Deviation	0.4%	0.5%	0.2%
Mobile Neural Network - mobilenet-v1-1.0	7.535	7.269	7.274
Normalized	96.47%	100%	99.93%
Standard Deviation	5.2%	0.2%	0.5%
Mobile Neural Network - inception-v3 (ms)	76.677	76.513	76.696
Normalized	99.79%	100%	99.76%
Standard Deviation	7.3%	7%	6%

LAMMPS Molecular Dynamics Simulator 29Oct2020

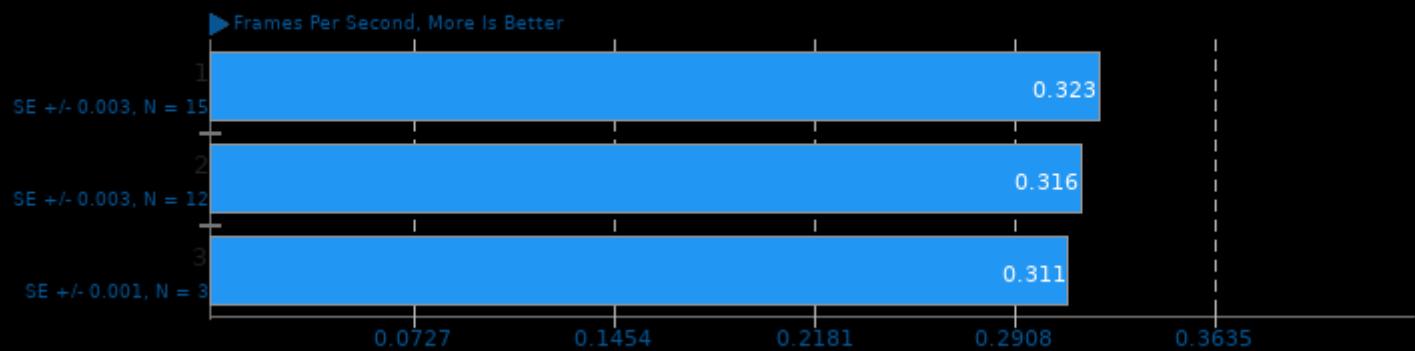
Model: Rhodopsin Protein



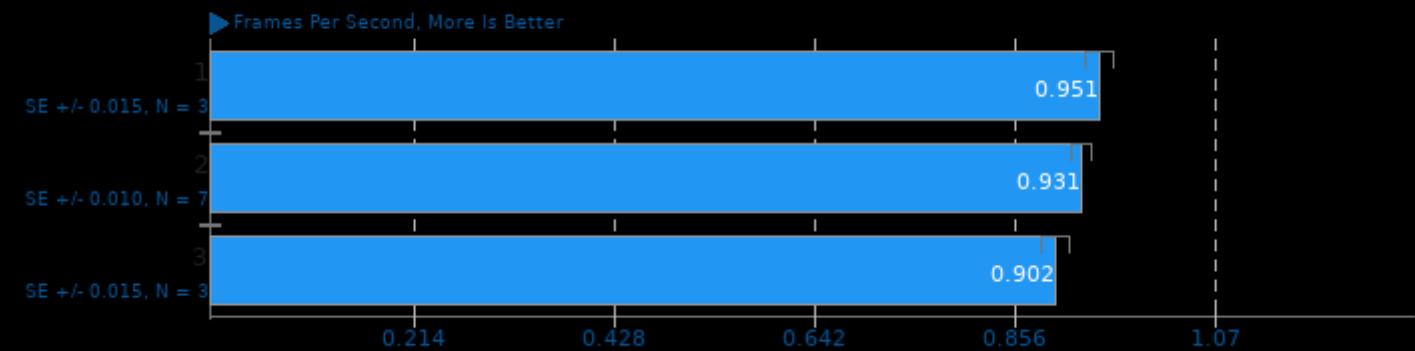
1. (CXX) g++ options: -O3 -pthread -lm

rav1e 0.4

Speed: 1

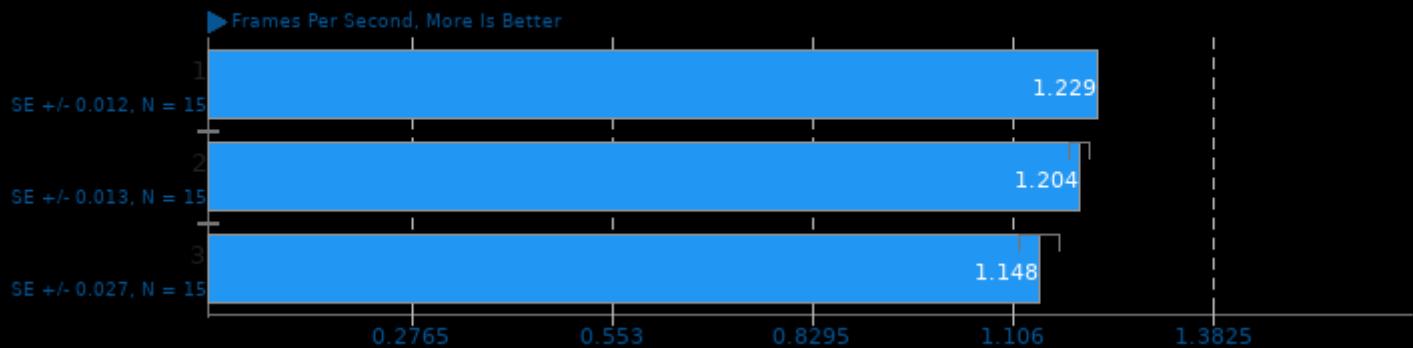
**rav1e 0.4**

Speed: 5

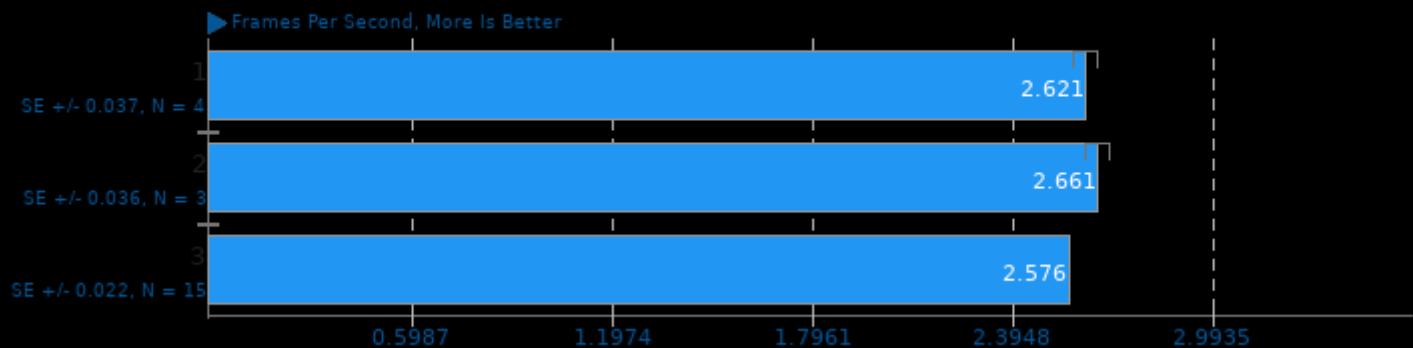


rav1e 0.4

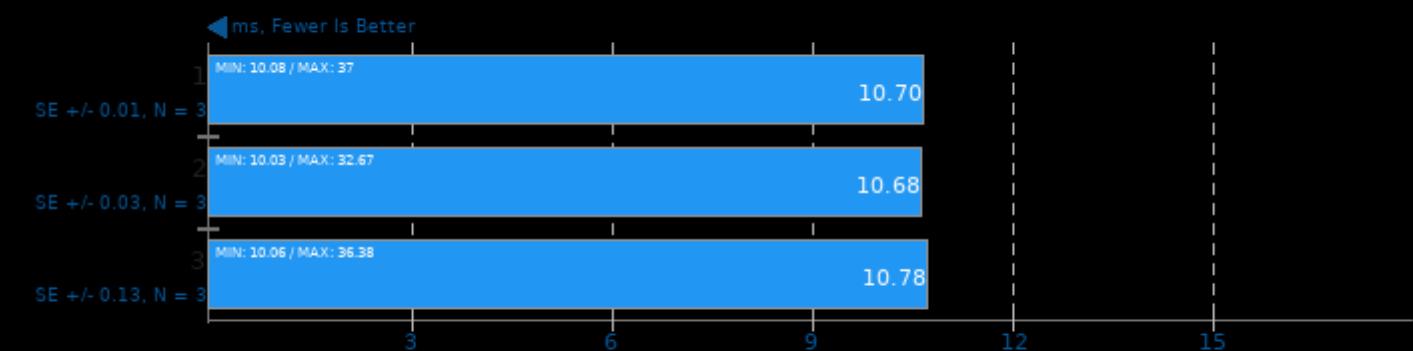
Speed: 6

**rav1e 0.4**

Speed: 10

**Mobile Neural Network 1.1.1**

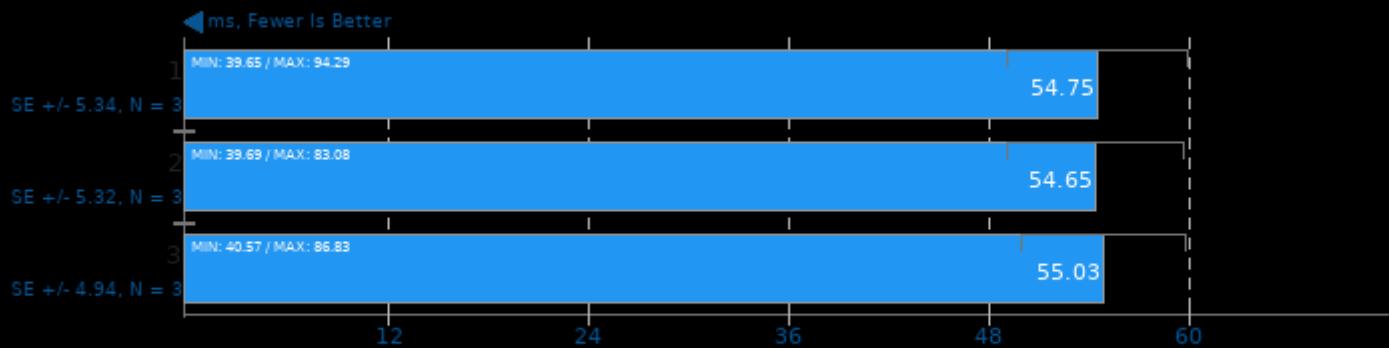
Model: SqueezeNetV1.0



1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fno-threadsafe-statics

Mobile Neural Network 1.1.1

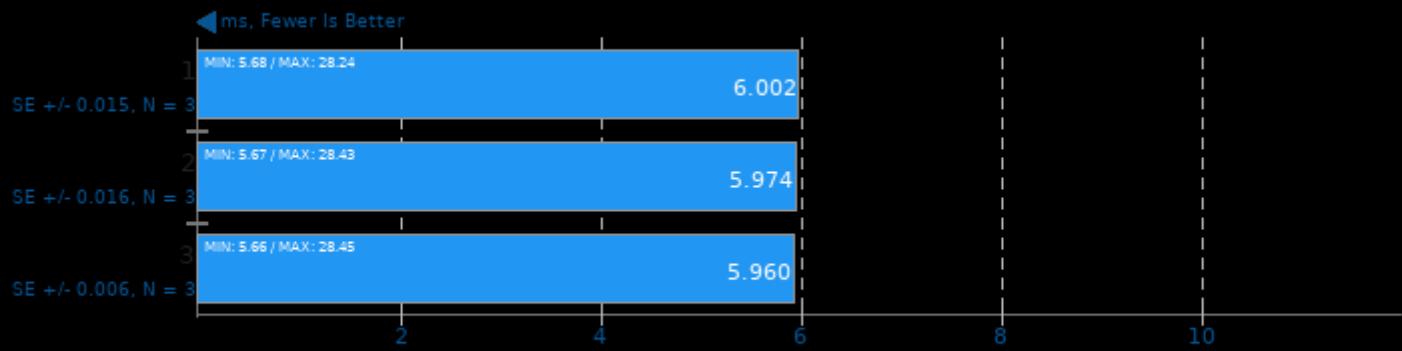
Model: resnet-v2-50



```
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fr
```

Mobile Neural Network 1.1.1

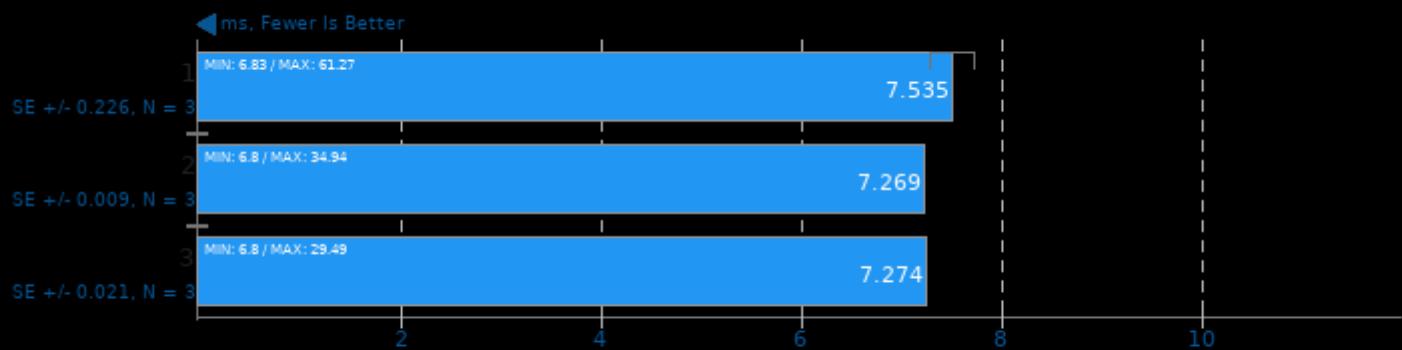
Model: MobileNetV2_224



```
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fr
```

Mobile Neural Network 1.1.1

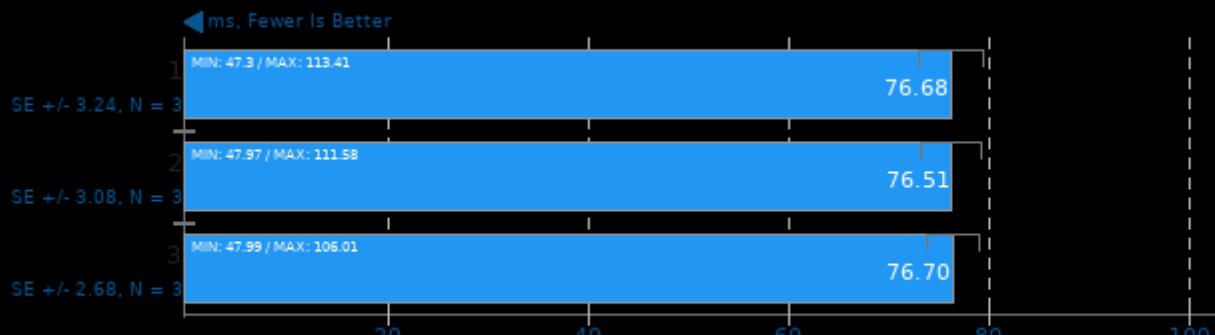
Model: mobilenet-v1-1.0



```
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fr
```

Mobile Neural Network 1.1.1

Model: inception-v3

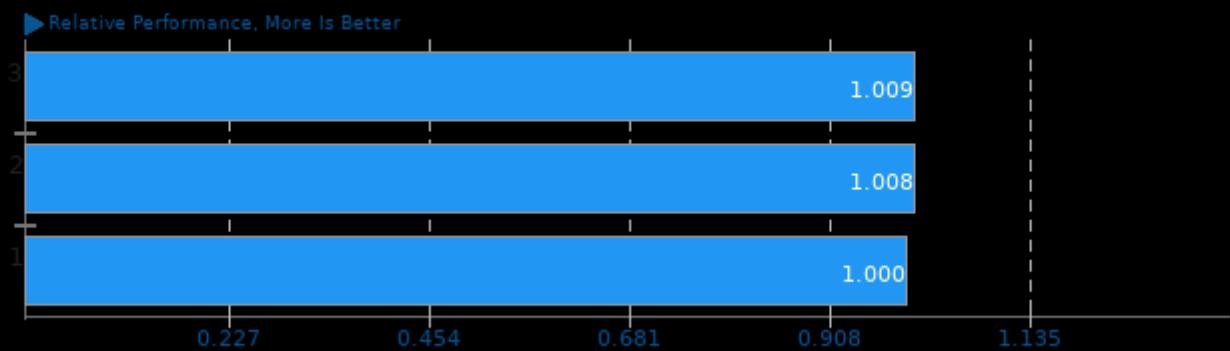


```
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fr
```

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

Geometric Mean Of HPC - High Performance Computing Tests

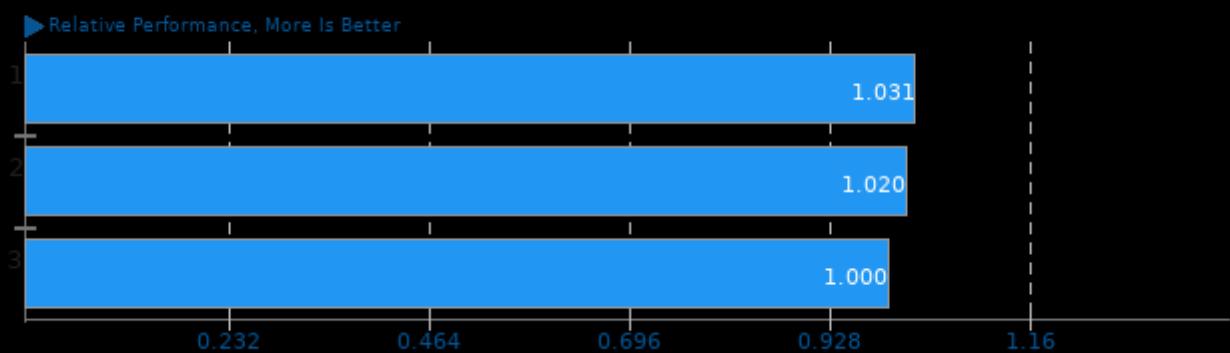
Result Composite - 8565u rav1e 0.4 + more



Geometric mean based upon tests: pts/lammps and pts/mnn

Geometric Mean Of Multi-Core Tests

Result Composite - 8565u rav1e 0.4 + more



Geometric mean based upon tests: pts/rav1e and pts/lammps

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 11:38.