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## i7 6800K Debian

Intel Core i7-6800K testing with a MSI X99A WORKSTATION (MS-7A54) v1.0 (1.10 BIOS) and Zotac NVIDIA GeForce GTX 1050 2GB on Debian 10 via the Phoronix Test Suite.

### Automated Executive Summary

*Repeat had the most wins, coming in first place for 40% of the tests.*

*Based on the geometric mean of all complete results, the fastest (Debian 10 Buster) was 1.001x the speed of the slowest (Debian 10). Debian 10 Buster was 1x the speed of Repeat and Debian 10 was 0.999x the speed of Debian 10 Buster.*

*The results with the greatest spread from best to worst included:*

Zstd Compression (Compression Level: 19) at 1.111x  
NCNN (Target: CPU - Model: blazeface) at 1.035x  
OSBench (Test: Memory Allocations) at 1.031x  
WebP Image Encode (Encode Settings: Quality 100, Lossless) at 1.03x  
Incompact3D (Input: Cylinder) at 1.028x  
NCNN (Target: CPU - Model: squeezenet\_int8) at 1.026x  
doraw (RAW To PPM Image Conversion) at 1.023x  
OSBench (Test: Launch Programs) at 1.022x

eSpeak-NG Speech Engine (Text-To-Speech Synthesis) at 1.02x  
 WebP Image Encode (Encode Settings: Default) at 1.017x.

## Test Systems:

### Debian 10

### Debian 10 Buster

### Repeat

Processor: Intel Core i7-6800K @ 3.80GHz (6 Cores / 12 Threads), Motherboard: MSI X99A WORKSTATION (MS-7A54) v1.0 (1.10 BIOS), Chipset: Intel Xeon E7 v4/Xeon, Memory: 16GB, Disk: 120GB TOSHIBA TR150, Graphics: Zotac NVIDIA GeForce GTX 1050 2GB, Audio: Realtek ALC1150, Monitor: G237HL, Network: Intel I218-LM + Intel I210

OS: Debian 10, Kernel: 4.19.0-10-amd64 (x86\_64), Desktop: GNOME Shell 3.30.2, Display Server: X Server 1.20.4 + Wayland, Display Driver: modesetting 1.20.4, Compiler: GCC 8.3.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v

Processor Notes: Scaling Governor: intel\_pstate powersave - CPU Microcode: 0xb000002e

Python Notes: Python 2.7.16 + Python 3.7.3

Security Notes: itlb\_multihit: KVM: Mitigation of Split huge pages + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Vulnerable: Clear buffers attempted no microcode; SMT vulnerable + meltdown: Mitigation of PTI + 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 generic retpoline IBPB: conditional IBRS\_FW STIBP: conditional RSB filling + srbs: Not affected + tsx\_async\_abort: Vulnerable: Clear buffers attempted no microcode; SMT vulnerable

	Debian 10	Debian 10 Buster	Repeat
Zstd Compression - 19 (MB/s)	<b>34.2</b>	<b>38</b>	<b>38</b>
Normalized	90%	100%	100%
Standard Deviation	0.2%		
NCNN - CPU - blazeface (ms)	<b>1.98</b>	2.02	<b>2.05</b>
Normalized	100%	98.02%	96.59%
Standard Deviation	1.3%	3%	2.1%
OSBench - Memory Allocations (Ns/Event)	<b>84.364653</b>	<b>81.814369</b>	84.232648
Normalized	96.98%	100%	97.13%
Standard Deviation	0.1%	1.5%	0.3%
WebP Image Encode - Q.1.L (Encode Time - sec)	19.790	<b>19.819</b>	<b>19.239</b>
Normalized	97.22%	97.07%	100%
Standard Deviation	0.2%	0.3%	2.3%
Incompact3D - Cylinder (sec)	<b>535.034912</b>	<b>550.102097</b>	536.131409
Normalized	100%	97.26%	99.8%
Standard Deviation	0.4%	2.6%	0.2%

<b>NCNN - CPU - squeezenet_int8 (ms)</b>	<b>22.38</b>	<b>22.96</b>	22.88
Normalized	100%	97.47%	97.81%
Standard Deviation	2.4%	0.3%	0.8%
<b>ddraw - R.T.P.I.C (sec)</b>	<b>48.356</b>	<b>49.476</b>	49.447
Normalized	100%	97.74%	97.79%
Standard Deviation	2.8%	0%	0.2%
<b>OSBench - Launch Programs (us/Event)</b>	<b>39.476554</b>	40.109952	<b>40.352344</b>
Normalized	100%	98.42%	97.83%
Standard Deviation	0.2%	0.4%	0.1%
<b>eSpeak-NG Speech Engine - T.T.S.S (sec)</b>	<b>39.383</b>	<b>38.614</b>	39.052
Normalized	98.05%	100%	98.88%
Standard Deviation	3%	2%	2.8%
<b>WebP Image Encode - Default (Encode Time - sec)</b>	1.875	<b>1.877</b>	<b>1.845</b>
Normalized	98.4%	98.3%	100%
Standard Deviation	2.7%	2.8%	2.6%
<b>NCNN - CPU - resnet50_int8 (ms)</b>	<b>108.20</b>	<b>109.90</b>	108.37
Normalized	100%	98.45%	99.84%
Standard Deviation	0.3%	0.4%	0.1%
<b>OSBench - Create Processes (us/Event)</b>	23.462772	<b>23.286343</b>	<b>23.643971</b>
Normalized	99.25%	100%	98.49%
Standard Deviation	1.7%	1.1%	1.8%
<b>NCNN - CPU - mnasnet (ms)</b>	5.52	<b>5.55</b>	<b>5.47</b>
Normalized	99.09%	98.56%	100%
Standard Deviation	2.5%	2.2%	2.1%
<b>WebP Image Encode - Q.1.H.C (Encode Time - sec)</b>	8.550	<b>8.566</b>	<b>8.447</b>
Normalized	98.8%	98.61%	100%
Standard Deviation	0.3%	0.4%	2.9%
<b>OSBench - Create Files (us/Event)</b>	<b>14.685416</b>	14.684122	<b>14.494470</b>
Normalized	98.7%	98.71%	100%
Standard Deviation	0.1%	1.3%	2.9%
<b>NCNN - CPU - mobilenetv2_yolov3 (ms)</b>	<b>21.73</b>	21.60	<b>21.45</b>
Normalized	98.71%	99.31%	100%
Standard Deviation	1.1%	0.7%	0.1%
<b>InfluxDB - 64 - 10000 - 2,5000,1 - 10000 (val/sec)</b>	983617	<b>977784</b>	<b>990405</b>
Normalized	99.31%	98.73%	100%
Standard Deviation	1.2%	2.7%	2.1%
<b>Blender - Classroom - CPU-Only (sec)</b>	<b>786.59</b>	<b>796.08</b>	790.46
Normalized	100%	98.81%	99.51%
Standard Deviation	0.2%	0.7%	0.6%
<b>Zstd Compression - 3 (MB/s)</b>	<b>3026</b>	<b>3062</b>	3056
Normalized	98.82%	100%	99.79%
Standard Deviation	0.1%	0.2%	0.2%
<b>WebP Image Encode - Quality 100 (Encode Time - sec)</b>	<b>2.848</b>	<b>2.881</b>	2.878
Normalized	100%	98.85%	98.96%
Standard Deviation	2.7%	0.5%	0.2%
<b>NCNN - CPU - resnet18_int8 (ms)</b>	<b>32.83</b>	32.97	<b>33.16</b>
Normalized	100%	99.58%	99%
Standard Deviation	2.2%	1.9%	2.1%

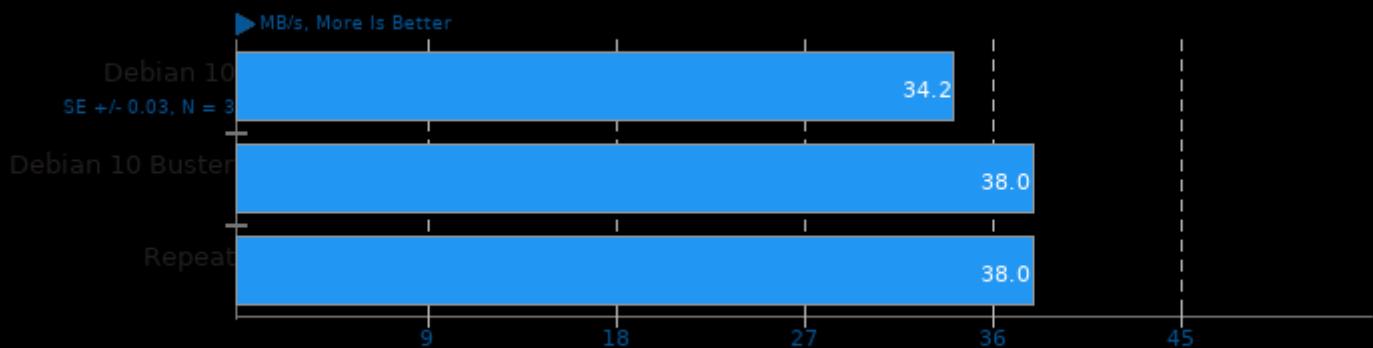
InfluxDB - 1024 - 10000 - 2,5000,1 - 10000 (val/sec)	<b>1089453</b>	1096129	<b>1099269</b>
Normalized	99.11%	99.71%	100%
Standard Deviation	1.5%	0.2%	1%
<b>AOM AV1 - Speed 6 Realtime (FPS)</b>	<b>14.61</b>	14.67	<b>14.73</b>
Normalized	99.19%	99.59%	100%
Standard Deviation	1.3%	0.7%	0.5%
WebP Image Encode - Q.1.L.H.C (Encode Time - sec)	41.613	<b>41.648</b>	<b>41.311</b>
Normalized	99.27%	99.19%	100%
Standard Deviation	0.1%	0.2%	2.2%
<b>NCNN - CPU - mobilenet_v3 (ms)</b>	<b>5.56</b>	<b>5.57</b>	<b>5.53</b>
Normalized	99.46%	99.28%	100%
Standard Deviation	1%	0.7%	0.2%
<b>Blender - Barbershop - CPU-Only (sec)</b>	<b>1053</b>	<b>1045</b>	1048
Normalized	99.28%	100%	99.76%
Standard Deviation	1.1%	0.1%	0.1%
<b>AOM AV1 - Speed 6 Two-Pass (FPS)</b>	<b>2.88</b>	<b>2.90</b>	<b>2.90</b>
Normalized	99.31%	100%	100%
Standard Deviation	0.5%	0.7%	0.3%
<b>NCNN - CPU - squeezenet (ms)</b>	4.58	<b>4.59</b>	<b>4.56</b>
Normalized	99.56%	99.35%	100%
Standard Deviation	1.1%	0.9%	0.3%
<b>Timed LLVM Compilation - Time To Compile (sec)</b>	<b>886.587</b>	<b>881.705</b>	883.997
Normalized	99.45%	100%	99.74%
Standard Deviation	0.5%	0.3%	0.2%
<b>Blender - Fishy Cat - CPU-Only (sec)</b>	364.79	<b>366.18</b>	<b>364.20</b>
Normalized	99.84%	99.46%	100%
Standard Deviation	0.1%	0.2%	0.2%
<b>NCNN - CPU - googlenet_int8 (ms)</b>	<b>61.10</b>	<b>60.77</b>	60.96
Normalized	99.46%	100%	99.69%
Standard Deviation	0.9%	0.7%	0.9%
<b>Mobile Neural Network - inception-v3 (ms)</b>	<b>49.966</b>	49.977	<b>50.233</b>
Normalized	100%	99.98%	99.47%
Standard Deviation	0.7%	1.7%	1%
<b>Mobile Neural Network - resnet-v2-50 (ms)</b>	40.059	<b>39.918</b>	<b>40.129</b>
Normalized	99.65%	100%	99.47%
Standard Deviation	1.5%	1.1%	1.5%
<b>AOM AV1 - Speed 8 Realtime (FPS)</b>	<b>30.50</b>	<b>30.66</b>	30.52
Normalized	99.48%	100%	99.54%
Standard Deviation	0.2%	1.4%	0.5%
<b>Blender - Pabellon Barcelona - CPU-Only</b>	876.25	<b>872.30</b>	<b>876.86</b>
Normalized	99.55%	100%	99.48%
Standard Deviation	0.1%	0.4%	0.1%
<b>NCNN - CPU - alexnet (ms)</b>	<b>15.78</b>	15.73	<b>15.71</b>
Normalized	99.56%	99.87%	100%
Standard Deviation	1%	0.4%	0.4%
<b>Mobile Neural Network - MobileNetV2_224</b>	<b>4.655</b>	4.648	<b>4.635</b>
Normalized	99.57%	99.72%	100%
Standard Deviation	1.1%	0.9%	0.4%
<b>Monte Carlo Simulations of Ionised Nebulae - Dust 2D tau100.0 (sec)</b>	<b>253</b>	<b>252</b>	<b>252</b>
Normalized	99.6%	100%	100%
Standard Deviation	0.2%		

<b>NCNN - CPU - vgg16_int8 (ms)</b>	<b>179.99</b>	179.89	<b>179.30</b>
Normalized	99.62%	99.67%	100%
Standard Deviation	0.4%	0.2%	0.3%
<b>LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)</b>	<b>4.247</b>	<b>4.231</b>	4.246
Normalized	100%	99.62%	99.98%
Standard Deviation	0.5%	0.6%	0.3%
<b>LibRaw - P.P.B (Mpix/sec)</b>	30.31	<b>30.37</b>	<b>30.26</b>
Normalized	99.8%	100%	99.64%
Standard Deviation	1%	1.4%	1.2%
<b>Blender - BMW27 - CPU-Only (sec)</b>	259.45	<b>260.13</b>	<b>259.34</b>
Normalized	99.96%	99.7%	100%
Standard Deviation	0.3%	0.4%	0.1%
<b>Mobile Neural Network - SqueezeNetV1.0</b>	<b>7.681</b>	7.687	<b>7.704</b>
Normalized	100%	99.92%	99.7%
Standard Deviation	0.7%	0.8%	0.3%
<b>InfluxDB - 4 - 10000 - 2,5000,1 - 10000</b>	<b>902054</b>	<b>904699</b>	902556
Normalized	99.71%	100%	99.76%
Standard Deviation	2.7%	2.6%	2.2%
<b>Mobile Neural Network - mobilenet-v1-1.0</b>	7.219	<b>7.223</b>	<b>7.202</b>
Normalized	99.76%	99.71%	100%
Standard Deviation	0.2%	0.5%	0.1%
<b>LAMMPS Molecular Dynamics Simulator - 20k Atoms (ns/day)</b>	<b>4.050</b>	<b>4.060</b>	<b>4.050</b>
Normalized	99.75%	100%	99.75%
Standard Deviation	0.5%	0.4%	0.2%
<b>NAMD - ATPase Simulation - 327,506 Atoms (days/ns)</b>	<b>2.75748</b>	<b>2.76335</b>	2.76279
Normalized	100%	99.79%	99.81%
Standard Deviation	0.6%	0.1%	0.3%
<b>TensorFlow Lite - NASNet Mobile (us)</b>	<b>302458</b>	302155	<b>302017</b>
Normalized	99.85%	99.95%	100%
Standard Deviation	0.2%	0.3%	0.4%
<b>TensorFlow Lite - Mobilenet Float (us)</b>	254122	<b>254280</b>	<b>253975</b>
Normalized	99.94%	99.88%	100%
Standard Deviation	0.2%	0.2%	0.1%
<b>TensorFlow Lite - Mobilenet Quant (us)</b>	<b>246406</b>	246397	<b>246225</b>
Normalized	99.93%	99.93%	100%
Standard Deviation	0.2%	0.2%	0.1%
<b>TensorFlow Lite - Inception V4 (us)</b>	5425967	<b>5428113</b>	<b>5425307</b>
Normalized	99.99%	99.95%	100%
Standard Deviation	0%	0%	0.1%
<b>TensorFlow Lite - I.R.V (us)</b>	4888407	<b>4888160</b>	<b>4889750</b>
Normalized	99.99%	100%	99.97%
Standard Deviation	0.1%	0.1%	0.1%
<b>GPAW - Carbon Nanotube (sec)</b>	<b>436.433</b>	436.385	<b>436.322</b>
Normalized	99.97%	99.99%	100%
Standard Deviation	0.1%	0.1%	0.3%
<b>TensorFlow Lite - SqueezeNet (us)</b>	370424	<b>370419</b>	<b>370499</b>
Normalized	100%	100%	99.98%
Standard Deviation	0.1%	0.2%	0.1%
<b>AOM AV1 - Speed 4 Two-Pass (FPS)</b>	1.83	1.83	1.83
Standard Deviation	0.3%	0.3%	0.3%
<b>AOM AV1 - Speed 0 Two-Pass (FPS)</b>	0.24	0.24	0.24
Standard Deviation	2.4%	2.4%	2.4%

<b>OpenCV - DNN - D.N.N (ms)</b>	<b>8326</b>	<b>9290</b>	8743
<b>Normalized</b>	100%	89.62%	95.23%
<b>Standard Deviation</b>	12.7%	13.4%	9.3%
<b>Kripke (Throughput FoM)</b>	<b>3130019</b>	<b>3527303</b>	3145270
<b>Normalized</b>	88.74%	100%	89.17%
<b>Standard Deviation</b>	1.1%	25.2%	2.8%
<b>System GZIP Decompression (sec)</b>	<b>3.580</b>	3.463	<b>3.433</b>
<b>Normalized</b>	95.89%	99.13%	100%
<b>Standard Deviation</b>	10.9%	10%	3%
<b>OSBench - Create Threads (us/Event)</b>	<b>11.610190</b>	12.149334	<b>12.640794</b>
<b>Normalized</b>	100%	95.56%	91.85%
<b>Standard Deviation</b>	2.5%	9.8%	11.4%

## Zstd Compression 1.4.5

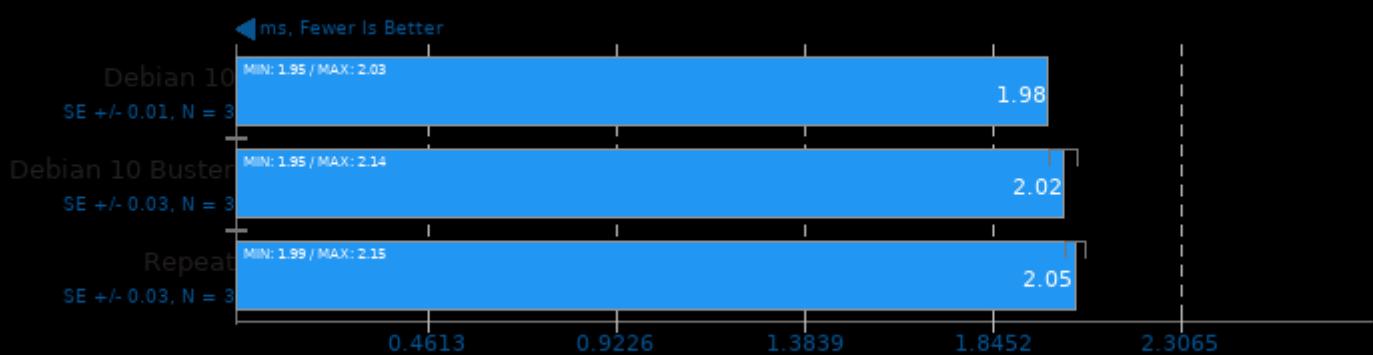
Compression Level: 19



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

## NCNN 20200916

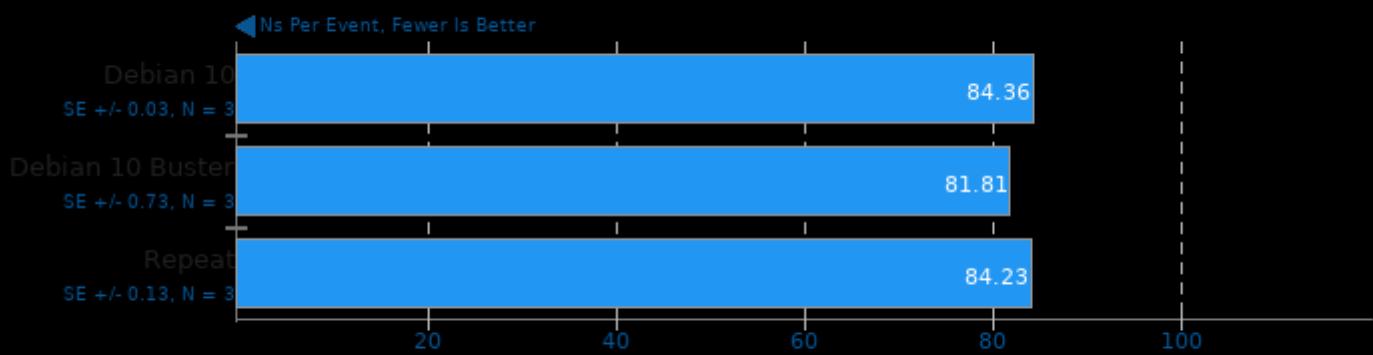
Target: CPU - Model: blazeface



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

## OSBench

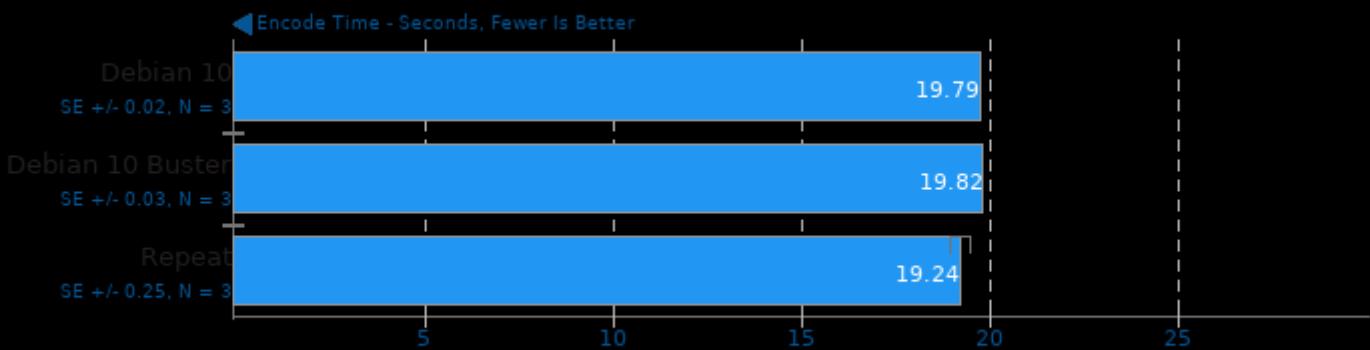
Test: Memory Allocations



1. (CC) gcc options: -lm

## WebP Image Encode 1.1

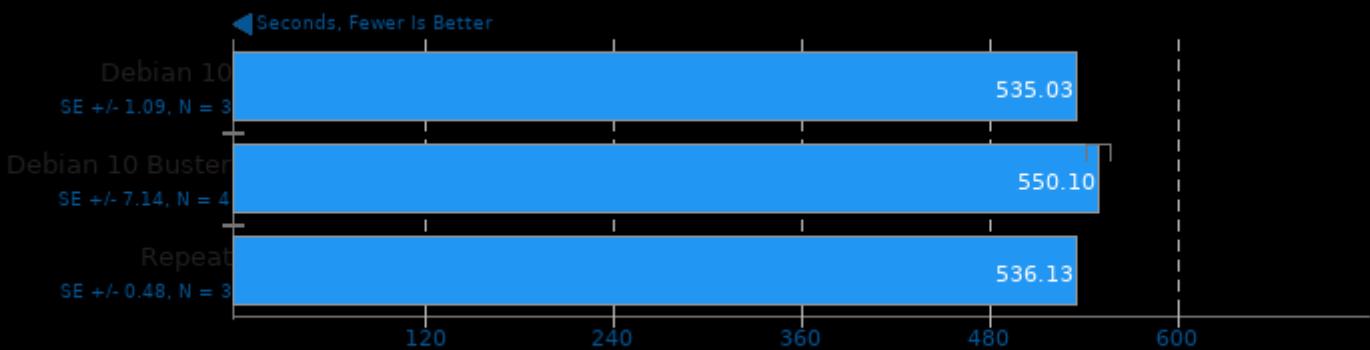
Encode Settings: Quality 100, Lossless



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

## Incompact3D 2020-09-17

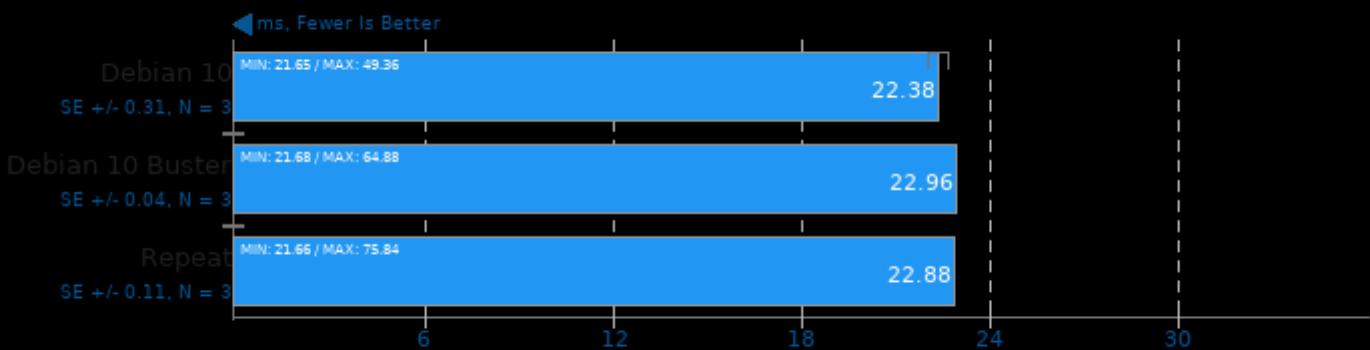
Input: Cylinder



1. (F9X) gfortran options: -cpp -funroll-loops -floop-optimize -fcray-pointer -fbacktrace -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi

## NCNN 20200916

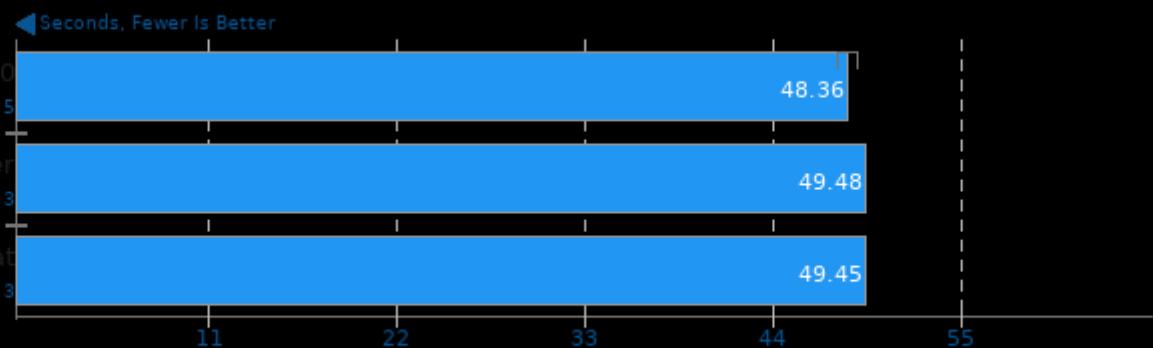
Target: CPU - Model: squeezeenet\_int8



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

**ddraw**

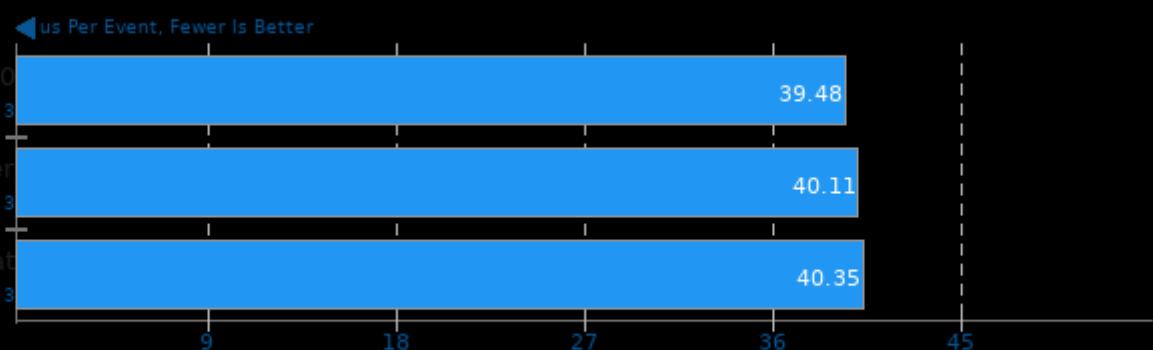
RAW To PPM Image Conversion



1. (CC) gcc options: -lm

**OSBench**

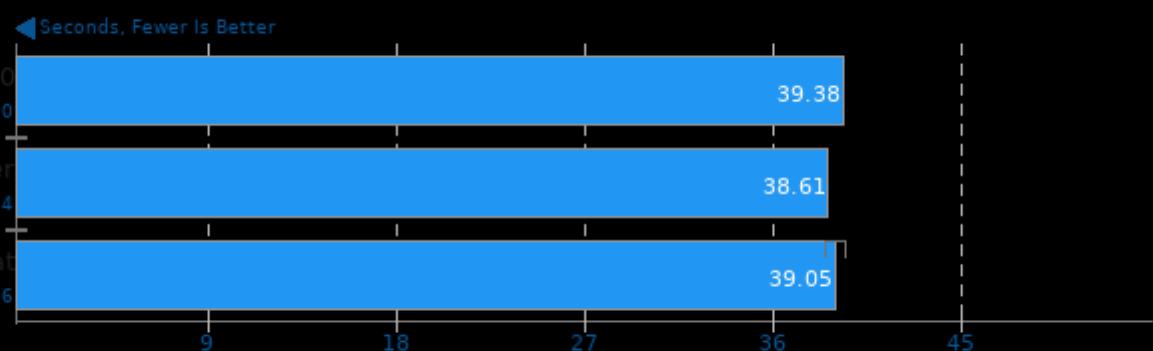
Test: Launch Programs



1. (CC) gcc options: -lm

**eSpeak-NG Speech Engine 20200907**

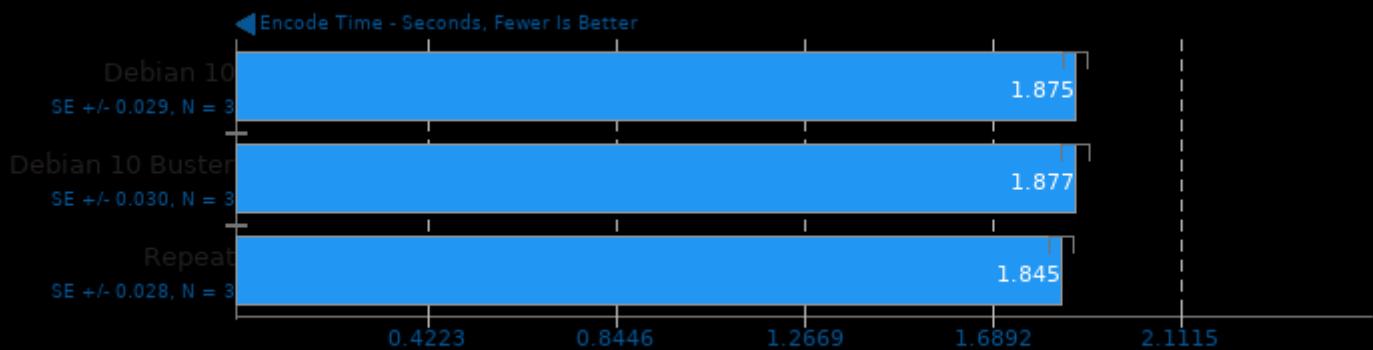
Text-To-Speech Synthesis



1. (CC) gcc options: -O2 -std=c99

## WebP Image Encode 1.1

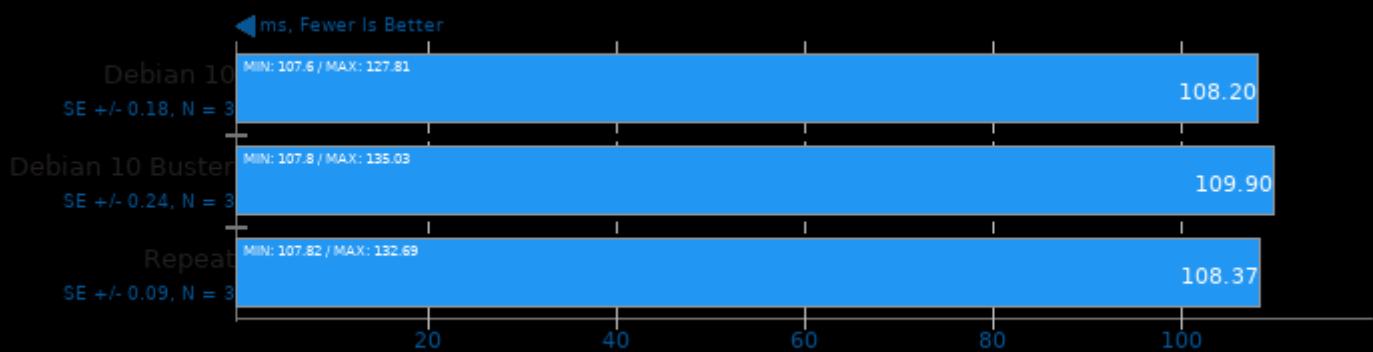
Encode Settings: Default



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

## NCNN 20200916

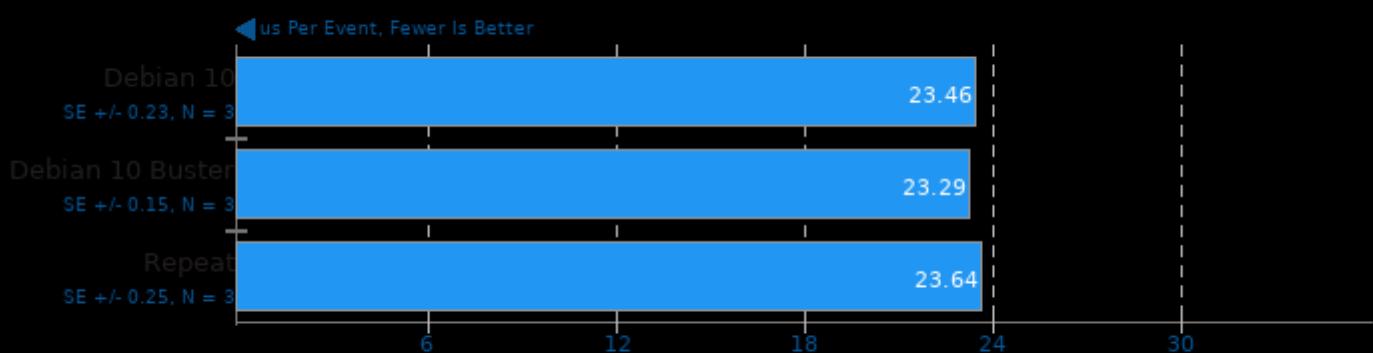
Target: CPU - Model: resnet50\_int8



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

## OSBench

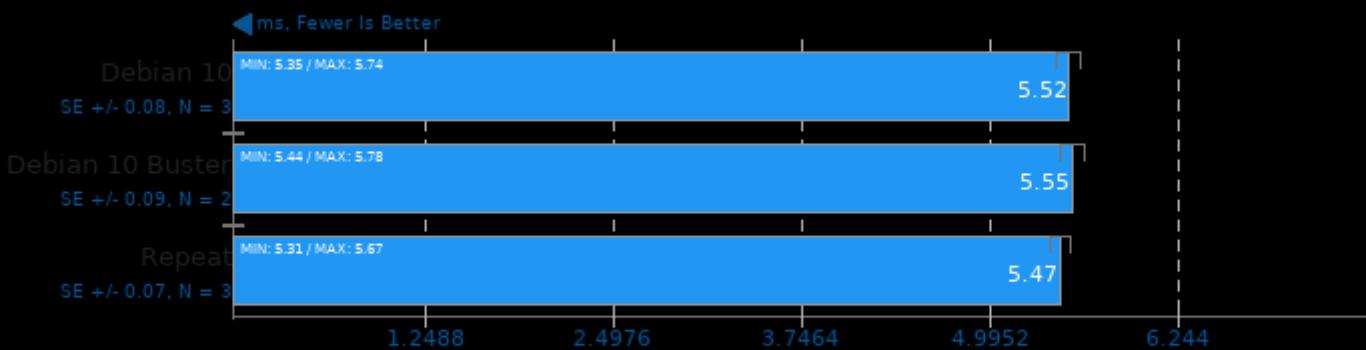
Test: Create Processes



1. (CC) gcc options: -lm

## NCNN 20200916

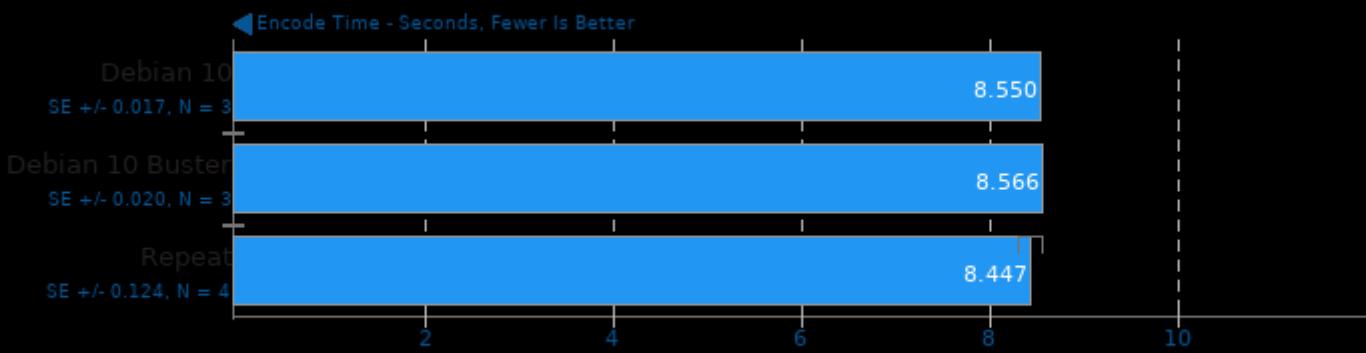
Target: CPU - Model: mnasnet



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

## WebP Image Encode 1.1

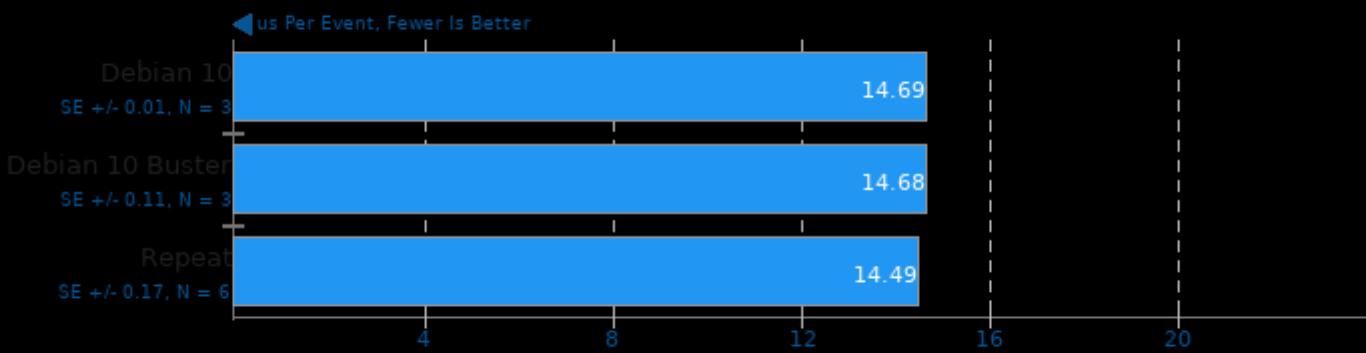
Encode Settings: Quality 100, Highest Compression



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

## OSBench

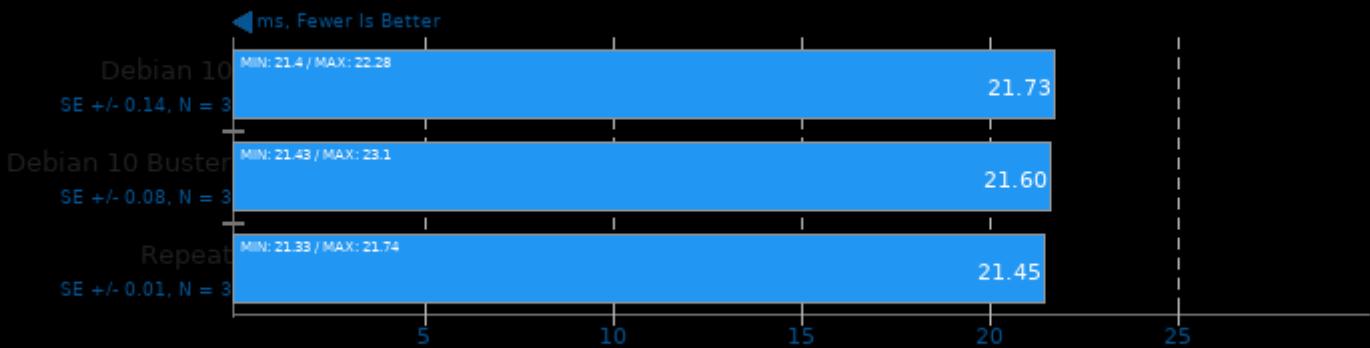
Test: Create Files



1. (CC) gcc options: -lm

## NCNN 20200916

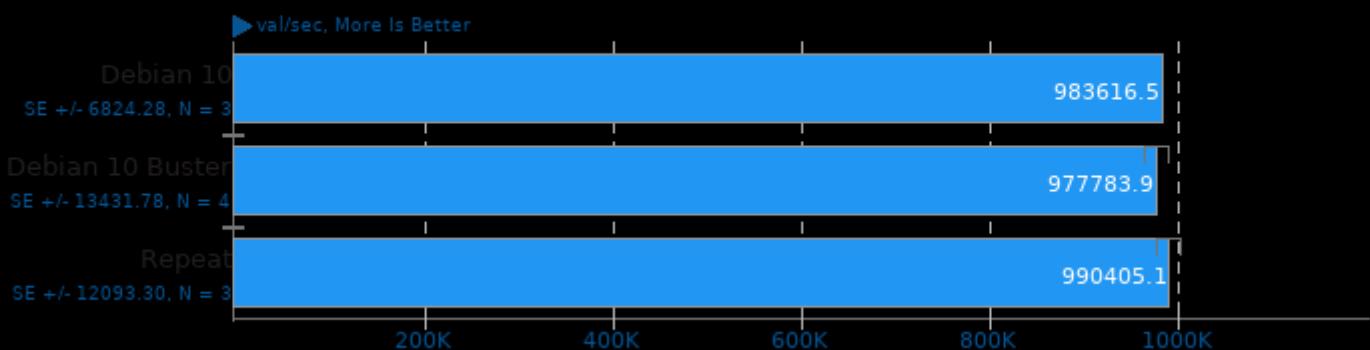
Target: CPU - Model: mobilenetv2\_yolov3



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

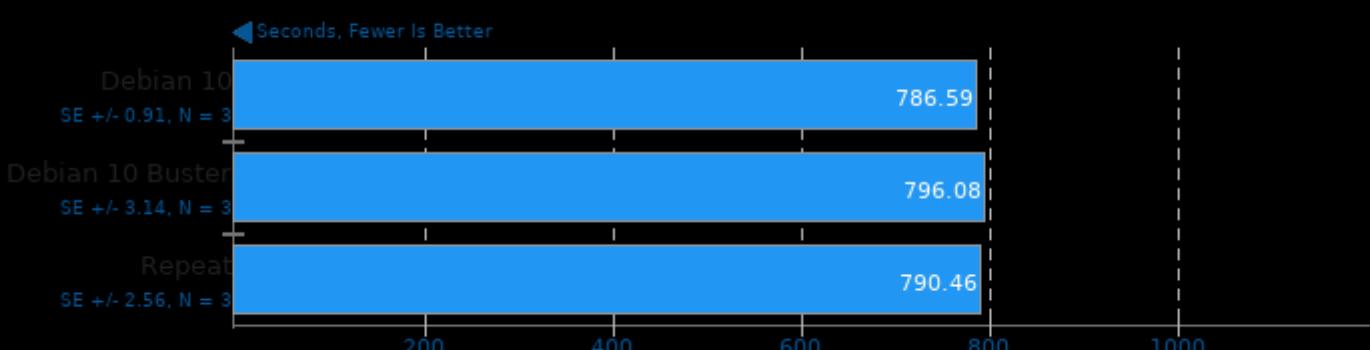
## InfluxDB 1.8.2

Concurrent Streams: 64 - Batch Size: 10000 - Tags: 2,5000,1 - Points Per Series: 10000



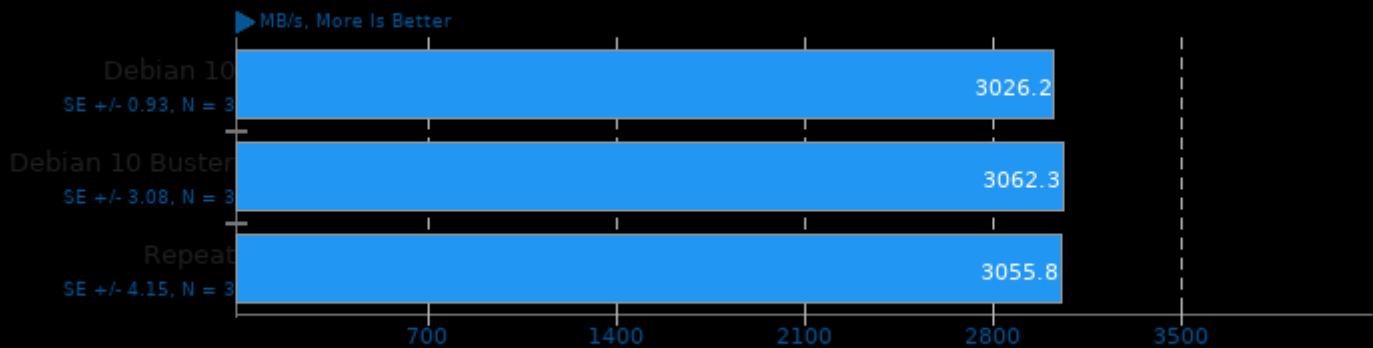
## Blender 2.90

Blend File: Classroom - Compute: CPU-Only



## Zstd Compression 1.4.5

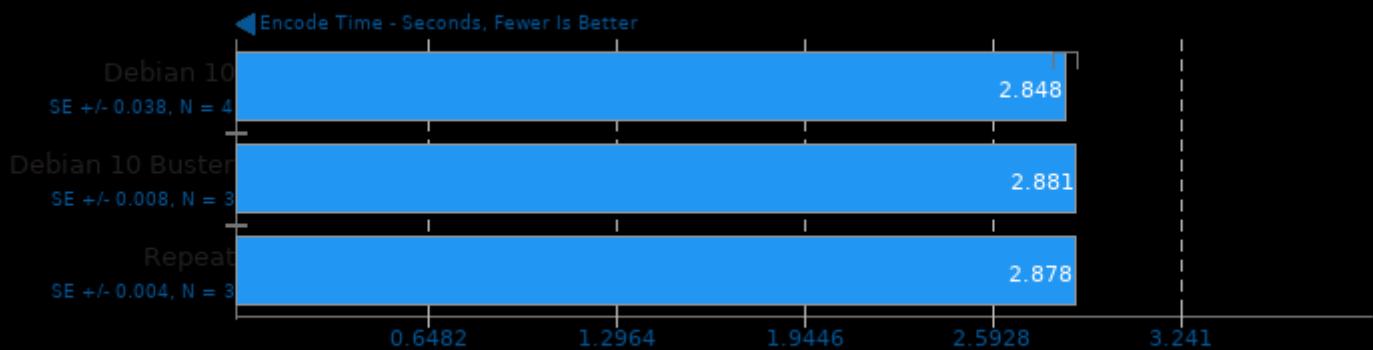
Compression Level: 3



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

## WebP Image Encode 1.1

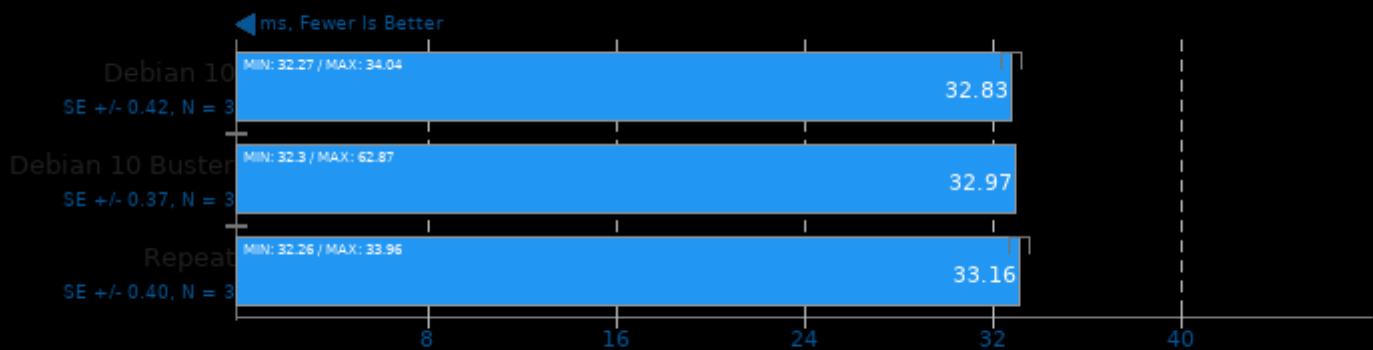
Encode Settings: Quality 100



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

## NCNN 20200916

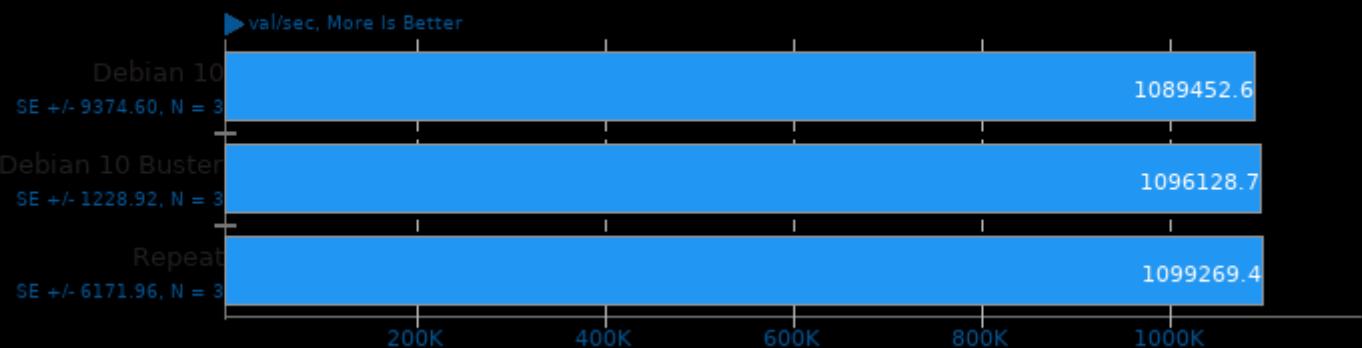
Target: CPU - Model: resnet18\_int8



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

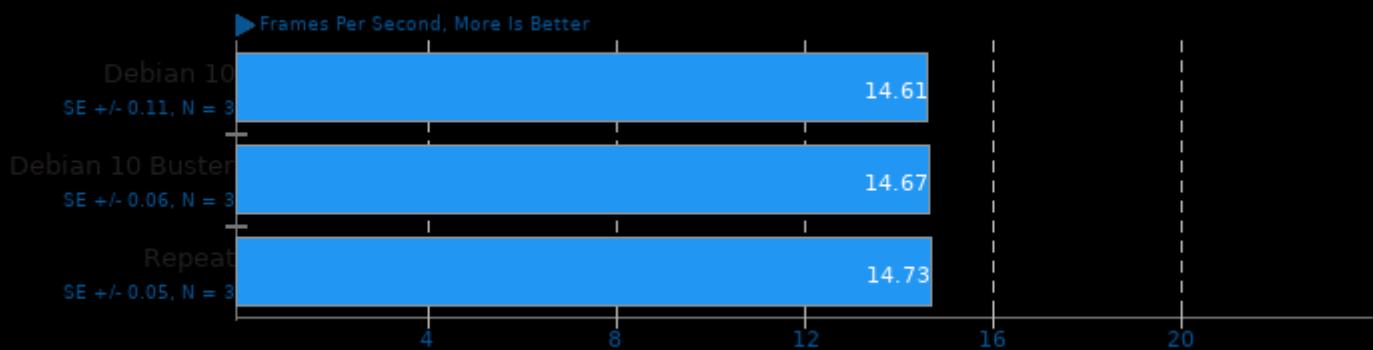
## InfluxDB 1.8.2

Concurrent Streams: 1024 - Batch Size: 10000 - Tags: 2,5000,1 - Points Per Series: 10000



## AOM AV1 2.0

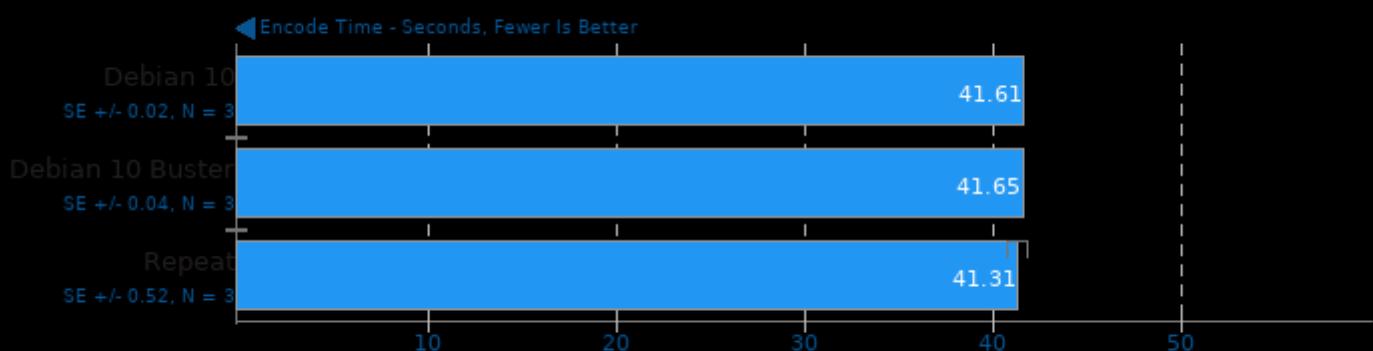
Encoder Mode: Speed 6 Realtime



1. (CXX) g++ options: -O3 -std=c++11 -U\_FORTIFY\_SOURCE -fno-plt -fthread

## WebP Image Encode 1.1

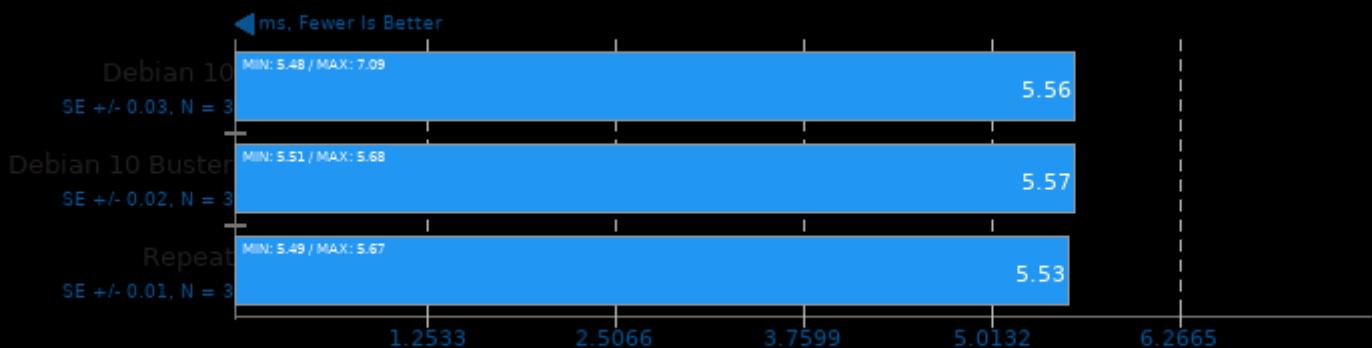
Encode Settings: Quality 100, Lossless, Highest Compression



1. (CC) gcc options: -fvisibility=hidden -O2 -fno-plt -fjpeg -fpng16 -ltiff

## NCNN 20200916

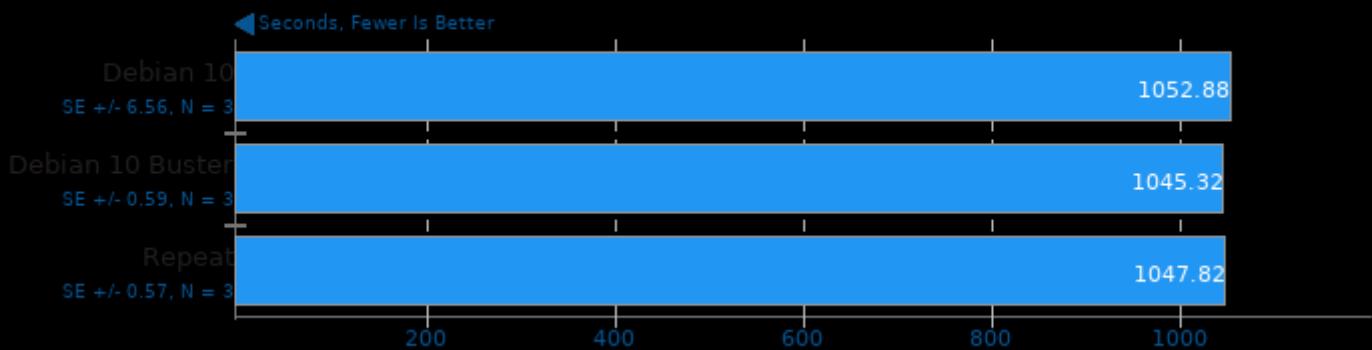
Target: CPU - Model: mobilenet\_v3



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

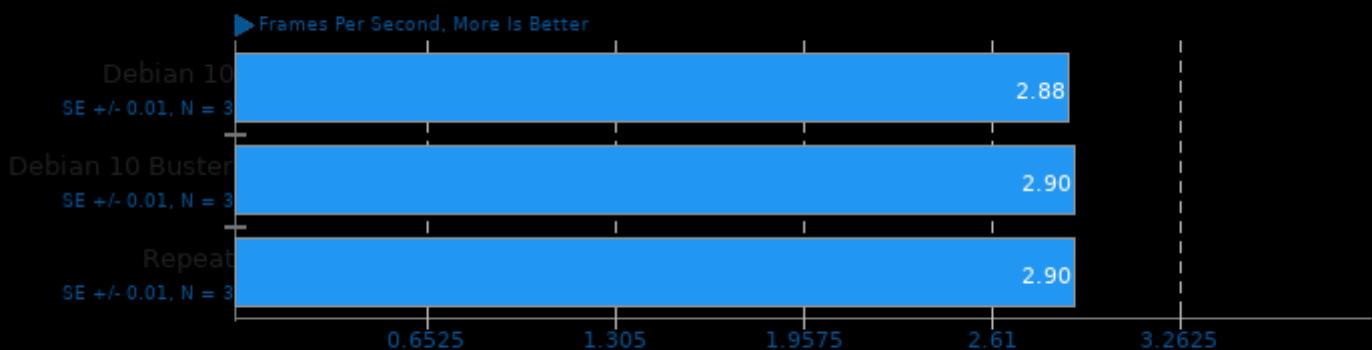
## Blender 2.90

Blend File: Barbershop - Compute: CPU-Only



## AOM AV1 2.0

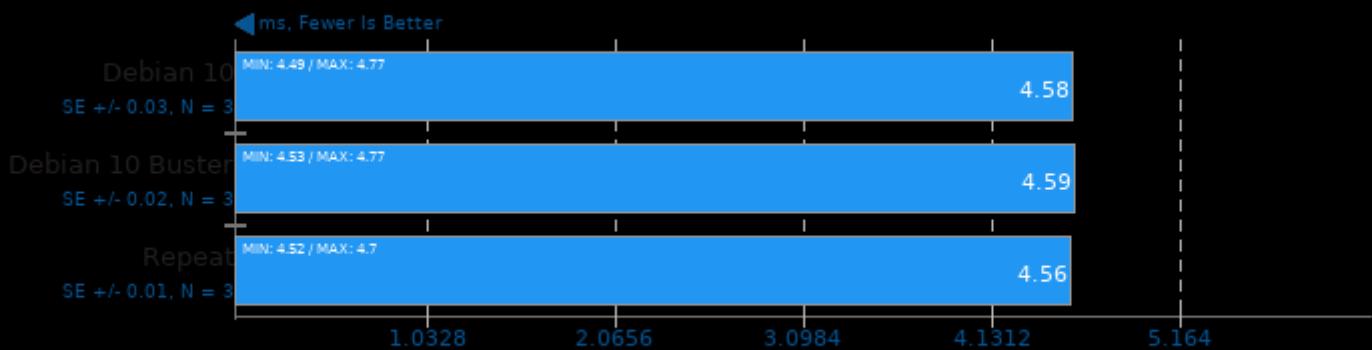
Encoder Mode: Speed 6 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U\_FORTIFY\_SOURCE -fim -lpthread

## NCNN 20200916

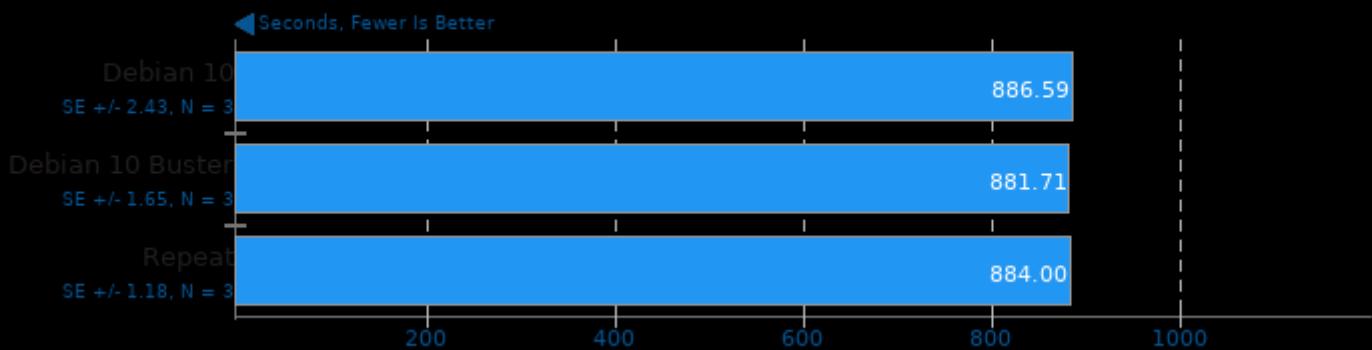
Target: CPU - Model: squeezeonet



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

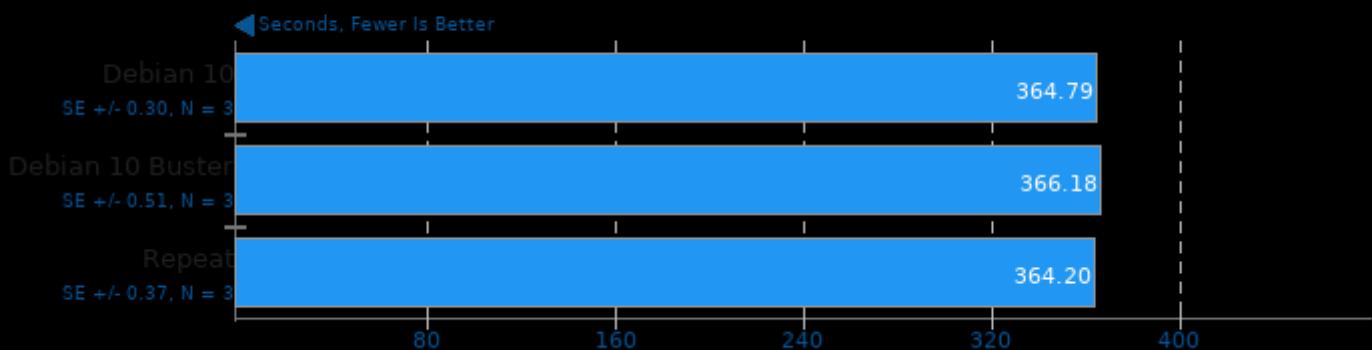
## Timed LLVM Compilation 10.0

Time To Compile



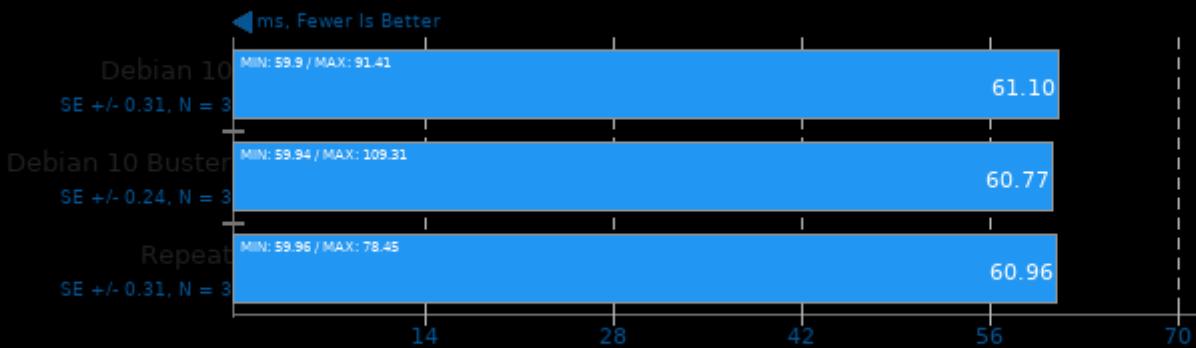
## Blender 2.90

Blend File: Fishy Cat - Compute: CPU-Only



## NCNN 20200916

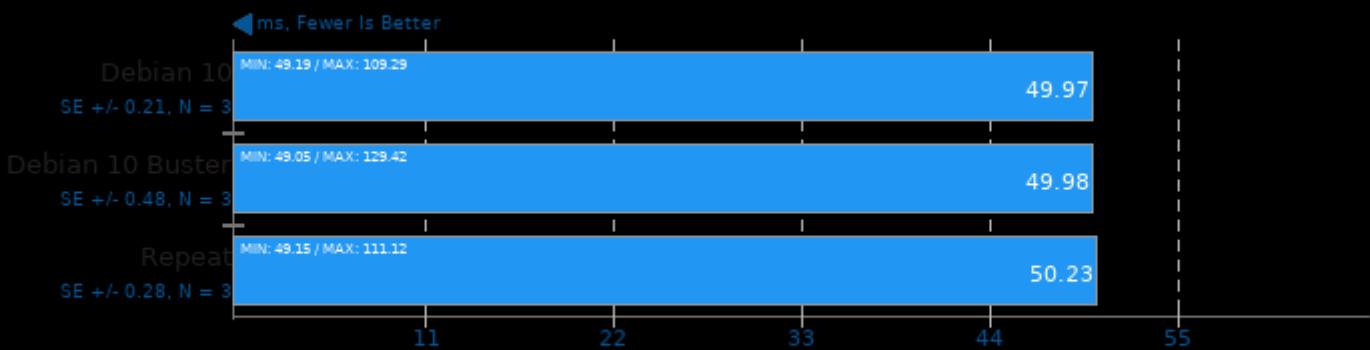
Target: CPU - Model: googlenet\_int8



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

## Mobile Neural Network 2020-09-17

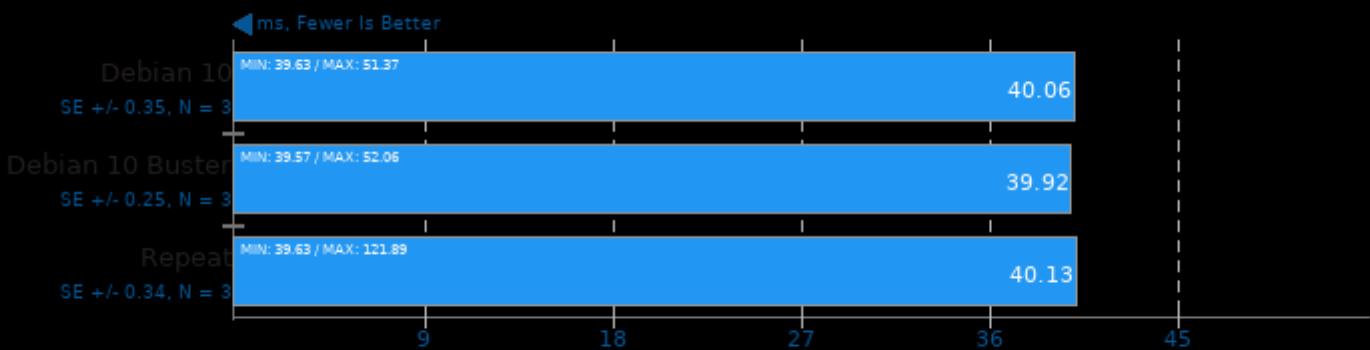
Model: inception-v3



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

## Mobile Neural Network 2020-09-17

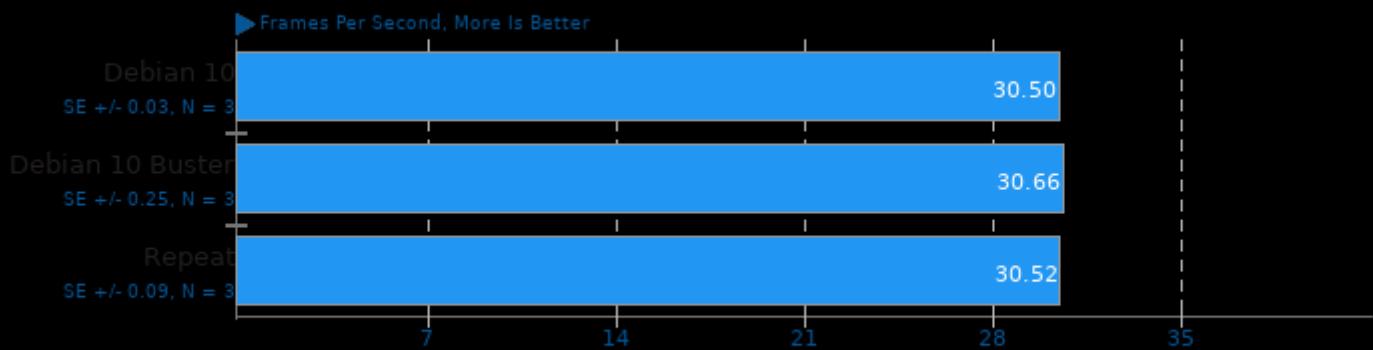
Model: resnet-v2-50



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

## AOM AV1 2.0

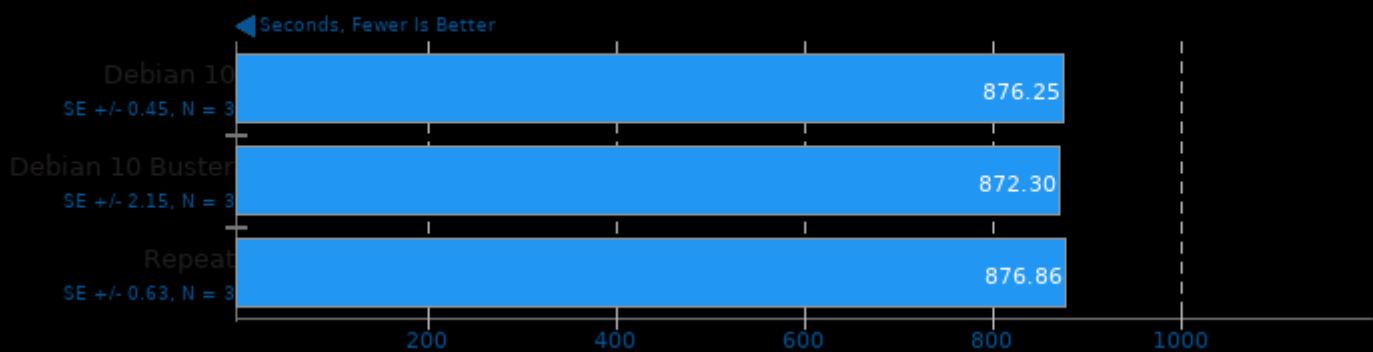
Encoder Mode: Speed 8 Realtime



1. (CXX) g++ options: -O3 -std=c++11 -U\_FORTIFY\_SOURCE -lm -lpthread

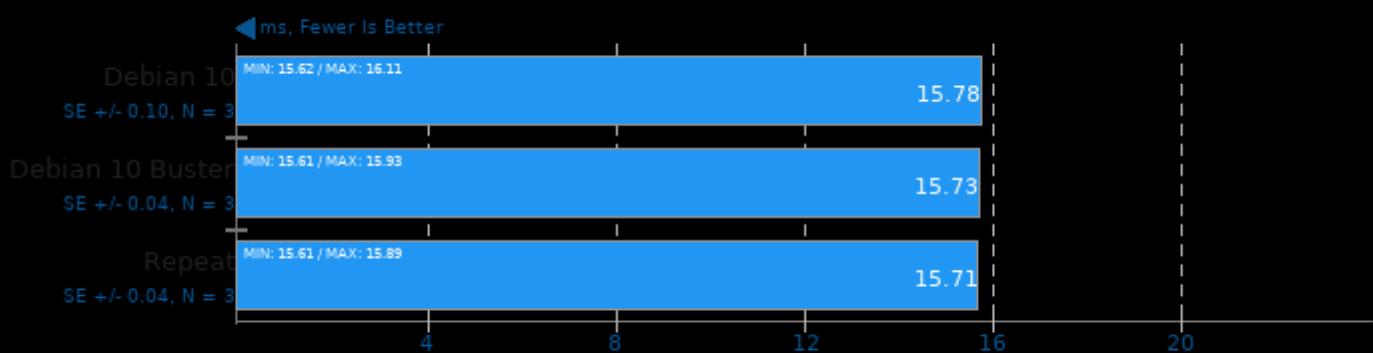
## Blender 2.90

Blend File: Pabellon Barcelona - Compute: CPU-Only



## NCNN 20200916

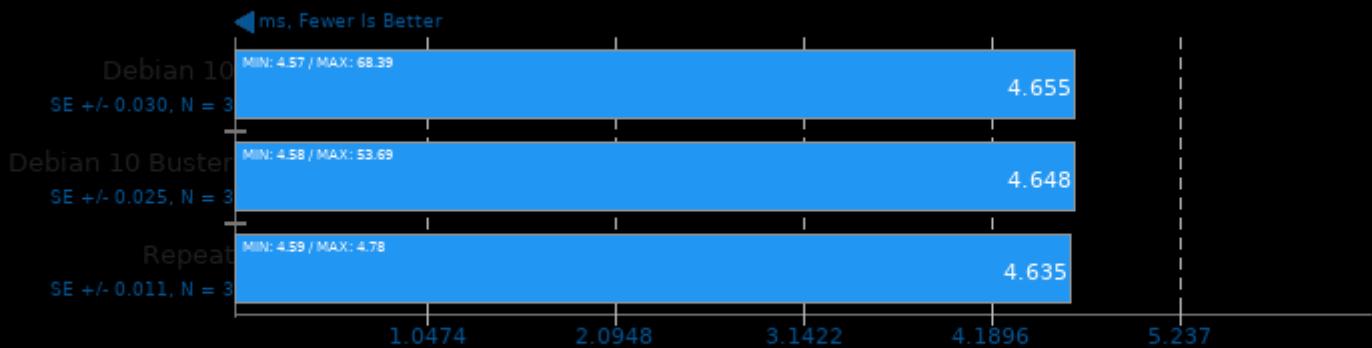
Target: CPU - Model: alexnet



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

## Mobile Neural Network 2020-09-17

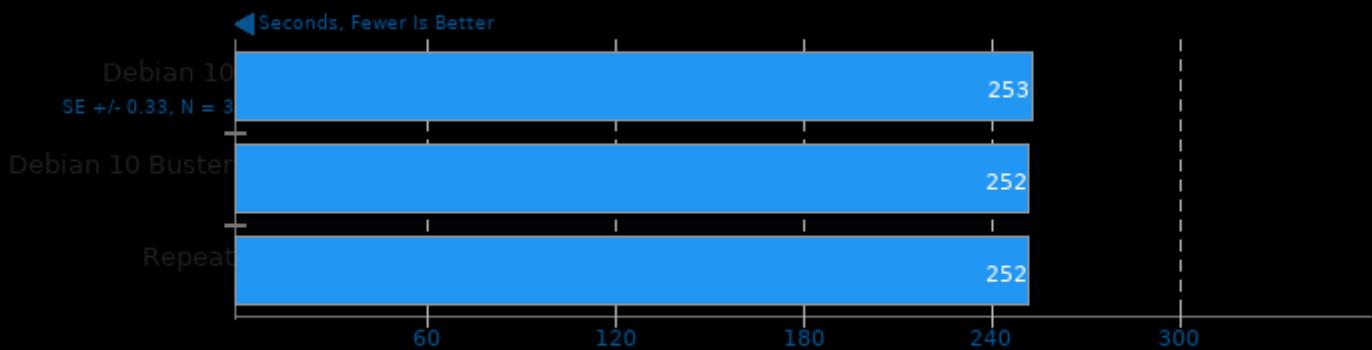
Model: MobileNetV2\_224



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

## Monte Carlo Simulations of Ionised Nebulae 2019-03-24

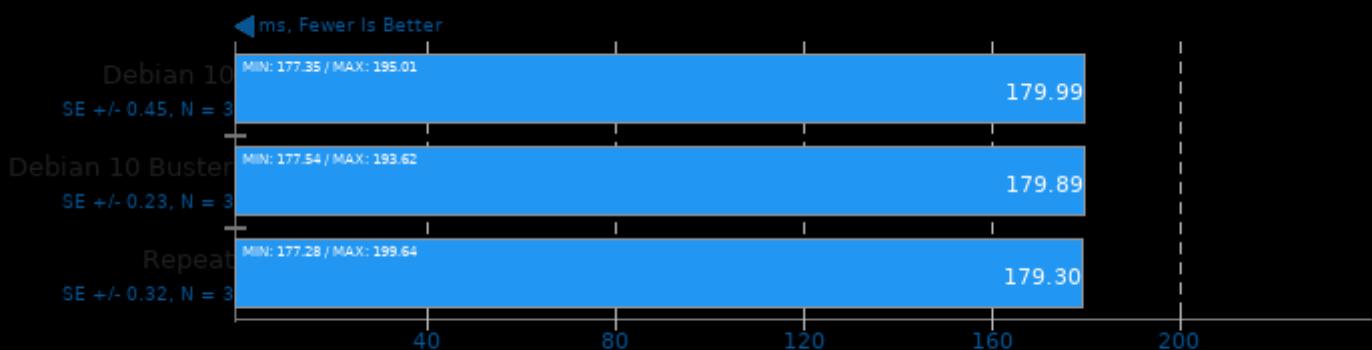
Input: Dust 2D tau100.0



1. (F9X) gfortran options: -cpp -jsource/ -ffree-line-length-0 -lm -std=legacy -O3 -O2 -pthread -lmpic\_usempif08 -lmpic\_mpifh -lmpic

## NCNN 20200916

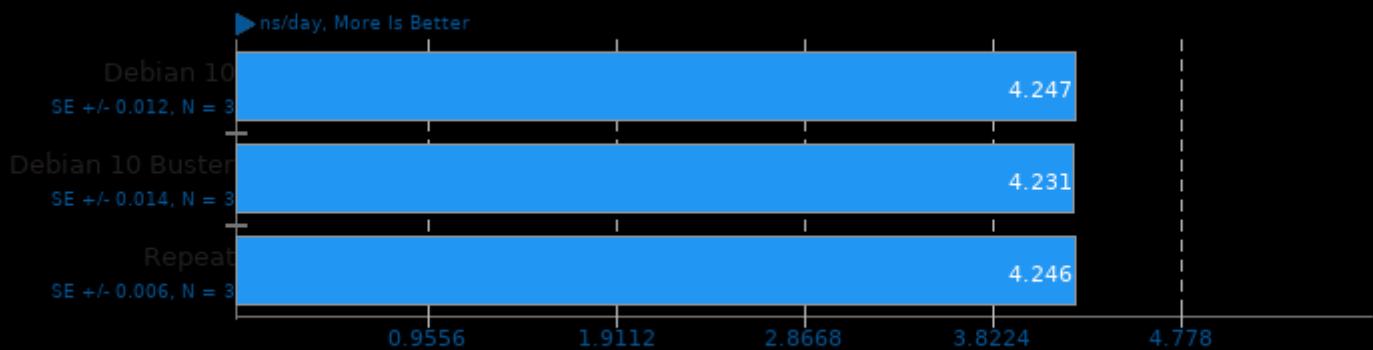
Target: CPU - Model: vgg16\_int8



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

## LAMMPS Molecular Dynamics Simulator 24Aug2020

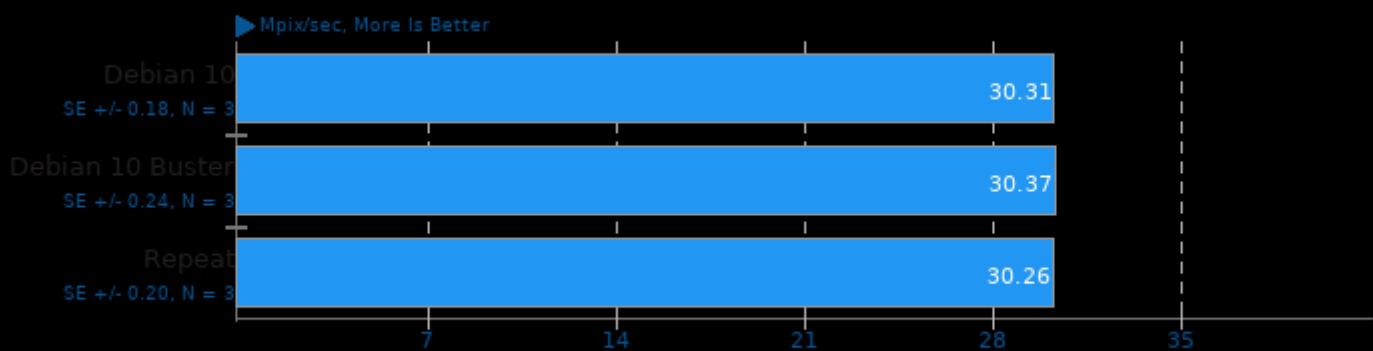
Model: Rhodopsin Protein



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

## LibRaw 0.20

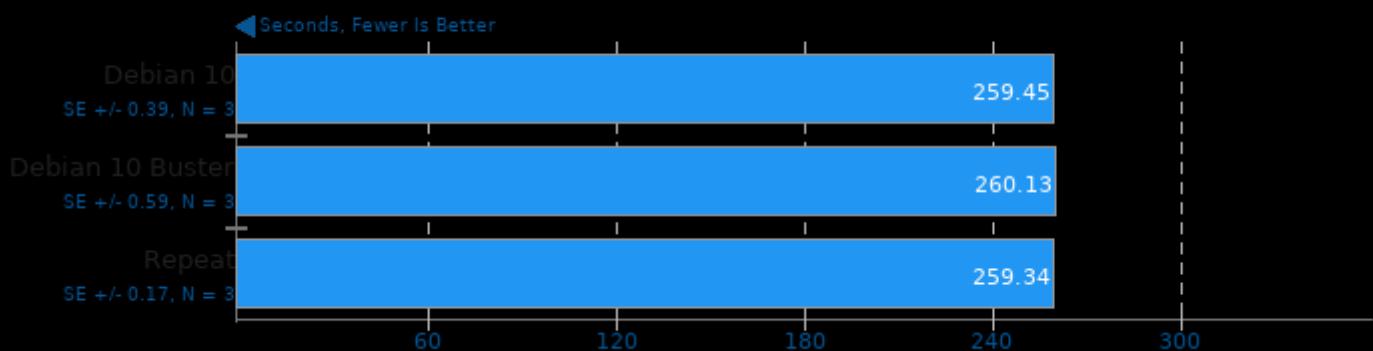
Post-Processing Benchmark



1. (CXX) g++ options: -O2 -fopenmp -ljpeg -lz -lm

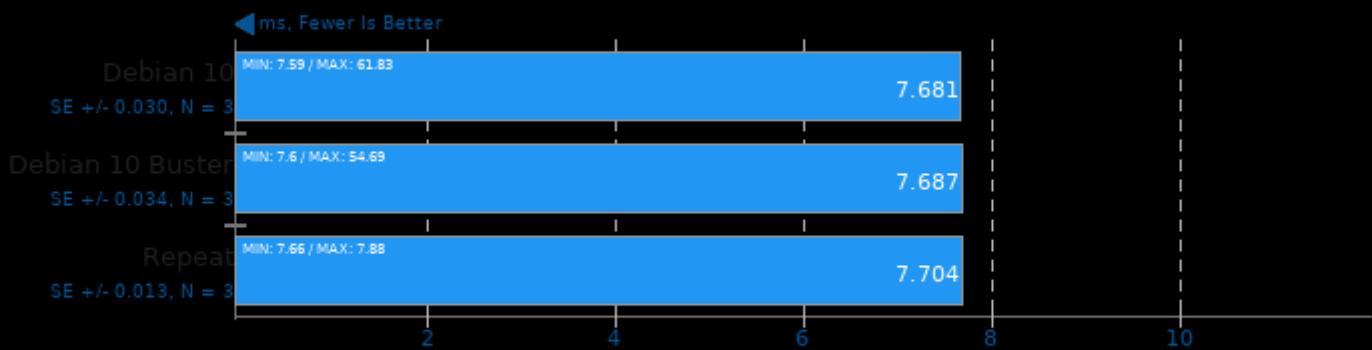
## Blender 2.90

Blend File: BMW27 - Compute: CPU-Only



## Mobile Neural Network 2020-09-17

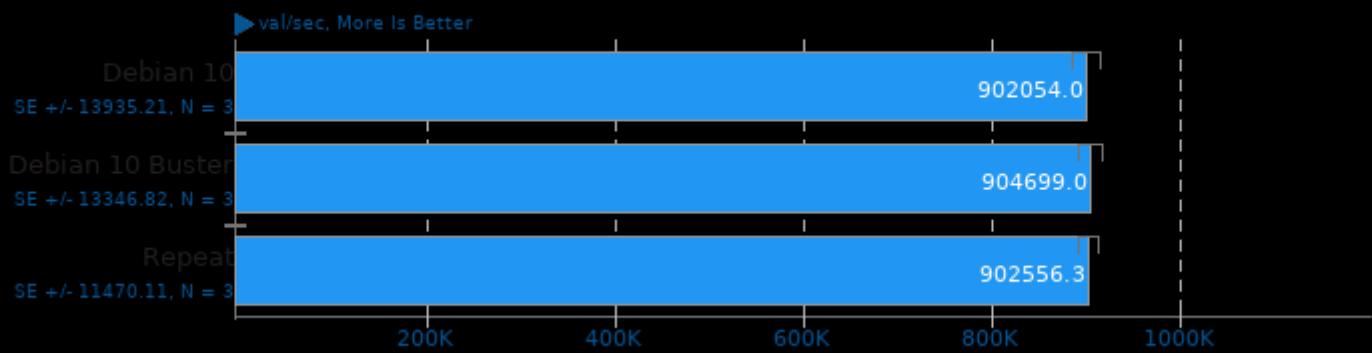
Model: SqueezeNetV1.0



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

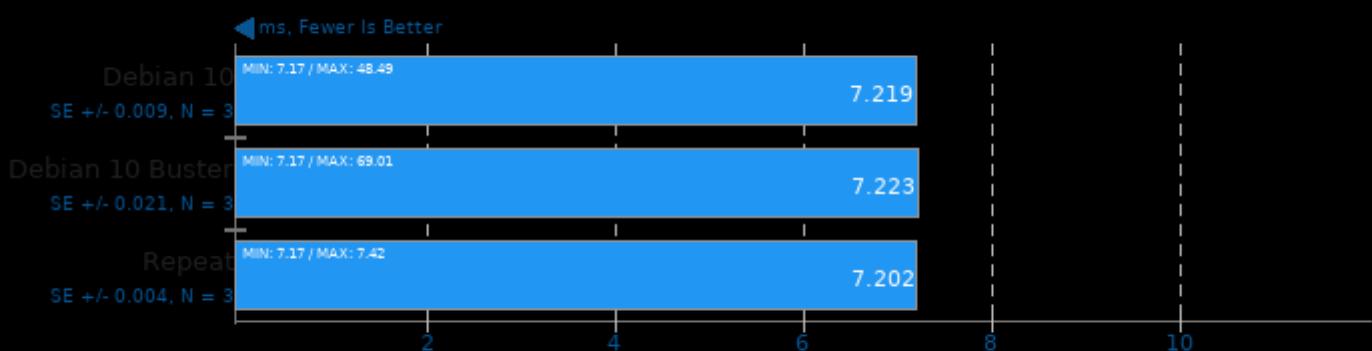
## InfluxDB 1.8.2

Concurrent Streams: 4 - Batch Size: 10000 - Tags: 2,5000,1 - Points Per Series: 10000



## Mobile Neural Network 2020-09-17

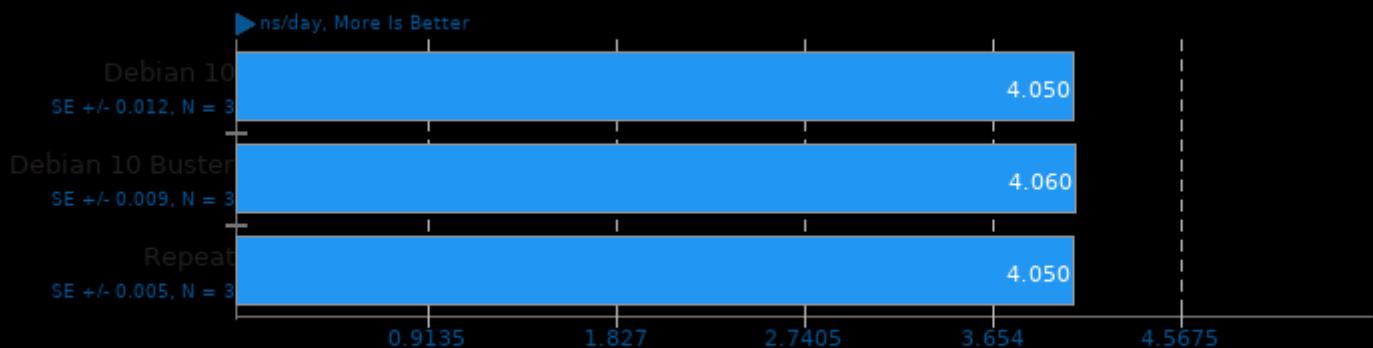
Model: mobilenet-v1-1.0



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

## LAMMPS Molecular Dynamics Simulator 24Aug2020

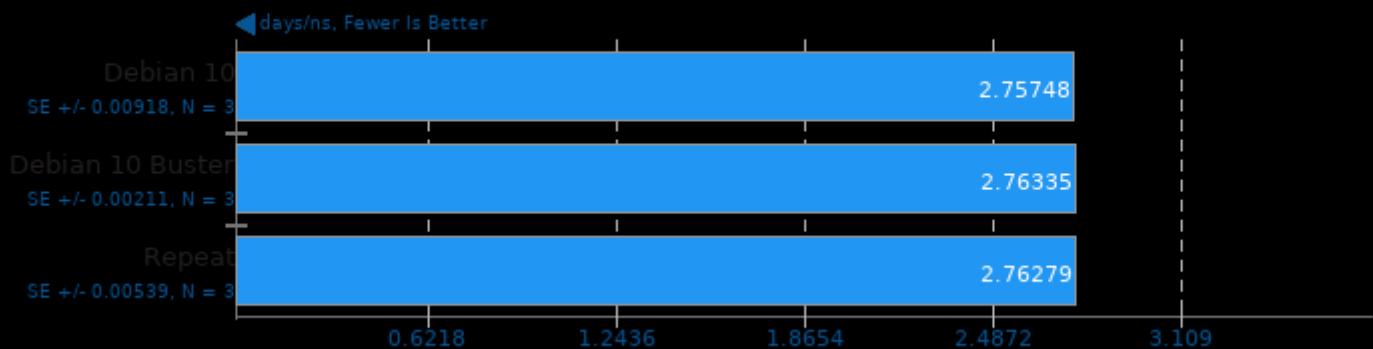
Model: 20k Atoms



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

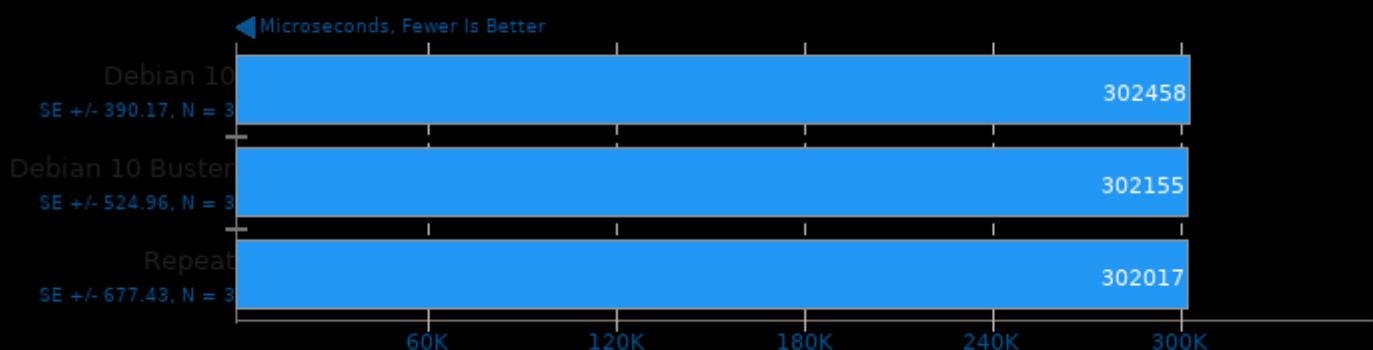
## NAMD 2.14

ATPase Simulation - 327,506 Atoms



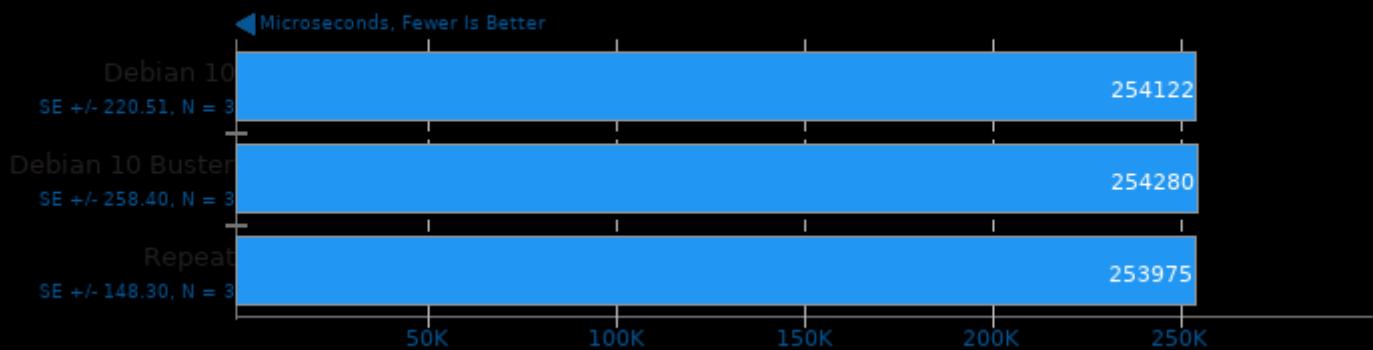
## TensorFlow Lite 2020-08-23

Model: NASNet Mobile



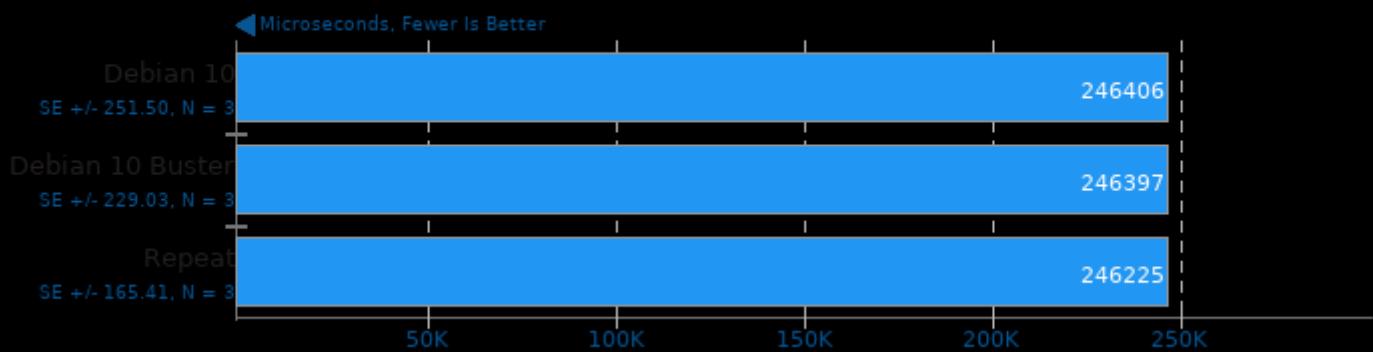
## TensorFlow Lite 2020-08-23

Model: Mobilenet Float



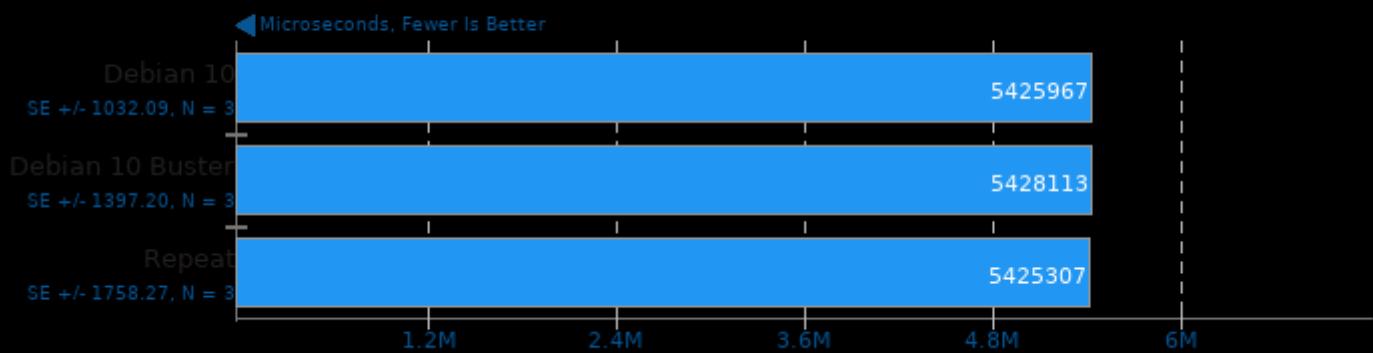
## TensorFlow Lite 2020-08-23

Model: Mobilenet Quant



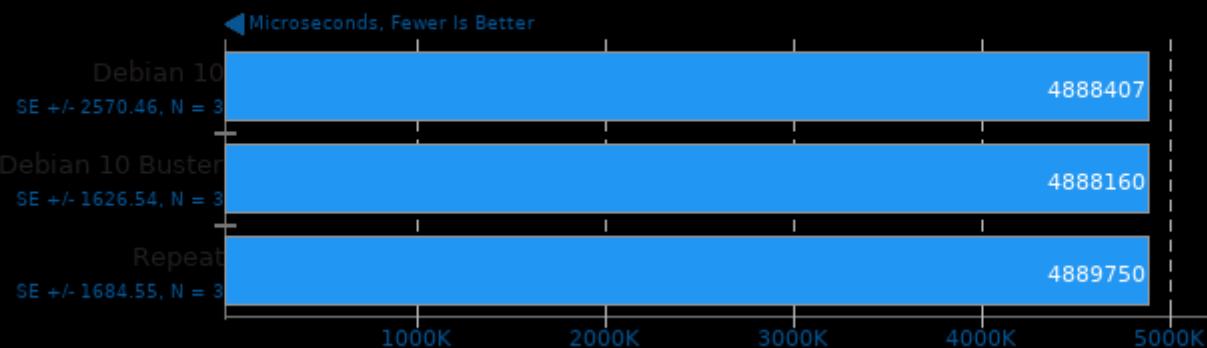
## TensorFlow Lite 2020-08-23

Model: Inception V4



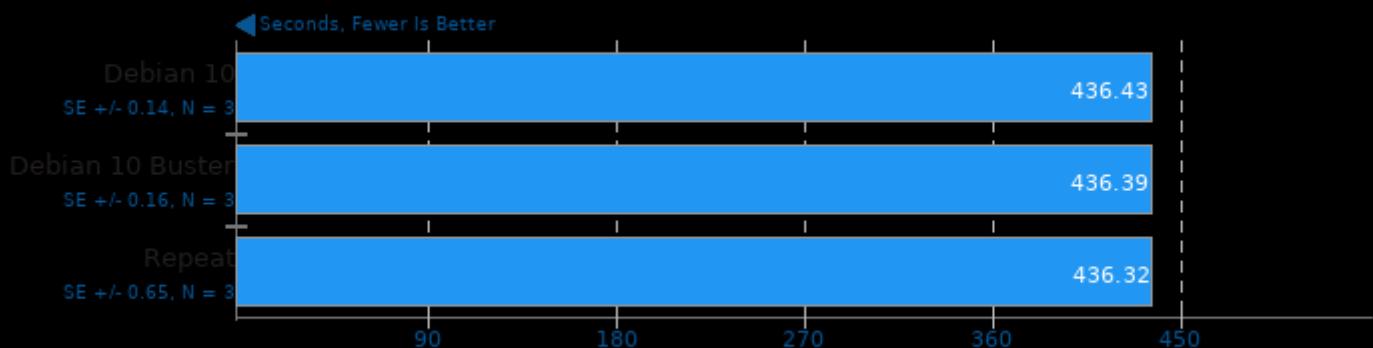
## TensorFlow Lite 2020-08-23

Model: Inception ResNet V2



## GPAW 20.1

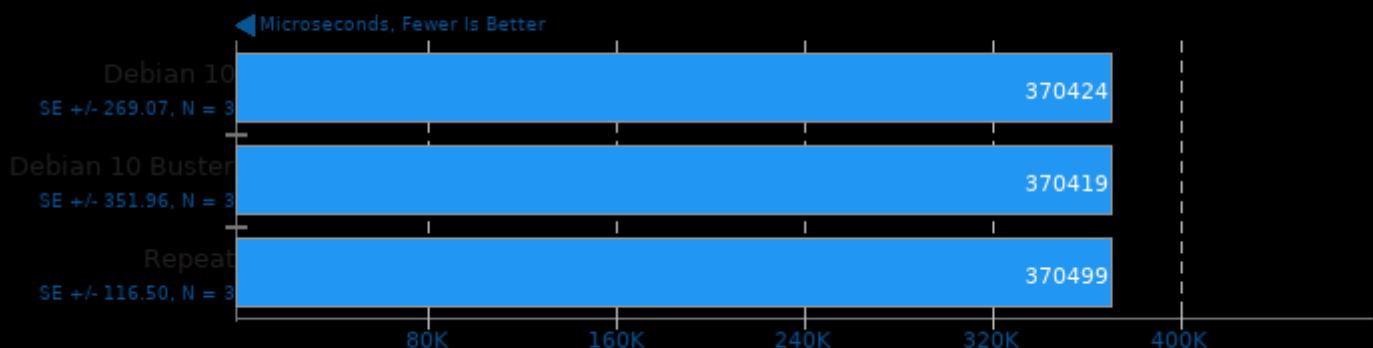
Input: Carbon Nanotube



1. (CC) gcc options: -pthread -shared -lxc -lblas -lmpi

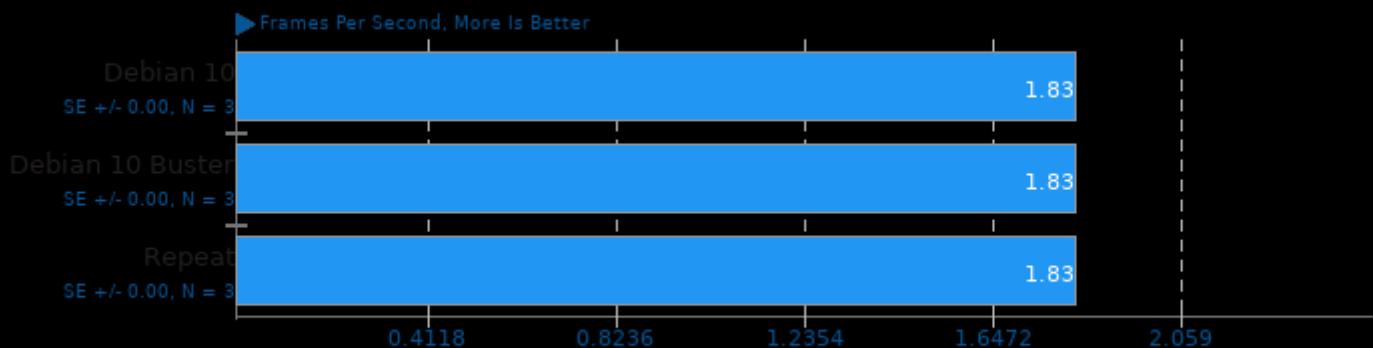
## TensorFlow Lite 2020-08-23

Model: SqueezeNet



## AOM AV1 2.0

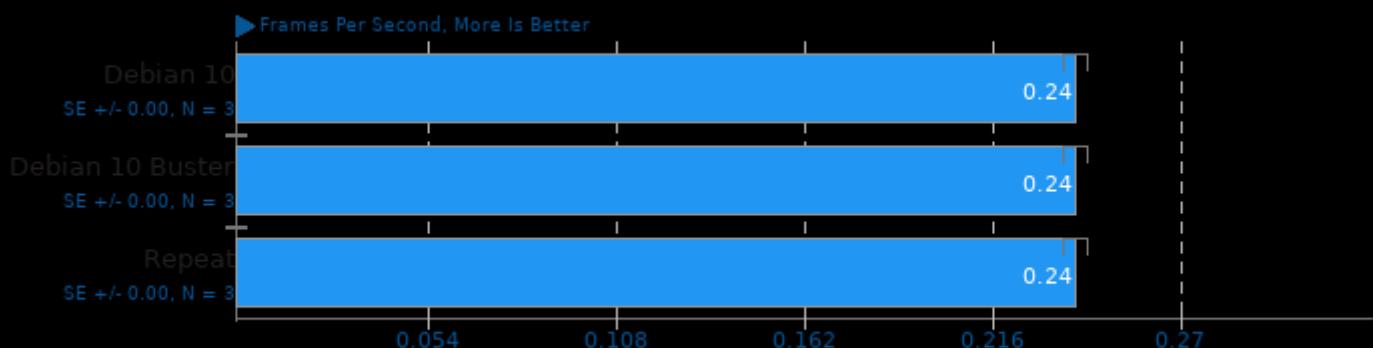
Encoder Mode: Speed 4 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U\_FORTIFY\_SOURCE -lm -lpthread

## AOM AV1 2.0

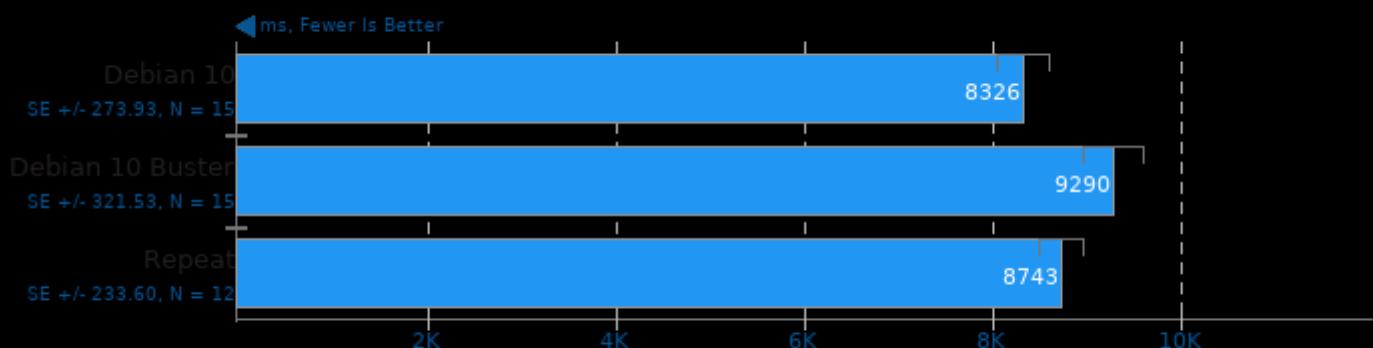
Encoder Mode: Speed 0 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U\_FORTIFY\_SOURCE -lm -lpthread

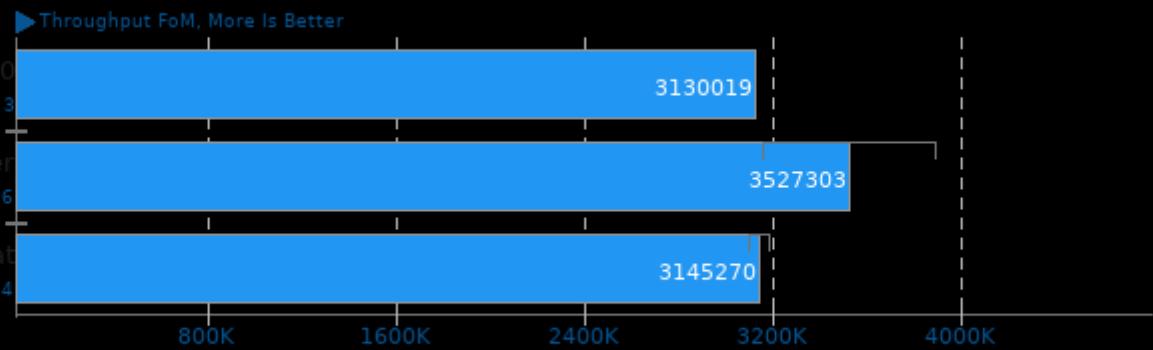
## OpenCV 4.4

Test: DNN - Deep Neural Network



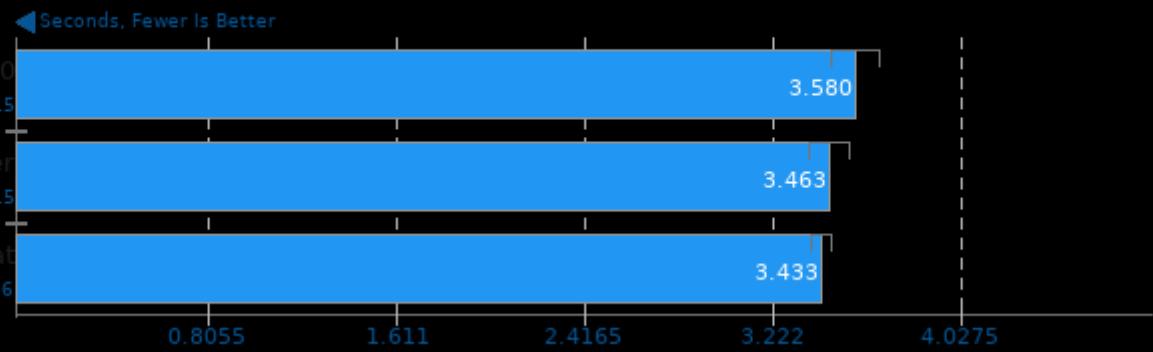
1. (CXX) g++ options: -fsigned-char -pthread -fomit-frame-pointer -ffunction-sections -fdata-sections -msse -msse2 -msse3 -fvisibility=hidden -O3 -ldl -lr

## Kripke 1.2.4



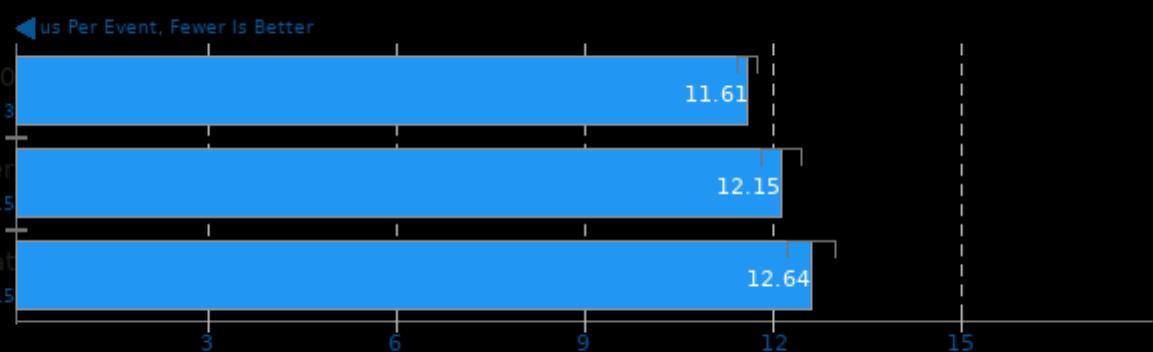
1. (CXX) g++ options: -O3 -fopenmp

## System GZIP Decompression



## OSBench

Test: Create Threads

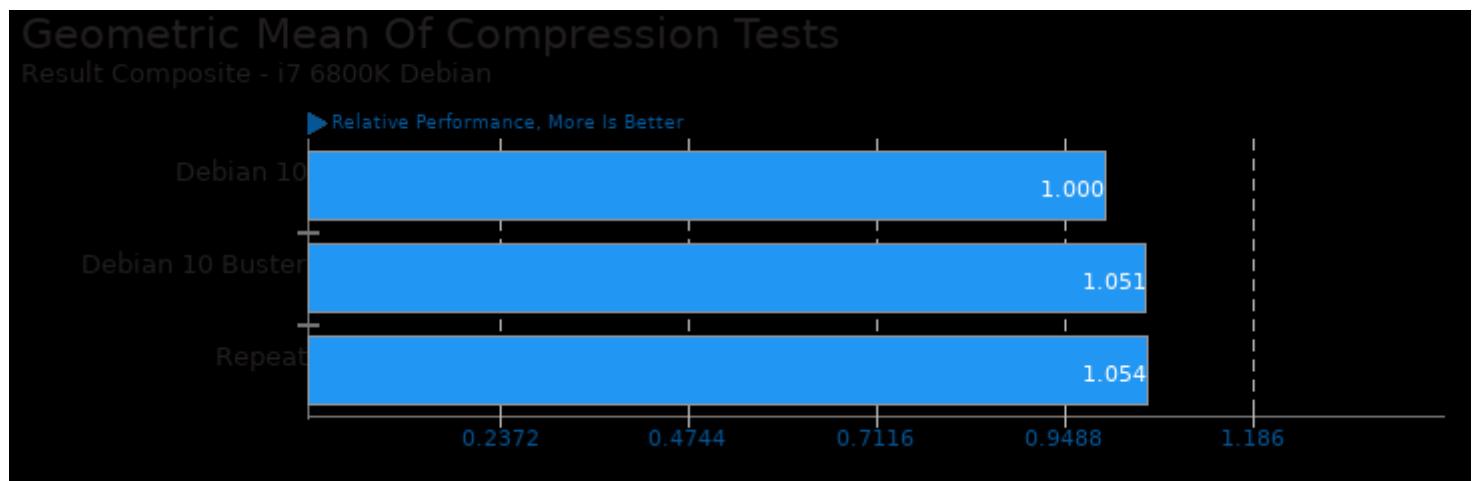


1. (CC) gcc options: -lm

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



Geometric mean based upon tests: pts/build-llvm, pts/compress-zstd, pts/lammps and pts/aom-av1



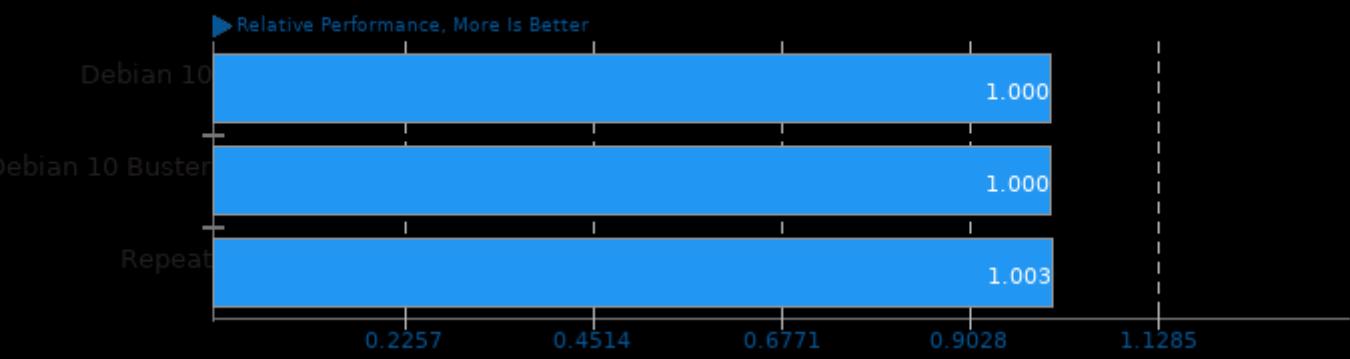
Geometric mean based upon tests: pts/compress-zstd and pts/system-decompress-gzip



Geometric mean based upon tests: pts/build-llvm, pts/compress-zstd, pts/lammps, pts/namd and pts/blender

## Geometric Mean Of Creator Workloads Tests

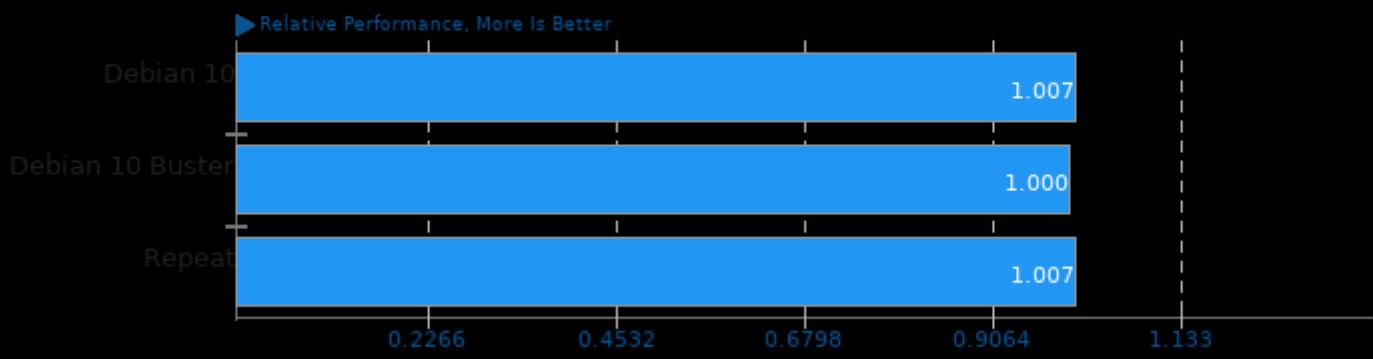
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/blender, pts/aom-av1, pts/libraw, pts/webp, pts/dcraw and pts/espeak

## Geometric Mean Of Fortran Tests

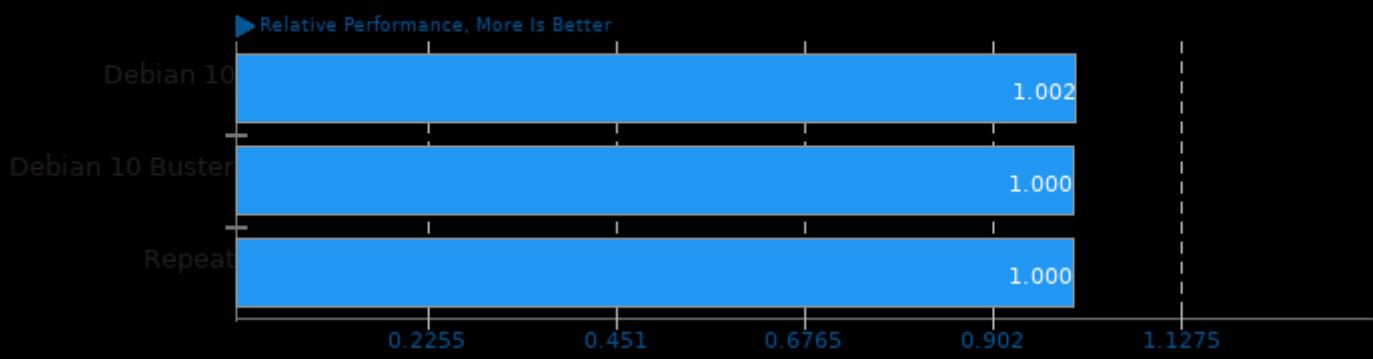
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/incompact3d, pts/mocassin and pts/lammps

## Geometric Mean Of HPC - High Performance Computing Tests

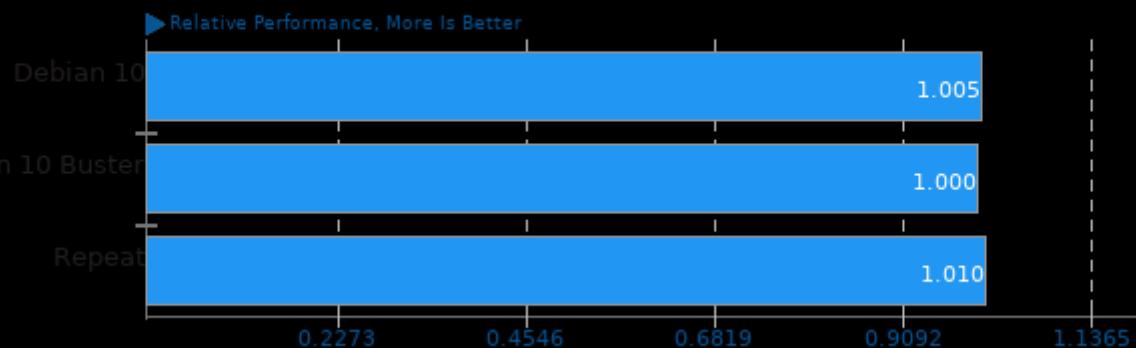
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/namd, pts/lammps, pts/incompact3d, pts/gpaw, pts/mocassin, pts/kripke, pts/mnn, pts/ncnn, pts/openCV and pts/tensorflow-lite

## Geometric Mean Of Imaging Tests

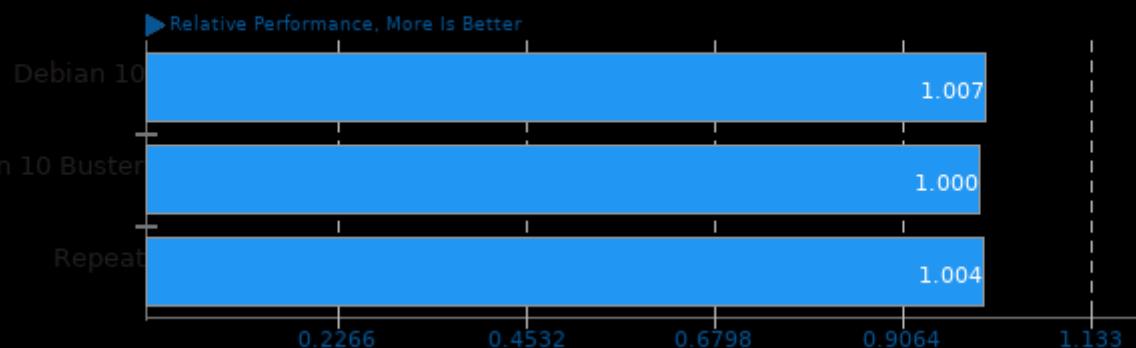
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/libraw, pts/webp and pts/draw

## Geometric Mean Of Machine Learning Tests

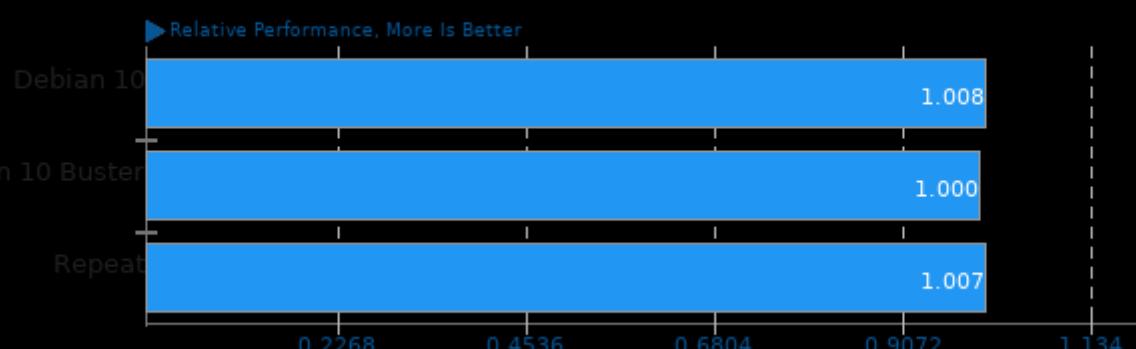
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/mnn, pts/ncnn, pts/opencv and pts/tensorflow-lite

## Geometric Mean Of Molecular Dynamics Tests

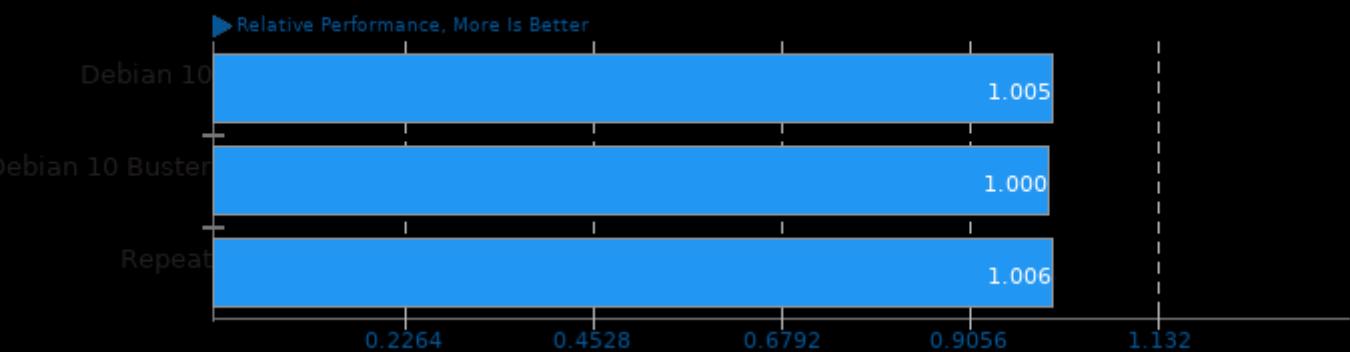
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/namd, pts/lammps and pts/incompact3d

## Geometric Mean Of MPI Benchmarks Tests

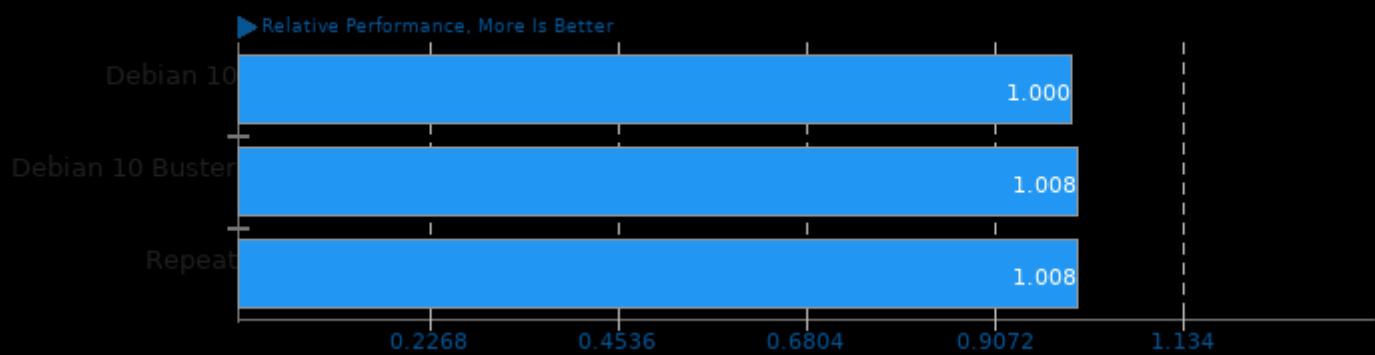
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/lammps, pts/incompact3d, pts/gpaw and pts/mocassin

## Geometric Mean Of Multi-Core Tests

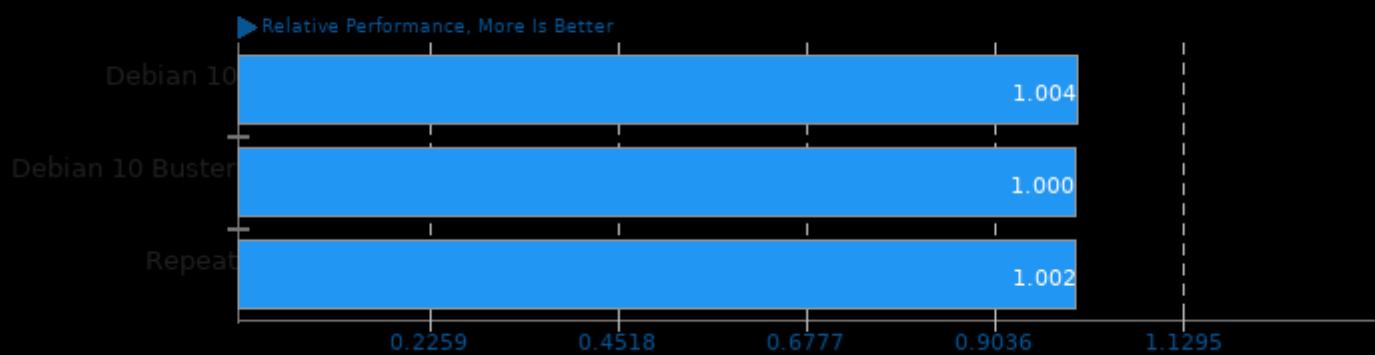
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/blender, pts/aom-av1, pts/namd, pts/lammps, pts/compress-zstd and pts/build-llvm

## Geometric Mean Of NVIDIA GPU Compute Tests

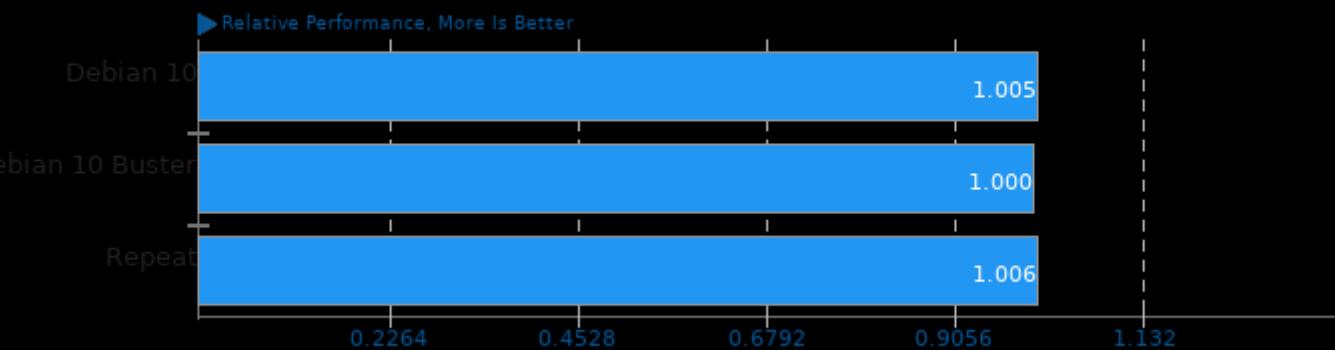
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/blender and pts/ncnn

## Geometric Mean Of OpenMPI Tests

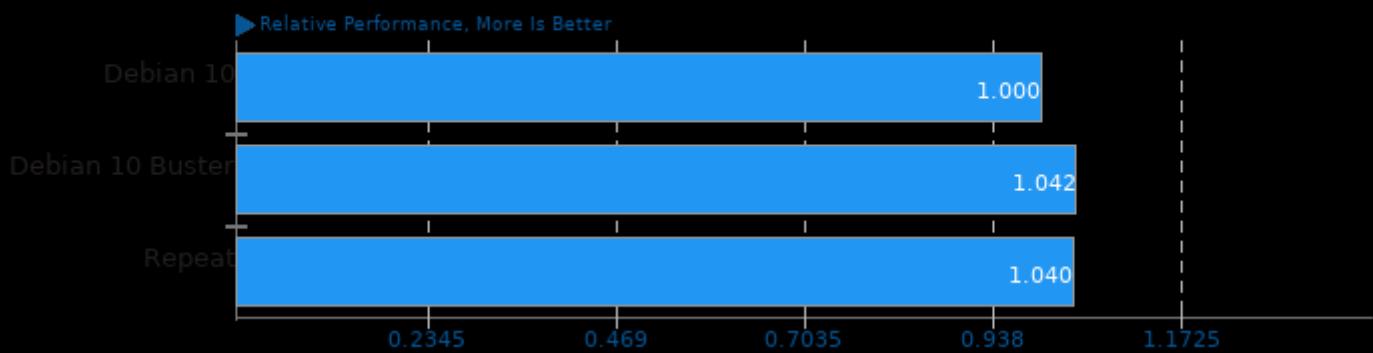
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/incompact3d, pts/mocassin, pts/lammps and pts/gpaw

## Geometric Mean Of Programmer / Developer System Benchmarks Tests

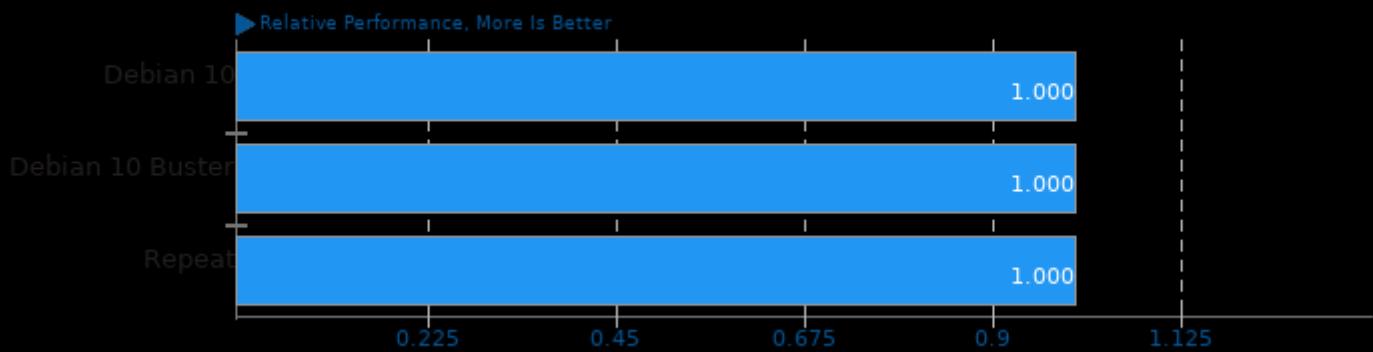
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/compress-zstd and pts/build-llvm

## Geometric Mean Of Python Tests

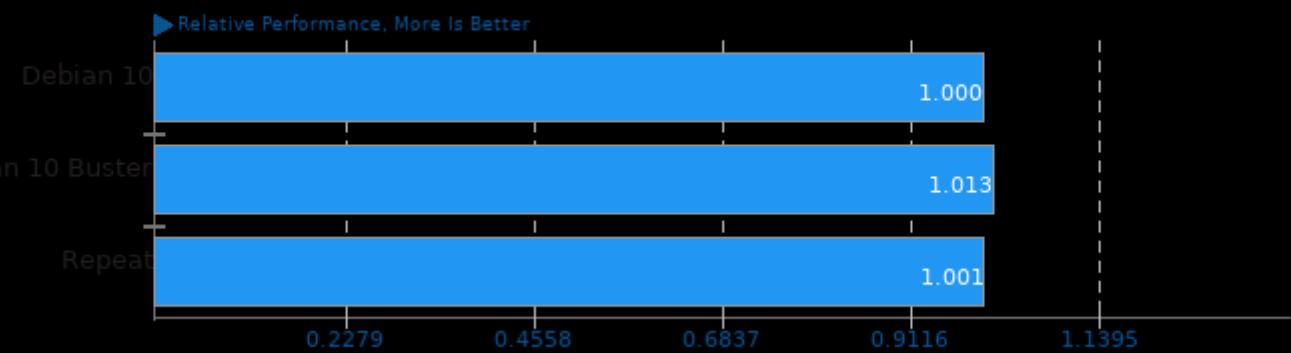
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/build-llvm and pts/gpaw

### Geometric Mean Of Scientific Computing Tests

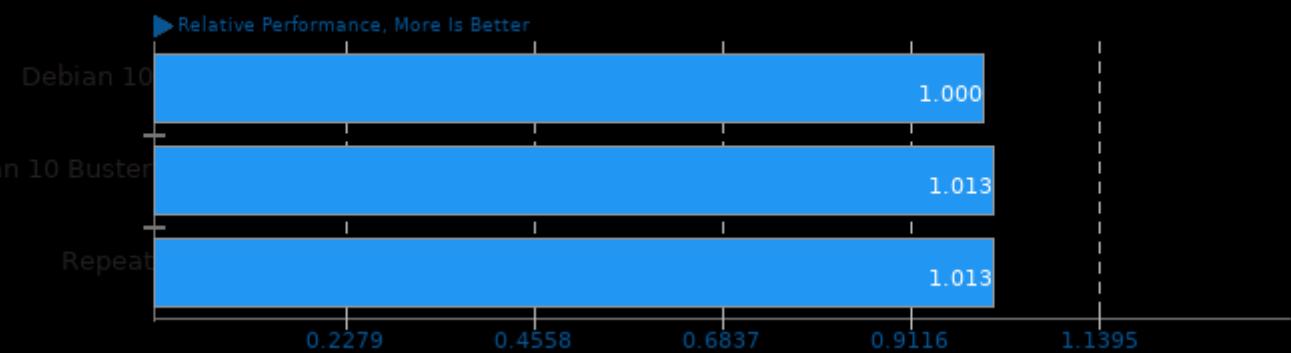
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/namd, pts/lammps, pts/incompact3d, pts/gpaw, pts/mocassin and pts/kripke

### Geometric Mean Of Server CPU Tests

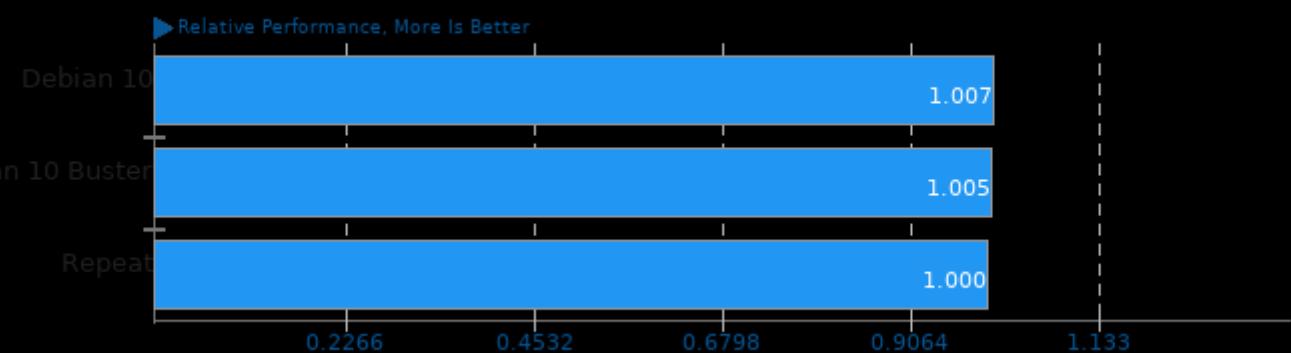
Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/namd, pts/build-llvm, pts/compress-zstd and pts/blender

### Geometric Mean Of Single-Threaded Tests

Result Composite - i7 6800K Debian



Geometric mean based upon tests: pts/dcraw and pts/espeak

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 11:58.*