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# Core i3 10100 January

Intel Core i3-10100 testing with a Gigabyte B460M DS3H (F2 BIOS) and Gigabyte Intel UHD 630 3GB on Ubuntu 20.04 via the Phoronix Test Suite.

**Automated Executive Summary**

*1 had the most wins, coming in first place for 36% of the tests.*

*Based on the geometric mean of all complete results, the fastest (3) was 1.001x the speed of the slowest (1). 2 was 0.999x the speed of 3 and 1 was 1x the speed of 2.*

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

*IOR (Block Size: 32MB - Disk Target: Default Test Directory) at 1.169x*
*IOR (Block Size: 4MB - Disk Target: Default Test Directory) at 1.121x*
*Algebraic Multi-Grid Benchmark at 1.071x*
*rav1e (Speed: 10) at 1.069x*
*IOR (Block Size: 2MB - Disk Target: Default Test Directory) at 1.062x*
*OpenFOAM (Input: Motorbike 30M) at 1.041x*
*IOR (Block Size: 8MB - Disk Target: Default Test Directory) at 1.037x*
*QMCPACK (Input: simple-H2O) at 1.026x*
*IOR (Block Size: 16MB - Disk Target: Default Test Directory) at 1.023x*

*dav1d (Video Input: Summer Nature 4K) at 1.023x.*

# Test Systems:

## 1

## 2

## 3

Processor: Intel Core i3-10100 @ 4.30GHz (4 Cores / 8 Threads), Motherboard: Gigabyte B460M DS3H (F2 BIOS), Chipset: Intel Device 9b63, Memory: 16GB, Disk: 500GB Western Digital WDS500G3X0C-00SJG0, Graphics: Gigabyte Intel UHD 630 3GB (1100MHz), Audio: Realtek ALC887-VD, Monitor: G237HL, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 20.04, Kernel: 5.9.0-050900rc7daily20201002-generic (x86_64) 20201001, Desktop: GNOME Shell 3.36.3, Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, OpenGL: 4.6 Mesa 20.0.8, Vulkan: 1.2.131, Compiler: GCC 9.3.0, 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++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none,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
Disk Notes: NONE / errors=remount-ro,relatime,rw / Block Size: 4096
Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0xcc
Python Notes: Python 3.8.2
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Not affected + mds: Not affected + 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: Not affected + tsx_async_abort: Not affected

| | 1 | 2 | 3 |
|---|---|---|---|
| **IOR - 2MB (MB/s)** | **842.32** | **894.51** | 886.87 |
| **Normalized** | 94.17% | 100% | 99.15% |
| **Standard Deviation** | 1.6% | 0.5% | 1.3% |
| **IOR - 4MB (MB/s)** | **841.08** | **943.17** | 941.09 |
| **Normalized** | 89.18% | 100% | 99.78% |
| **Standard Deviation** | 3% | 1.3% | 0.1% |
| **IOR - 8MB (MB/s)** | **950.59** | **985.89** | 984.09 |
| **Normalized** | 96.42% | 100% | 99.82% |
| **Standard Deviation** | 1% | 0.4% | 0.8% |
| **IOR - 16MB (MB/s)** | **945.79** | **967.72** | 963.66 |
| **Normalized** | 97.73% | 100% | 99.58% |
| **Standard Deviation** | 0.3% | 1.2% | 1% |
| **IOR - 32MB (MB/s)** | **746.64** | **638.68** | 645.34 |
| **Normalized** | 100% | 85.54% | 86.43% |
| **Standard Deviation** | 3.9% | 5.3% | 5.1% |

# Core i3 10100 January

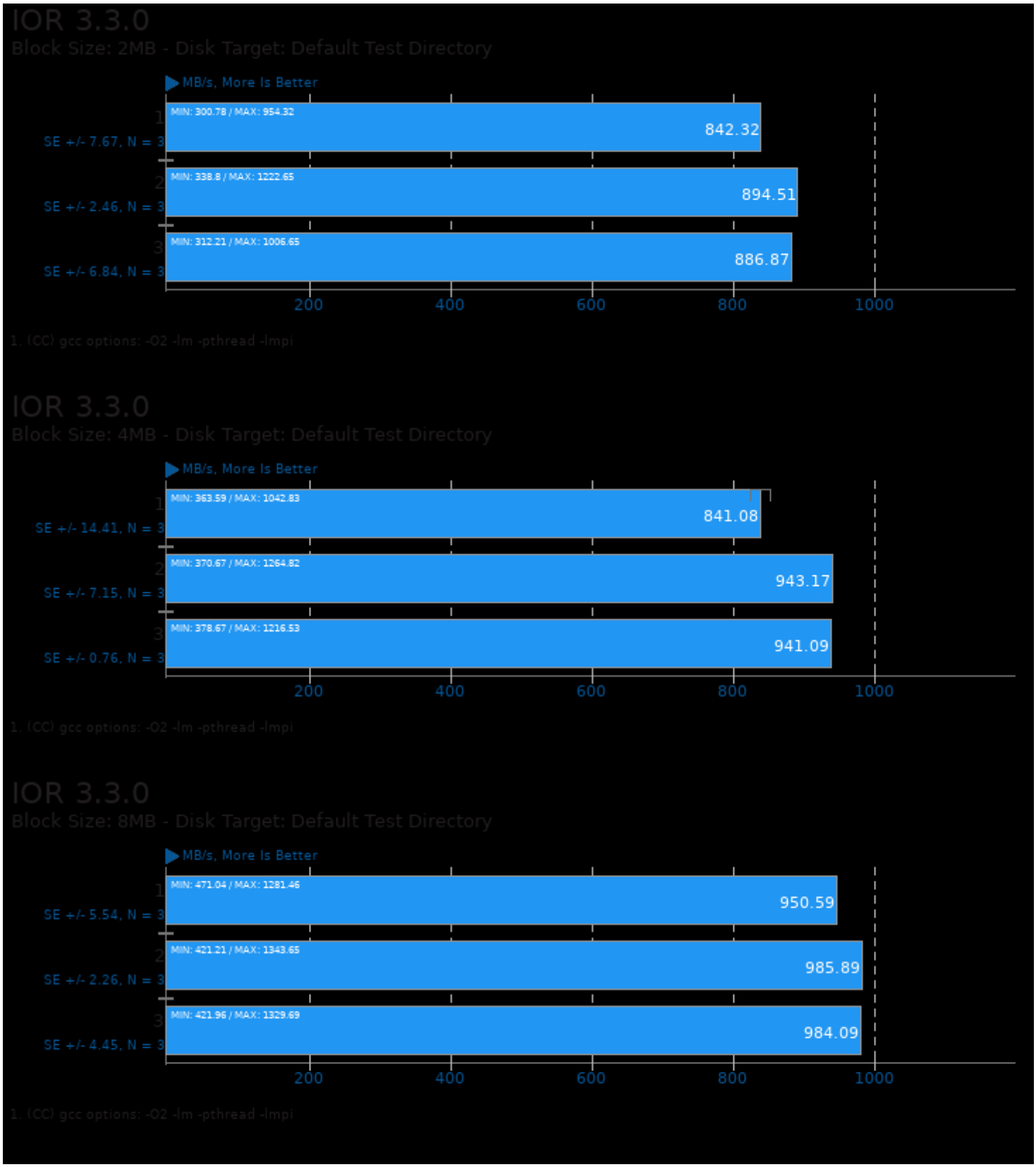
| | | | |
|---|---|---|---|
| **IOR - 64MB (MB/s)** | **707.51** | 705.30 | **704.20** |
| **Normalized** | 100% | 99.69% | 99.53% |
| **Standard Deviation** | 3.6% | 2.9% | 3% |
| **IOR - 256MB (MB/s)** | **776.91** | 777.12 | **784.28** |
| **Normalized** | 99.06% | 99.09% | 100% |
| **Standard Deviation** | 0.9% | 1.2% | 1.6% |
| **Etcpak - DXT1 (Mpx/s)** | 1940 | **1940** | **1948** |
| **Normalized** | 99.6% | 99.59% | 100% |
| **Standard Deviation** | 0% | 0.1% | 0.3% |
| **Etcpak - ETC1 (Mpx/s)** | **314.434** | **314.310** | 314.346 |
| **Normalized** | 100% | 99.96% | 99.97% |
| **Standard Deviation** | 0% | 0% | 0.1% |
| **Etcpak - ETC2 (Mpx/s)** | **175.502** | 175.899 | **175.923** |
| **Normalized** | 99.76% | 99.99% | 100% |
| **Standard Deviation** | 0.4% | 0% | 0% |
| **Etcpak - ETC1 + Dithering (Mpx/s)** | 297.405 | **297.367** | **297.507** |
| **Normalized** | 99.97% | 99.95% | 100% |
| **Standard Deviation** | 0% | 0% | 0% |
| **CloverLeaf - L.E.H (sec)** | 273.36 | **273.43** | **273.26** |
| **Normalized** | 99.96% | 99.94% | 100% |
| **Standard Deviation** | 0% | 0% | 0% |
| **CP2K Molecular Dynamics - Fayalite-FIST Data (sec)** | **1125** | **1108** | 1109 |
| **Normalized** | 98.49% | 100% | 99.86% |
| **Algebraic Multi-Grid Benchmark (Figure Of Merit)** | **183233500** | 179950467 | **171060000** |
| **Normalized** | 100% | 98.21% | 93.36% |
| **Standard Deviation** | 0.1% | 0.2% | 0.8% |
| **QMCPACK - simple-H2O (Execution Time - sec)** | **27.767** | 27.354 | **27.071** |
| **Normalized** | 97.49% | 98.97% | 100% |
| **Standard Deviation** | 3% | 1.3% | 2.2% |
| **OpenFOAM - Motorbike 30M (sec)** | **417.05** | 423.04 | **434.03** |
| **Normalized** | 100% | 98.58% | 96.09% |
| **Standard Deviation** | 0.1% | 0.1% | 0.1% |
| **OpenFOAM - Motorbike 60M (sec)** | **1562** | 1579 | **1581** |
| **Normalized** | 100% | 98.93% | 98.83% |
| **Standard Deviation** | 0.2% | 1.1% | 0% |
| **Quantum ESPRESSO - AUSURF112 (sec)** | 3860 | **3880** | **3820** |
| **Normalized** | 98.96% | 98.45% | 100% |
| **Standard Deviation** | 0.9% | 0.9% | 0.9% |
| **RELION - Basic - CPU (sec)** | 4673 | **4681** | **4668** |
| **Normalized** | 99.9% | 99.73% | 100% |
| **Standard Deviation** | 0.2% | 0.3% | 0.3% |
| **LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)** | **3.179** | **3.224** | 3.211 |
| **Normalized** | 98.6% | 100% | 99.6% |
| **Standard Deviation** | 0.5% | 0.2% | 0.4% |
| **LULESH (z/s)** | **1338** | **1335** | 1335 |
| **Normalized** | 100% | 99.76% | 99.81% |
| **Standard Deviation** | 0.4% | 0.3% | 0.7% |
| **dav1d - Chimera 1080p (FPS)** | **317.69** | **318.04** | 317.85 |
| **Normalized** | 99.89% | 100% | 99.94% |
| **Standard Deviation** | 0.2% | 0.1% | 0.4% |

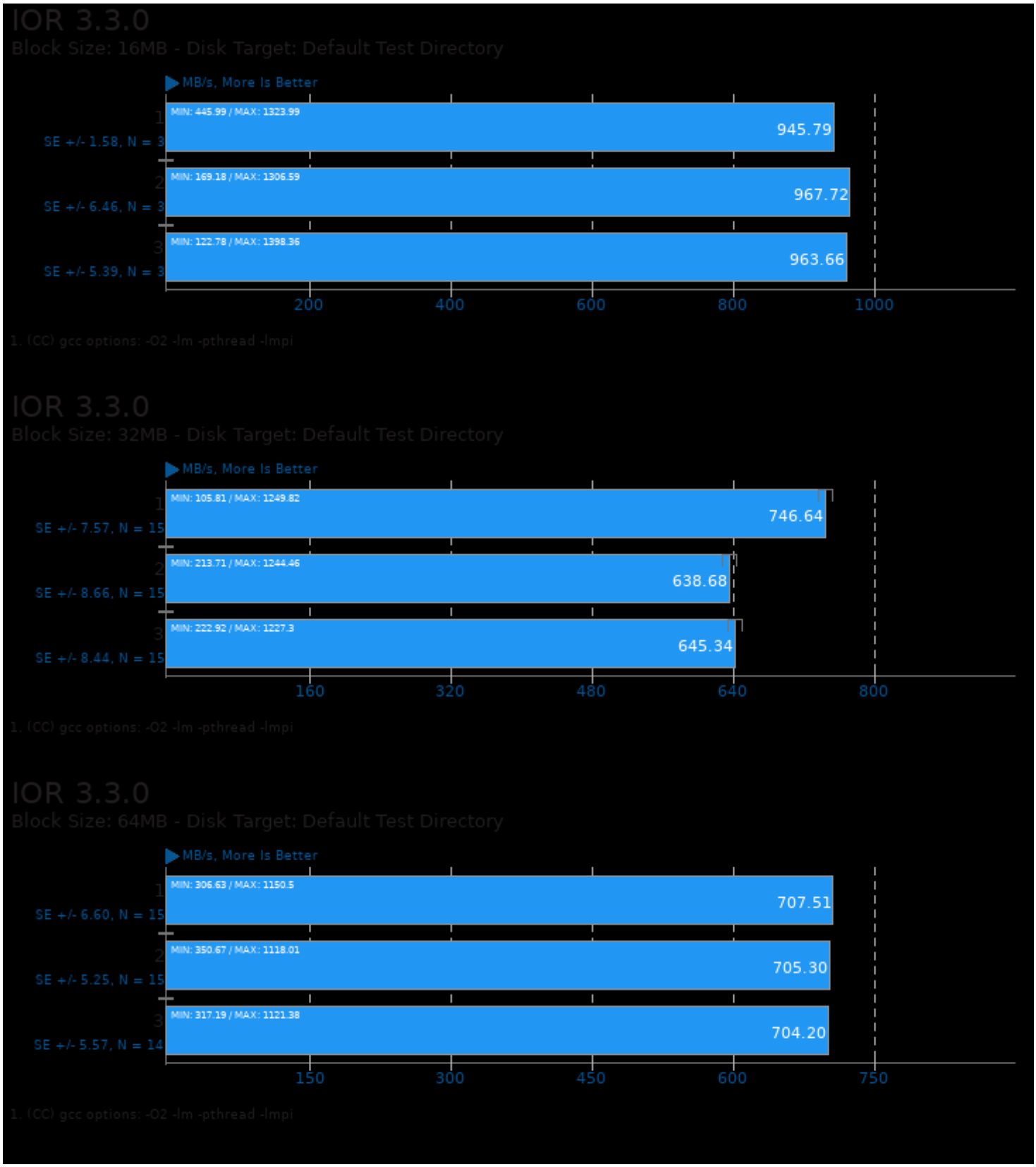
# Core i3 10100 January

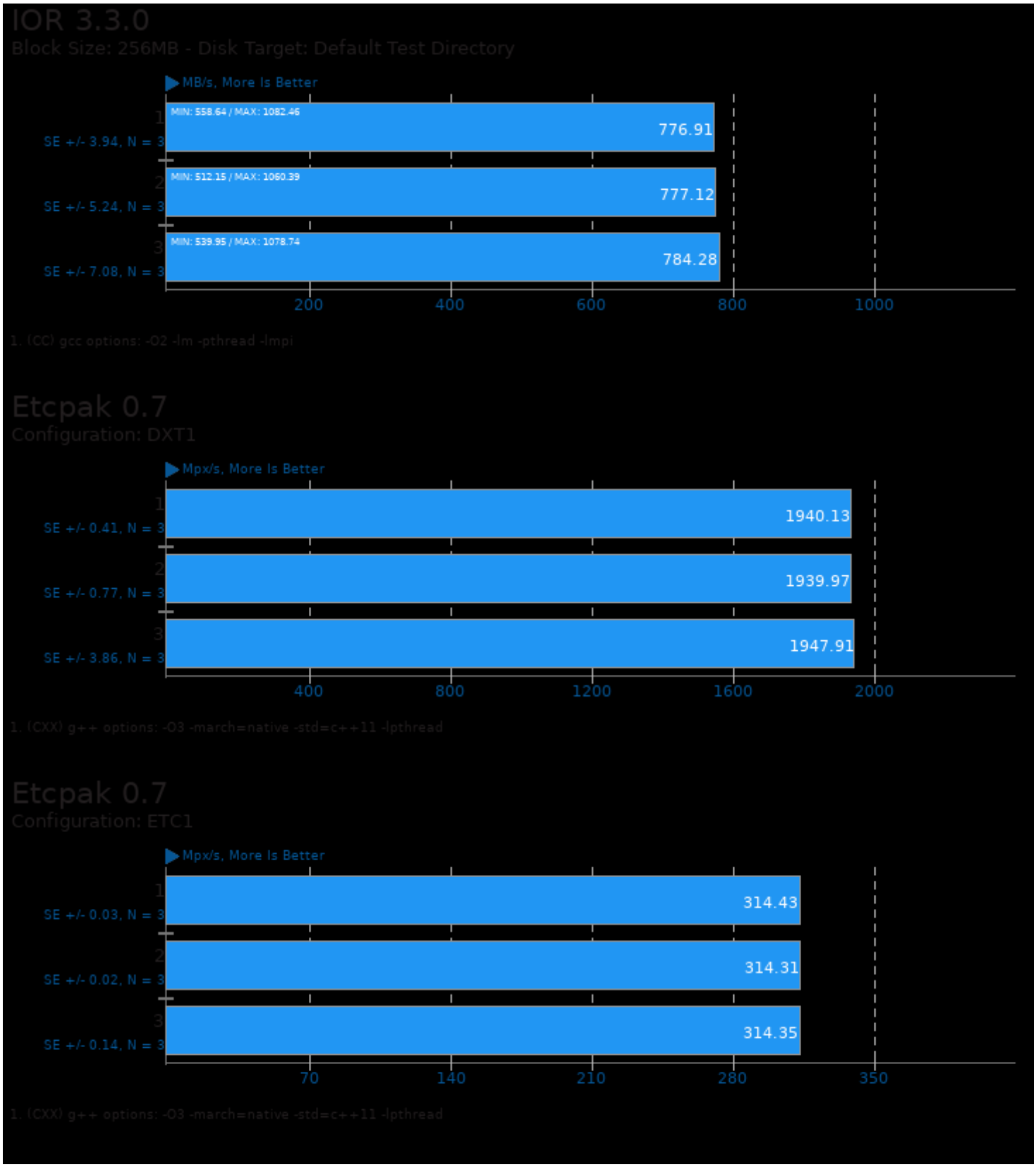
| | | | |
|---|---|---|---|
| **dav1d - Summer Nature 4K (FPS)** | 84.90 | **83.86** | **85.75** |
| **Normalized** | 99.01% | 97.8% | 100% |
| **Standard Deviation** | 0.1% | 0.3% | 0.1% |
| **dav1d - S.N.1 (FPS)** | **302.06** | 302.42 | **303.97** |
| **Normalized** | 99.37% | 99.49% | 100% |
| **Standard Deviation** | 0.3% | 0.2% | 0.3% |
| **dav1d - C.1.1.b (FPS)** | **75.38** | **75.26** | **75.26** |
| **Normalized** | 100% | 99.84% | 99.84% |
| **Standard Deviation** | 0.2% | 0.1% | 0.1% |
| **rav1e - 1 (FPS)** | **0.417** | 0.418 | **0.420** |
| **Normalized** | 99.29% | 99.52% | 100% |
| **Standard Deviation** | 1% | 1.3% | 0.6% |
| **rav1e - 5 (FPS)** | **1.183** | **1.162** | 1.169 |
| **Normalized** | 100% | 98.22% | 98.82% |
| **Standard Deviation** | 1.5% | 1.5% | 0.2% |
| **rav1e - 6 (FPS)** | **1.556** | **1.522** | 1.543 |
| **Normalized** | 100% | 97.81% | 99.16% |
| **Standard Deviation** | 1.6% | 2.4% | 1.8% |
| **rav1e - 10 (FPS)** | 3.251 | **3.068** | **3.280** |
| **Normalized** | 99.12% | 93.54% | 100% |
| **Standard Deviation** | 2.7% | 1.6% | 2.7% |
| **Timed Godot Game Engine Compilation - Time To Compile (sec)** | **284.360** | **284.139** | 284.302 |
| **Normalized** | 99.92% | 100% | 99.94% |
| **Standard Deviation** | 0.1% | 0.3% | 0% |
| **Google SynthMark - VoiceMark_100 (Voices)** | **586.666** | **604.842** | 594.354 |
| **Normalized** | 96.99% | 100% | 98.27% |
| **Standard Deviation** | 6.2% | 4.7% | 5.7% |
| **Mobile Neural Network - SqueezeNetV1.0** | 6.604 | **6.587** | **6.630** |
| **Normalized** | 99.74% | 100% | 99.35% |
| **Standard Deviation** | 0.3% | 0.4% | 0.4% |
| **Mobile Neural Network - resnet-v2-50 (ms)** | 36.889 | **36.843** | **36.971** |
| **Normalized** | 99.88% | 100% | 99.65% |
| **Standard Deviation** | 0.2% | 0.2% | 0% |
| **Mobile Neural Network - MobileNetV2_224** | **4.016** | 4.018 | **4.038** |
| **Normalized** | 100% | 99.95% | 99.46% |
| **Standard Deviation** | 0.4% | 0.9% | 0.2% |
| **Mobile Neural Network - mobilenet-v1-1.0** | **4.360** | **4.343** | 4.358 |
| **Normalized** | 99.61% | 100% | 99.66% |
| **Standard Deviation** | 0.4% | 0.4% | 0.3% |
| **Mobile Neural Network - inception-v3 (ms)** | 47.412 | **47.493** | **47.352** |
| **Normalized** | 99.87% | 99.7% | 100% |
| **Standard Deviation** | 1% | 0.7% | 1.1% |
| **TNN - CPU - MobileNet v2 (ms)** | **330.425** | **331.310** | 330.481 |
| **Normalized** | 100% | 99.73% | 99.98% |
| **Standard Deviation** | 0.4% | 0.4% | 0.4% |
| **TNN - CPU - SqueezeNet v1.1 (ms)** | 312.966 | **312.812** | **312.974** |
| **Normalized** | 99.95% | 100% | 99.95% |
| **Standard Deviation** | 0% | 0% | 0% |
| **ONNX Runtime - yolov4 - OpenMP CPU (Inferences/min)** | 223 | 223 | 223 |
| **Standard Deviation** | 0.1% | 0.4% | 0.2% |

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| | | | |
|---|---|---|---|
| **ONNX Runtime - bertsquad-10 - OpenMP CPU (Inferences/min)** | 340 | 340 | 340 |
| **Standard Deviation** | 0.1% | 0.3% | 0.4% |
| **ONNX Runtime - fcn-resnet101-11 - OpenMP CPU (Inferences/min)** | 41 | 41 | 41 |
| **Standard Deviation** | 0% | 0% | 0% |
| **ONNX Runtime - shufflenet-v2-10 - OpenMP CPU (Inferences/min)** | 15284 | **15304** | **15252** |
| **Normalized** | 99.87% | 100% | 99.66% |
| **Standard Deviation** | 0.1% | 0.3% | 0.2% |
| **ONNX Runtime - super-resolution-10 - OpenMP CPU (Inferences/min)** | **2891** | **2889** | 2890 |
| **Normalized** | 100% | 99.93% | 99.97% |
| **Standard Deviation** | 0.4% | 0.2% | 0.2% |
| **Kripke (Throughput FoM)** | **18336940** | 18403700 | **18457573** |
| **Normalized** | 99.35% | 99.71% | 100% |
| **Standard Deviation** | 0.3% | 0.3% | 0.4% |

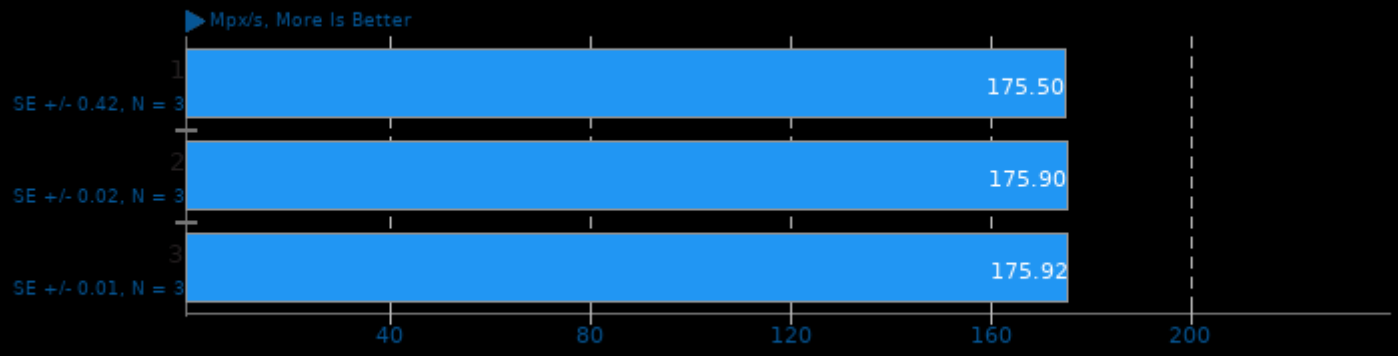

IOR 3.3.0
Block Size: 2MB - Disk Target: Default Test Directory
MB/s, More Is Better
MIN: 300.78 / MAX: 954.32
842.32
SE +/- 7.67, N = 3
MIN: 338.8 / MAX: 1222.65
894.51
SE +/- 2.46, N = 3
MIN: 312.21 / MAX: 1006.65
886.87
SE +/- 6.84, N = 3
200
400
600
800
1000
1. (CC) gcc options: -O2 -lm -pthread -lmpi
IOR 3.3.0
Block Size: 4MB - Disk Target: Default Test Directory
MB/s, More Is Better
MIN: 363.59 / MAX: 1042.83
841.08
SE +/- 14.41, N = 3
MIN: 370.67 / MAX: 1264.82
943.17
SE +/- 7.15, N = 3
MIN: 378.67 / MAX: 1216.53
941.09
SE +/- 0.76, N = 3
200
400
600
800
1000
1. (CC) gcc options: -O2 -lm -pthread -lmpi
IOR 3.3.0
Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
MIN: 471.04 / MAX: 1281.46
950.59
SE +/- 5.54, N = 3
MIN: 421.21 / MAX: 1343.65
985.89
SE +/- 2.26, N = 3
MIN: 421.96 / MAX: 1329.69
984.09
SE +/- 4.45, N = 3
200
400
600
800
1000
1. (CC) gcc options: -O2 -lm -pthread -lmpi


IOR 3.3.0
Block Size: 16MB - Disk Target: Default Test Directory
MB/s, More Is Better
1
MIN: 445.99 / MAX: 1323.99
945.79
SE +/- 1.58, N = 3
2
MIN: 169.18 / MAX: 1306.59
967.72
SE +/- 6.46, N = 3
3
MIN: 122.78 / MAX: 1398.36
963.66
SE +/- 5.39, N = 3
200
400
600
800
1000
1. (CC) gcc options: -O2 -lm -pthread -lmpi
IOR 3.3.0
Block Size: 32MB - Disk Target: Default Test Directory
MB/s, More Is Better
1
MIN: 105.81 / MAX: 1249.82
746.64
SE +/- 7.57, N = 15
2
MIN: 213.71 / MAX: 1244.46
638.68
SE +/- 8.66, N = 15
3
MIN: 222.92 / MAX: 1227.3
645.34
SE +/- 8.44, N = 15
160
320
480
640
800
1. (CC) gcc options: -O2 -lm -pthread -lmpi
IOR 3.3.0
Block Size: 64MB - Disk Target: Default Test Directory
MB/s, More Is Better
1
MIN: 306.63 / MAX: 1150.5
707.51
SE +/- 6.60, N = 15
2
MIN: 350.67 / MAX: 1118.01
705.30
SE +/- 5.25, N = 15
3
MIN: 317.19 / MAX: 1121.38
704.20
SE +/- 5.57, N = 14
150
300
450
600
750
1. (CC) gcc options: -O2 -lm -pthread -lmpi


IOR 3.3.0
Block Size: 256MB - Disk Target: Default Test Directory
MB/s, More Is Better
1
MIN: 558.64 / MAX: 1082.46
776.91
SE +/- 3.94, N = 3
2
MIN: 512.15 / MAX: 1060.39
777.12
SE +/- 5.24, N = 3
3
MIN: 539.95 / MAX: 1078.74
784.28
SE +/- 7.08, N = 3
200
400
600
800
1000
1. (CC) gcc options: -O2 -lm -pthread -lmpi
Etcpak 0.7
Configuration: DXT1
Mpx/s, More Is Better
1
1940.13
SE +/- 0.41, N = 3
2
1939.97
SE +/- 0.77, N = 3
3
1947.91
SE +/- 3.86, N = 3
400
800
1200
1600
2000
1. (CXX) g++ options: -O3 -march=native -std=c++11 -lpthread
Etcpak 0.7
Configuration: ETC1
Mpx/s, More Is Better
1
314.43
SE +/- 0.03, N = 3
2
314.31
SE +/- 0.02, N = 3
3
314.35
SE +/- 0.14, N = 3
70
140
210
280
350
1. (CXX) g++ options: -O3 -march=native -std=c++11 -lpthread

## Etcpak 0.7

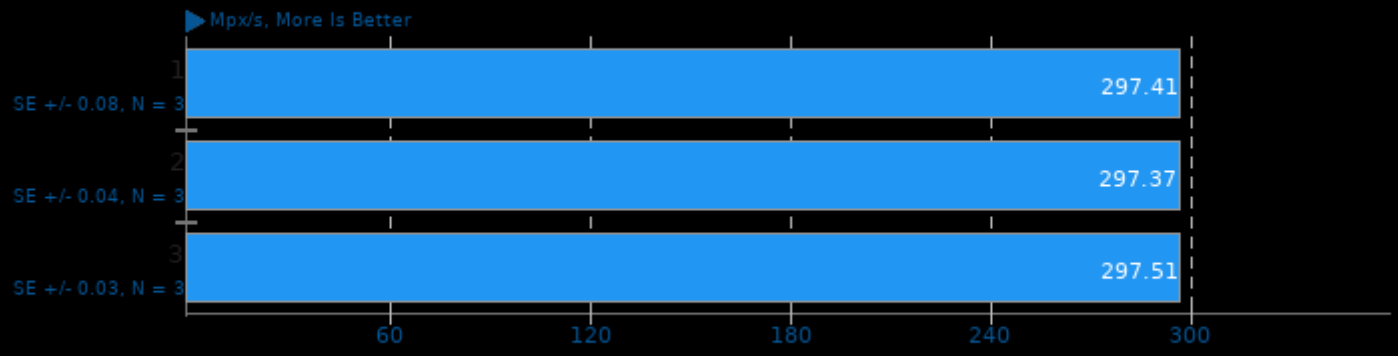
Configuration: ETC2




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

## Etcpak 0.7

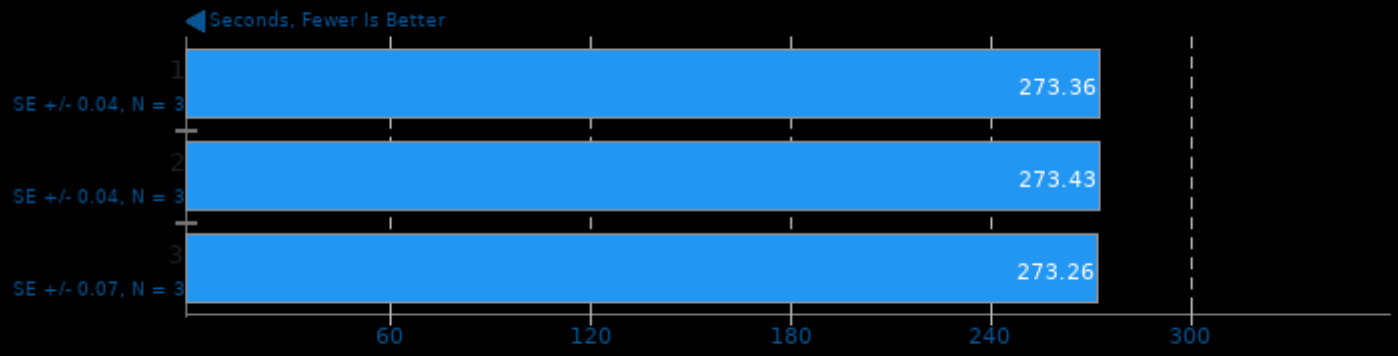
Configuration: ETC1 + Dithering



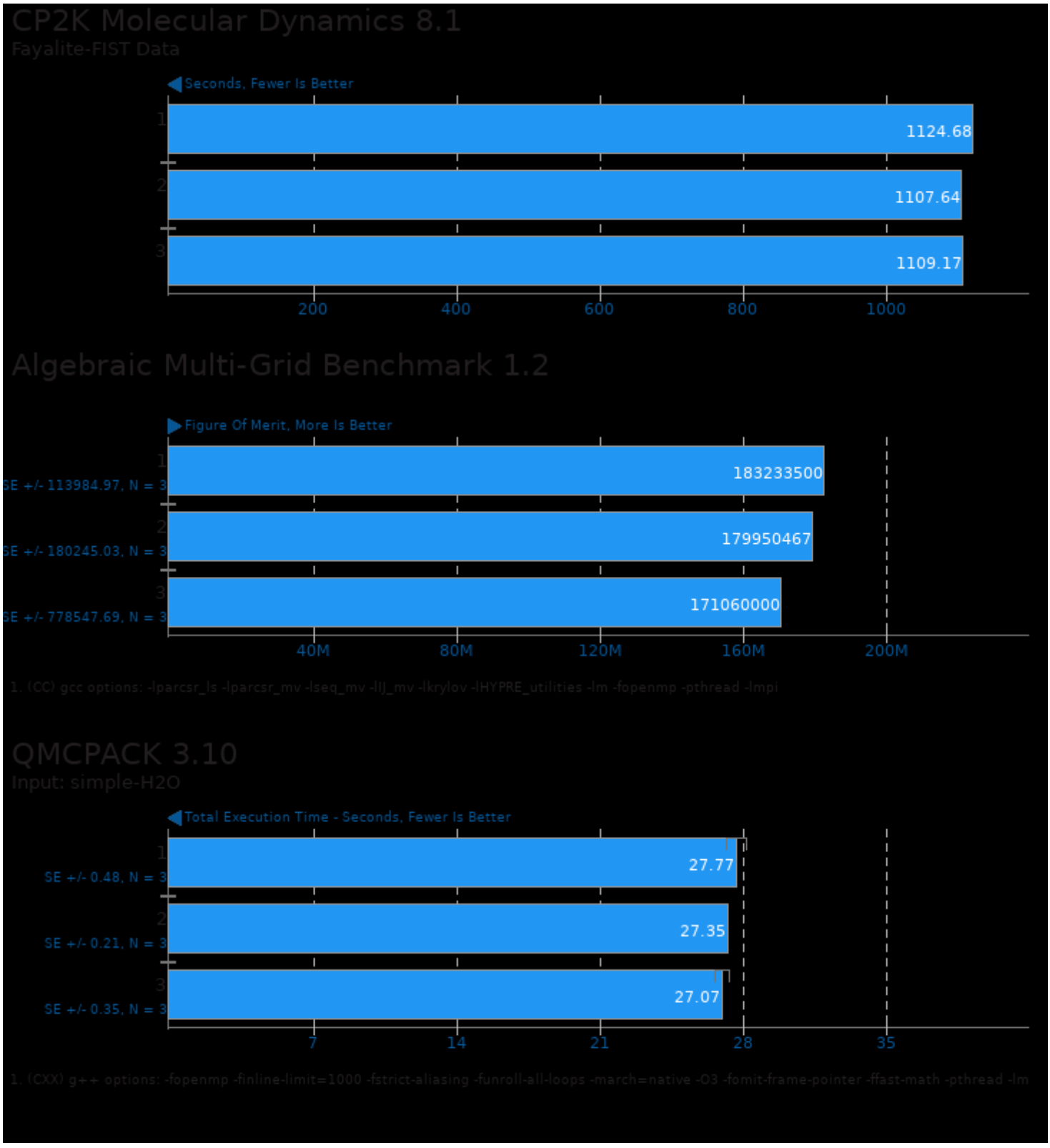

1. (CXX) g++ options: -O3 -march=native -std=c++11 -lpthread

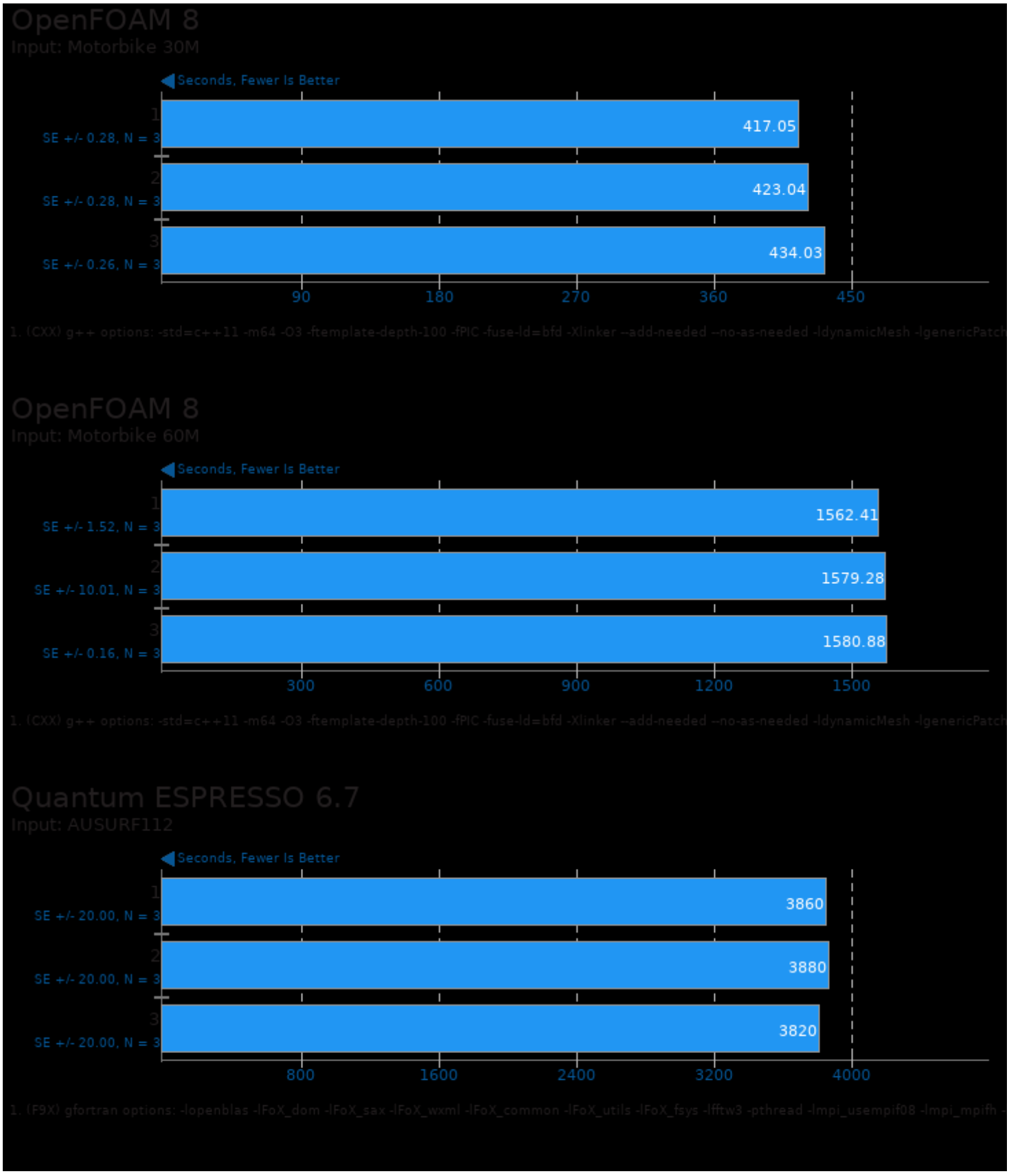
## CloverLeaf

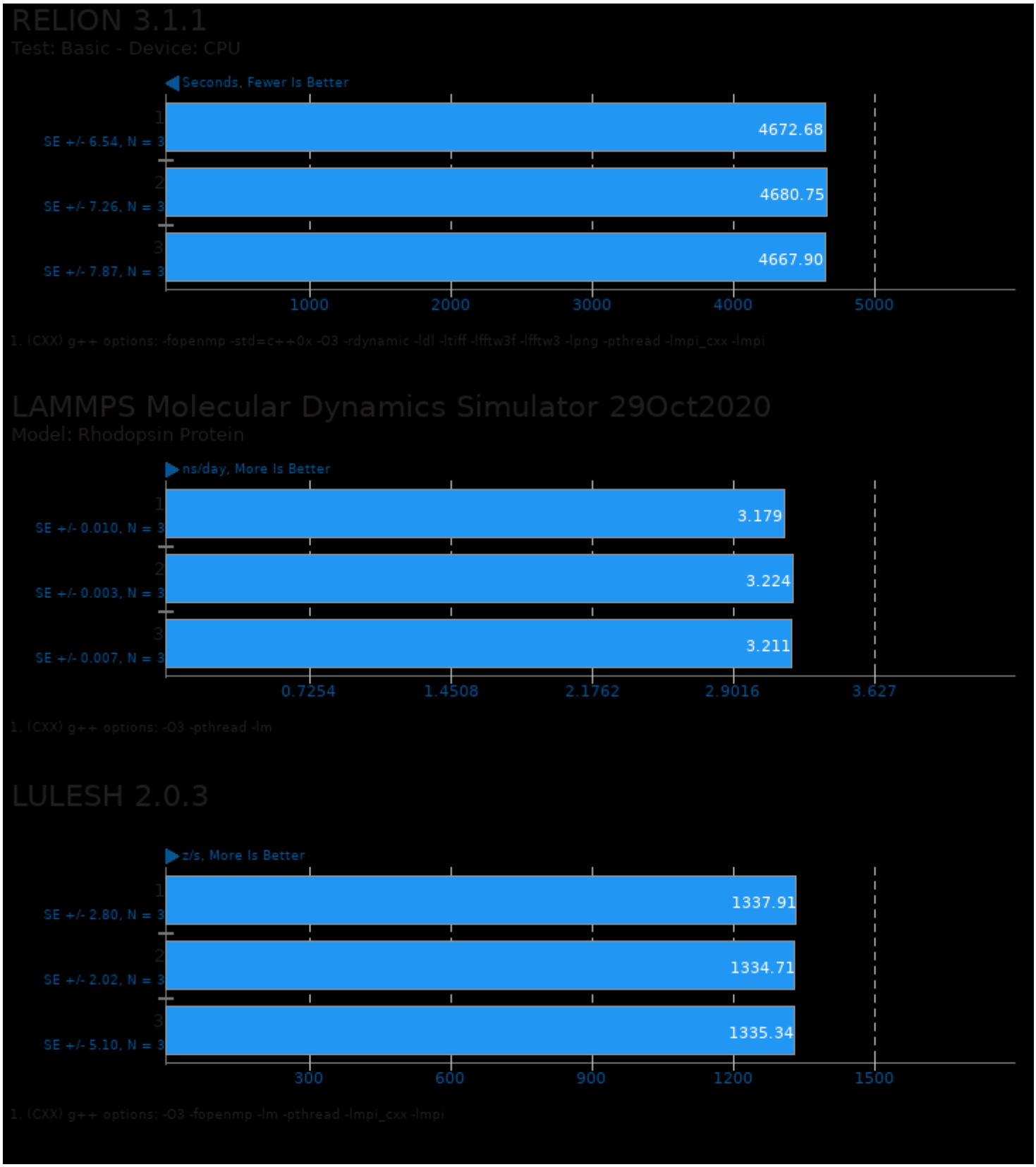
Lagrangian-Eulerian Hydrodynamics

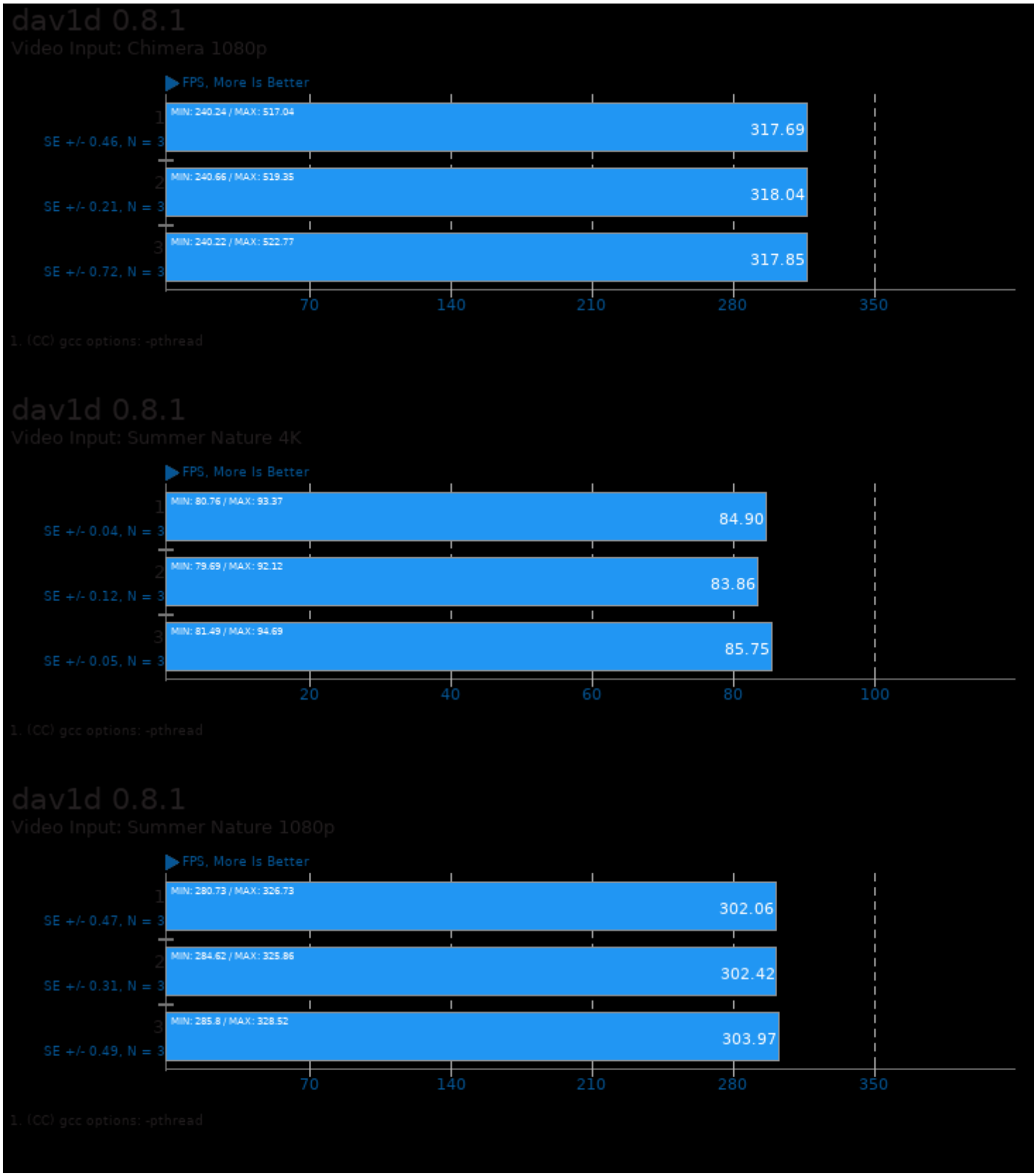



1. (F9X) gfortran options: -O3 -march=native -funroll-loops -fopenmp

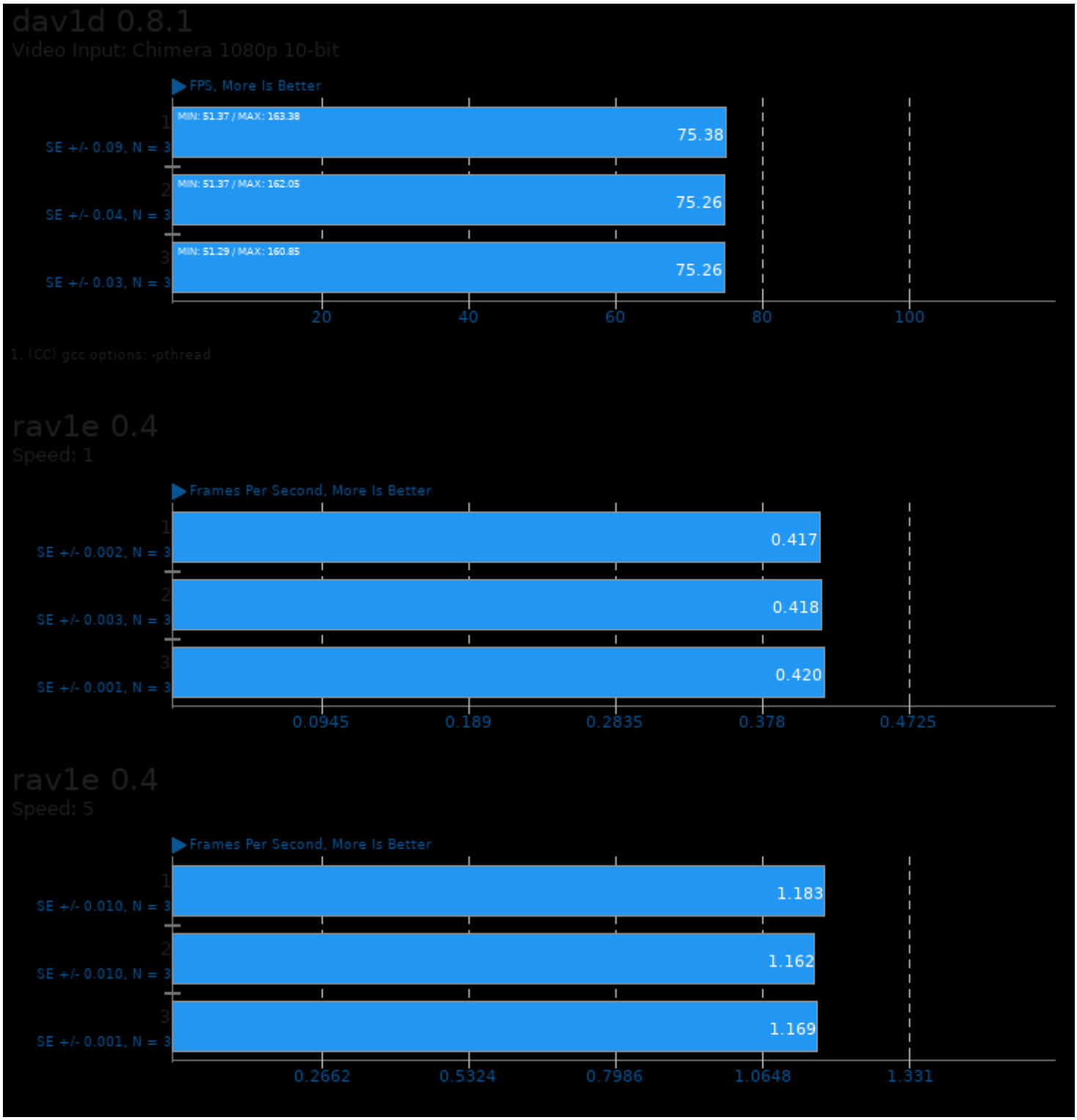

CP2K Molecular Dynamics 8.1
Fayalite-FIST Data
Seconds, Fewer Is Better
1124.68
1107.64
1109.17
200
400
600
800
1000
Algebraic Multi-Grid Benchmark 1.2
Figure Of Merit, More Is Better
183233500
179950467
171060000
40M
80M
120M
160M
200M
1. (CC) gcc options: -lparcsr_ls -lparcsr_mv -lseq_mv -lIJ_mv -lkrylov -lHYPRE_utilities -lm -fopenmp -pthread -lmpi
QMCPACK 3.10
Input: simple-H2O
Total Execution Time - Seconds, Fewer Is Better
SE +/- 0.48, N = 3
27.77
SE +/- 0.21, N = 3
27.35
SE +/- 0.35, N = 3
27.07
7
14
21
28
35
1. (CXX) g++ options: -fopenmp -finline-limit=1000 -fstrict-aliasing -funroll-all-loops -march=native -O3 -fomit-frame-pointer -ffast-math -pthread -lm

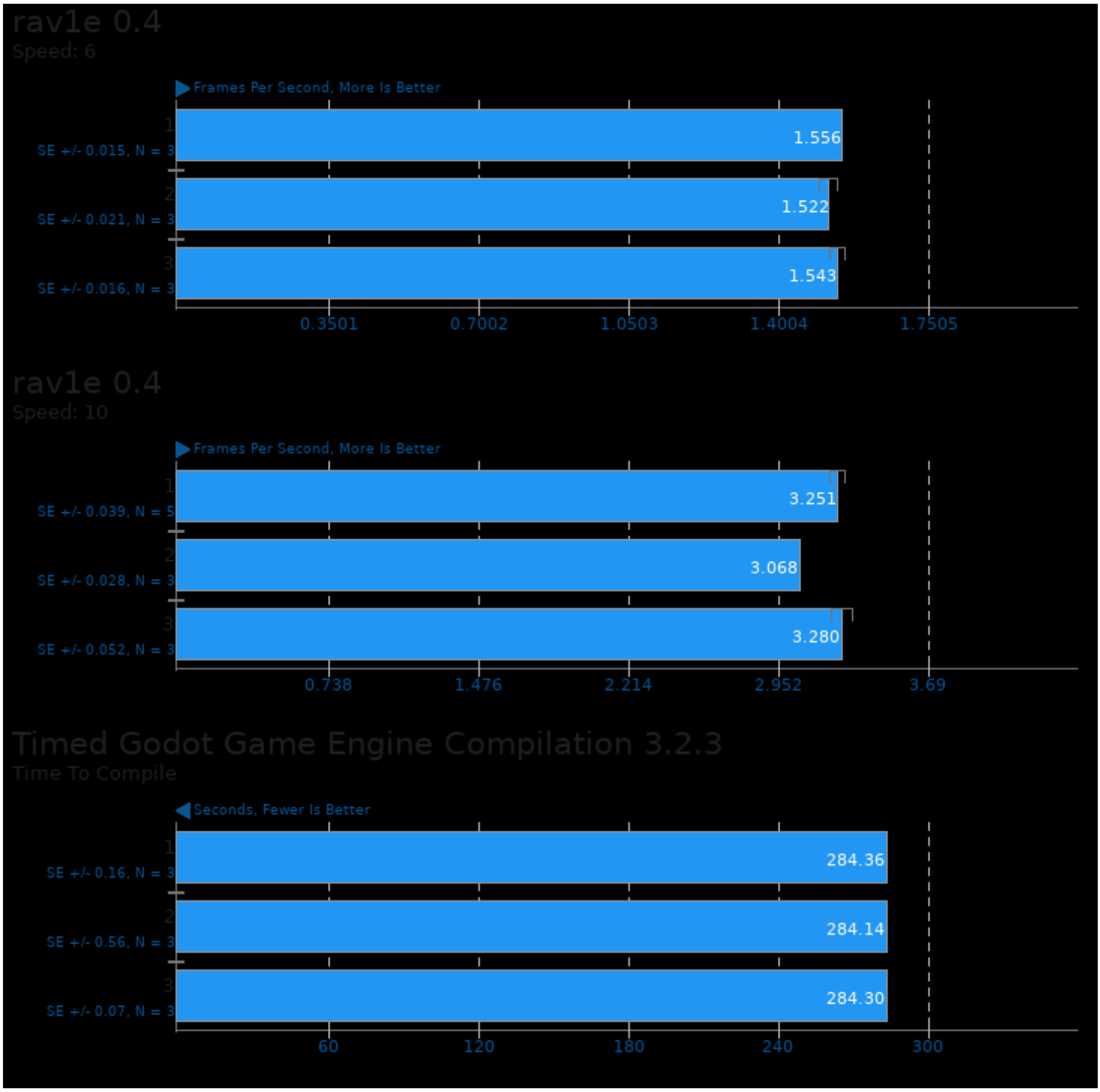

OpenFOAM 8
Input: Motorbike 30M
Seconds, Fewer Is Better
1
SE +/- 0.28, N = 3
417.05
2
SE +/- 0.28, N = 3
423.04
3
SE +/- 0.26, N = 3
434.03
90
180
270
360
450
1. (CXX) g++ options: -std=c++11 -m64 -O3 -ftemplate-depth-100 -fPIC -fuse-ld=bfd -Xlinker --add-needed --no-as-needed -ldynamicMesh -lgenericPatch
OpenFOAM 8
Input: Motorbike 60M
Seconds, Fewer Is Better
1
SE +/- 1.52, N = 3
1562.41
2
SE +/- 10.01, N = 3
1579.28
3
SE +/- 0.16, N = 3
1580.88
300
600
900
1200
1500
1. (CXX) g++ options: -std=c++11 -m64 -O3 -ftemplate-depth-100 -fPIC -fuse-ld=bfd -Xlinker --add-needed --no-as-needed -ldynamicMesh -lgenericPatch
Quantum ESPRESSO 6.7
Input: AUSURF112
Seconds, Fewer Is Better
1
SE +/- 20.00, N = 3
3860
2
SE +/- 20.00, N = 3
3880
3
SE +/- 20.00, N = 3
3820
800
1600
2400
3200
4000
1. (F9X) gfortran options: -lopenblas -lFoX_dom -lFoX_sax -lFoX_wxml -lFoX_common -lFoX_utils -lFoX_fsys -lfftw3 -pthread -lmpi_usempif08 -lmpi_mpifh


RELION 3.1.1
Test: Basic - Device: CPU
Seconds, Fewer Is Better
1
SE +/- 6.54, N = 3
4672.68
2
SE +/- 7.26, N = 3
4680.75
3
SE +/- 7.87, N = 3
4667.90
1000
2000
3000
4000
5000
1. (CXX) g++ options: -fopenmp -std=c++0x -O3 -rdynamic -ldl -ltiff -lfftw3f -lfftw3 -lpng -pthread -lmpi_cxx -lmpi
LAMMPS Molecular Dynamics Simulator 29Oct2020
Model: Rhodopsin Protein
ns/day, More Is Better
1
SE +/- 0.010, N = 3
3.179
2
SE +/- 0.003, N = 3
3.224
3
SE +/- 0.007, N = 3
3.211
0.7254
1.4508
2.1762
2.9016
3.627
1. (CXX) g++ options: -O3 -pthread -lm
LULESH 2.0.3
z/s, More Is Better
1
SE +/- 2.80, N = 3
1337.91
2
SE +/- 2.02, N = 3
1334.71
3
SE +/- 5.10, N = 3
1335.34
300
600
900
1200
1500
1. (CXX) g++ options: -O3 -fopenmp -lm -pthread -lmpi_cxx -lmpi


dav1d 0.8.1
Video Input: Chimera 1080p
FPS, More Is Better
1
MIN: 240.24 / MAX: 517.04
317.69
SE +/- 0.46, N = 3
2
MIN: 240.66 / MAX: 519.35
318.04
SE +/- 0.21, N = 3
3
MIN: 240.22 / MAX: 522.77
317.85
SE +/- 0.72, N = 3
70
140
210
280
350
1. (CC) gcc options: -pthread
dav1d 0.8.1
Video Input: Summer Nature 4K
FPS, More Is Better
1
MIN: 80.76 / MAX: 93.37
84.90
SE +/- 0.04, N = 3
2
MIN: 79.69 / MAX: 92.12
83.86
SE +/- 0.12, N = 3
3
MIN: 81.49 / MAX: 94.69
85.75
SE +/- 0.05, N = 3
20
40
60
80
100
1. (CC) gcc options: -pthread
dav1d 0.8.1
Video Input: Summer Nature 1080p
FPS, More Is Better
1
MIN: 280.73 / MAX: 326.73
302.06
SE +/- 0.47, N = 3
2
MIN: 284.62 / MAX: 325.86
302.42
SE +/- 0.31, N = 3
3
MIN: 285.8 / MAX: 328.52
303.97
SE +/- 0.49, N = 3
70
140
210
280
350
1. (CC) gcc options: -pthread

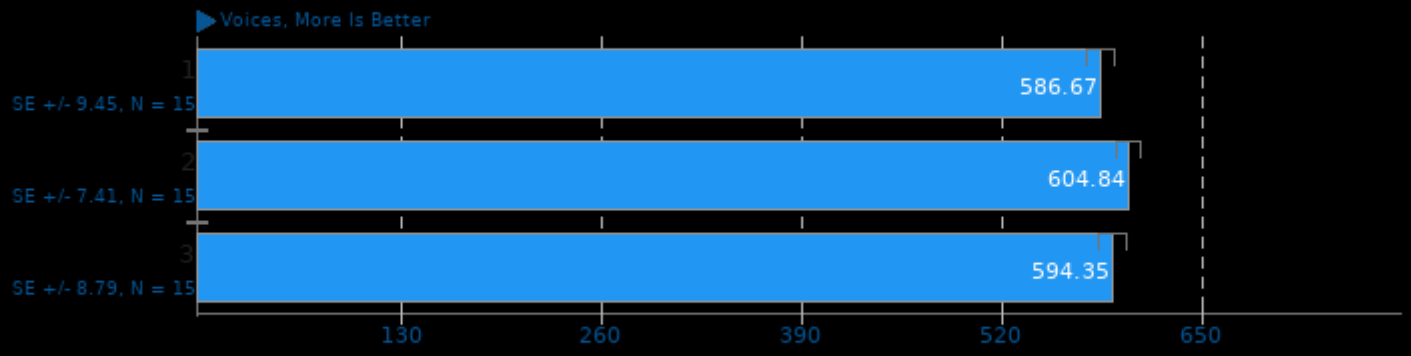
# Core i3 10100 January




rav1e 0.4
Speed: 6
Frames Per Second, More Is Better
1
SE +/- 0.015, N = 3
1.556
2
SE +/- 0.021, N = 3
1.522
3
SE +/- 0.016, N = 3
1.543
0.3501
0.7002
1.0503
1.4004
1.7505
rav1e 0.4
Speed: 10
Frames Per Second, More Is Better
1
SE +/- 0.039, N = 5
3.251
2
SE +/- 0.028, N = 3
3.068
3
SE +/- 0.052, N = 3
3.280
0.738
1.476
2.214
2.952
3.69
Timed Godot Game Engine Compilation 3.2.3
Time To Compile
Seconds, Fewer Is Better
1
SE +/- 0.16, N = 3
284.36
2
SE +/- 0.56, N = 3
284.14
3
SE +/- 0.07, N = 3
284.30
60
120
180
240
300

## Google SynthMark 20201109

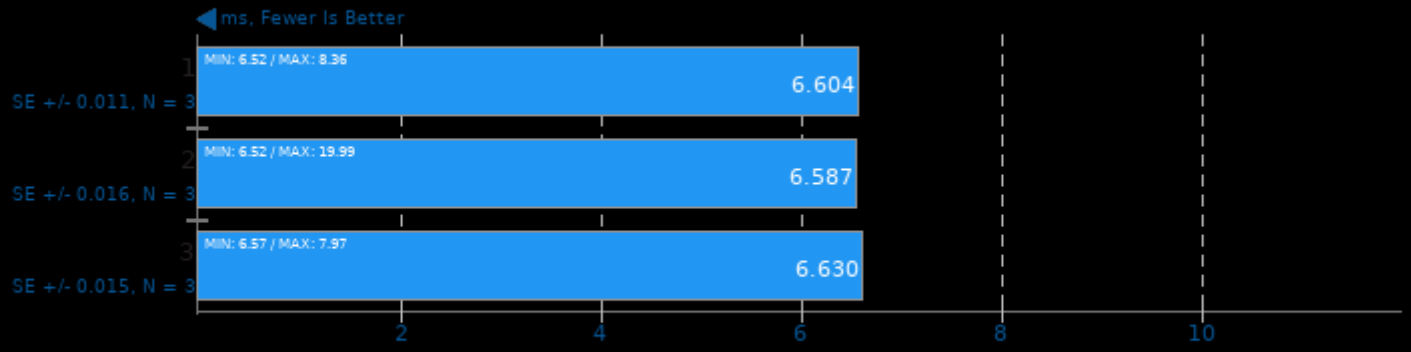
Test: VoiceMark_100




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

## Mobile Neural Network 1.1.1

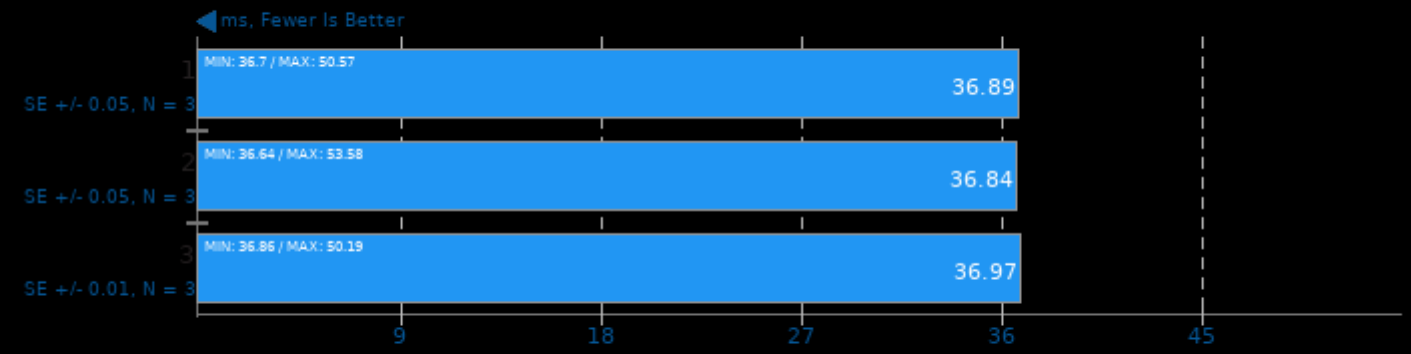
Model: SqueezeNetV1.0



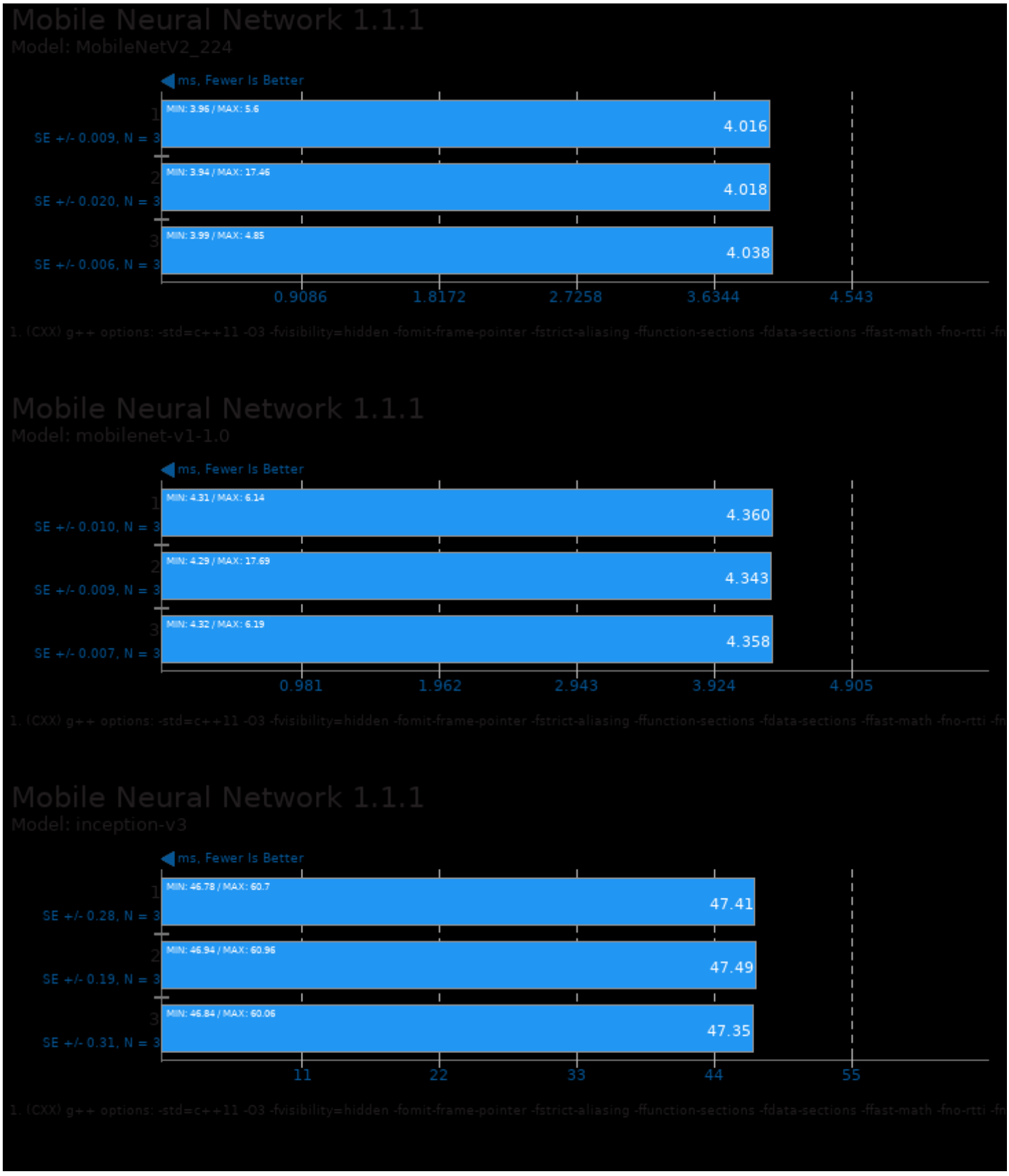

1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fv

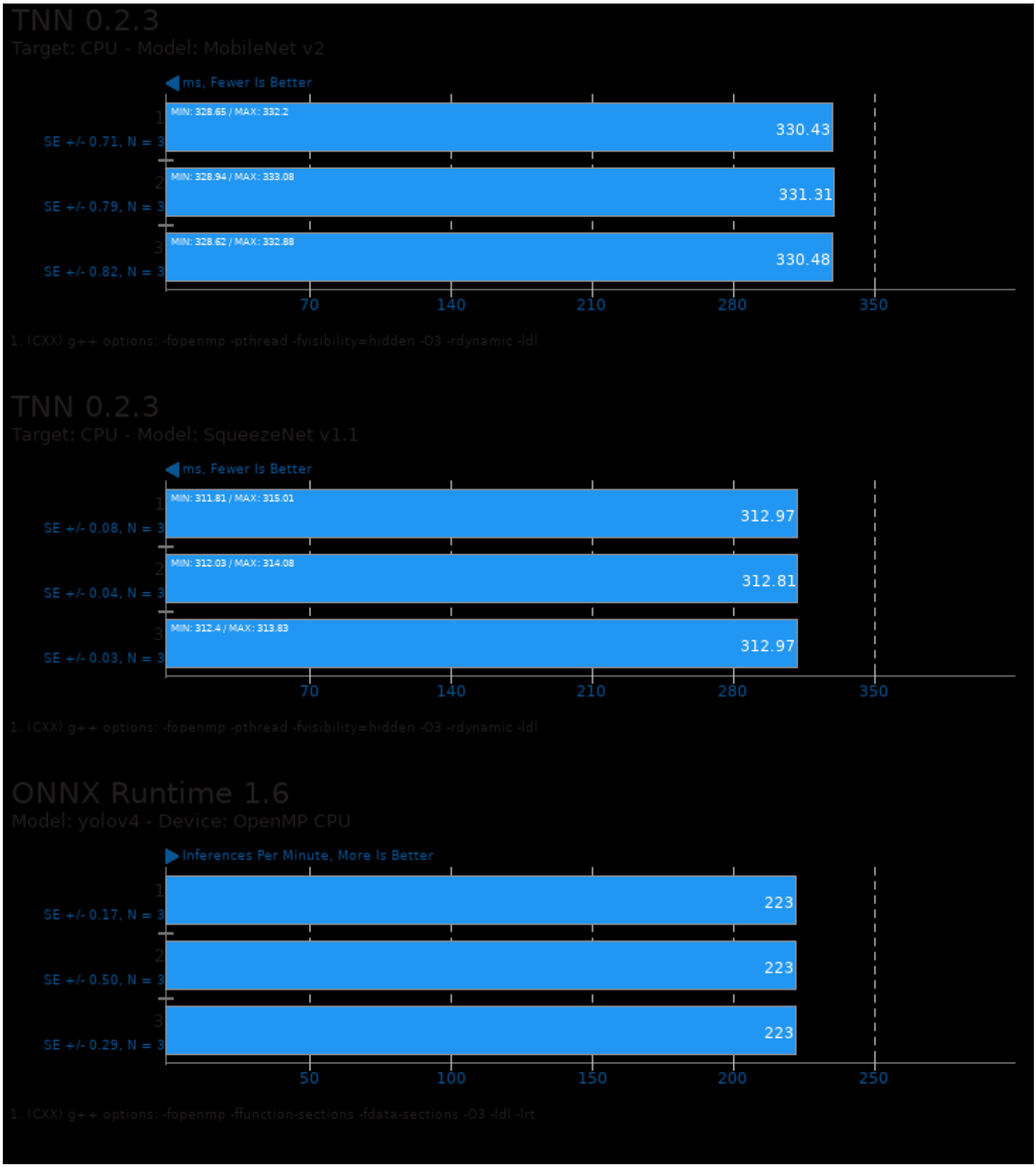
## Mobile Neural Network 1.1.1

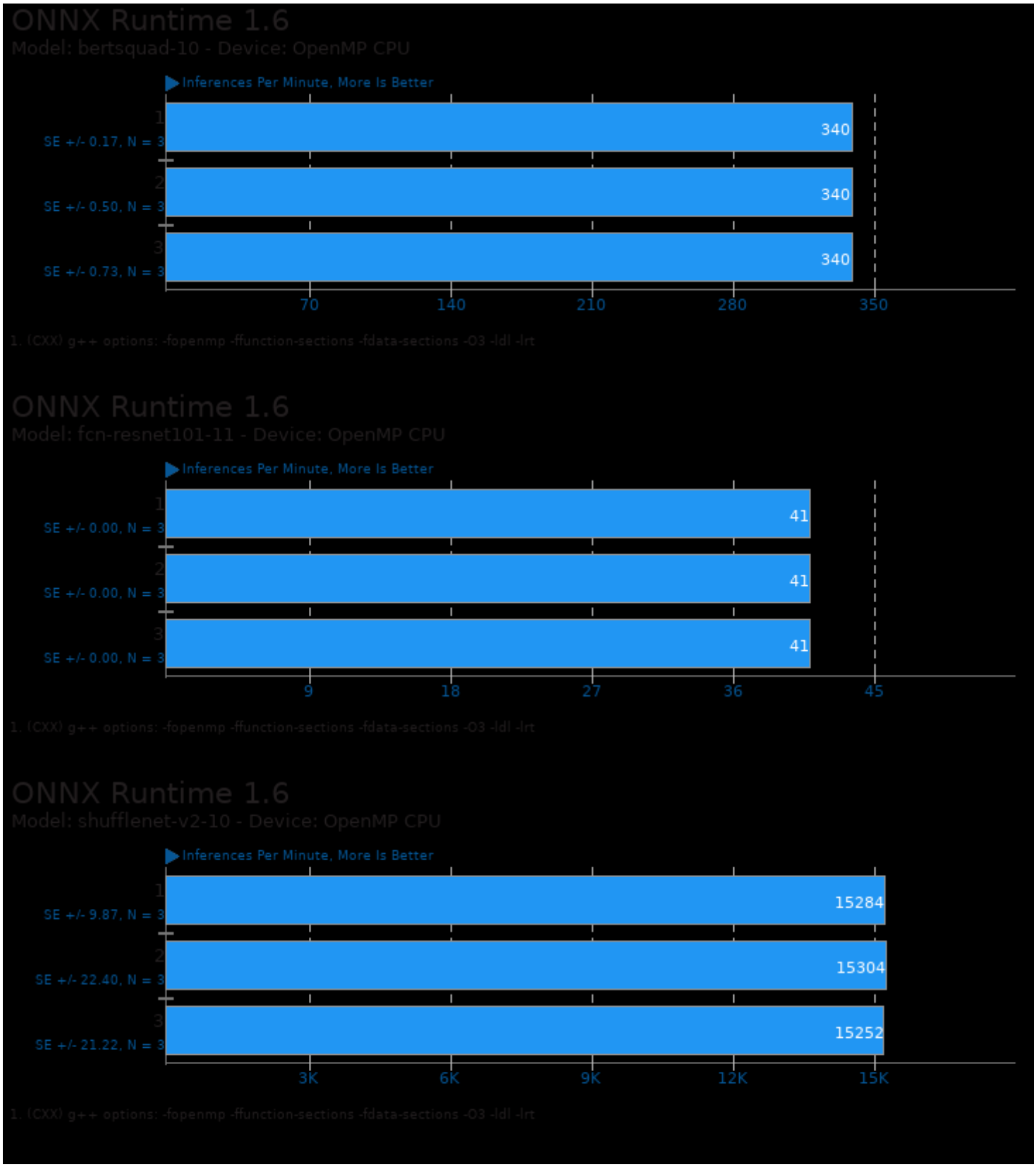
Model: resnet-v2-50



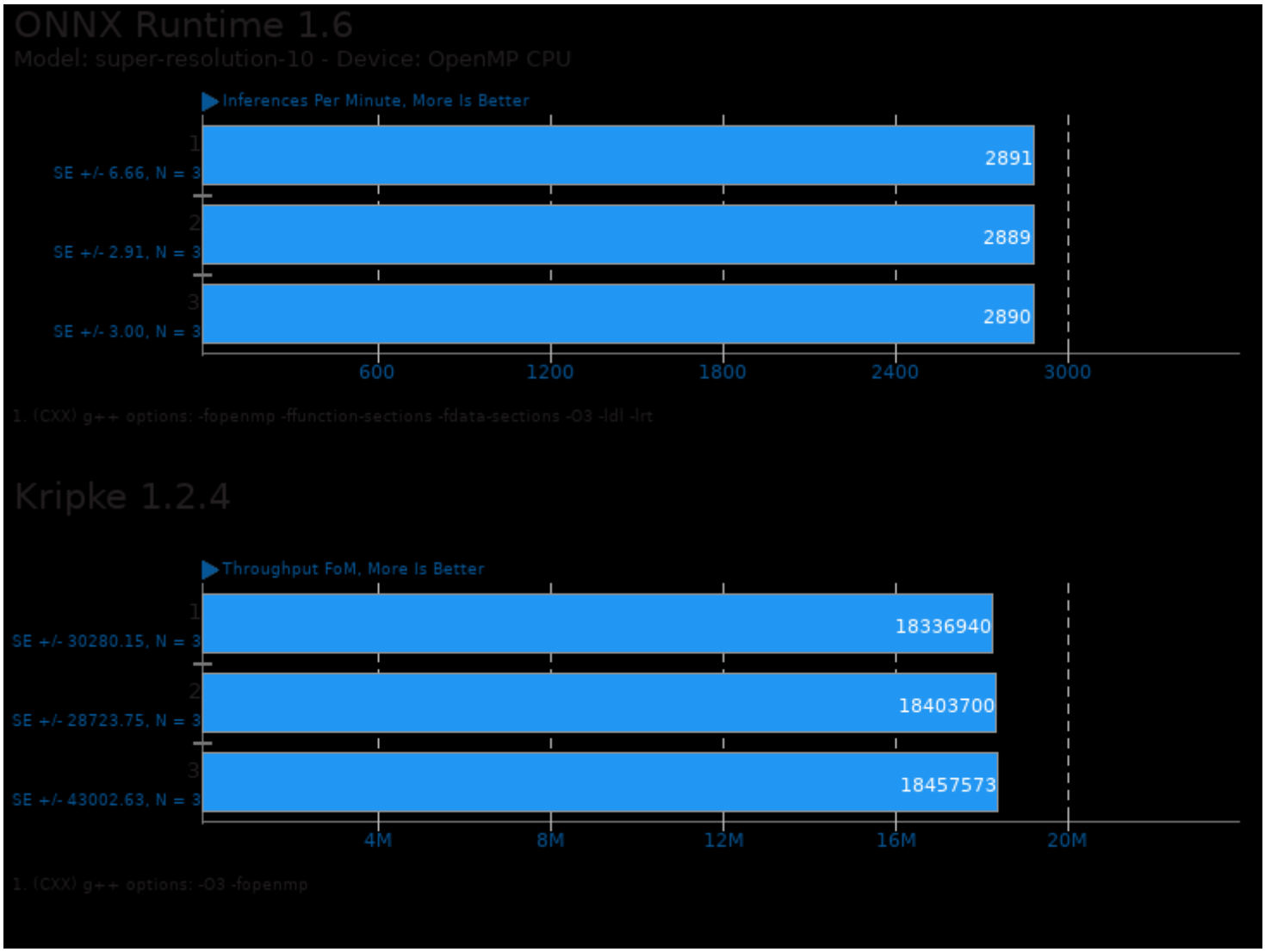

1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fv


Mobile Neural Network 1.1.1
Model: MobileNetV2_224
ms, Fewer Is Better
MIN: 3.96 / MAX: 5.6
4.016
SE +/- 0.009, N = 3
MIN: 3.94 / MAX: 17.46
4.018
SE +/- 0.020, N = 3
MIN: 3.99 / MAX: 4.85
4.038
SE +/- 0.006, N = 3
0.9086
1.8172
2.7258
3.6344
4.543
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fv
Mobile Neural Network 1.1.1
Model: mobilenet-v1-1.0
ms, Fewer Is Better
MIN: 4.31 / MAX: 6.14
4.360
SE +/- 0.010, N = 3
MIN: 4.29 / MAX: 17.69
4.343
SE +/- 0.009, N = 3
MIN: 4.32 / MAX: 6.19
4.358
SE +/- 0.007, N = 3
0.981
1.962
2.943
3.924
4.905
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fv
Mobile Neural Network 1.1.1
Model: inception-v3
ms, Fewer Is Better
MIN: 46.78 / MAX: 60.7
47.41
SE +/- 0.28, N = 3
MIN: 46.94 / MAX: 60.96
47.49
SE +/- 0.19, N = 3
MIN: 46.84 / MAX: 60.06
47.35
SE +/- 0.31, N = 3
11
22
33
44
55
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fv

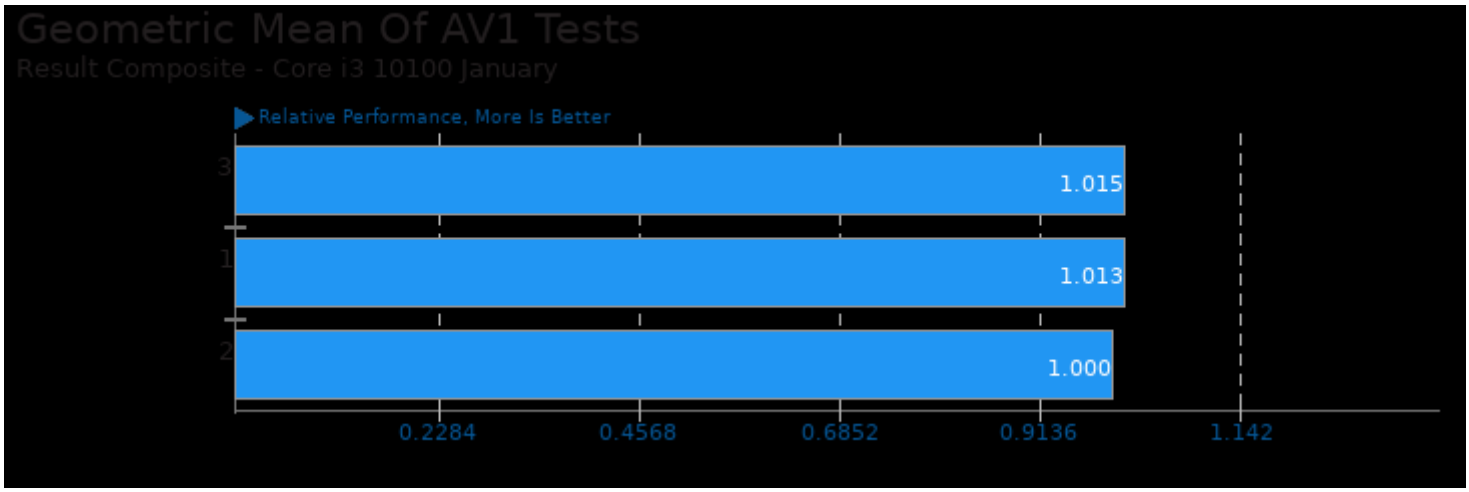

TNN 0.2.3
Target: CPU - Model: MobileNet v2
ms, Fewer Is Better
1
MIN: 328.65 / MAX: 332.2
330.43
SE +/- 0.71, N = 3
2
MIN: 328.94 / MAX: 333.08
331.31
SE +/- 0.79, N = 3
3
MIN: 328.62 / MAX: 332.88
330.48
SE +/- 0.82, N = 3
70
140
210
280
350
1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -O3 -rdynamic -ldl
TNN 0.2.3
Target: CPU - Model: SqueezeNet v1.1
ms, Fewer Is Better
1
MIN: 311.81 / MAX: 315.01
312.97
SE +/- 0.08, N = 3
2
MIN: 312.03 / MAX: 314.08
312.81
SE +/- 0.04, N = 3
3
MIN: 312.4 / MAX: 313.83
312.97
SE +/- 0.03, N = 3
70
140
210
280
350
1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -O3 -rdynamic -ldl
ONNX Runtime 1.6
Model: yolov4 - Device: OpenMP CPU
Inferences Per Minute, More Is Better
1
223
SE +/- 0.17, N = 3
2
223
SE +/- 0.50, N = 3
3
223
SE +/- 0.29, N = 3
50
100
150
200
250
1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt


ONNX Runtime 1.6
Model: bertsquad-10 - Device: OpenMP CPU
Inferences Per Minute, More Is Better
1
SE +/- 0.17, N = 3
340
2
SE +/- 0.50, N = 3
340
3
SE +/- 0.73, N = 3
340
70
140
210
280
350
1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt
ONNX Runtime 1.6
Model: fcn-resnet101-11 - Device: OpenMP CPU
Inferences Per Minute, More Is Better
1
SE +/- 0.00, N = 3
41
2
SE +/- 0.00, N = 3
41
3
SE +/- 0.00, N = 3
41
9
18
27
36
45
1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt
ONNX Runtime 1.6
Model: shufflenet-v2-10 - Device: OpenMP CPU
Inferences Per Minute, More Is Better
1
SE +/- 9.87, N = 3
15284
2
SE +/- 22.40, N = 3
15304
3
SE +/- 21.22, N = 3
15252
3K
6K
9K
12K
15K
1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt

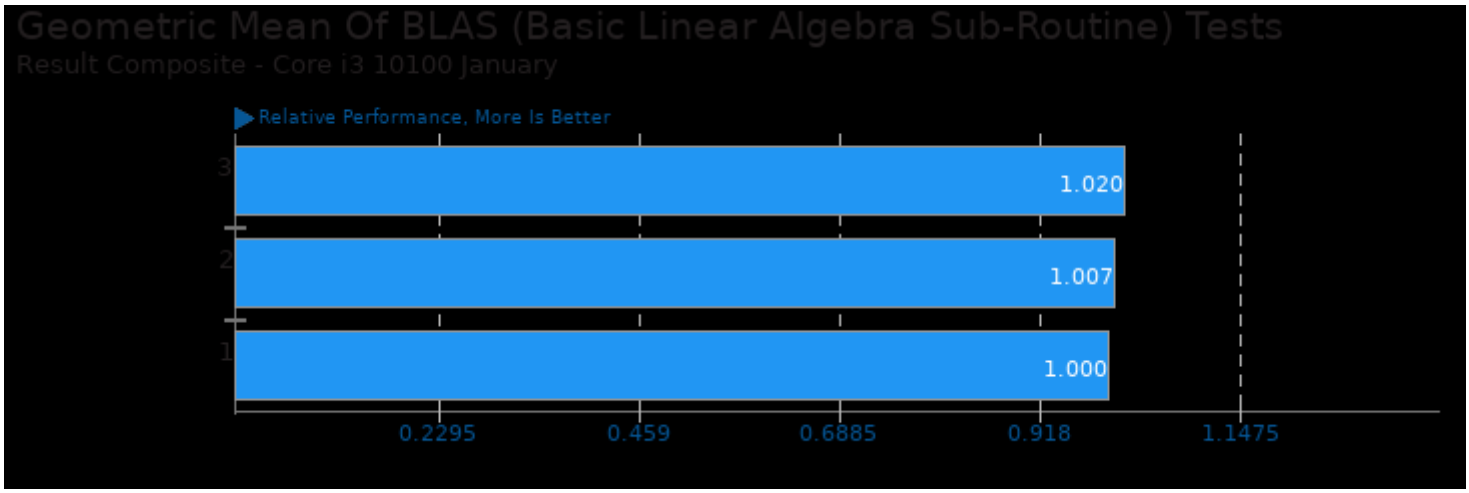
# Core i3 10100 January



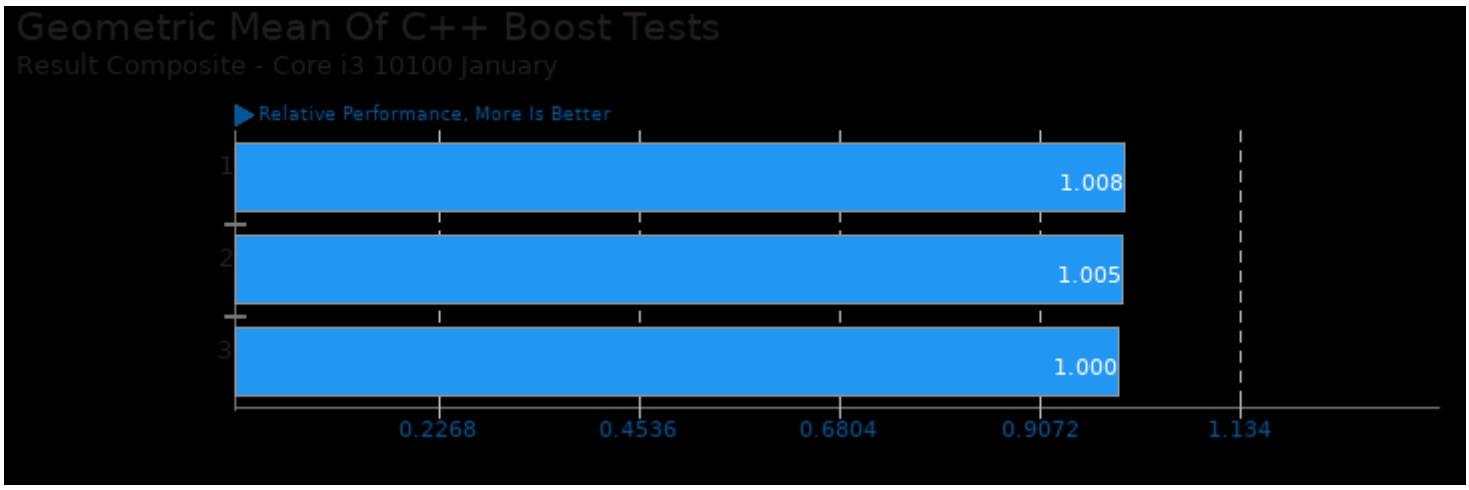
These geometric means are based upon test groupings / test suites for this result file.




Geometric mean based upon tests: pts/dav1d and pts/rav1e

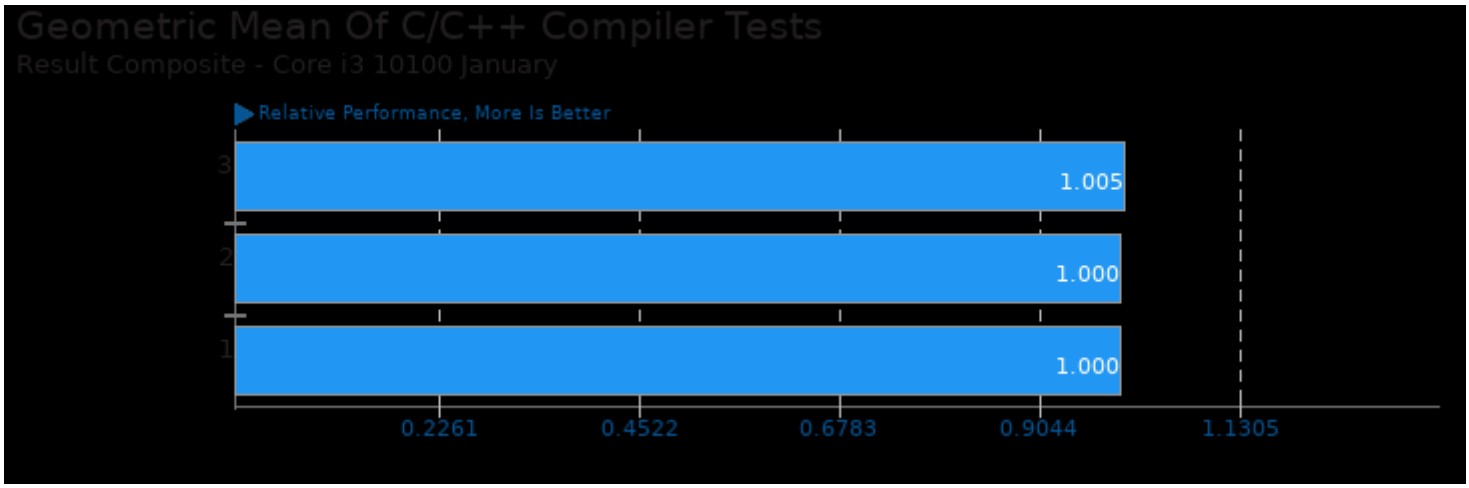



Geometric mean based upon tests: pts/qmcpack and pts/qe

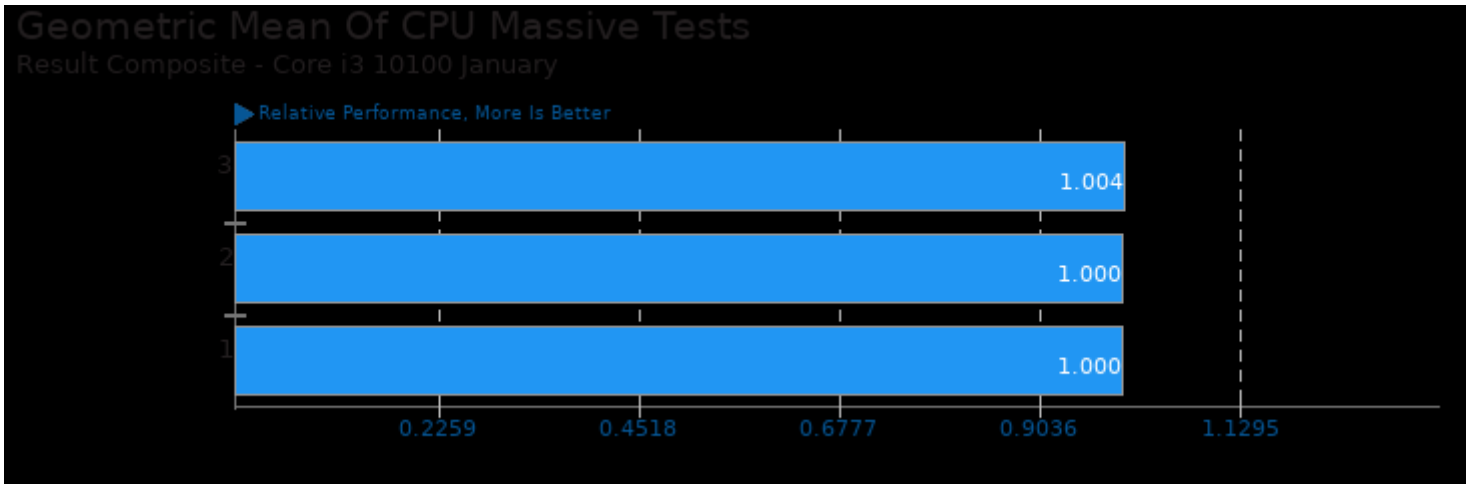



Geometric mean based upon tests: pts/qmcpack and pts/openfoam

# Core i3 10100 January




Geometric mean based upon tests: pts/dav1d and pts/lammps

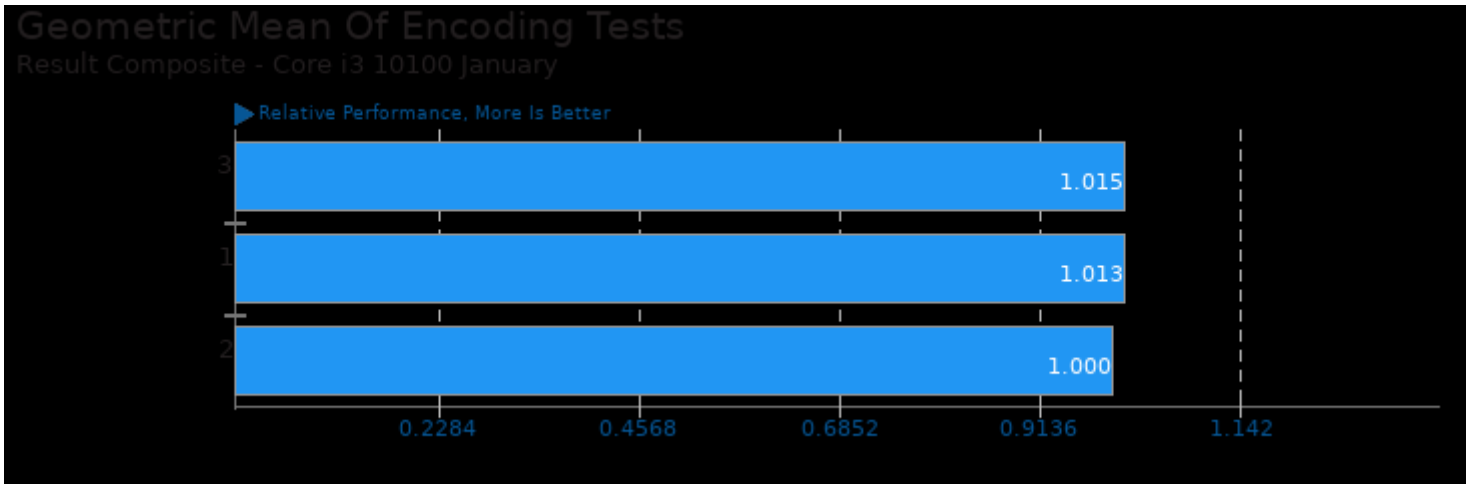



Geometric mean based upon tests: pts/cloverleaf, pts/dav1d and pts/lammps

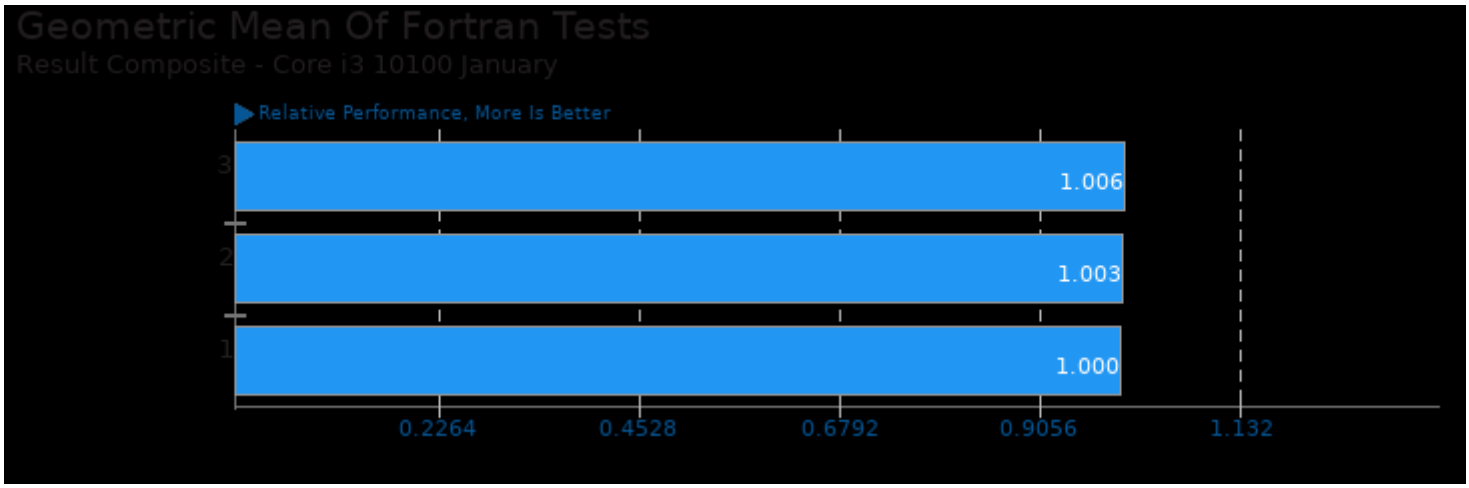



Geometric mean based upon tests: pts/dav1d, pts/rav1e, pts/etcpak, pts/build-godot and pts/synthmark

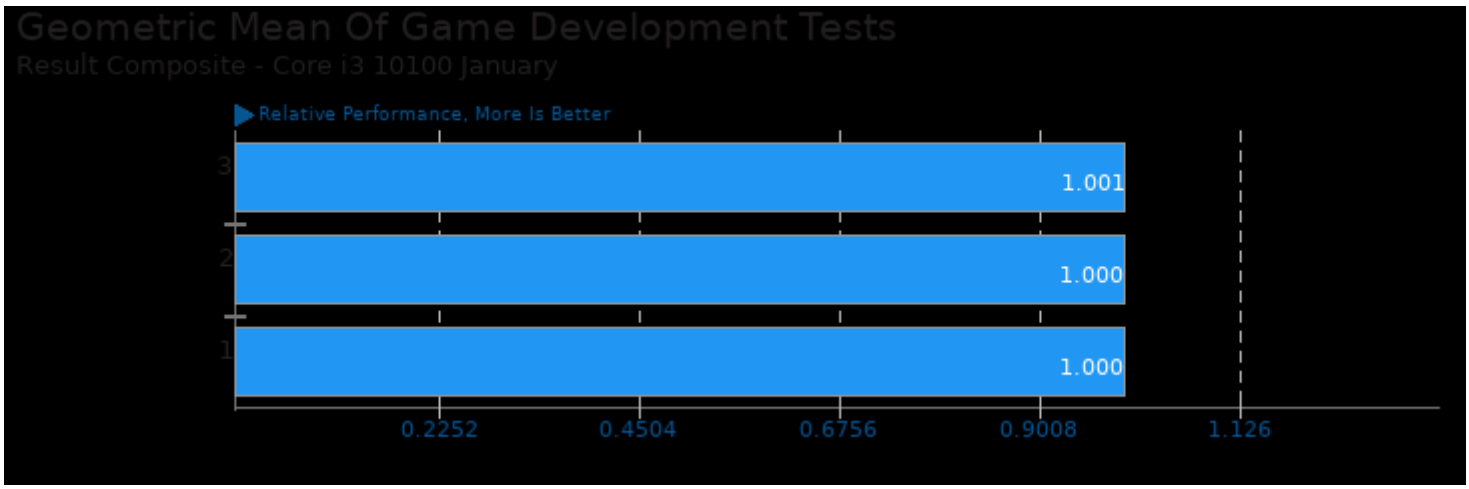
# Core i3 10100 January



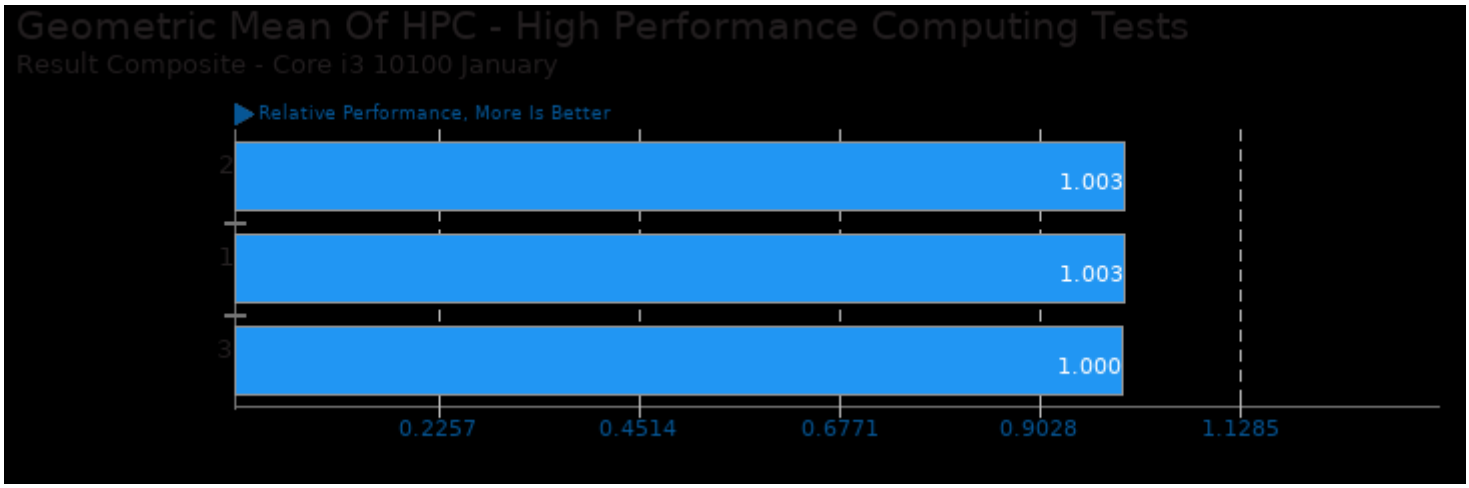

Geometric mean based upon tests: pts/dav1d and pts/rav1e



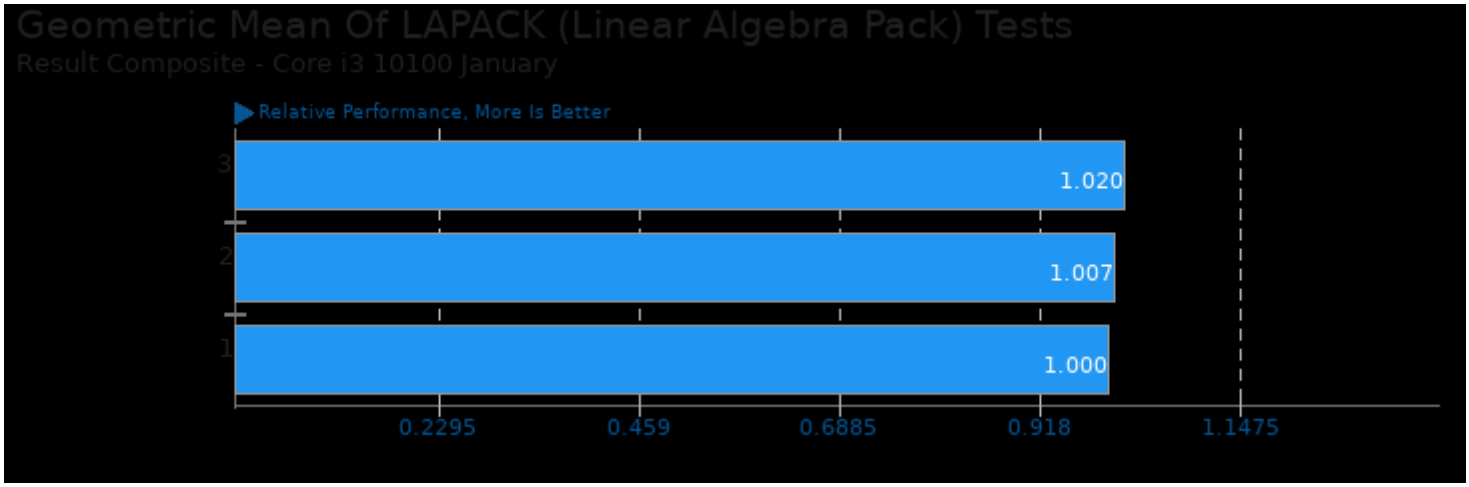

Geometric mean based upon tests: pts/cloverleaf, pts/qe and pts/lammps



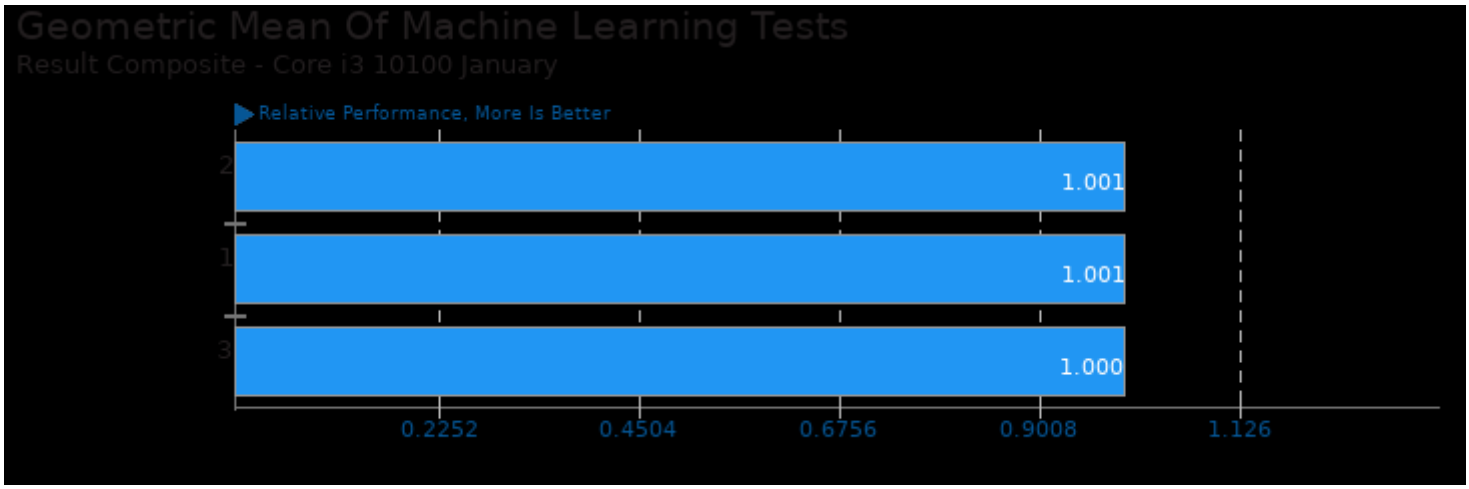

Geometric mean based upon tests: pts/etcpak and pts/build-godot



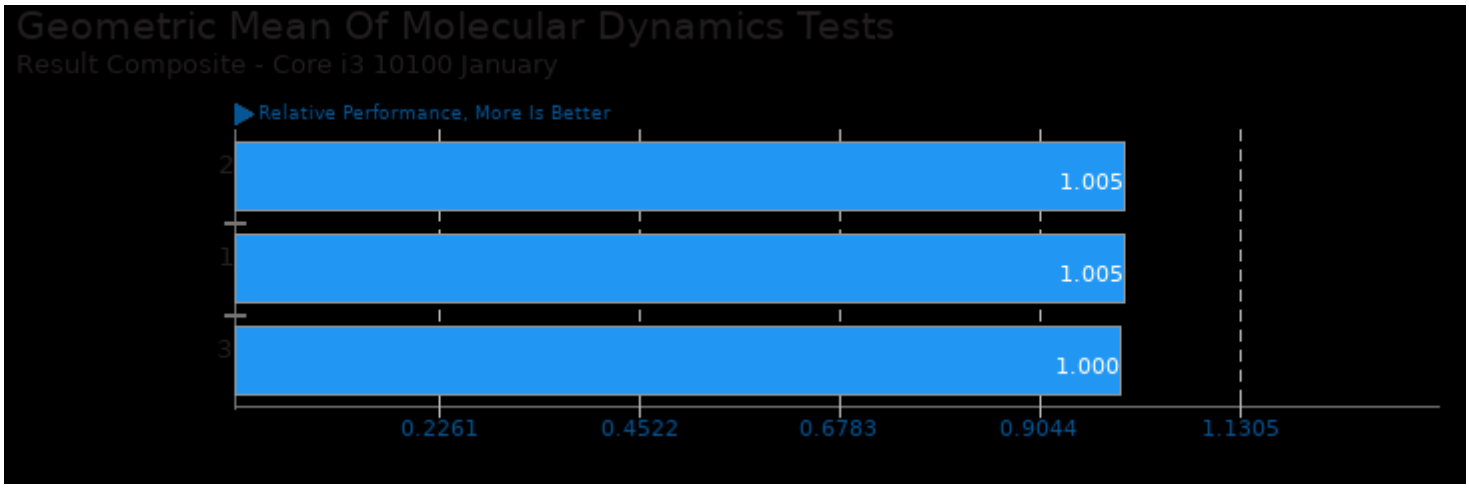

Geometric mean based upon tests: pts/qe, pts/amg, pts/cp2k, pts/cloverleaf, pts/lammps, pts/lulesh, pts/openfoam, pts/qmcpack, pts/kripke, pts/relion, pts/mnn, pts/tnn and pts/onnx



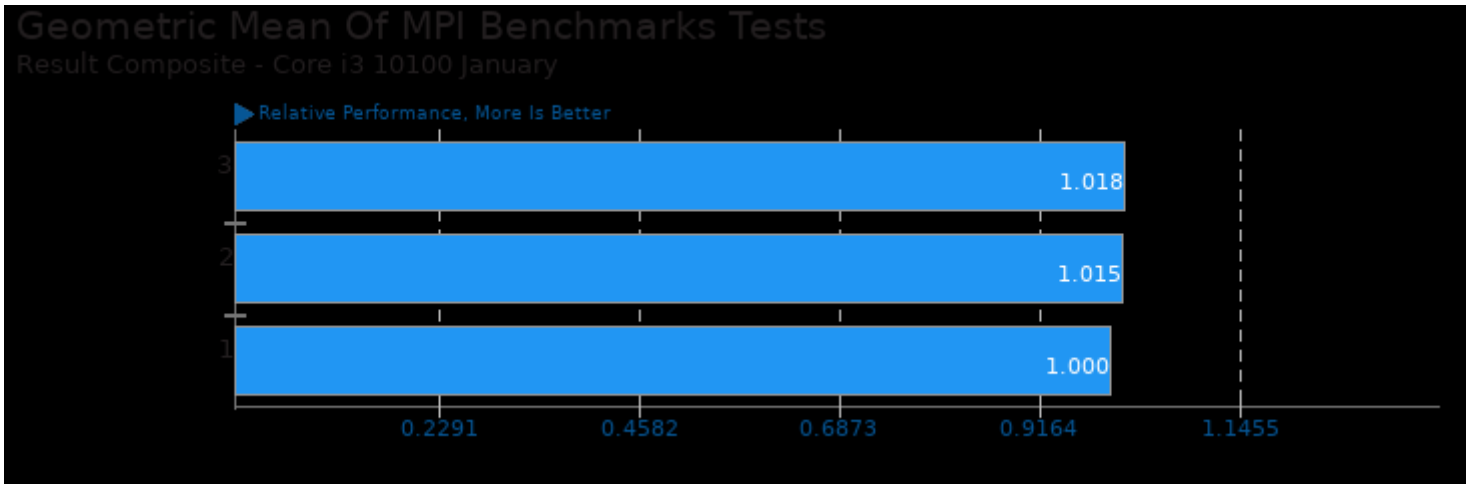

Geometric mean based upon tests: pts/qmcpack and pts/qe



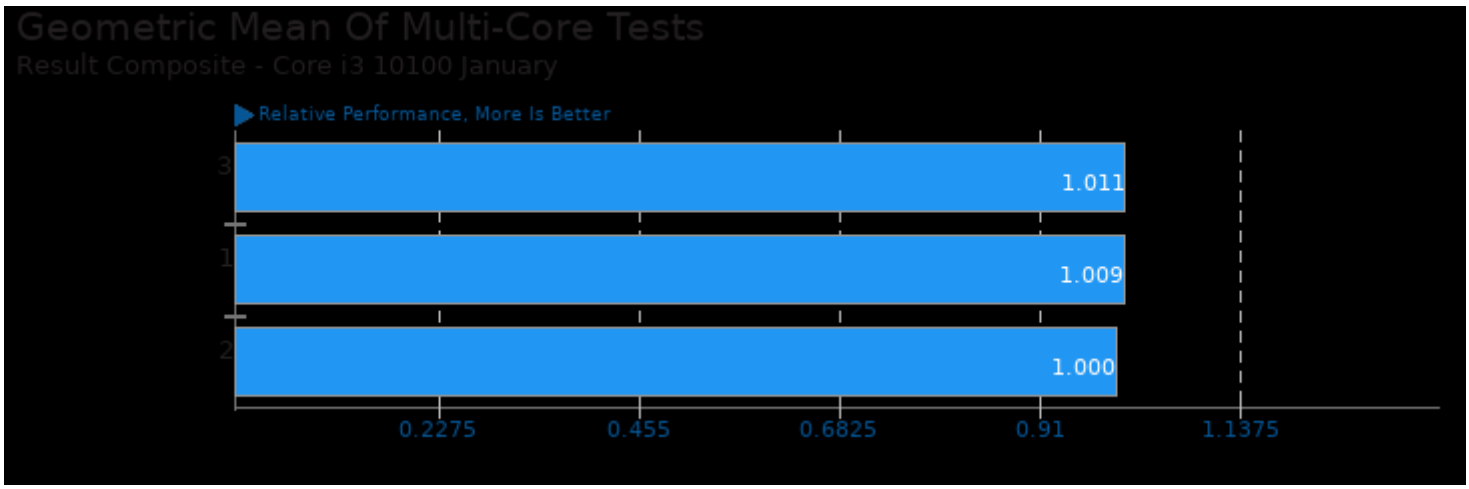

Geometric mean based upon tests: pts/mnn, pts/tnn and pts/onnx




Geometric mean based upon tests: pts/cp2k, pts/cloverleaf, pts/lammps, pts/lulesh and pts/openfoam



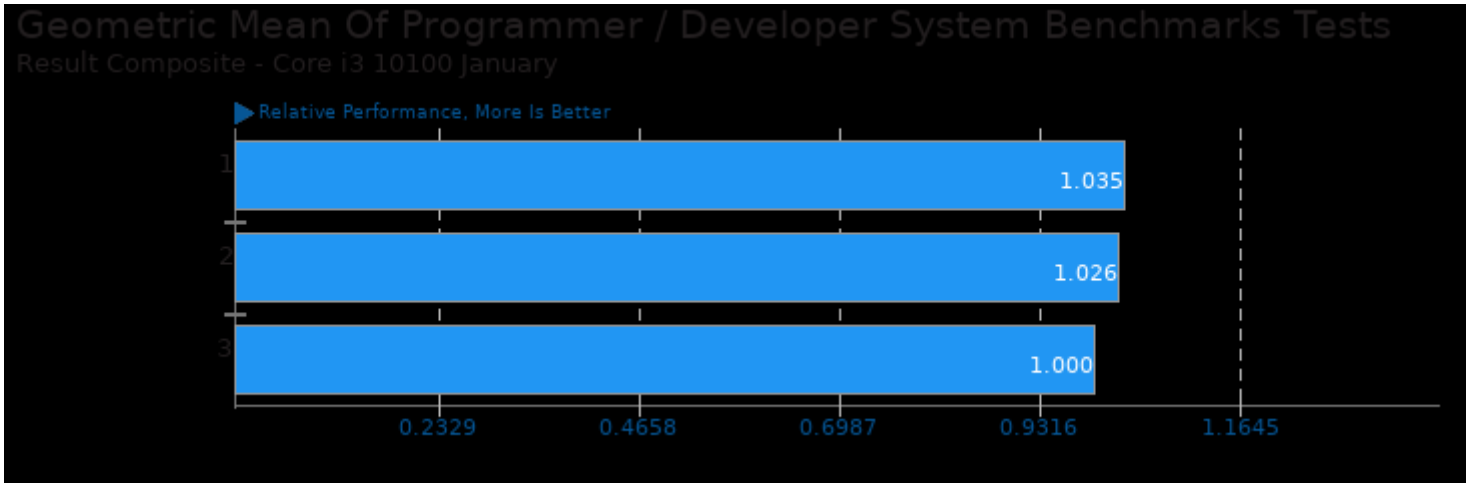

Geometric mean based upon tests: pts/lammps and pts/qmcpack



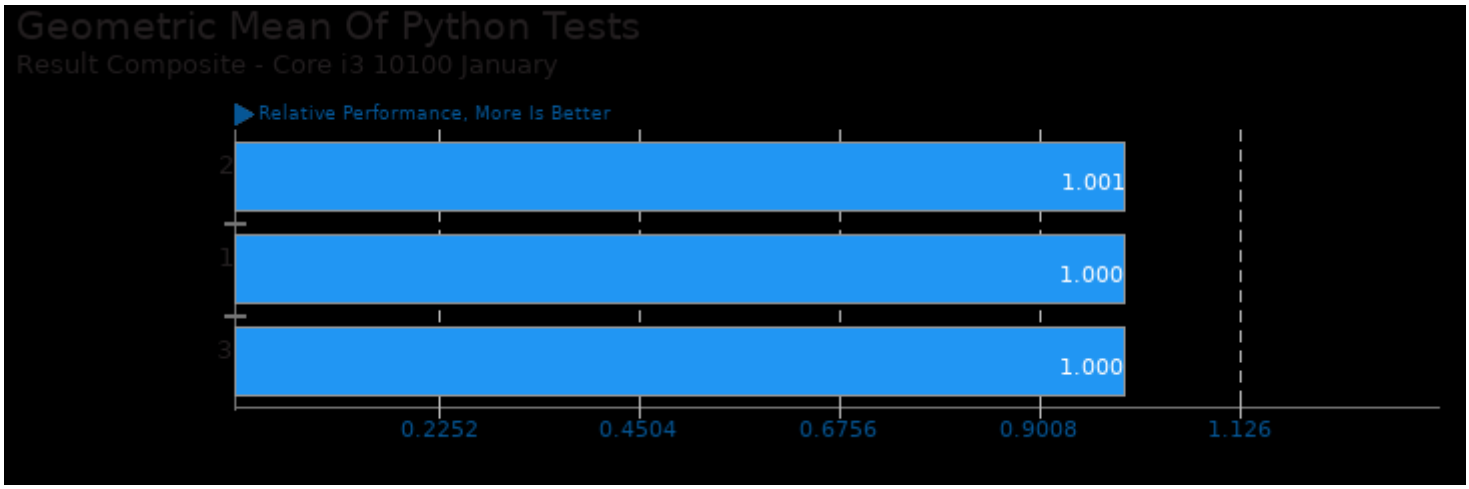

Geometric mean based upon tests: pts/dav1d, pts/rav1e, pts/lammps and pts/build-godot



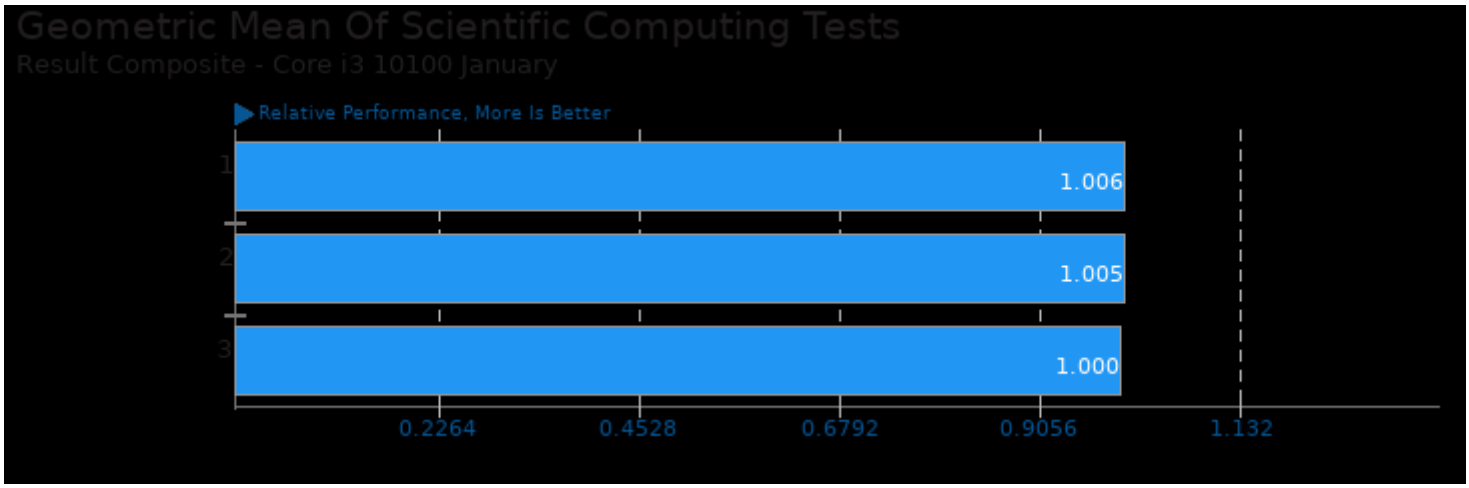

Geometric mean based upon tests: pts/ior, pts/cloverleaf, pts/cp2k, pts/amg, pts/qmcpack, pts/openfoam, pts/qe, pts/relion, pts/lammps and pts/lulesh



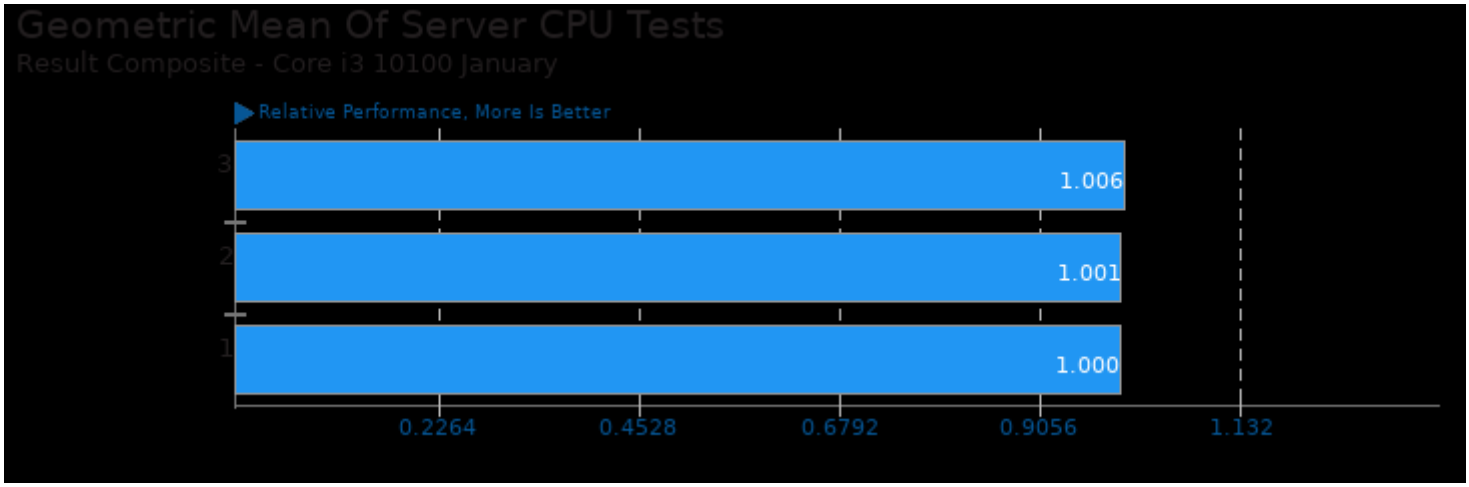

Geometric mean based upon tests: pts/build-godot and pts/amg



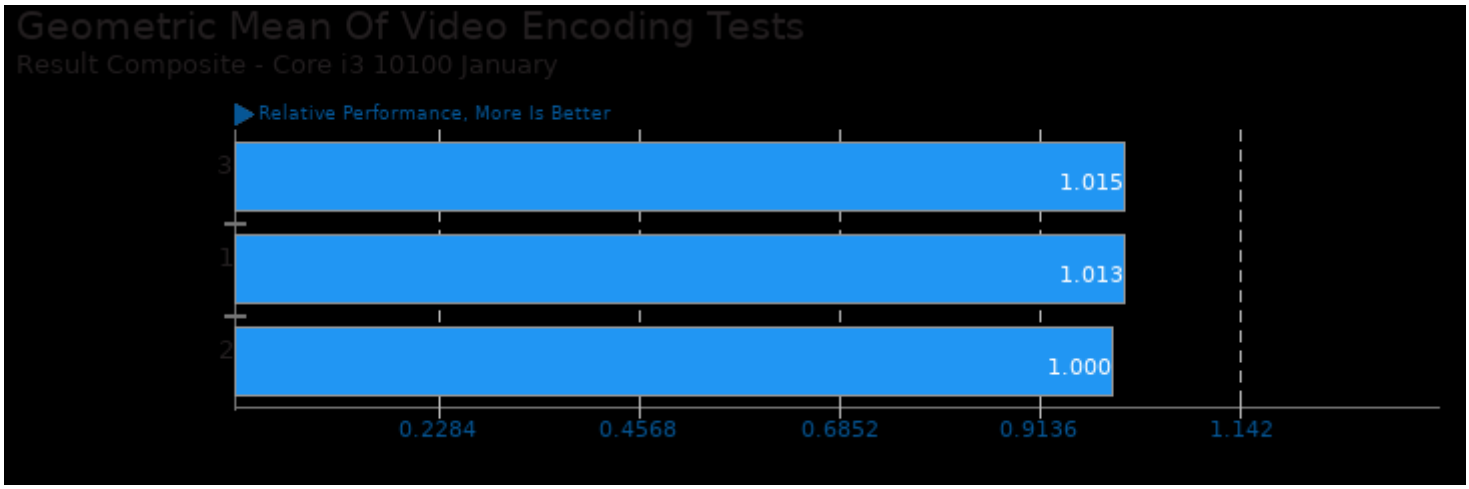

Geometric mean based upon tests: pts/build-godot and pts/onnx




Geometric mean based upon tests: pts/amg, pts/cp2k, pts/cloverleaf, pts/lammps, pts/lulesh, pts/openfoam, pts/qmcpack, pts/qe and pts/kripke




Geometric mean based upon tests: pts/cp2k and pts/dav1d




Geometric mean based upon tests: pts/dav1d and pts/rav1e

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 06:49.*