www.phoronix-test-suite.com

Apple M1 Mac Mini

Apple M1 testing with a Apple Mac mini (M1 2020) and llvmpipe on Arch Linux ARM via the Phoronix Test Suite.

Test Systems:

M1 Mac Mini

Processor: Apple M1 @ 2.06GHz (4 Cores / 8 Threads), Motherboard: Apple Mac mini (M1 2020), Memory: 8GB, Disk: 251GB APPLE SSD AP0256Q + 2 x 0GB APPLE SSD AP0256Q, Graphics: llvmpipe, Network: Broadcom NetXtreme BCM57762 PCIe + Broadcom BRCM4378 + Broadcom Device 5f69

OS: Arch Linux ARM, Kernel: 5.19.0-rc7-asahi-2-1-ARCH (aarch64), Desktop: KDE Plasma 5.25.4, Display Server: X Server 1.21.1.4, OpenGL: 4.5 Mesa 22.1.4 (LLVM 14.0.6 128 bits), Compiler: GCC 12.1.0 + Clang 14.0.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=aarch64-unknown-linux-gnu --disable-libssp --disable-libstdcxx-pch --disable-multilib --disable-werror --enable-__cxa_atexit --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-default-ssp --enable-fix-cortex-a53-835769 --enable-fix-cortex-a53-843419 --enable-gnu-indirect-function --enable-gnu-unique-object --enable-languages=c,c++,fortran,go,lto,objc,obj-c++ --enable-lto --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-unknown-linux-gnu --mandir=/usr/share/man --with-arch=armv8-a --with-linker-hash-style=gnu
Processor Notes: Scaling Governor: apple-cpufreq schedutil

Apple M1 Mac Mini

Java Notes: OpenJDK Runtime Environment (build 11.0.16+8)
Python Notes: Python 3.10.5
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Not affected + srbds: Not affected + tsx_async_abort: Not affected

	M1 Mac Mini
Etcpak - Multi-Threaded - ETC2 (Mpx/s)	575.607
Standard Deviation	0%
Etcpak - Single-Threaded - ETC2 (Mpx/s)	110.403
Standard Deviation	0%
LeelaChessZero - Eigen (Nodes/s)	1264
Standard Deviation	2.5%
LAMMPS Molecular Dynamics Simulator - 20k Atoms (ns/day)	4.017
Standard Deviation	0.2%
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein	3.955
Standard Deviation	0.1%
WebP Image Encode - Q.1.L (Encode Time - sec)	16.377
Standard Deviation	0.1%
WebP Image Encode - Q.1.H.C (Encode Time - sec)	6.799
Standard Deviation	0%
simdjson - Kostya (GB/s)	2.91
Standard Deviation	0%
simdjson - TopTweet (GB/s)	3.96
Standard Deviation	0%
simdjson - LargeRand (GB/s)	0.97
Standard Deviation	0%
simdjson - PartialTweets (GB/s)	3.9
Standard Deviation	0%
simdjson - DistinctUserID (GB/s)	3.97
Standard Deviation	0.1%
Xmrig - Monero - 1M (H/s)	2245
Standard Deviation	0.5%
Xmrig - Wownero - 1M (H/s)	2812
Standard Deviation	0.1%
Java Gradle Build - Reactor (sec)	167.360
Standard Deviation	3.3%
DaCapo Benchmark - H2 (msec)	5371
Standard Deviation	4.5%
DaCapo Benchmark - Jython (msec)	3160
Standard Deviation	1.3%
DaCapo Benchmark - Tradesoap (msec)	4624
Standard Deviation	2.5%
DaCapo Benchmark - Tradebeans (msec)	4410
Standard Deviation	1.9%
Renaissance - Scala Dotty (ms)	660.7
Standard Deviation	8.1%
Renaissance - Rand Forest (ms)	723.2
Standard Deviation	0.6%
Renaissance - ALS Movie Lens (ms)	8676
Standard Deviation	2.4%

Apple M1 Mac Mini

Renaissance - Apache Spark ALS (ms)	3398
Standard Deviation	9.6%
Renaissance - Apache Spark Bayes (ms)	6880
Standard Deviation	0.9%
Renaissance - Savina Reactors.IO (ms)	5812
Standard Deviation	1.4%
Renaissance - A.S.P (ms)	3151
Standard Deviation	1.8%
Renaissance - F.H.R (ms)	2058
Standard Deviation	0.5%
Renaissance - I.M.D.S (ms)	3911
Standard Deviation	0.9%
Renaissance - A.U.C.T (ms)	9153
Standard Deviation	0.8%
Renaissance - G.A.U.J.F (ms)	6278
Standard Deviation	0.9%
Zstd Compression - 3 - Compression Speed (MB/s)	3387
Standard Deviation	1.3%
Zstd Compression - 3 - D.S (MB/s)	4443
Standard Deviation	0%
Zstd Compression - 8 - Compression Speed (MB/s)	734.2
Standard Deviation	2.1%
Zstd Compression - 8 - D.S (MB/s)	4620
Standard Deviation	0.6%
Zstd Compression - 19 - Compression Speed (MB/s)	22.8
Standard Deviation	0.5%
Zstd Compression - 19 - D.S (MB/s)	4124
Standard Deviation	0.1%
Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	240.6
Standard Deviation	2.7%
Zstd Compression - 3, Long Mode - D.S (MB/s)	4832
Standard Deviation	0%
Zstd Compression - 8, Long Mode - Compression Speed (MB/s)	693
Standard Deviation	0.3%
Zstd Compression - 8, Long Mode - D.S (MB/s)	5057
Standard Deviation	0.1%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	19.4
Standard Deviation	0.5%
Zstd Compression - 19, Long Mode - D.S (MB/s)	4172
Standard Deviation	0.3%
LuaRadio - F.B.t.B.F.F (MiB/s)	166.3
Standard Deviation	1.2%
LuaRadio - F.D.F (MiB/s)	230.2
Standard Deviation	0.1%
LuaRadio - Hilbert Transform (MiB/s)	408.4
Standard Deviation	0.1%
LuaRadio - Complex Phase (MiB/s)	868.4
Standard Deviation	0.3%
GNU Radio - F.B.t.B.F.F (MiB/s)	122.8
Standard Deviation	0.7%
GNU Radio - S.S.C (MiB/s)	4823
Standard Deviation	21%
GNU Radio - FIR Filter (MiB/s)	506.0

Standard Deviation	0.5%
GNU Radio - IIR Filter (MiB/s)	1079
Standard Deviation	5.6%
GNU Radio - F.D.F (MiB/s)	819.0
Standard Deviation	0.5%
GNU Radio - Hilbert Transform (MiB/s)	385.7
Standard Deviation	0.7%
VP9 libvpx Encoding - Speed 0 - Bosphorus 4K (FPS)	3.86
Standard Deviation	0.4%
VP9 libvpx Encoding - Speed 5 - Bosphorus 4K (FPS)	9.48
Standard Deviation	0.1%
VP9 libvpx Encoding - Speed 0 - Bosphorus 1080p (FPS)	9.53
Standard Deviation	0.1%
VP9 libvpx Encoding - Speed 5 - Bosphorus 1080p (FPS)	24.95
Standard Deviation	0.2%
x265 - Bosphorus 4K (FPS)	1.9
Standard Deviation	0%
x265 - Bosphorus 1080p (FPS)	7.08
Standard Deviation	0%
Coremark - CoreMark Size 666 - I.P.S (Iterations/Sec)	175072
Standard Deviation	0%
Stockfish - Total Time (Nodes/s)	13220192
Standard Deviation	2.3%
libavif avifenc - 0 (sec)	273.674
Standard Deviation	0.9%
libavif avifenc - 2 (sec)	137.045
Standard Deviation	0.3%
libavif avifenc - 6 (sec)	13.622
Standard Deviation	1.6%
libavif avifenc - 6, Lossless (sec)	15.454
Standard Deviation	0.4%
libavif avifenc - 10, Lossless (sec)	6.223
Standard Deviation	1.9%
Build2 - Time To Compile (sec)	170.449
Standard Deviation	0.4%
Parallel BZIP2 Compression - F.1.0.R.a.m.i.C (sec)	17.242
Standard Deviation	3.2%
POV-Ray - Trace Time (sec)	73.689
Standard Deviation	0.1%
Primesieve - 1e12 (sec)	27.285
Standard Deviation	0.1%
Primesieve - 1e13 (sec)	348.819
Standard Deviation	0%
Numpy Benchmark (Score)	621.11
Standard Deviation	0.1%
XZ Compression - C.u.1.0.3.s.i.i.C.L.9 (sec)	53.486
Standard Deviation	1.8%
FLAC Audio Encoding - WAV To FLAC (sec)	28.232
Standard Deviation	0.5%
LAME MP3 Encoding - WAV To MP3 (sec)	28.524
Standard Deviation	0.1%
Ngspice - C2670 (sec)	177.347
Standard Deviation	0.1%

Apple M1 Mac Mini

Ngspice - C7552 (sec)	101.477
Standard Deviation	2.1%
RNNoise (sec)	23.027
Standard Deviation	0.1%
WebP2 Image Encode - Default (sec)	5.493
Standard Deviation	0.7%
WebP2 Image Encode - Q.7.C.E.7 (sec)	304.977
Standard Deviation	0.5%
WebP2 Image Encode - Q.9.C.E.7 (sec)	615.668
Standard Deviation	0.3%
WebP2 Image Encode - Q.1.C.E.5 (sec)	12.735
Standard Deviation	0.1%
WebP2 Image Encode - Q.1.L.C (sec)	1441
Standard Deviation	0.1%
Google SynthMark - VoiceMark_100 (Voices)	668.297
Standard Deviation	0.1%
SecureMark - SecureMark-TLS (marks)	191241
Standard Deviation	0.1%
OpenSSL - SHA256 (byte/s)	7881866037
Standard Deviation	0.4%
OpenSSL - RSA4096 (sign/s)	1408
Standard Deviation	0%
OpenSSL - RSA4096 (verify/s)	99409
Standard Deviation	0%
Node.js V8 Web Tooling Benchmark (runs/s)	13.28
Standard Deviation	0.6%
Liquid-DSP - 1 - 256 - 57 (samples/s)	22237333
Standard Deviation	0%
Liquid-DSP - 2 - 256 - 57 (samples/s)	44432667
Standard Deviation	0%
Liquid-DSP - 4 - 256 - 57 (samples/s)	88848000
Standard Deviation	0%
Liquid-DSP - 8 - 256 - 57 (samples/s)	123873333
Standard Deviation	0%
Liquid-DSP - 16 - 256 - 57 (samples/s)	124016667
Standard Deviation	0.1%
Apache Spark - 1000000 - 100 - S.5.B.T (sec)	3.68
Standard Deviation	2.4%
Apache Spark - 1000000 - 100 - C.P.B (sec)	250.712089460
Standard Deviation	0.4%
Apache Spark - 1000000 - 100 - C.P.B.U.D (sec)	14.62
Standard Deviation	1%
Apache Spark - 1000000 - 100 - Group By Test Time (sec)	3.43
Standard Deviation	3.2%
Apache Spark - 1000000 - 100 - R.T.T (sec)	3.18
Standard Deviation	1.5%
Apache Spark - 1000000 - 100 - I.J.T.T (sec)	2.27
Standard Deviation	4.2%
Apache Spark - 1000000 - 100 - B.I.J.T.T (sec)	1.96
Standard Deviation	3.4%
Apache Spark - 1000000 - 2000 - S.5.B.T (sec)	4.73
Standard Deviation	2.1%
Apache Spark - 1000000 - 2000 - C.P.B (sec)	251.11

Standard Deviation	0.5%
Apache Spark - 1000000 - 2000 - C.P.B.U.D (sec)	14.49
Standard Deviation	0.6%
Apache Spark - 1000000 - 2000 - Group By Test Time (sec)	4.60
Standard Deviation	1.1%
Apache Spark - 1000000 - 2000 - R.T.T (sec)	3.77
Standard Deviation	1.5%
Apache Spark - 1000000 - 2000 - I.J.T.T (sec)	3.46
Standard Deviation	5.8%
Apache Spark - 1000000 - 2000 - B.I.J.T.T (sec)	2.95
Standard Deviation	11.1%
ASKAP - tConvolve MT - Gridding (Million Grid Points/sec)	1413
Standard Deviation	0%
ASKAP - tConvolve MT - Degridding (Million Grid Points/sec)	1414
ASKAP - H.C.O (Iterations/sec)	191.572
Standard Deviation	0.2%
ASKAP - tConvolve OpenMP - Gridding (Million Grid Points/sec)	1347
Standard Deviation	2%
ASKAP - tConvolve OpenMP - Degridding (Million Grid Points/sec)	1644
Standard Deviation	0.6%
Cryptsetup - PBKDF2-sha512 (Iterations/sec)	**3449263**
Normalized	100%
Standard Deviation	0%
Cryptsetup - PBKDF2-whirlpool (Iterations/sec)	**735327**
Normalized	99.95%
Standard Deviation	0.1%
Cryptsetup - A.X.2.E (MiB/s)	**3938**
Normalized	99.94%
Standard Deviation	0.1%
Cryptsetup - A.X.2.D (MiB/s)	**3938**
Normalized	99.95%
Standard Deviation	0.1%
Cryptsetup - S.X.2.E (MiB/s)	**93.7**
Normalized	100%
Standard Deviation	0%
Cryptsetup - S.X.2.D (MiB/s)	**97.2**
Normalized	100%
Standard Deviation	0.1%
Cryptsetup - T.X.2.E (MiB/s)	**208.8**
Normalized	100%
Standard Deviation	0%
Cryptsetup - T.X.2.D (MiB/s)	**209.5**
Normalized	100%
Standard Deviation	0%
Cryptsetup - A.X.5.E (MiB/s)	**3855**
Normalized	99.92%
Standard Deviation	0.1%
Cryptsetup - A.X.5.D (MiB/s)	**3856**
Normalized	99.96%
Standard Deviation	0.1%
Cryptsetup - S.X.5.E (MiB/s)	93.7
Cryptsetup - T.X.5.E (MiB/s)	**208.7**
Normalized	99.95%
Standard Deviation	0%

Apple M1 Mac Mini

Cryptsetup - T.X.5.D (MiB/s)	**209.2**
Normalized	99.9%
Standard Deviation	0%
Cryptsetup - S.X.5.D (MiB/s)	97.2
libjpeg-turbo tjbench - D.T (Megapixels/sec)	206.812513
Standard Deviation	0%
TensorFlow Lite - SqueezeNet (us)	5339
Standard Deviation	0.4%
TensorFlow Lite - Inception V4 (us)	70575
Standard Deviation	0.2%
TensorFlow Lite - NASNet Mobile (us)	16221
Standard Deviation	0.4%
TensorFlow Lite - Mobilenet Float (us)	3954
Standard Deviation	1%
TensorFlow Lite - Mobilenet Quant (us)	2213
Standard Deviation	0.3%
TensorFlow Lite - I.R.V (us)	64369
Standard Deviation	0.1%
ASTC Encoder - Medium (sec)	5.8986
Standard Deviation	0.4%
ASTC Encoder - Thorough (sec)	17.2032
Standard Deviation	0%
ASTC Encoder - Exhaustive (sec)	150.0211
Standard Deviation	0%
Basis Universal - ETC1S (sec)	27.422
Standard Deviation	0.4%
Basis Universal - UASTC Level 0 (sec)	6.550
Standard Deviation	0.5%
Basis Universal - UASTC Level 2 (sec)	38.646
Standard Deviation	1.2%
Basis Universal - UASTC Level 3 (sec)	79.606
Standard Deviation	0.5%
Darktable - Boat - CPU-only (sec)	6.335
Standard Deviation	2.4%
Darktable - Server Rack - CPU-only (sec)	0.735
Standard Deviation	2.1%
Darktable - Server Room - CPU-only (sec)	3.679
Standard Deviation	0.5%
GEGL - Crop (sec)	7.110
Standard Deviation	1.9%
GEGL - Scale (sec)	5.610
Standard Deviation	3%
GEGL - Cartoon (sec)	77.449
Standard Deviation	0.1%
GEGL - Reflect (sec)	26.931
Standard Deviation	0.2%
GEGL - Antialias (sec)	32.579
Standard Deviation	0.8%
GEGL - Tile Glass (sec)	26.136
Standard Deviation	0.7%
GEGL - Wavelet Blur (sec)	49.069
Standard Deviation	0%
GEGL - Color Enhance (sec)	45.131

Standard Deviation	0%
GEGL - Rotate 90 Degrees (sec)	40.165
Standard Deviation	0.3%
GIMP - resize (sec)	11.490
Standard Deviation	2.4%
GIMP - rotate (sec)	11.422
Standard Deviation	0.1%
GIMP - auto-levels (sec)	12.338
Standard Deviation	0.5%
GIMP - unsharp-mask (sec)	15.914
Standard Deviation	0.2%
Inkscape - SVG Files To PNG (sec)	25.445
Standard Deviation	1.2%
GNU Octave Benchmark (sec)	4.509
Standard Deviation	1%
Google Draco - Lion (ms)	3829
Standard Deviation	0%
Google Draco - Church Facade (ms)	5743
Standard Deviation	0.3%
Stress-NG - MMAP (Bogo Ops/s)	93.62
Standard Deviation	0.2%
Stress-NG - NUMA (Bogo Ops/s)	1392
Standard Deviation	2.5%
Stress-NG - Futex (Bogo Ops/s)	769132
Standard Deviation	4.3%
Stress-NG - MEMFD (Bogo Ops/s)	766.91
Standard Deviation	0.1%
Stress-NG - Atomic (Bogo Ops/s)	246257
Standard Deviation	0.2%
Stress-NG - Crypto (Bogo Ops/s)	9189
Standard Deviation	0.2%
Stress-NG - Malloc (Bogo Ops/s)	7924402
Standard Deviation	0.8%
Stress-NG - IO_uring (Bogo Ops/s)	393360
Standard Deviation	0.6%
Stress-NG - SENDFILE (Bogo Ops/s)	636925
Standard Deviation	0.4%
Stress-NG - CPU Cache (Bogo Ops/s)	738.00
Standard Deviation	0.9%
Stress-NG - CPU Stress (Bogo Ops/s)	2364
Standard Deviation	0%
Stress-NG - Semaphores (Bogo Ops/s)	593126
Standard Deviation	0%
Stress-NG - Matrix Math (Bogo Ops/s)	23692
Standard Deviation	1.7%
Stress-NG - Vector Math (Bogo Ops/s)	30357
Standard Deviation	0%
Stress-NG - Memory Copying (Bogo Ops/s)	2799
Standard Deviation	0.5%
Stress-NG - Socket Activity (Bogo Ops/s)	4346
Standard Deviation	2.4%
Stress-NG - Context Switching (Bogo Ops/s)	1935223
Standard Deviation	0.4%

Apple M1 Mac Mini

Stress-NG - G.C.S.F (Bogo Ops/s)	287445
Standard Deviation	0%
Stress-NG - G.Q.D.S (Bogo Ops/s)	109.69
Standard Deviation	0.2%
Stress-NG - S.V.M.P (Bogo Ops/s)	4916301
Standard Deviation	0.4%
NCNN - CPU - mobilenet (ms)	14.50
Standard Deviation	0.4%
NCNN - CPU-v2-v2 - mobilenet-v2 (ms)	2.60
Standard Deviation	2.1%
NCNN - CPU-v3-v3 - mobilenet-v3 (ms)	2.35
Standard Deviation	1.3%
NCNN - CPU - shufflenet-v2 (ms)	2.17
Standard Deviation	1%
NCNN - CPU - mnasnet (ms)	2.52
Standard Deviation	0.2%
NCNN - CPU - efficientnet-b0 (ms)	4.24
Standard Deviation	0.9%
NCNN - CPU - blazeface (ms)	2.50
Standard Deviation	4.8%
NCNN - CPU - googlenet (ms)	13.63
Standard Deviation	1%
NCNN - CPU - vgg16 (ms)	34.19
Standard Deviation	0.3%
NCNN - CPU - resnet18 (ms)	8.46
Standard Deviation	4%
NCNN - CPU - alexnet (ms)	13.32
Standard Deviation	1.4%
NCNN - CPU - resnet50 (ms)	19.03
Standard Deviation	1.3%
NCNN - CPU - yolov4-tiny (ms)	17.49
Standard Deviation	0.4%
NCNN - CPU - squeezenet_ssd (ms)	16.62
Standard Deviation	1.5%
NCNN - CPU - regnety_400m (ms)	5.87
Standard Deviation	0.6%
TNN - CPU - DenseNet (ms)	5538
Standard Deviation	0.1%
TNN - CPU - MobileNet v2 (ms)	324.951
Standard Deviation	0%
TNN - CPU - SqueezeNet v2 (ms)	78.575
Standard Deviation	0.2%
TNN - CPU - SqueezeNet v1.1 (ms)	337.016
Standard Deviation	0%
PyBench - T.F.A.T.T (Milliseconds)	921
Standard Deviation	0.1%
PyPerformance - go (Milliseconds)	179
Standard Deviation	0%
PyPerformance - 2to3 (Milliseconds)	245
Standard Deviation	0.4%
PyPerformance - chaos (Milliseconds)	81.4
Standard Deviation	0.2%
PyPerformance - float (Milliseconds)	85.3

Standard Deviation	0.2%
PyPerformance - nbody (Milliseconds)	110
Standard Deviation	0%
PyPerformance - pathlib (Milliseconds)	12.2
Standard Deviation	0%
PyPerformance - raytrace (Milliseconds)	381
Standard Deviation	0%
PyPerformance - json_loads (Milliseconds)	19.3
Standard Deviation	0%
PyPerformance - crypto_pyaes (Milliseconds)	94.9
Standard Deviation	0.1%
PyPerformance - regex_compile (Milliseconds)	114
Standard Deviation	0%
PyPerformance - python_startup (Milliseconds)	17.9
Standard Deviation	0.3%
PyPerformance - django_template (Milliseconds)	33.3
Standard Deviation	0.3%
PyPerformance - pickle_pure_python (Milliseconds)	332
Standard Deviation	0.3%
Git - T.T.C.C.G.C (sec)	45.935
Standard Deviation	0.3%
PyHPC Benchmarks - CPU - Numpy - 1048576 - Equation of State	0.152
Standard Deviation	0%
PyHPC Benchmarks - CPU - Numpy - 1048576 - Isoneutral Mixing	0.320
Standard Deviation	0.2%
PyHPC Benchmarks - CPU - Numpy - 4194304 - Equation of State	0.804
Standard Deviation	0.1%
PyHPC Benchmarks - CPU - Numpy - 4194304 - Isoneutral Mixing	1.298
Standard Deviation	0.1%
Unpacking Firefox - firefox-84.0.source.tar.xz (sec)	17.788
Standard Deviation	0.9%

Etcpak 1.0

Benchmark: Multi-Threaded - Configuration: ETC2

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

Etcpak 1.0

Benchmark: Single-Threaded - Configuration: ETC2

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

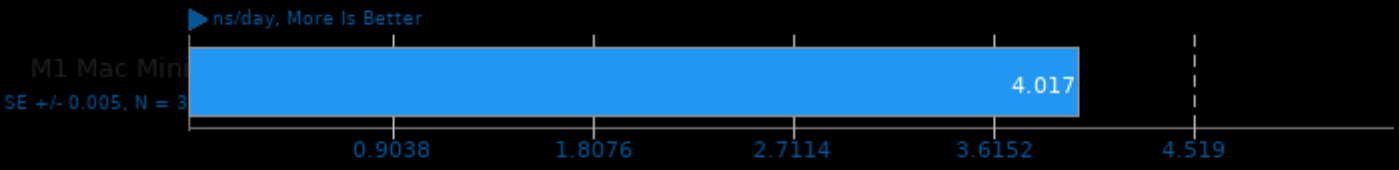
LeelaChessZero 0.28

Backend: Eigen

1. (CXX) g++ options: -flto -pthread

LAMMPS Molecular Dynamics Simulator 23Jun2022

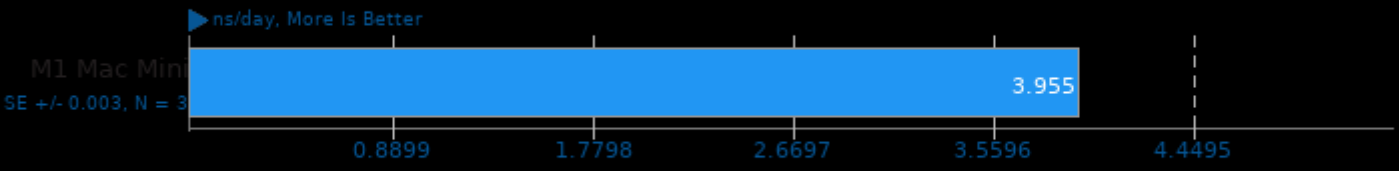
Model: 20k Atoms



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

LAMMPS Molecular Dynamics Simulator 23Jun2022

Model: Rhodopsin Protein



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

WebP Image Encode 1.1

Encode Settings: Quality 100, Lossless

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

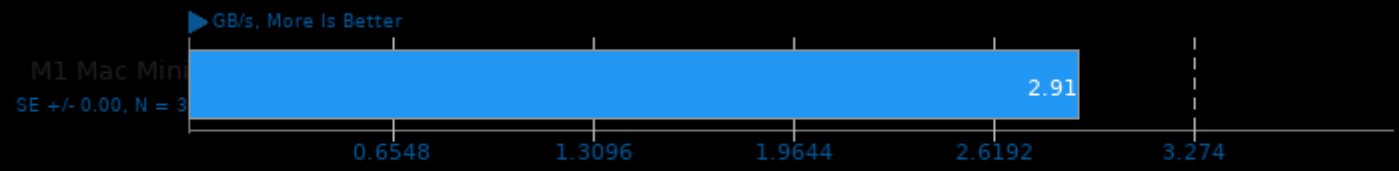
WebP Image Encode 1.1

Encode Settings: Quality 100, Highest Compression

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

simdjson 2.0

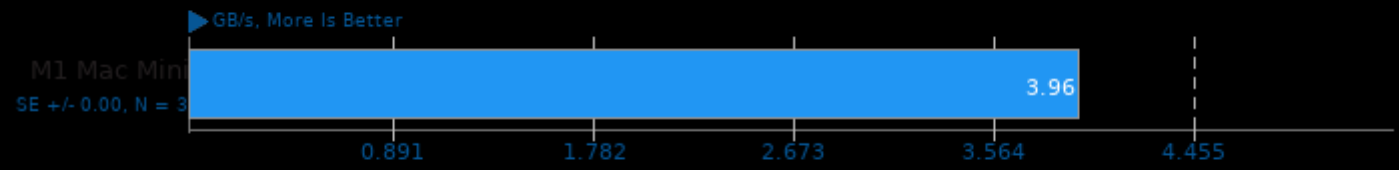
Throughput Test: Kostya



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

simdjson 2.0

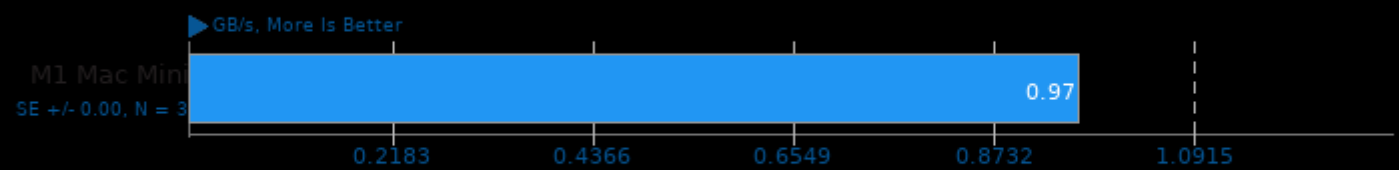
Throughput Test: TopTweet



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

simdjson 2.0

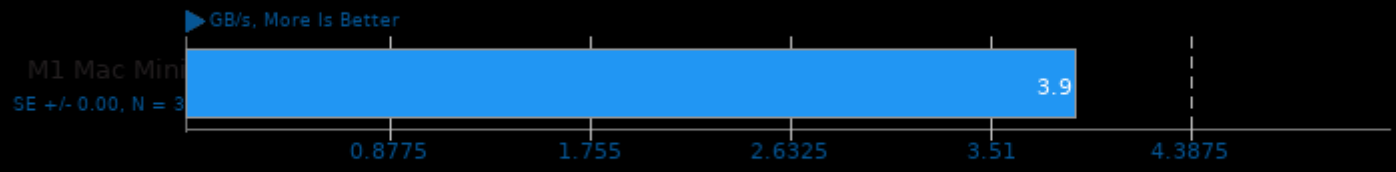
Throughput Test: LargeRandom



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

simdjson 2.0

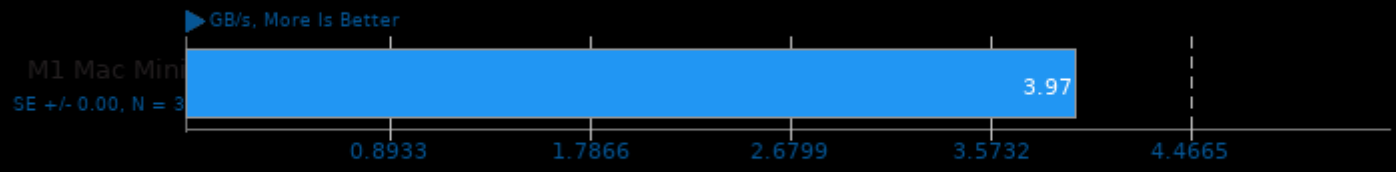
Throughput Test: PartialTweets



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

simdjson 2.0

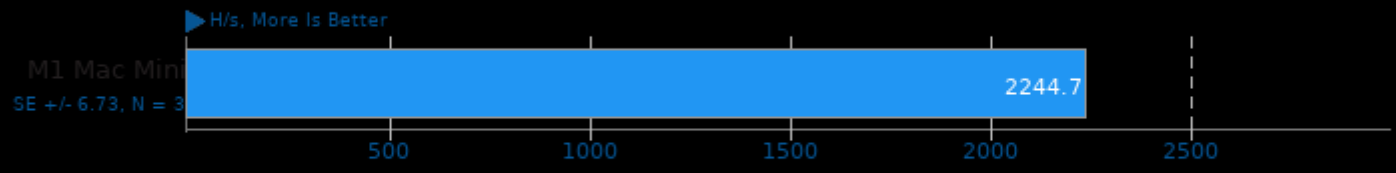
Throughput Test: DistinctUserID



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

Xmrig 6.12.1

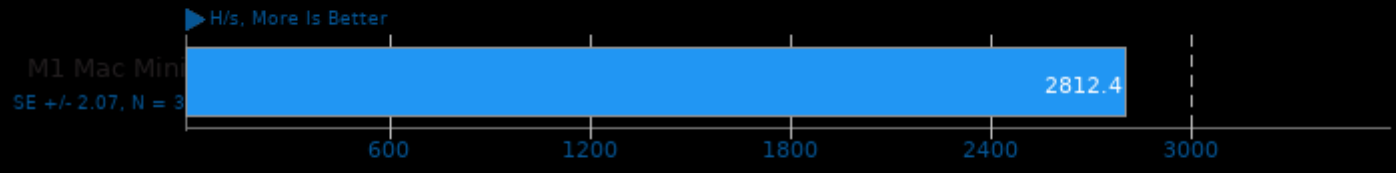
Variant: Monero - Hash Count: 1M



1. (CXX) g++ options: -fexceptions -fno-rtti -O3 -Ofast -static-libgcc -static-libstdc++ -rdynamic -lssl -lcrypto -luv -lpthread -lrt -ldl -lhwloc

Xmrig 6.12.1

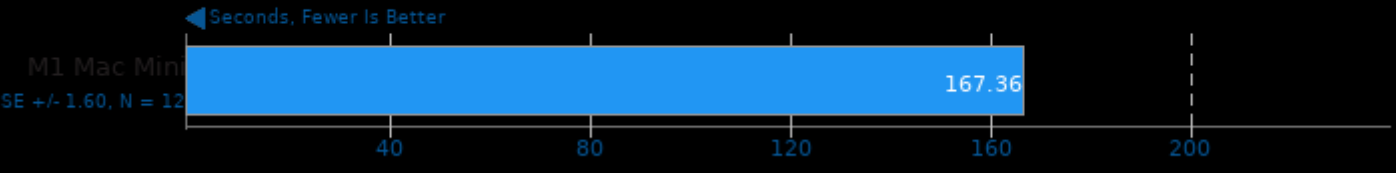
Variant: Wownero - Hash Count: 1M



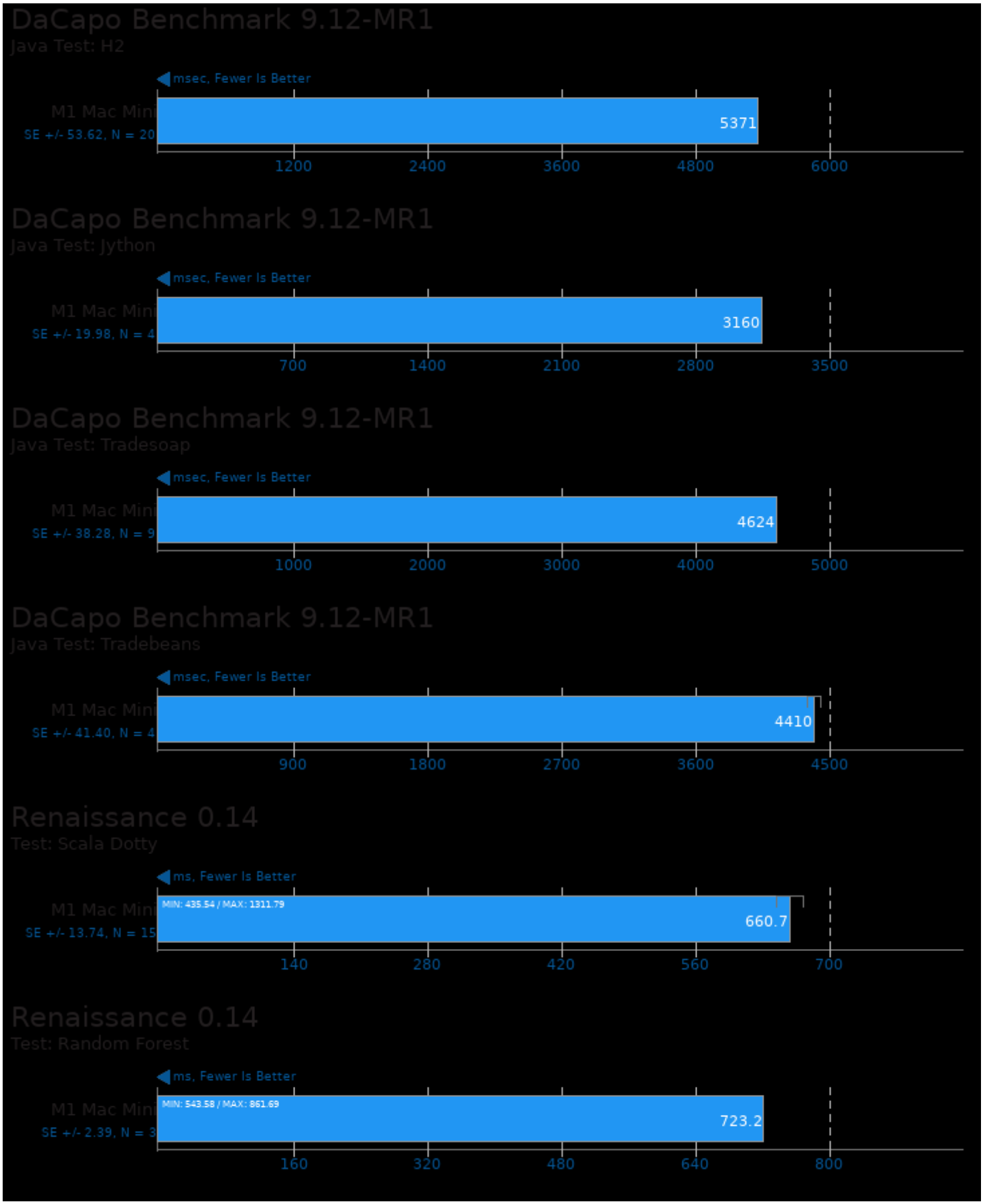
1. (CXX) g++ options: -fexceptions -fno-rtti -O3 -Ofast -static-libgcc -static-libstdc++ -rdynamic -lssl -lcrypto -luv -lpthread -lrt -ldl -lhwloc

Java Gradle Build

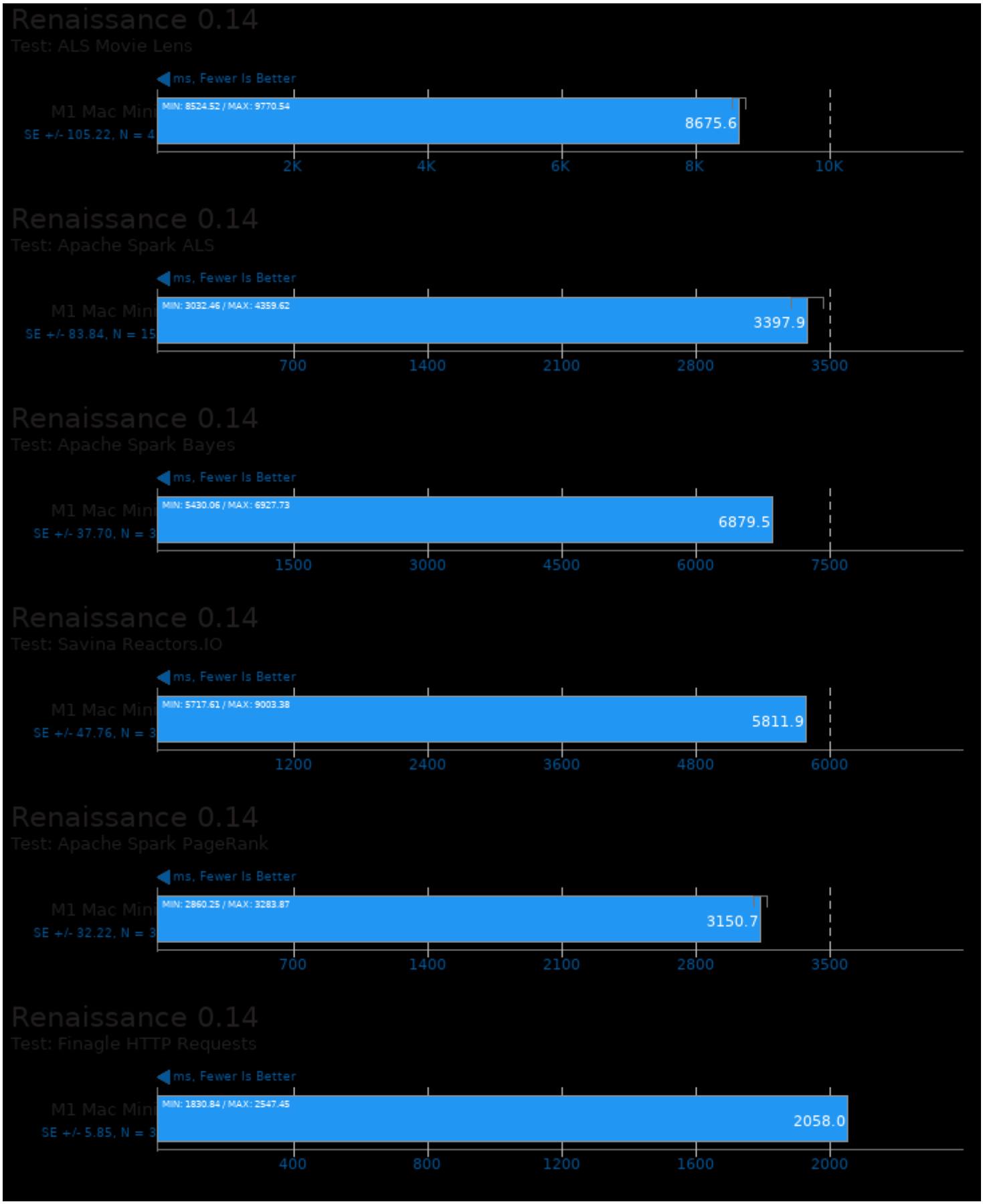
Gradle Build: Reactor



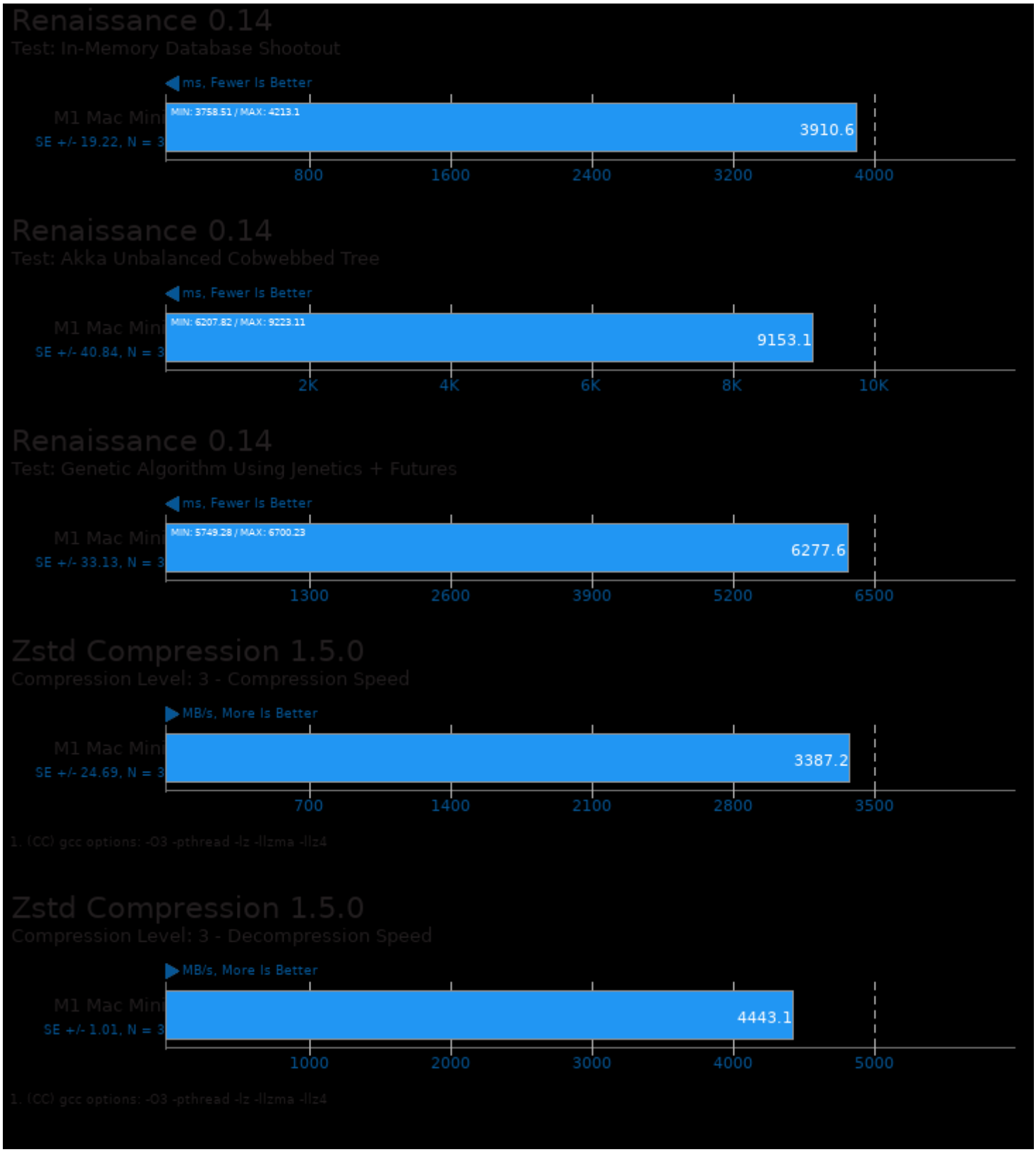
Apple M1 Mac Mini

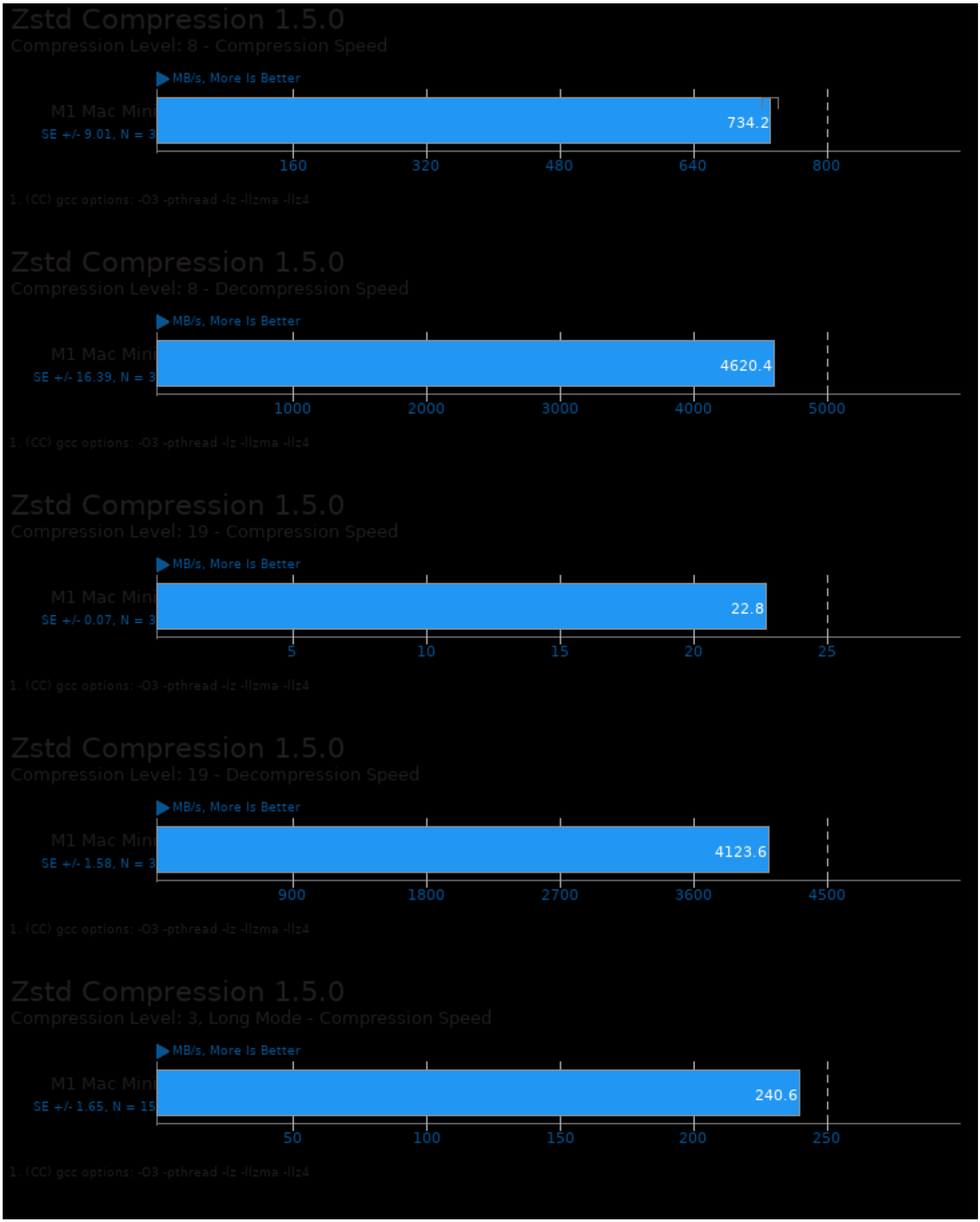


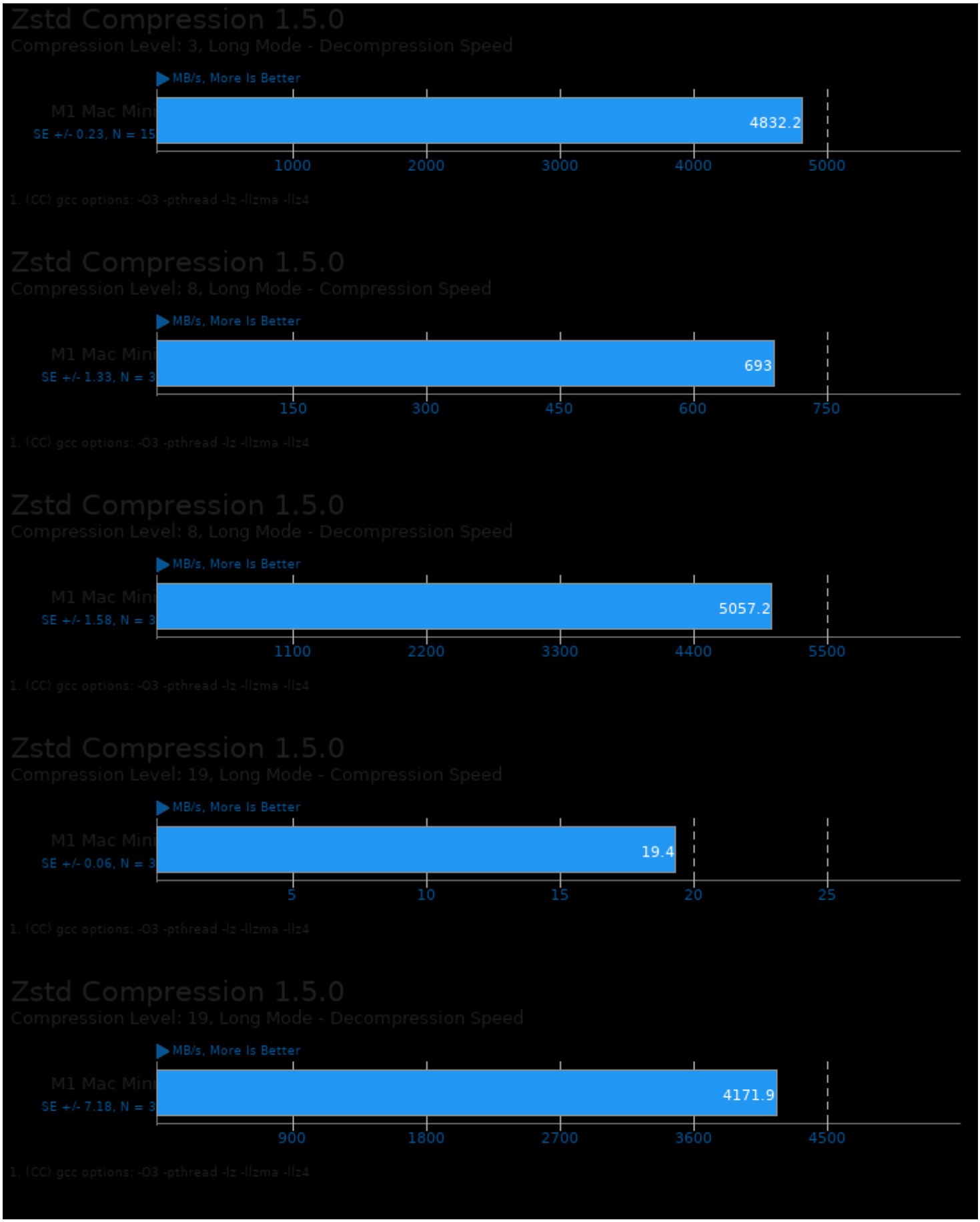
Apple M1 Mac Mini



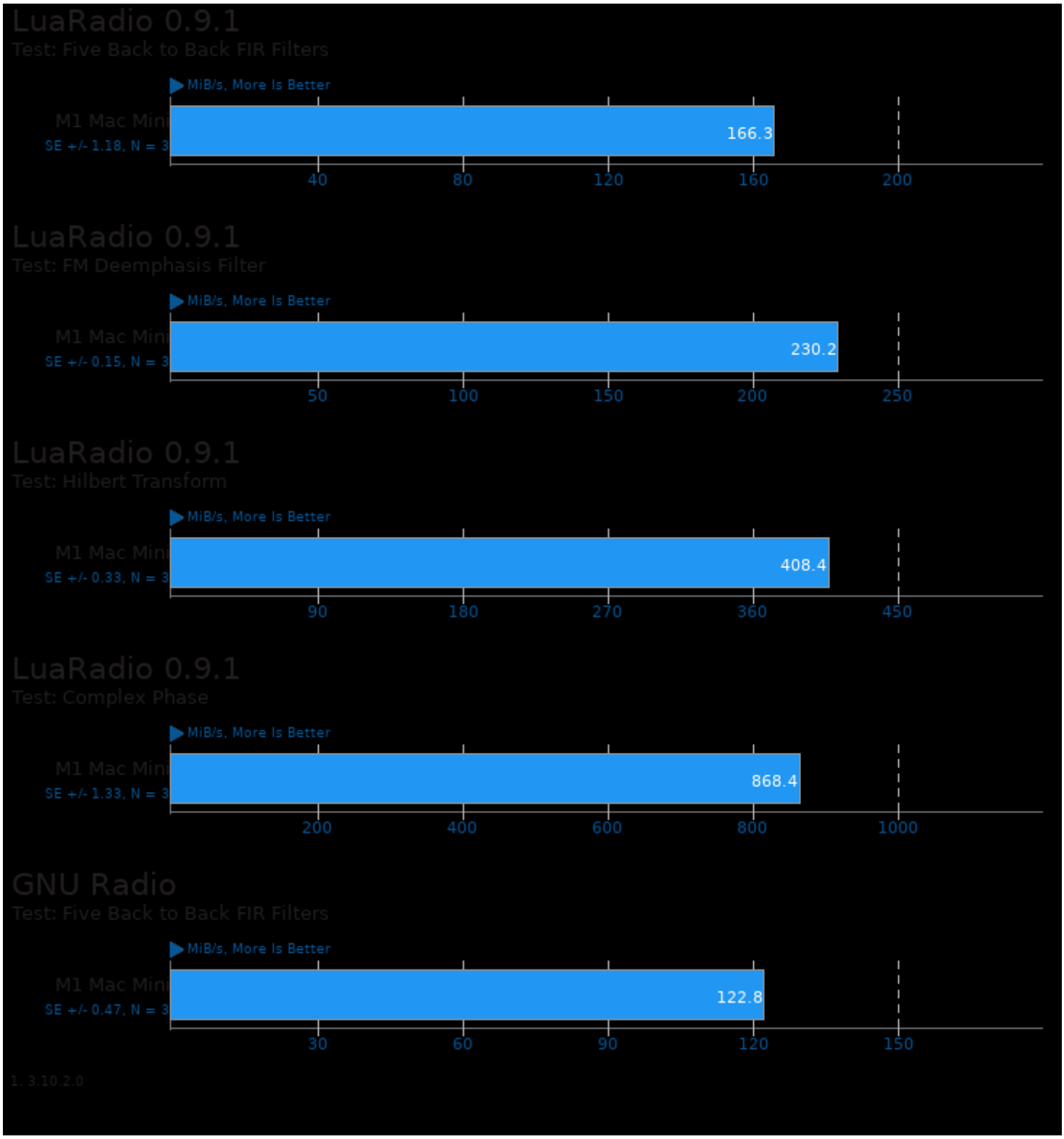
Apple M1 Mac Mini



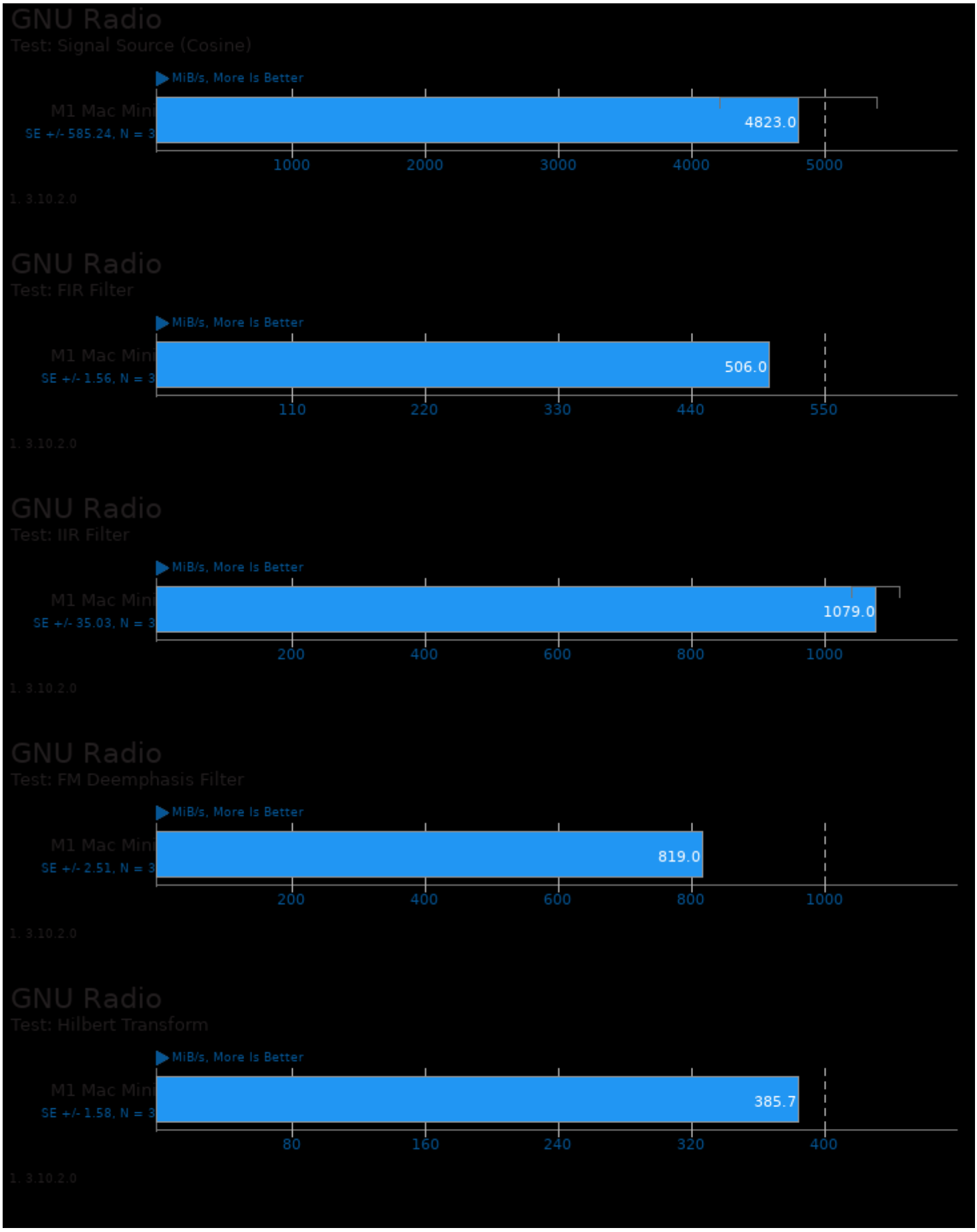

Zstd Compression 1.5.0
Compression Level: 8 - Compression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 9.01, N = 3
734.2
160
320
480
640
800
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 8 - Decompression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 16.39, N = 3
4620.4
1000
2000
3000
4000
5000
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 19 - Compression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 0.07, N = 3
22.8
5
10
15
20
25
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 19 - Decompression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 1.58, N = 3
4123.6
900
1800
2700
3600
4500
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 3, Long Mode - Compression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 1.65, N = 15
240.6
50
100
150
200
250
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4


Zstd Compression 1.5.0
Compression Level: 3, Long Mode - Decompression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 0.23, N = 15
4832.2
1000
2000
3000
4000
5000
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 8, Long Mode - Compression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 1.33, N = 3
693
150
300
450
600
750
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 8, Long Mode - Decompression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 1.58, N = 3
5057.2
1100
2200
3300
4400
5500
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 19, Long Mode - Compression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 0.06, N = 3
19.4
5
10
15
20
25
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4
Zstd Compression 1.5.0
Compression Level: 19, Long Mode - Decompression Speed
MB/s, More Is Better
M1 Mac Mini
SE +/- 7.18, N = 3
4171.9
900
1800
2700
3600
4500
1. (CC) gcc options: -O3 -pthread -lz -llzma -llz4

Apple M1 Mac Mini

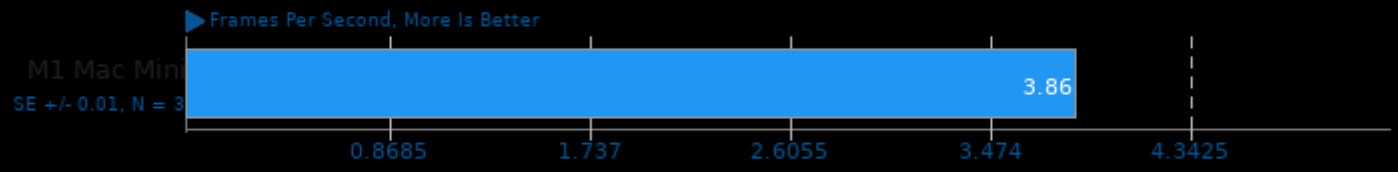


Apple M1 Mac Mini



VP9 libvpx Encoding 1.10.0

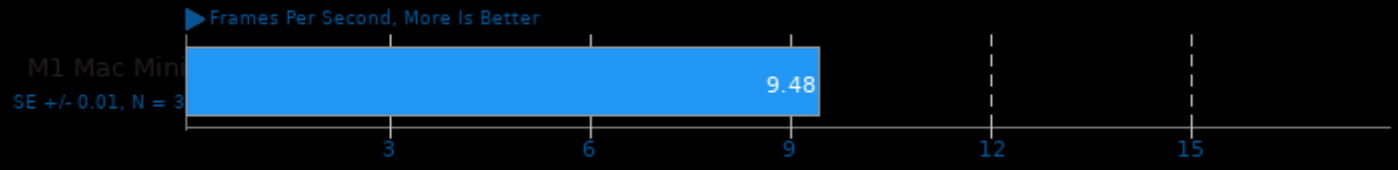
Speed: Speed 0 - Input: Bosphorus 4K



1. (CXX) g++ options: -lm -lpthread -march=armv8-a -O3 -fPIC -U_FORTIFY_SOURCE -std=gnu++11

VP9 libvpx Encoding 1.10.0

Speed: Speed 5 - Input: Bosphorus 4K



1. (CXX) g++ options: -lm -lpthread -march=armv8-a -O3 -fPIC -U_FORTIFY_SOURCE -std=gnu++11

VP9 libvpx Encoding 1.10.0

Speed: Speed 0 - Input: Bosphorus 1080p

1. (CXX) g++ options: -lm -lpthread -march=armv8-a -O3 -fPIC -U_FORTIFY_SOURCE -std=gnu++11

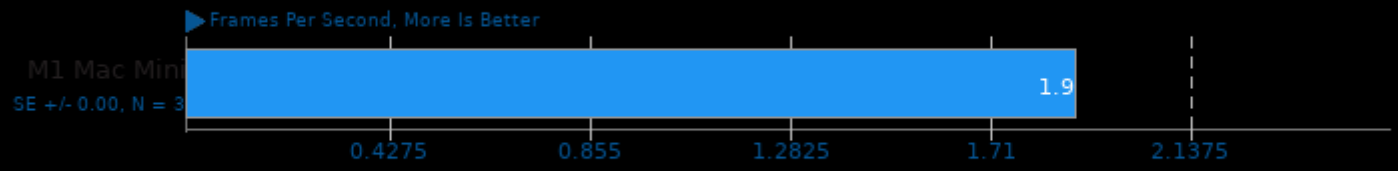
VP9 libvpx Encoding 1.10.0

Speed: Speed 5 - Input: Bosphorus 1080p

1. (CXX) g++ options: -lm -lpthread -march=armv8-a -O3 -fPIC -U_FORTIFY_SOURCE -std=gnu++11

x265 3.4

Video Input: Bosphorus 4K

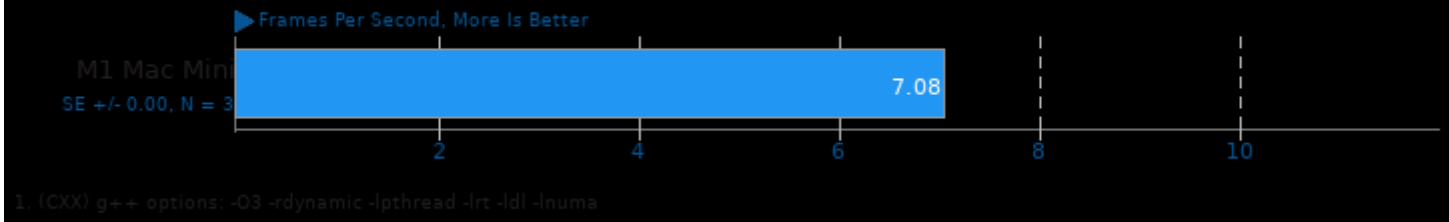


1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

Apple M1 Mac Mini

x265 3.4

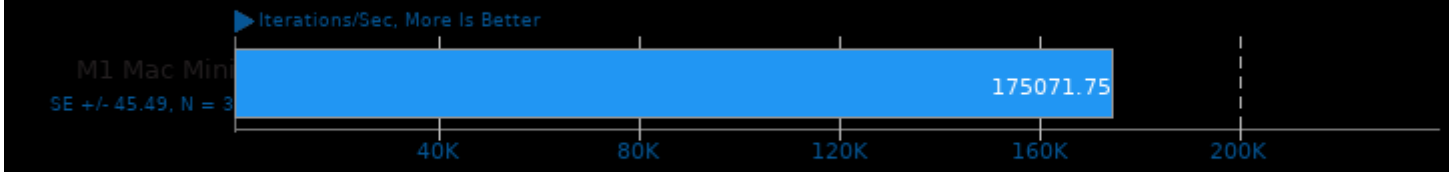
Video Input: Bosphorus 1080p



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

Coremark 1.0

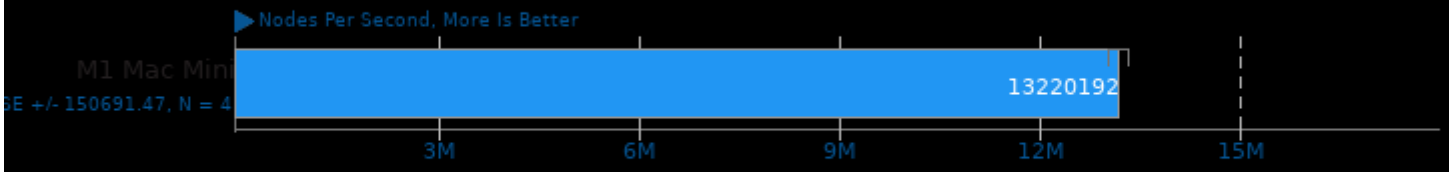
CoreMark Size 666 - Iterations Per Second



1. (CC) gcc options: -O2 -lrt" -lrt

Stockfish 15

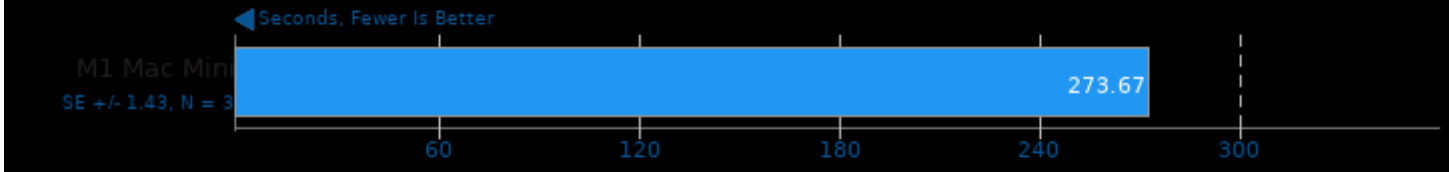
Total Time



1. (CXX) g++ options: -lgcov -lpthread -fno-exceptions -std=c++17 -fno-peel-loops -fno-tracer -pedantic -O3 -flto -flto=jobserver

libavif avifenc 0.10

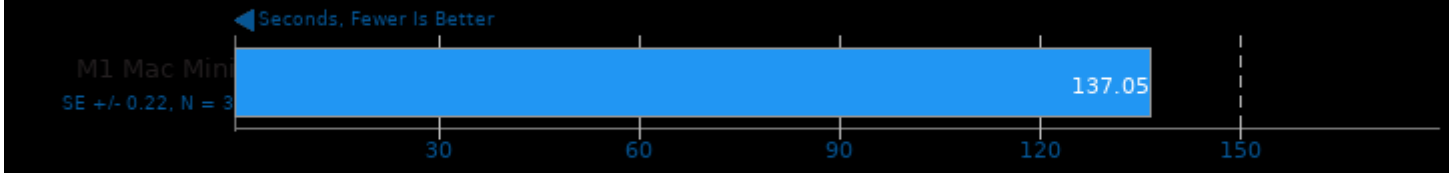
Encoder Speed: 0



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

libavif avifenc 0.10

Encoder Speed: 2



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

Apple M1 Mac Mini

libavif avifenc 0.10

Encoder Speed: 6

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

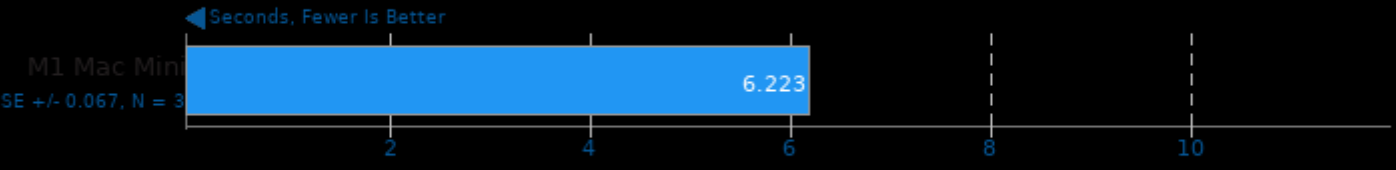
libavif avifenc 0.10

Encoder Speed: 6, Lossless

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

libavif avifenc 0.10

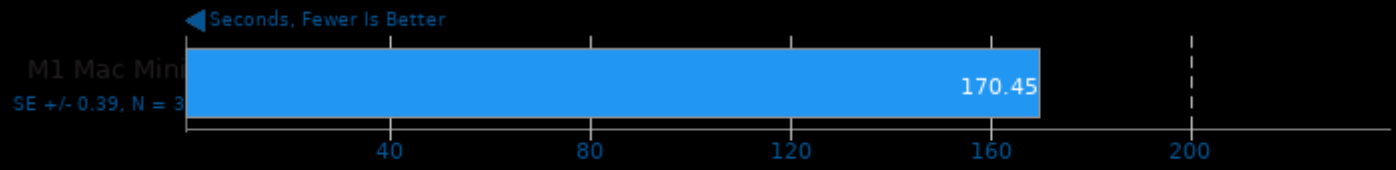
Encoder Speed: 10, Lossless



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

Build2 0.13

Time To Compile



Parallel BZIP2 Compression 1.1.13

FreeBSD-13.0-RELEASE-amd64-memstick.img Compression

1. (CXX) g++ options: -O2 -pthread -lbz2 -lpthread

Apple M1 Mac Mini

POV-Ray 3.7.0.7

Trace Time

1. (CXX) g++ options: -pipe -O3 -ffast-math -R/usr/lib -lSDL -lXpm -lSM -lICE -lX11 -ltiff -ljpeg -lpng -lz -lrt -lm -lboost_thread -lboost_system

Primesieve 8.0

Length: 1e12

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

Primesieve 8.0

Length: 1e13

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

Numpy Benchmark

XZ Compression 5.2.4

Compressing ubuntu-16.04.3-server-i386.img, Compression Level 9

1. (CC) gcc options: -fvisibility=hidden -O2

FLAC Audio Encoding 1.3.3

WAV To FLAC

1. (CXX) g++ options: -fvisibility=hidden -logg -lm

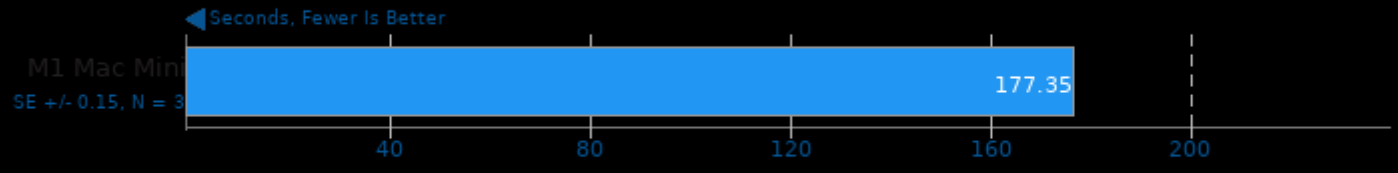
LAME MP3 Encoding 3.100

WAV To MP3

1. (CC) gcc options: -lncurses -lm

Ngspice 34

Circuit: C2670



1. (CC) gcc options: -O0 -fopenmp -lm -lstdc++ -lfftw3 -lXaw -lXmu -lXt -lXext -lX11 -lXft -lfontconfig -lXrender -lfreetype -lSM -lICE

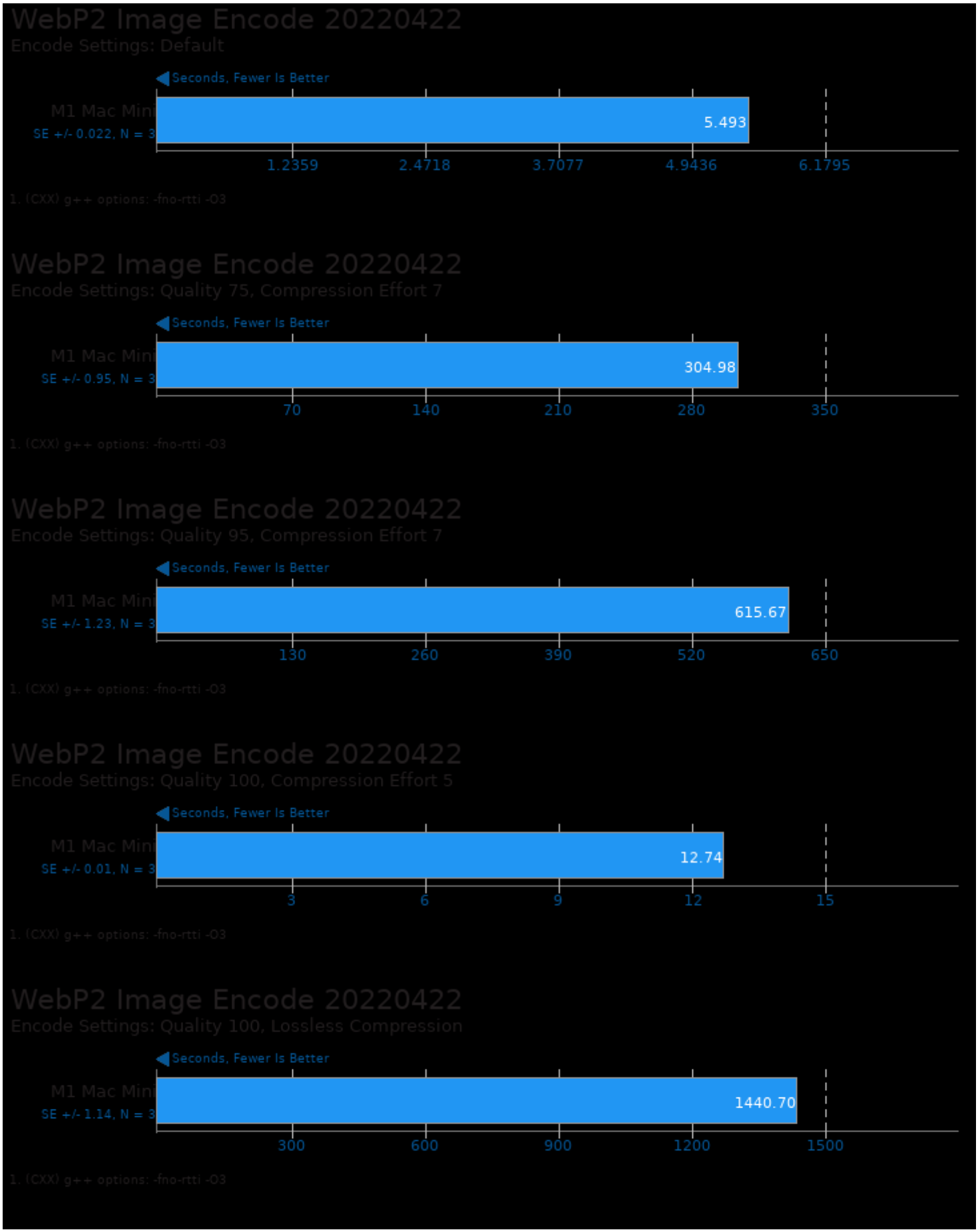
Ngspice 34

Circuit: C7552

1. (CC) gcc options: -O0 -fopenmp -lm -lstdc++ -lfftw3 -lXaw -lXmu -lXt -lXext -lX11 -lXft -lfontconfig -lXrender -lfreetype -lSM -lICE

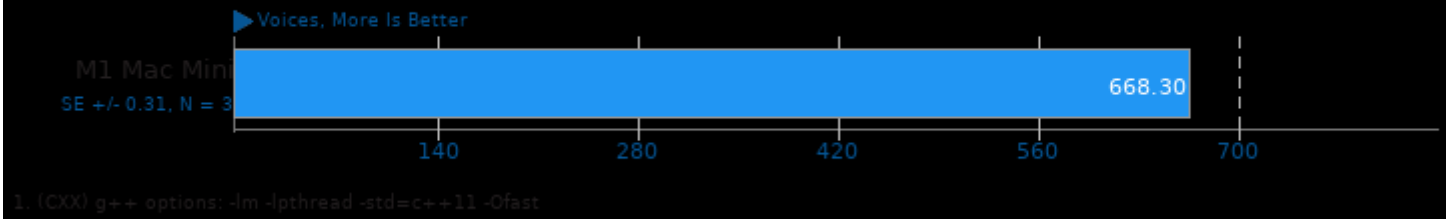
RNNoise 2020-06-28

1. (CC) gcc options: -O2 -pedantic -fvisibility=hidden -lm


WebP2 Image Encode 20220422
Encode Settings: Default
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.022, N = 3
5.493
1.2359
2.4718
3.7077
4.9436
6.1795
1. (CXX) g++ options: -fno-rtti -O3
WebP2 Image Encode 20220422
Encode Settings: Quality 75, Compression Effort 7
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.95, N = 3
304.98
70
140
210
280
350
1. (CXX) g++ options: -fno-rtti -O3
WebP2 Image Encode 20220422
Encode Settings: Quality 95, Compression Effort 7
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 1.23, N = 3
615.67
130
260
390
520
650
1. (CXX) g++ options: -fno-rtti -O3
WebP2 Image Encode 20220422
Encode Settings: Quality 100, Compression Effort 5
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.01, N = 3
12.74
3
6
9
12
15
1. (CXX) g++ options: -fno-rtti -O3
WebP2 Image Encode 20220422
Encode Settings: Quality 100, Lossless Compression
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 1.14, N = 3
1440.70
300
600
900
1200
1500
1. (CXX) g++ options: -fno-rtti -O3

Google SynthMark 20201109

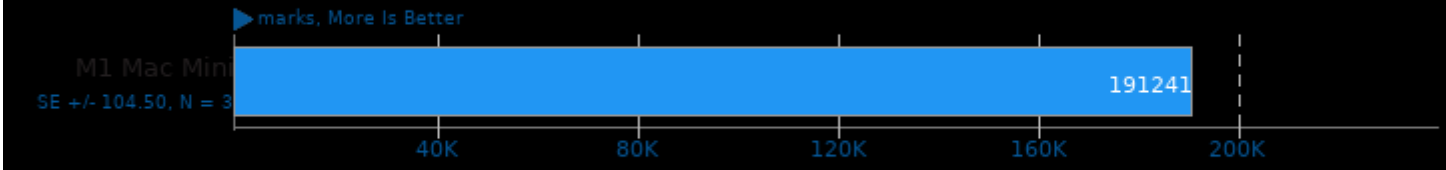
Test: VoiceMark_100



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

SecureMark 1.0.4

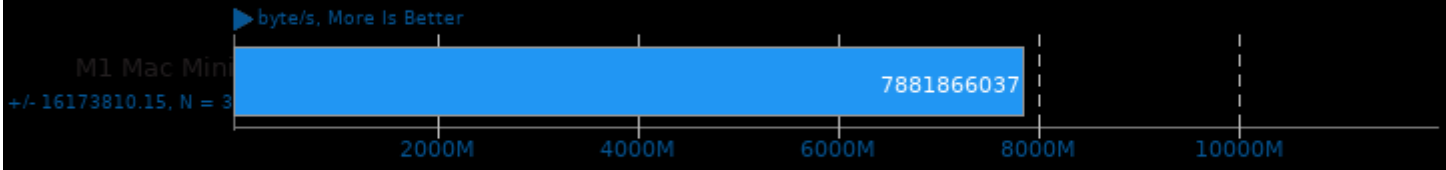
Benchmark: SecureMark-TLS



1. (CC) gcc options: -pedantic -O3

OpenSSL 3.0

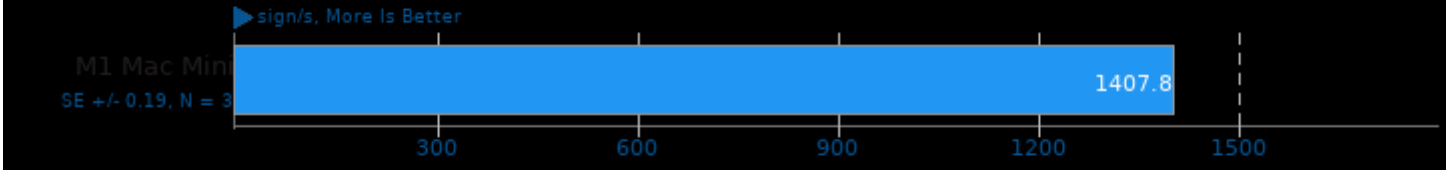
Algorithm: SHA256



1. (CC) gcc options: -pthread -O3 -lssl -lcrypto -ldl

OpenSSL 3.0

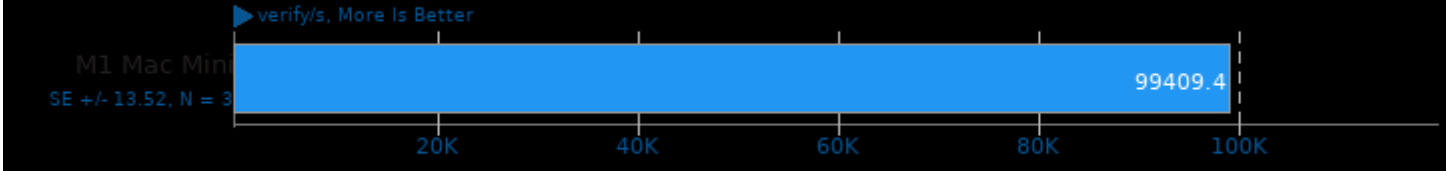
Algorithm: RSA4096



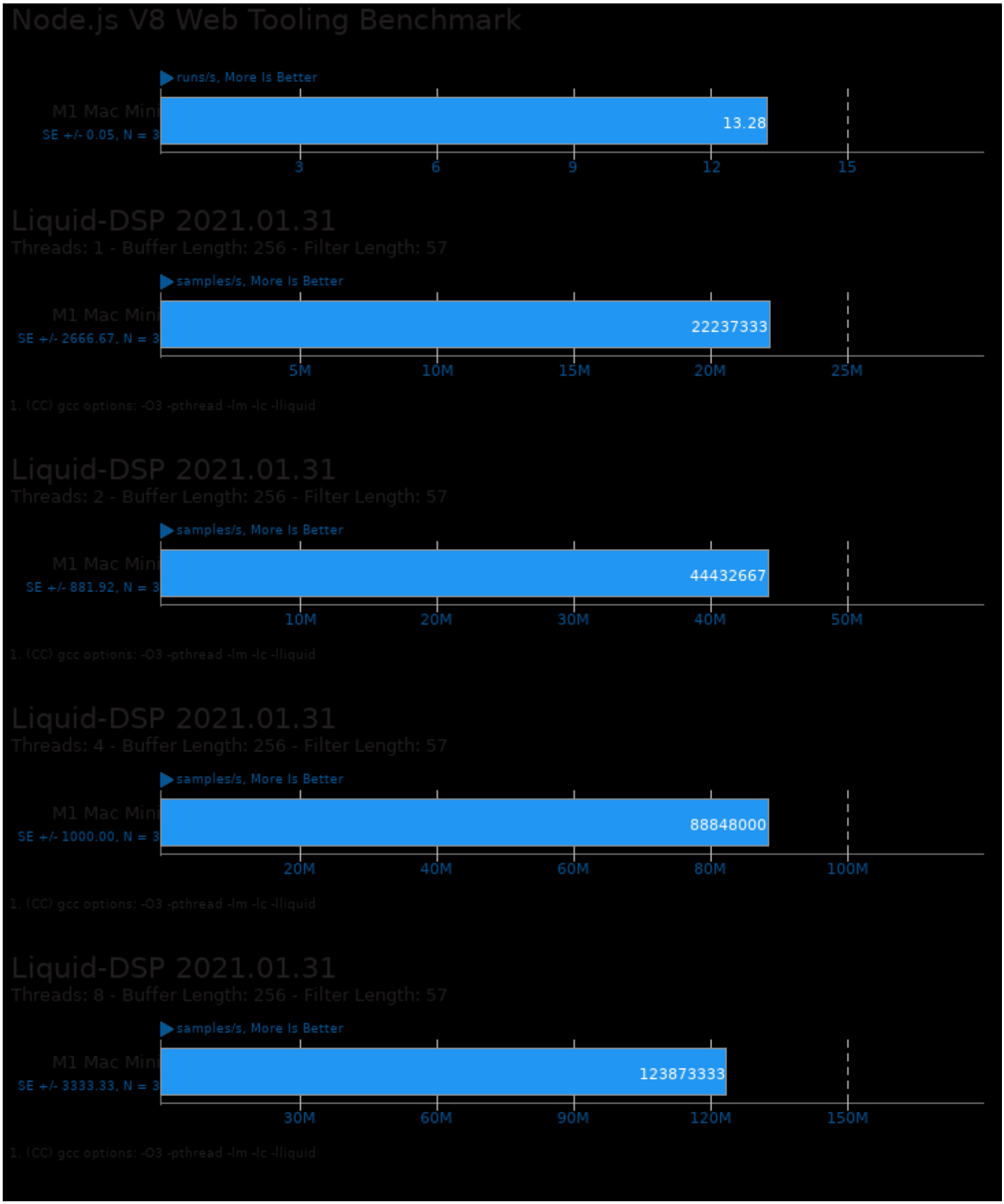
1. (CC) gcc options: -pthread -O3 -lssl -lcrypto -ldl

OpenSSL 3.0

Algorithm: RSA4096

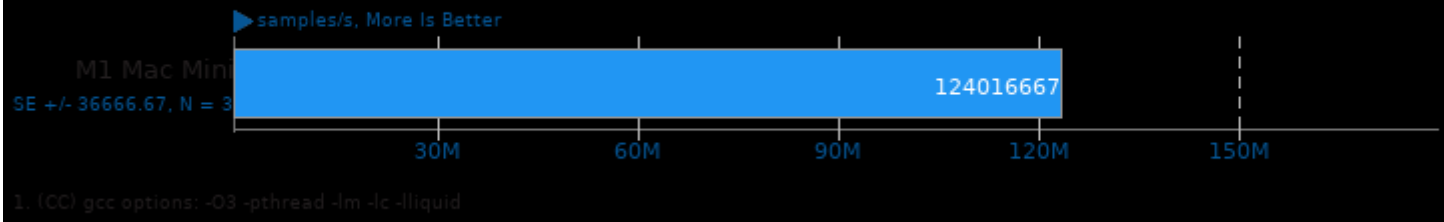


1. (CC) gcc options: -pthread -O3 -lssl -lcrypto -ldl


Node.js V8 Web Tooling Benchmark
runs/s, More Is Better
M1 Mac Mini
SE +/- 0.05, N = 3
13.28
3
6
9
12
15
Liquid-DSP 2021.01.31
Threads: 1 - Buffer Length: 256 - Filter Length: 57
samples/s, More Is Better
M1 Mac Mini
SE +/- 2666.67, N = 3
22237333
5M
10M
15M
20M
25M
1. (CC) gcc options: -O3 -pthread -lm -lc -lliquid
Liquid-DSP 2021.01.31
Threads: 2 - Buffer Length: 256 - Filter Length: 57
samples/s, More Is Better
M1 Mac Mini
SE +/- 881.92, N = 3
44432667
10M
20M
30M
40M
50M
1. (CC) gcc options: -O3 -pthread -lm -lc -lliquid
Liquid-DSP 2021.01.31
Threads: 4 - Buffer Length: 256 - Filter Length: 57
samples/s, More Is Better
M1 Mac Mini
SE +/- 1000.00, N = 3
88848000
20M
40M
60M
80M
100M
1. (CC) gcc options: -O3 -pthread -lm -lc -lliquid
Liquid-DSP 2021.01.31
Threads: 8 - Buffer Length: 256 - Filter Length: 57
samples/s, More Is Better
M1 Mac Mini
SE +/- 3333.33, N = 3
123873333
30M
60M
90M
120M
150M
1. (CC) gcc options: -O3 -pthread -lm -lc -lliquid

Liquid-DSP 2021.01.31

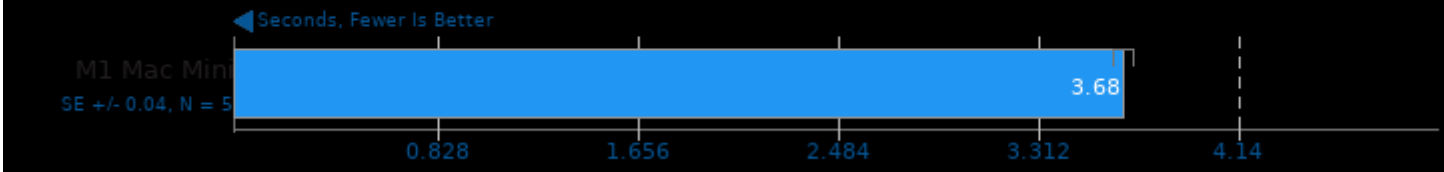
Threads: 16 - Buffer Length: 256 - Filter Length: 57



1. (CC) gcc options: -O3 -pthread -lm -lc -lliquid

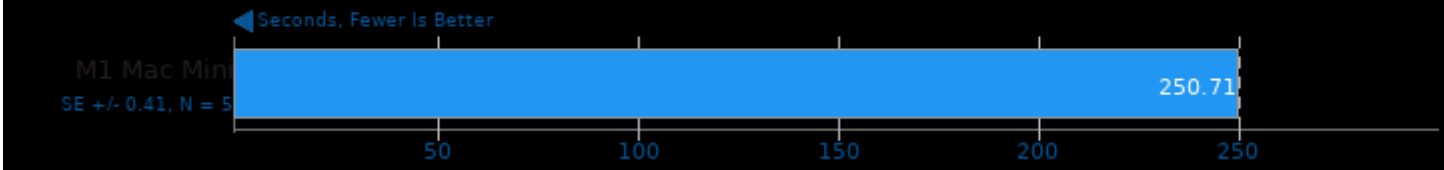
Apache Spark 3.3

Row Count: 1000000 - Partitions: 100 - SHA-512 Benchmark Time



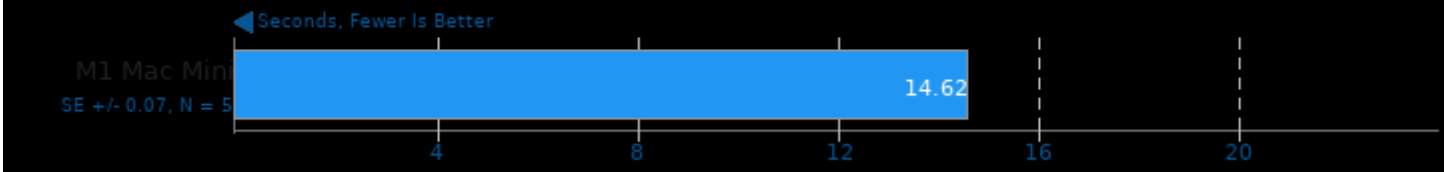
Apache Spark 3.3

Row Count: 1000000 - Partitions: 100 - Calculate Pi Benchmark



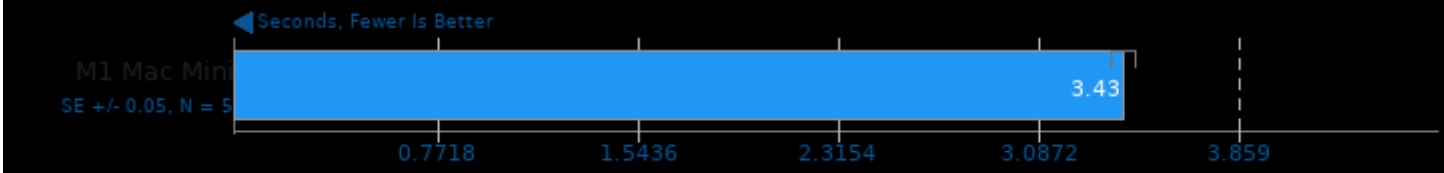
Apache Spark 3.3

Row Count: 1000000 - Partitions: 100 - Calculate Pi Benchmark Using Dataframe



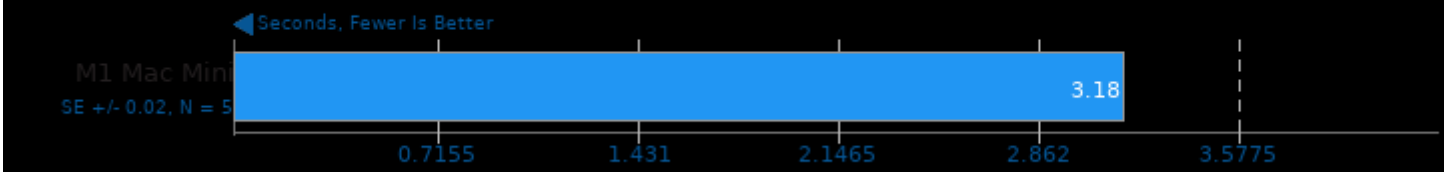
Apache Spark 3.3

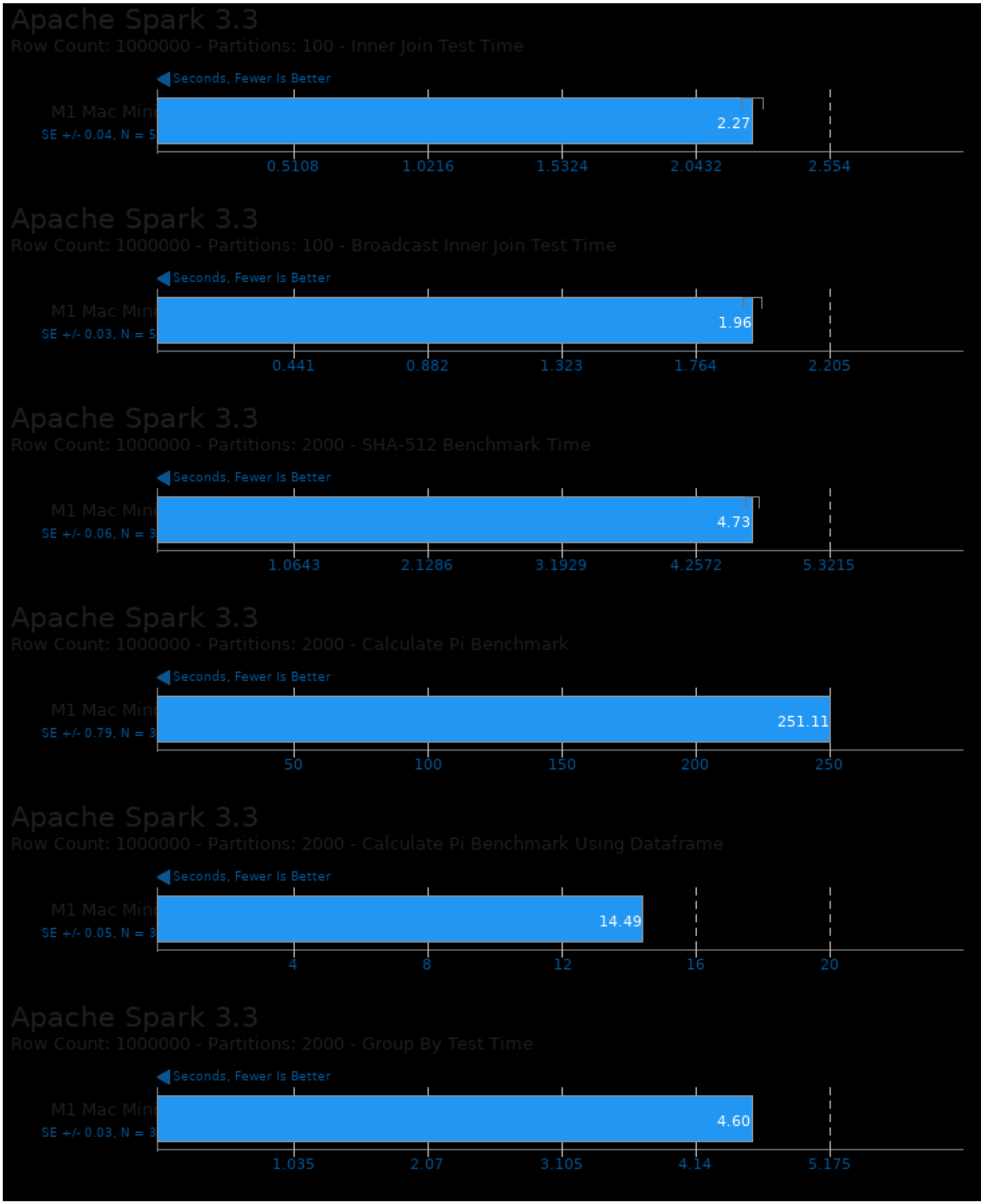
Row Count: 1000000 - Partitions: 100 - Group By Test Time



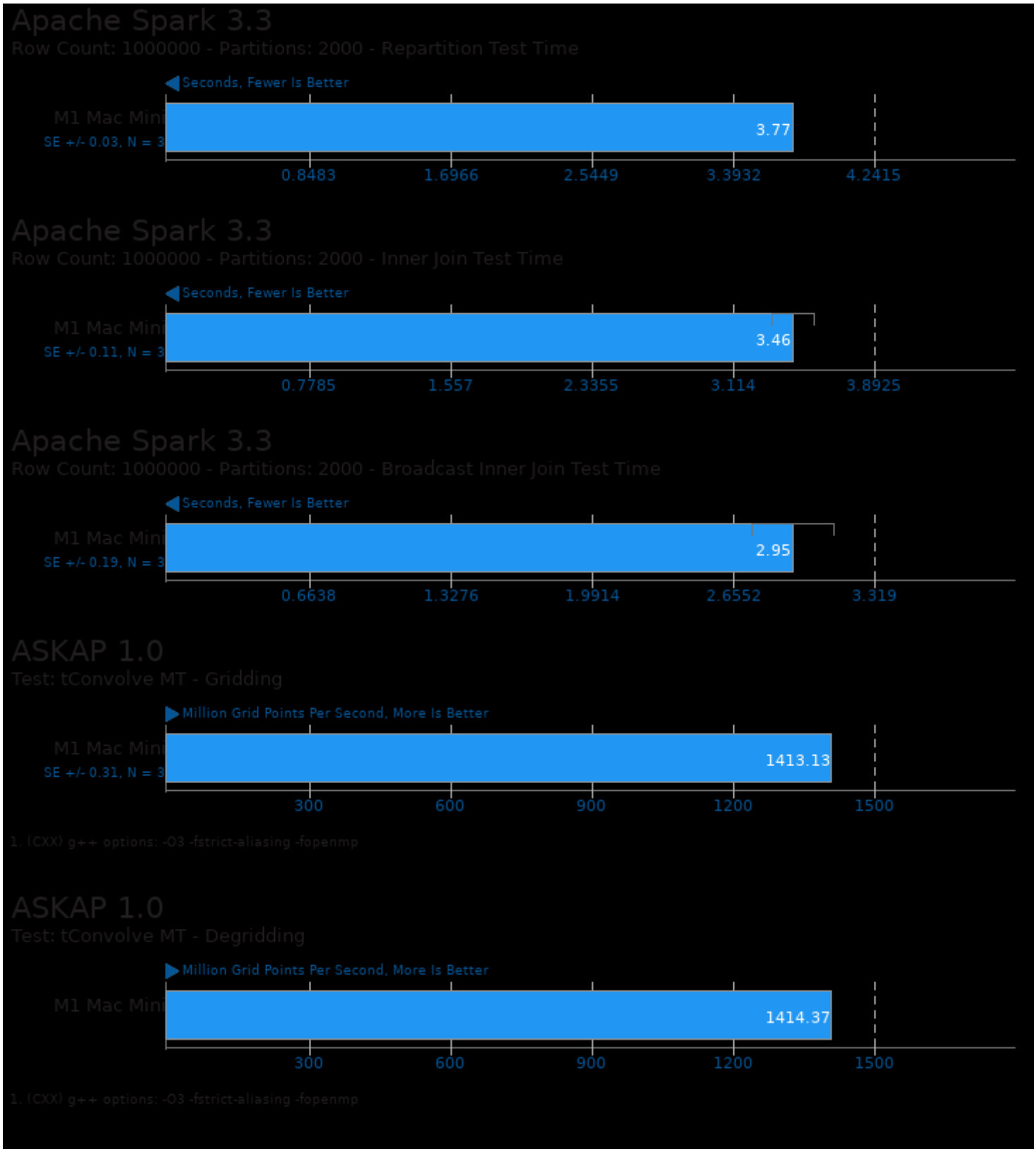
Apache Spark 3.3

Row Count: 1000000 - Partitions: 100 - Repartition Test Time

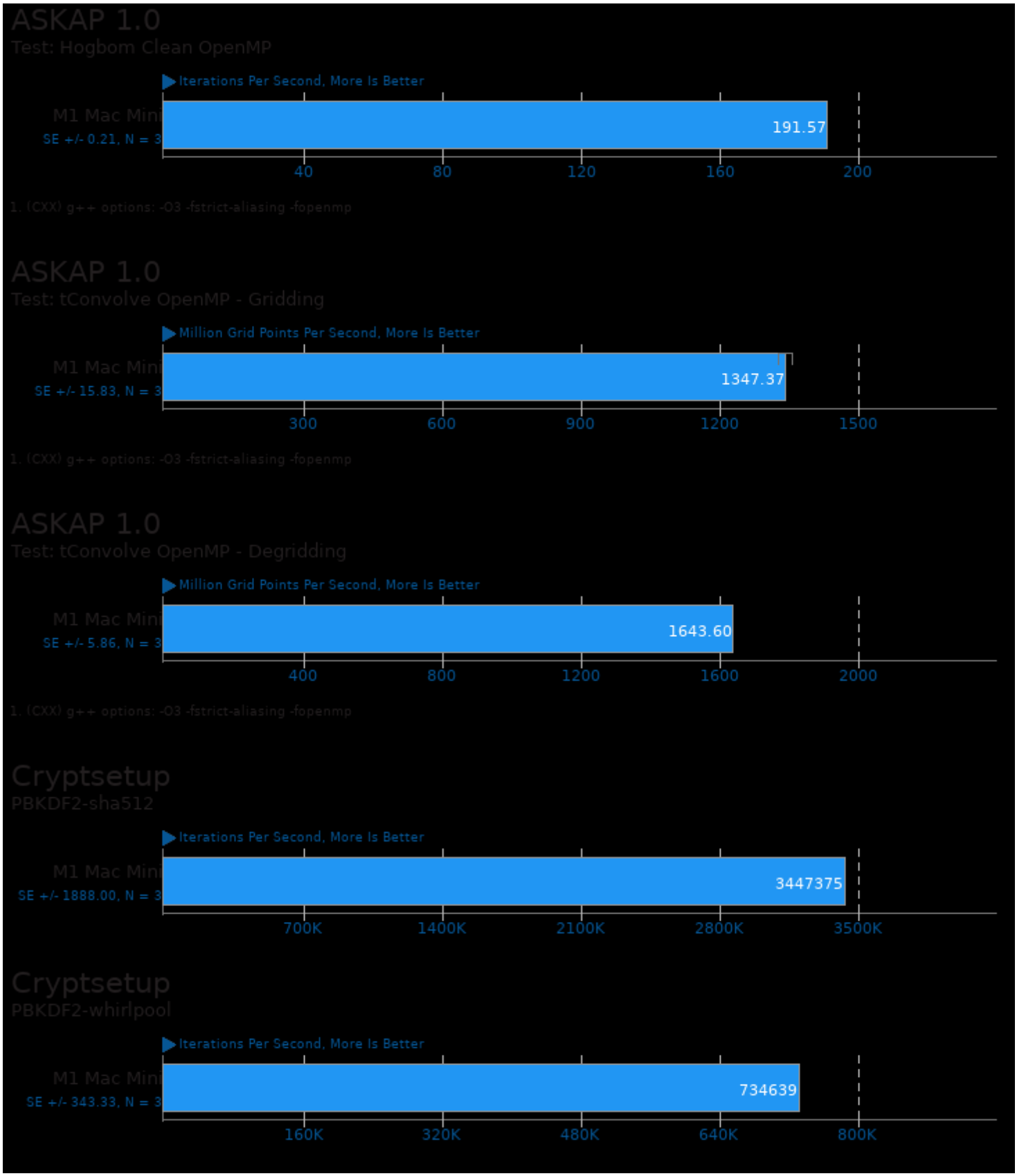



Apache Spark 3.3
Row Count: 1000000 - Partitions: 100 - Inner Join Test Time
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.04, N = 5
2.27
0.5108
1.0216
1.5324
2.0432
2.554
Apache Spark 3.3
Row Count: 1000000 - Partitions: 100 - Broadcast Inner Join Test Time
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.03, N = 5
1.96
0.441
0.882
1.323
1.764
2.205
Apache Spark 3.3
Row Count: 1000000 - Partitions: 2000 - SHA-512 Benchmark Time
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.06, N = 3
4.73
1.0643
2.1286
3.1929
4.2572
5.3215
Apache Spark 3.3
Row Count: 1000000 - Partitions: 2000 - Calculate Pi Benchmark
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.79, N = 3
251.11
50
100
150
200
250
Apache Spark 3.3
Row Count: 1000000 - Partitions: 2000 - Calculate Pi Benchmark Using Dataframe
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.05, N = 3
14.49
4
8
12
16
20
Apache Spark 3.3
Row Count: 1000000 - Partitions: 2000 - Group By Test Time
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.03, N = 3
4.60
1.035
2.07
3.105
4.14
5.175

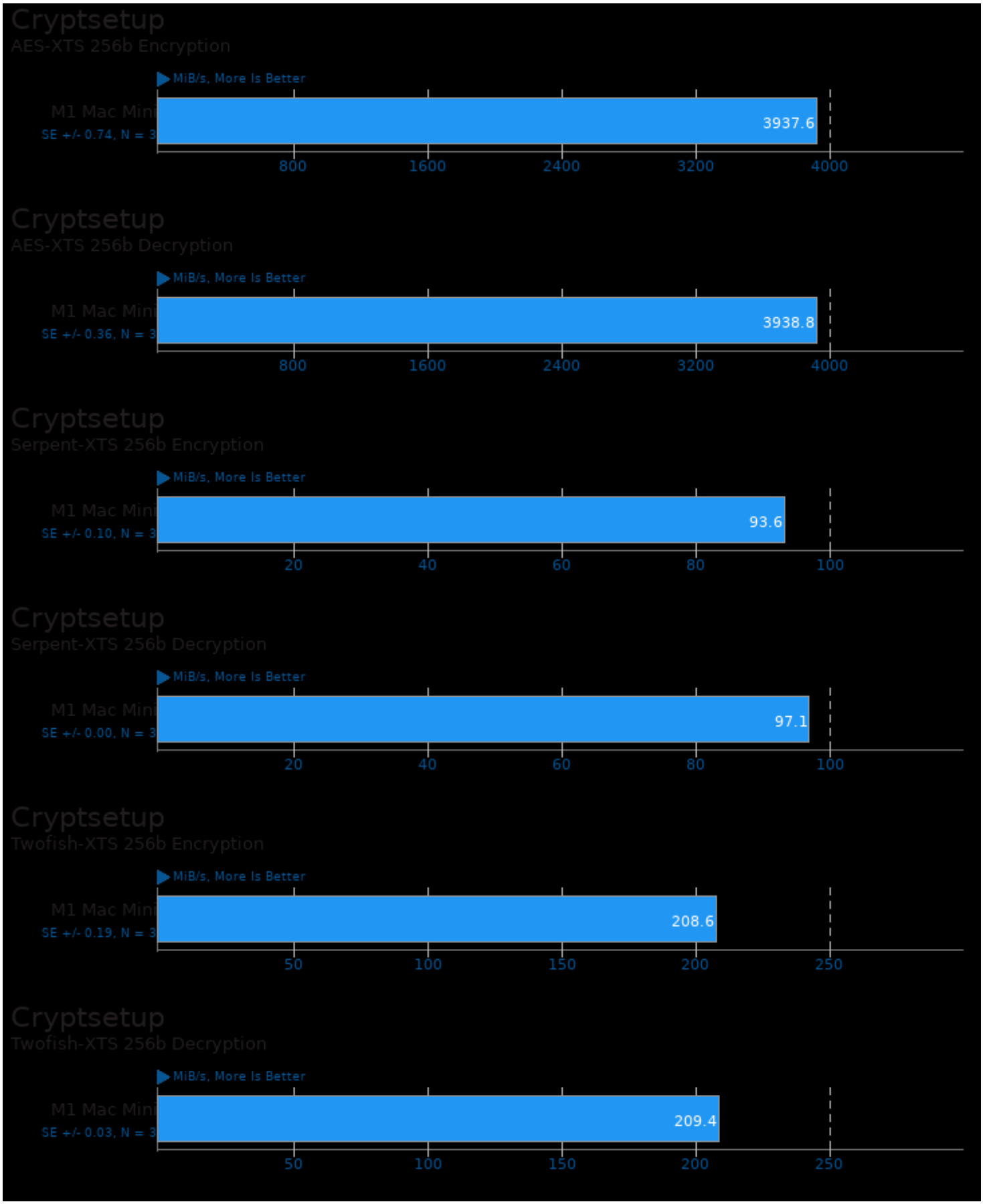
Apple M1 Mac Mini



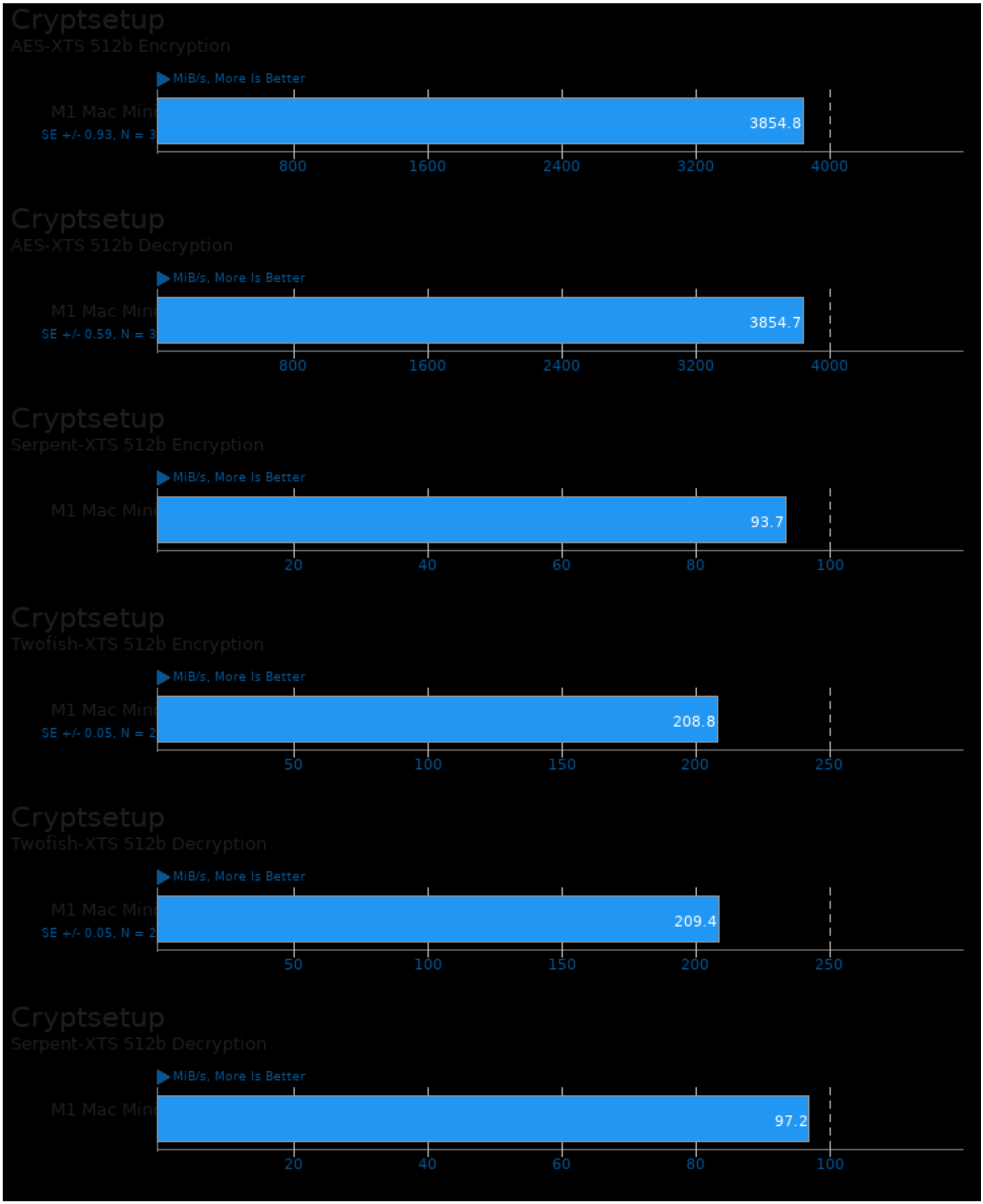
Apple M1 Mac Mini



Apple M1 Mac Mini

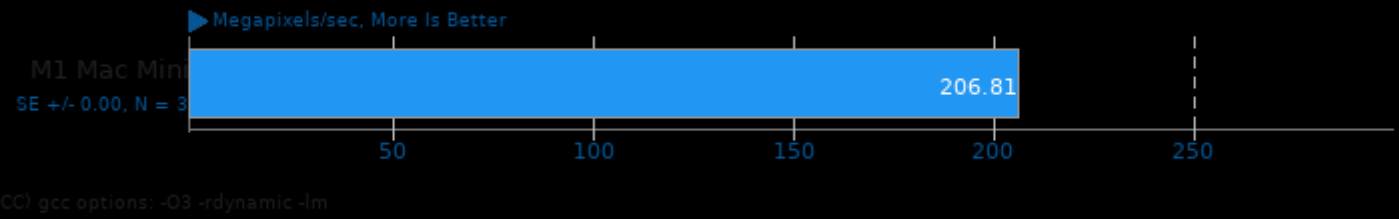


Apple M1 Mac Mini



libjpeg-turbo tjbench 2.1.0

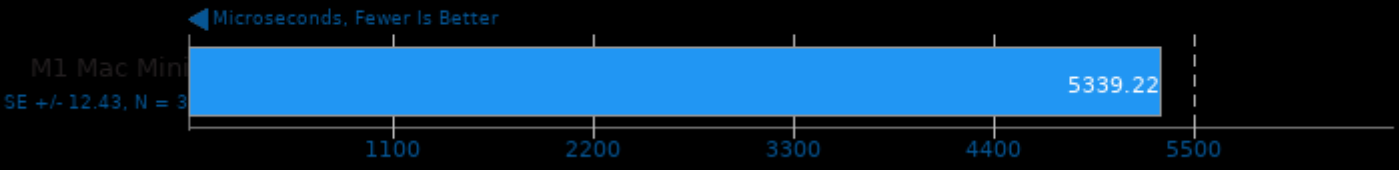
Test: Decompression Throughput



1. (CC) gcc options: -O3 -rdynamic -lm

TensorFlow Lite 2022-05-18

Model: SqueezeNet



TensorFlow Lite 2022-05-18

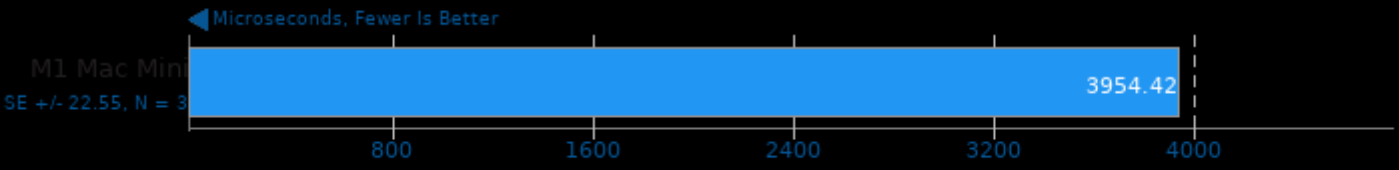
Model: Inception V4

TensorFlow Lite 2022-05-18

Model: NASNet Mobile

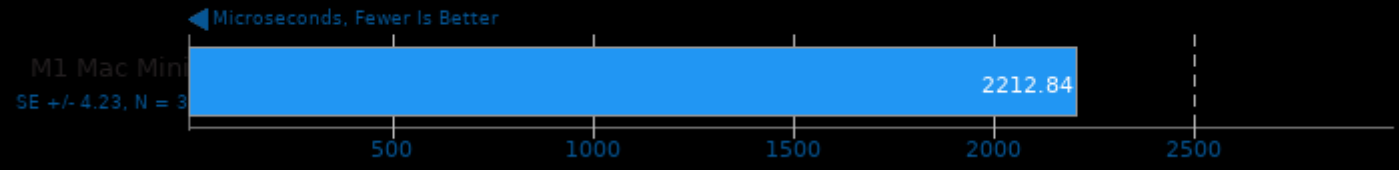
TensorFlow Lite 2022-05-18

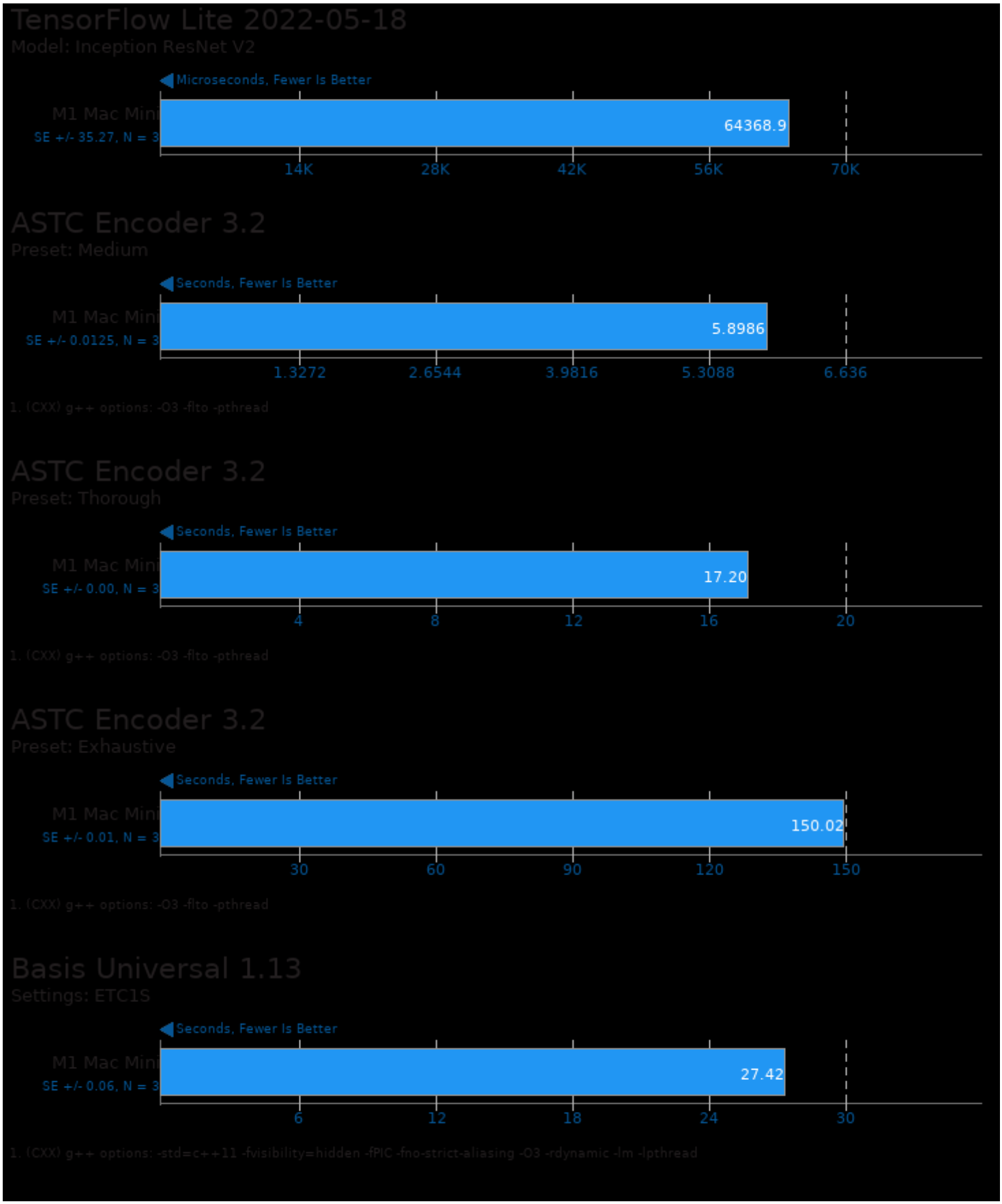
Model: Mobilenet Float



TensorFlow Lite 2022-05-18

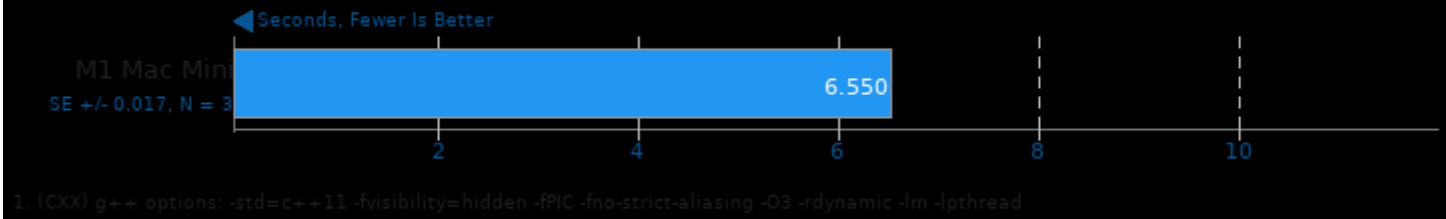
Model: Mobilenet Quant




TensorFlow Lite 2022-05-18
Model: Inception ResNet V2
Microseconds, Fewer Is Better
M1 Mac Mini
SE +/- 35.27, N = 3
64368.9
14K
28K
42K
56K
70K
ASTC Encoder 3.2
Preset: Medium
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.0125, N = 3
5.8986
1.3272
2.6544
3.9816
5.3088
6.636
1. (CXX) g++ options: -O3 -flto -pthread
ASTC Encoder 3.2
Preset: Thorough
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.00, N = 3
17.20
4
8
12
16
20
1. (CXX) g++ options: -O3 -flto -pthread
ASTC Encoder 3.2
Preset: Exhaustive
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.01, N = 3
150.02
30
60
90
120
150
1. (CXX) g++ options: -O3 -flto -pthread
Basis Universal 1.13
Settings: ETC1S
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.06, N = 3
27.42
6
12
18
24
30
1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.13

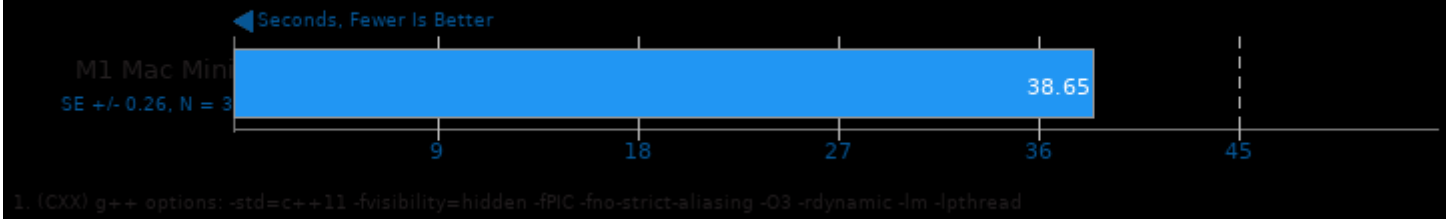
Settings: UASTC Level 0



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.13

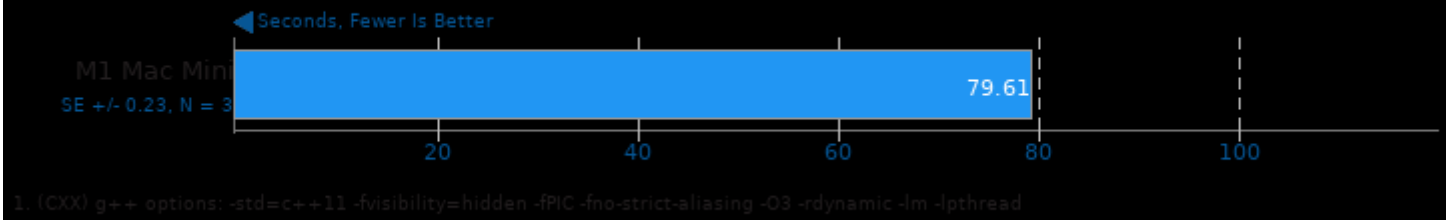
Settings: UASTC Level 2



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.13

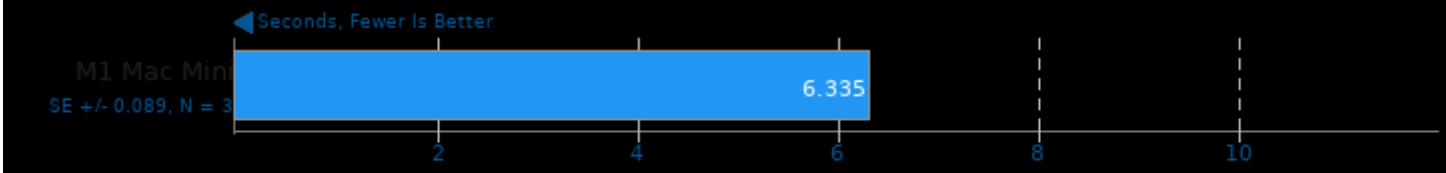
Settings: UASTC Level 3



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

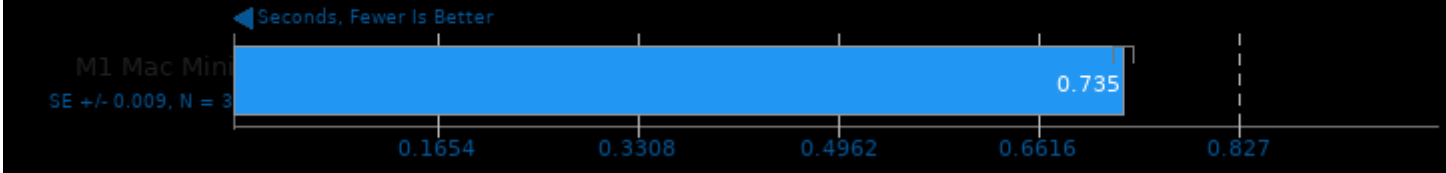
Darktable 4.0.0

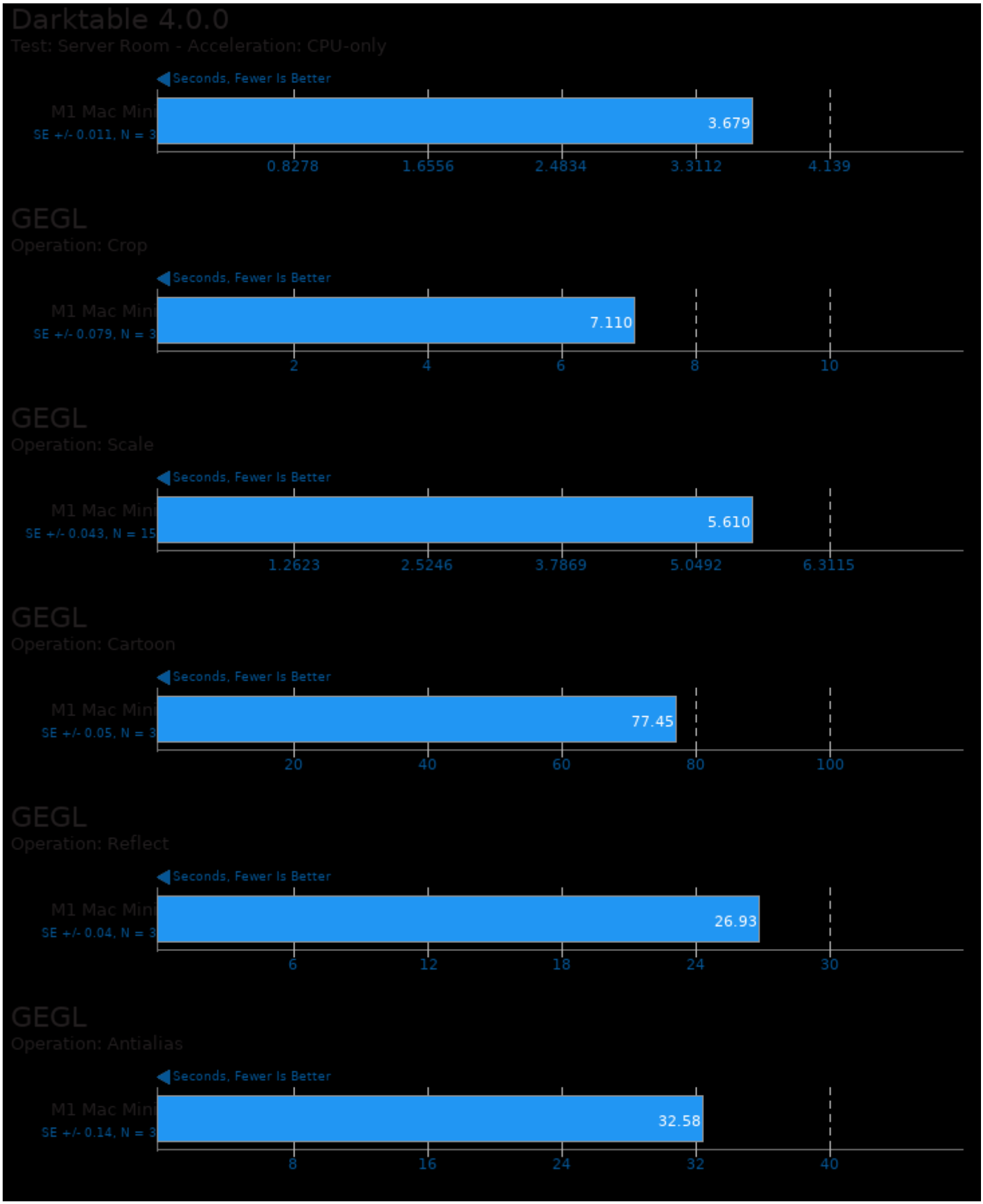
Test: Boat - Acceleration: CPU-only



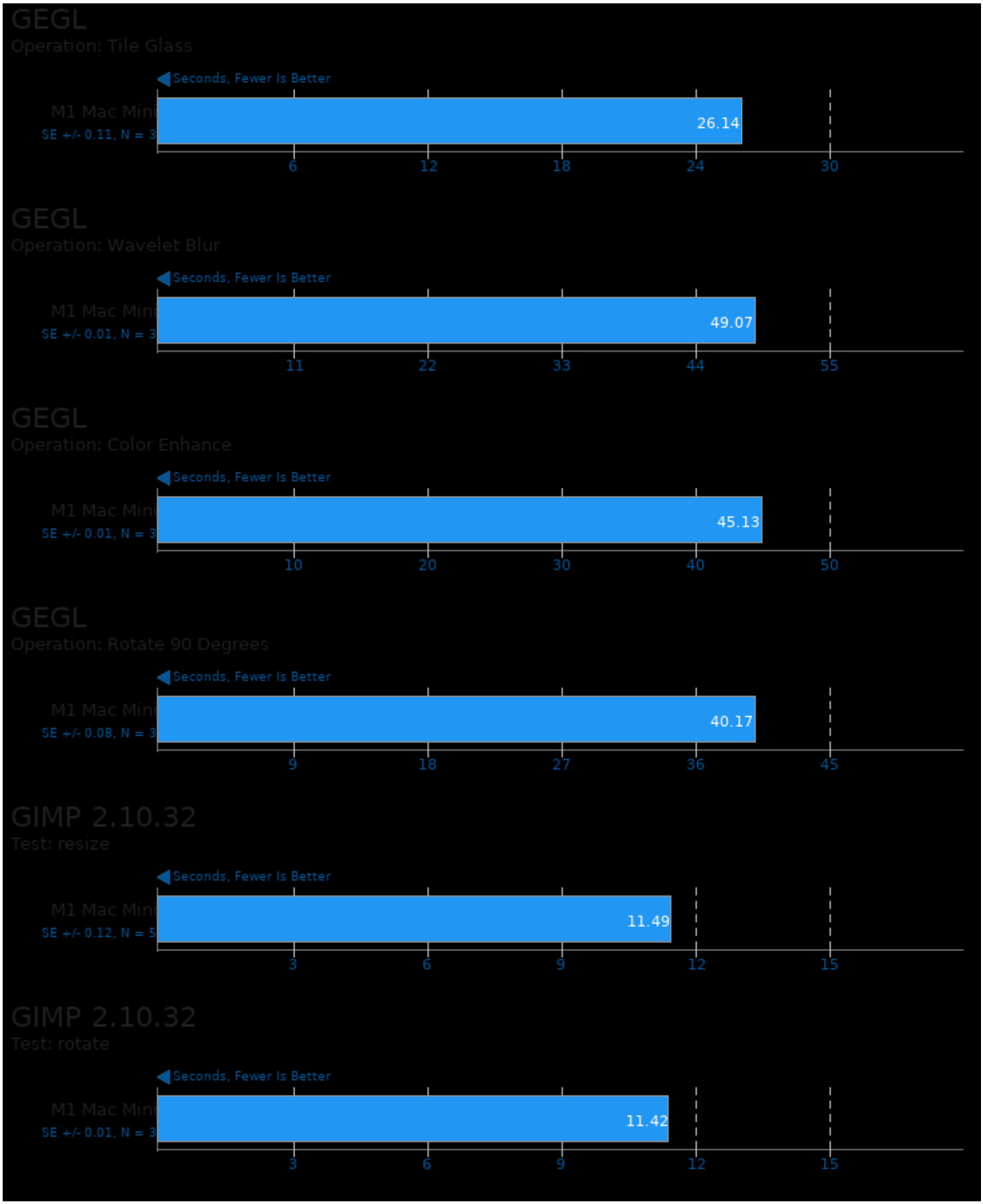
Darktable 4.0.0

Test: Server Rack - Acceleration: CPU-only

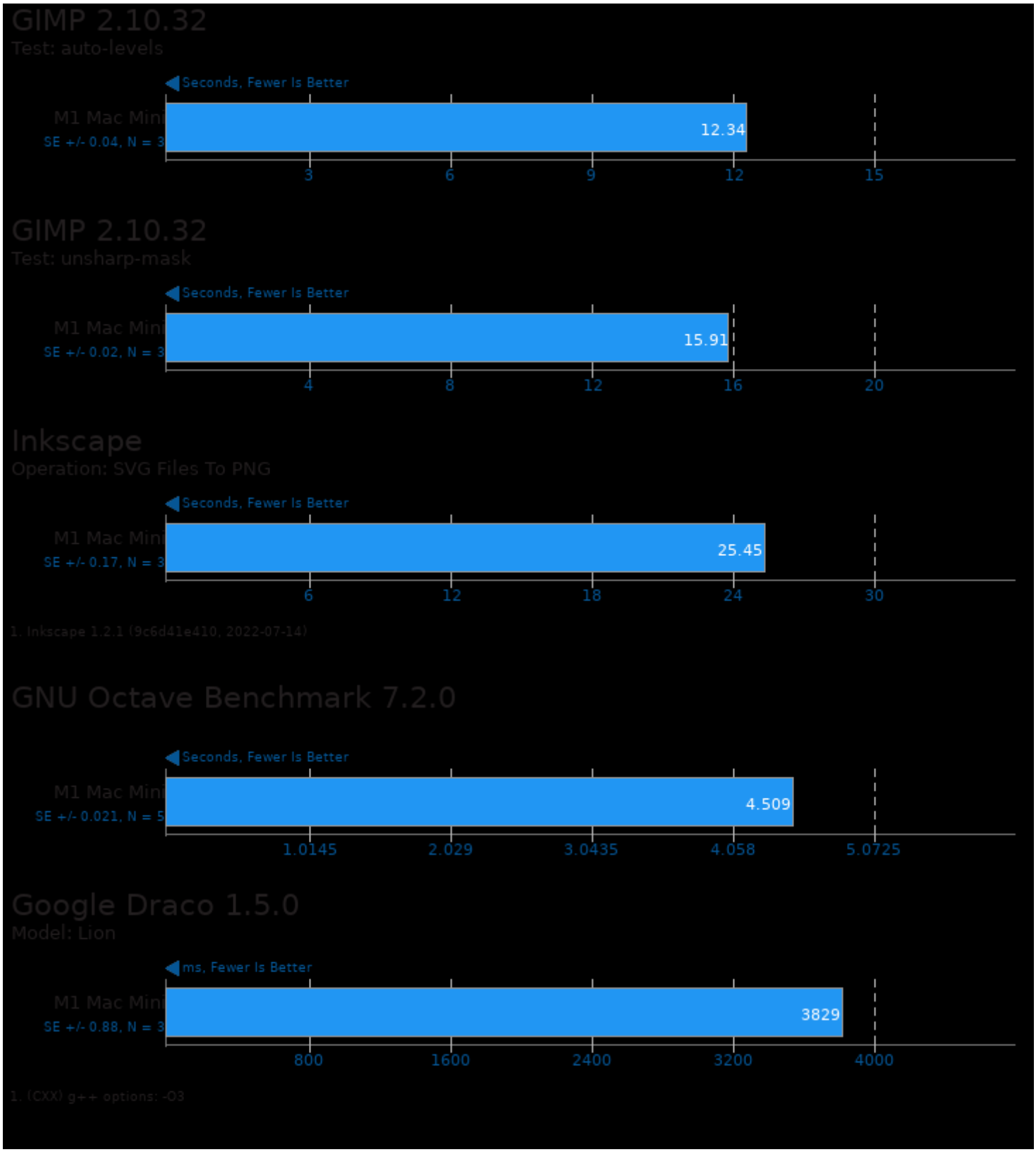



Darktable 4.0.0
Test: Server Room - Acceleration: CPU-only
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.011, N = 3
3.679
0.8278
1.6556
2.4834
3.3112
4.139
GEGL
Operation: Crop
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.079, N = 3
7.110
2
4
6
8
10
GEGL
Operation: Scale
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.043, N = 15
5.610
1.2623
2.5246
3.7869
5.0492
6.3115
GEGL
Operation: Cartoon
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.05, N = 3
77.45
20
40
60
80
100
GEGL
Operation: Reflect
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.04, N = 3
26.93
6
12
18
24
30
GEGL
Operation: Antialias
Seconds, Fewer Is Better
M1 Mac Mini
SE +/- 0.14, N = 3
32.58
8
16
24
32
40

Apple M1 Mac Mini

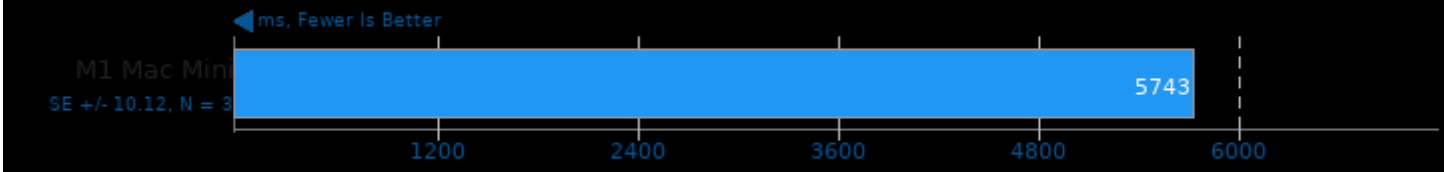


Apple M1 Mac Mini



Google Draco 1.5.0

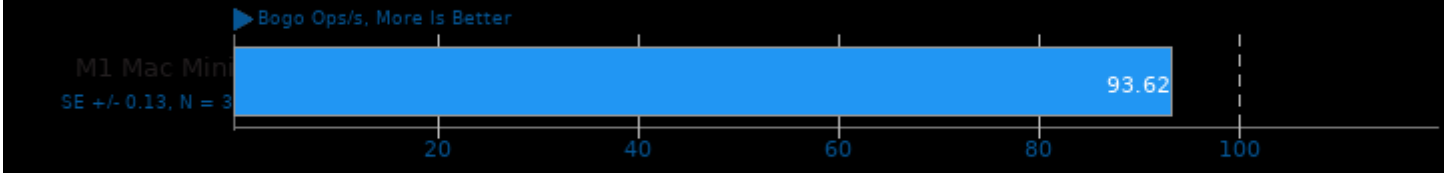
Model: Church Facade



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

Stress-NG 0.14

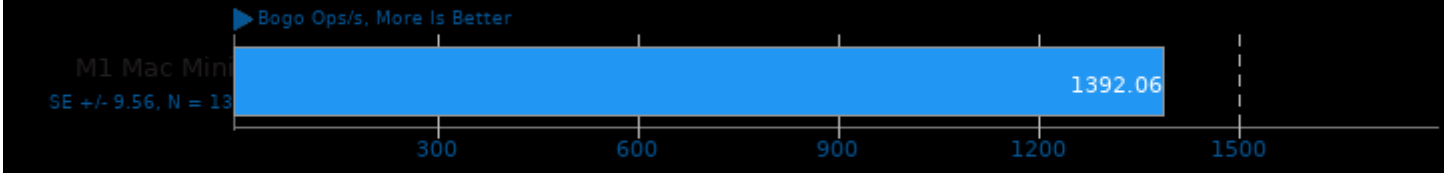
Test: MMAP



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

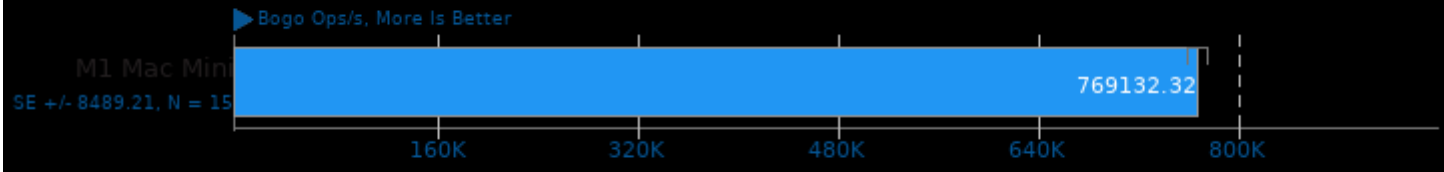
Test: NUMA



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

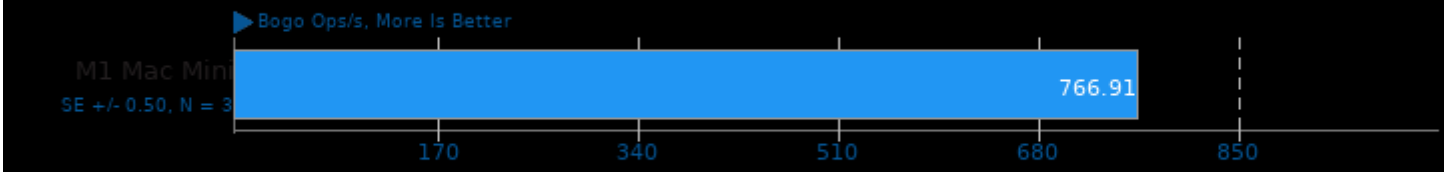
Test: Futex



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

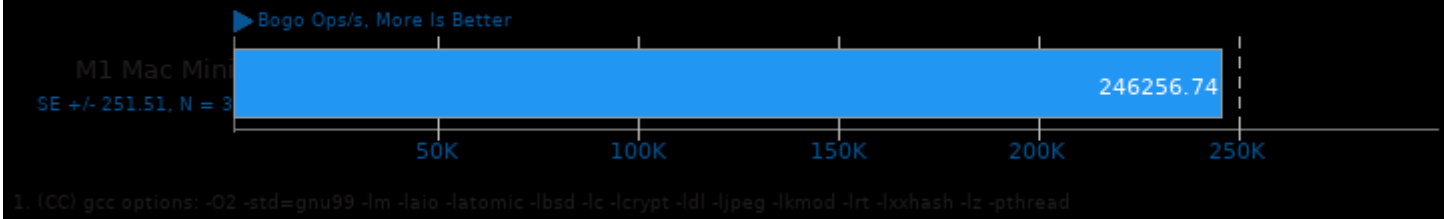
Test: MEMFD



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

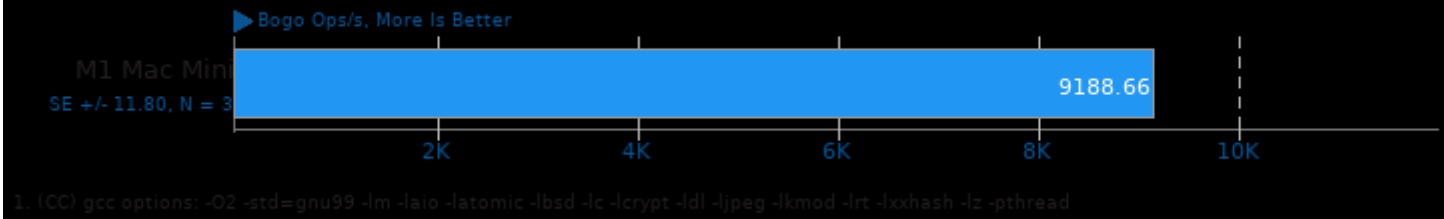
Test: Atomic



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

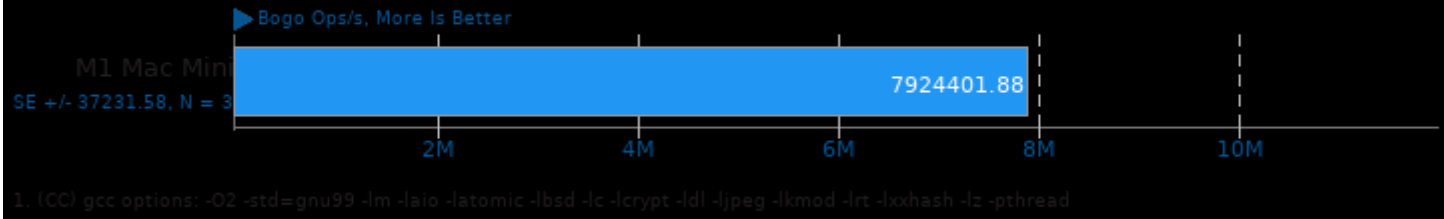
Test: Crypto



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

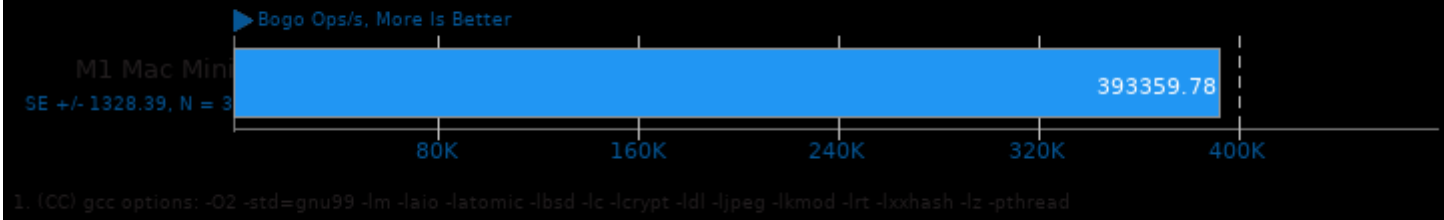
Test: Malloc



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

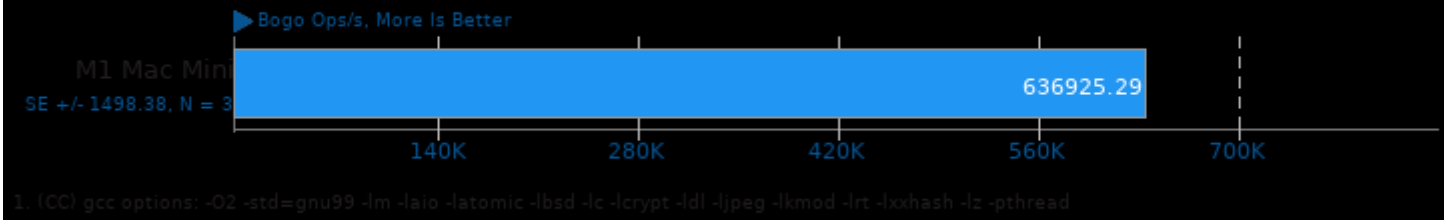
Test: IO_uring



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

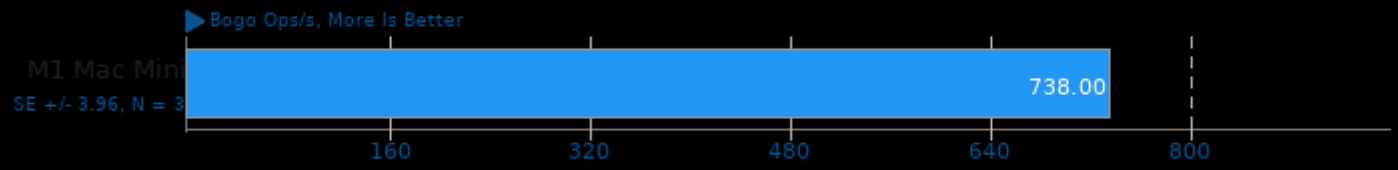
Test: SENDFILE



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

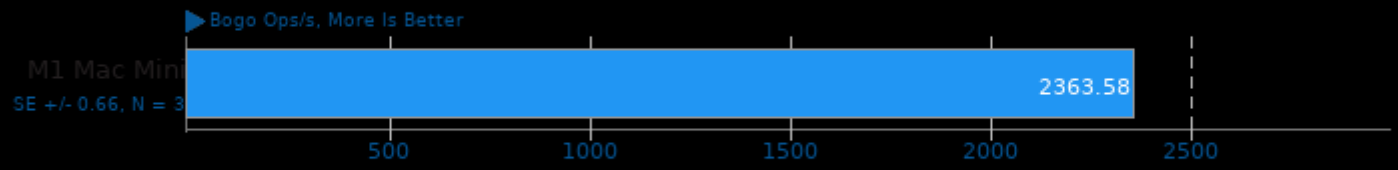
Test: CPU Cache



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

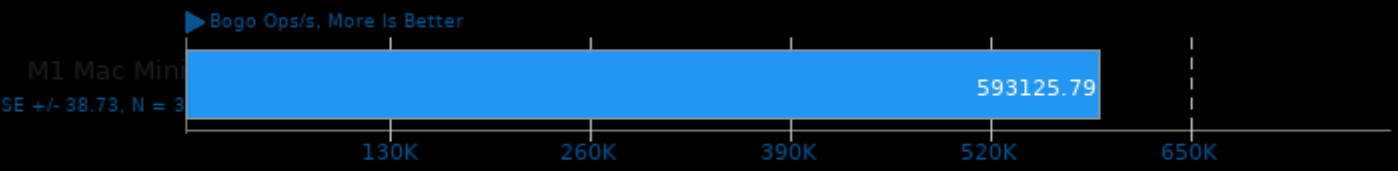
Test: CPU Stress



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

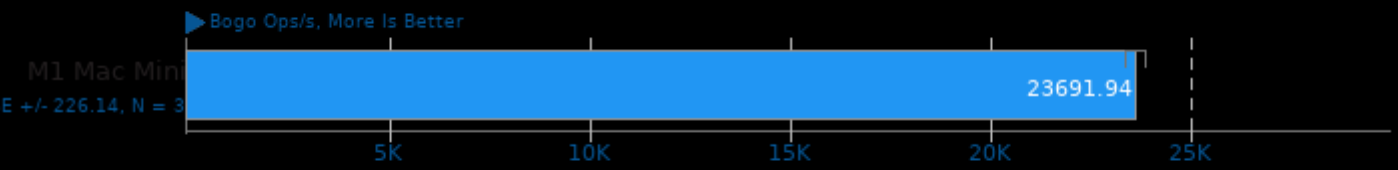
Test: Semaphores



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

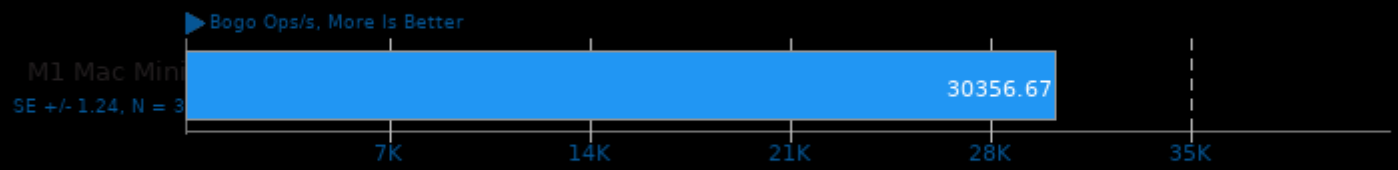
Test: Matrix Math



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

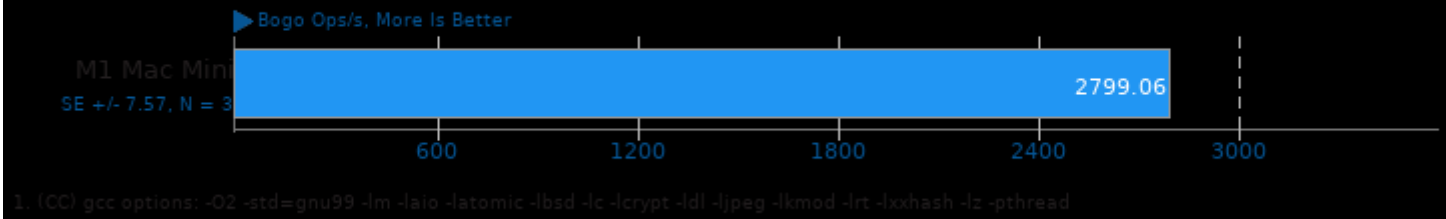
Test: Vector Math



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

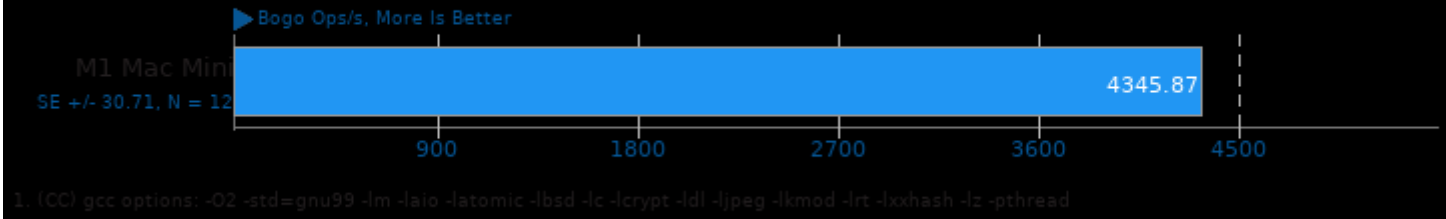
Test: Memory Copying



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

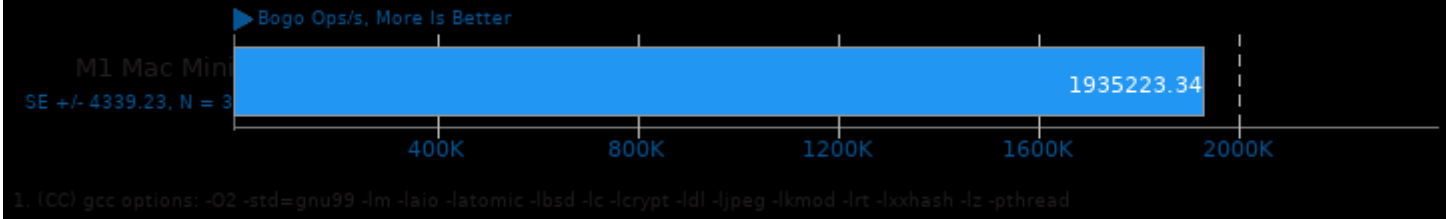
Test: Socket Activity



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

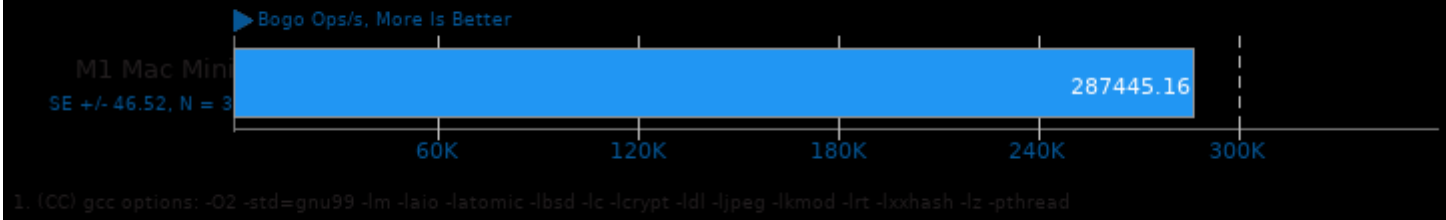
Test: Context Switching



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

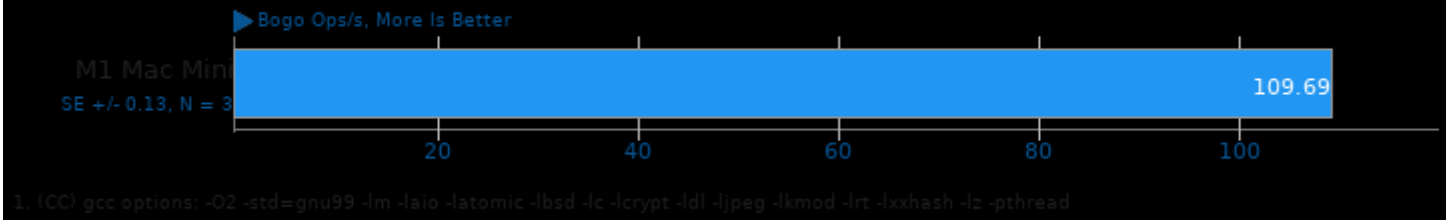
Test: Glibc C String Functions



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

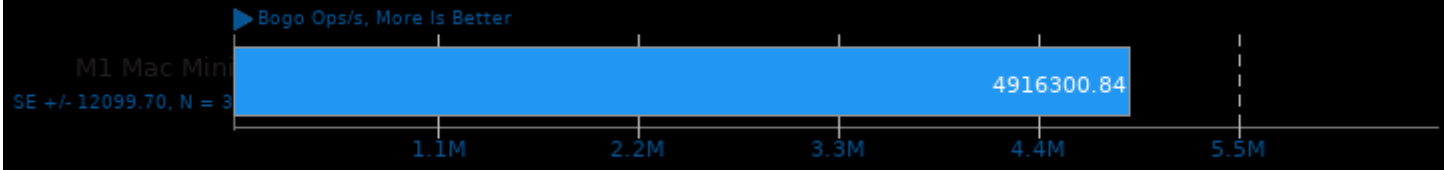
Test: Glibc Qsort Data Sorting



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

Stress-NG 0.14

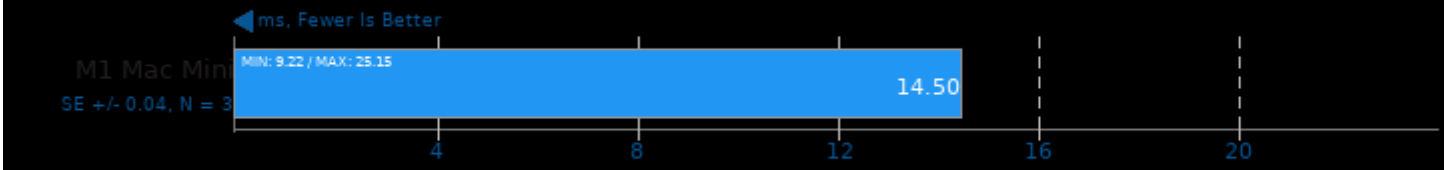
Test: System V Message Passing



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -latomic -lbsd -lc -lcrypt -ldl -ljpeg -lkmod -lrt -lxxhash -lz -pthread

NCNN 20210720

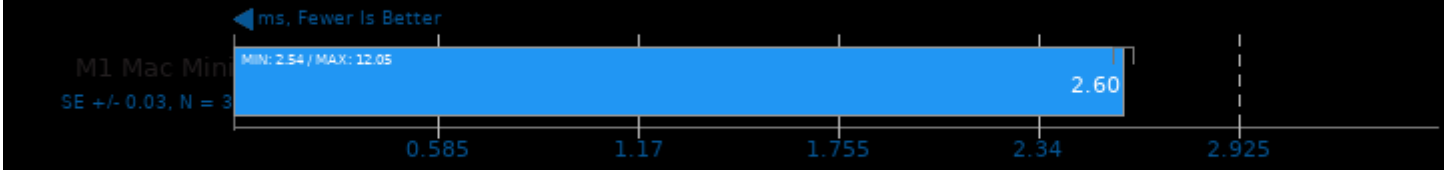
Target: CPU - Model: mobilenet



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

NCNN 20210720

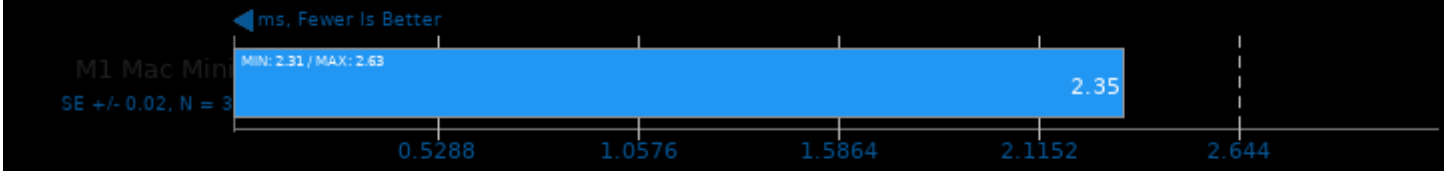
Target: CPU-v2-v2 - Model: mobilenet-v2



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

NCNN 20210720

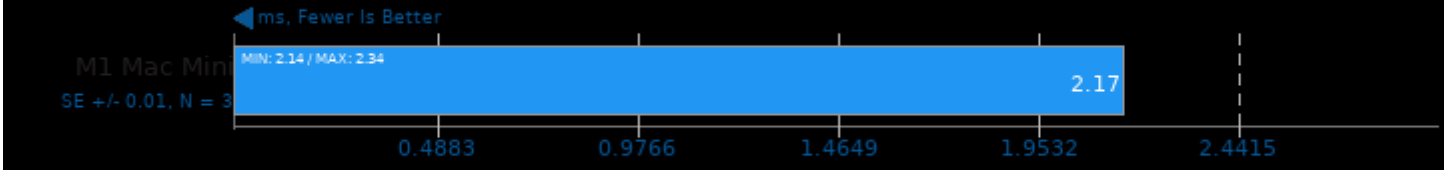
Target: CPU-v3-v3 - Model: mobilenet-v3



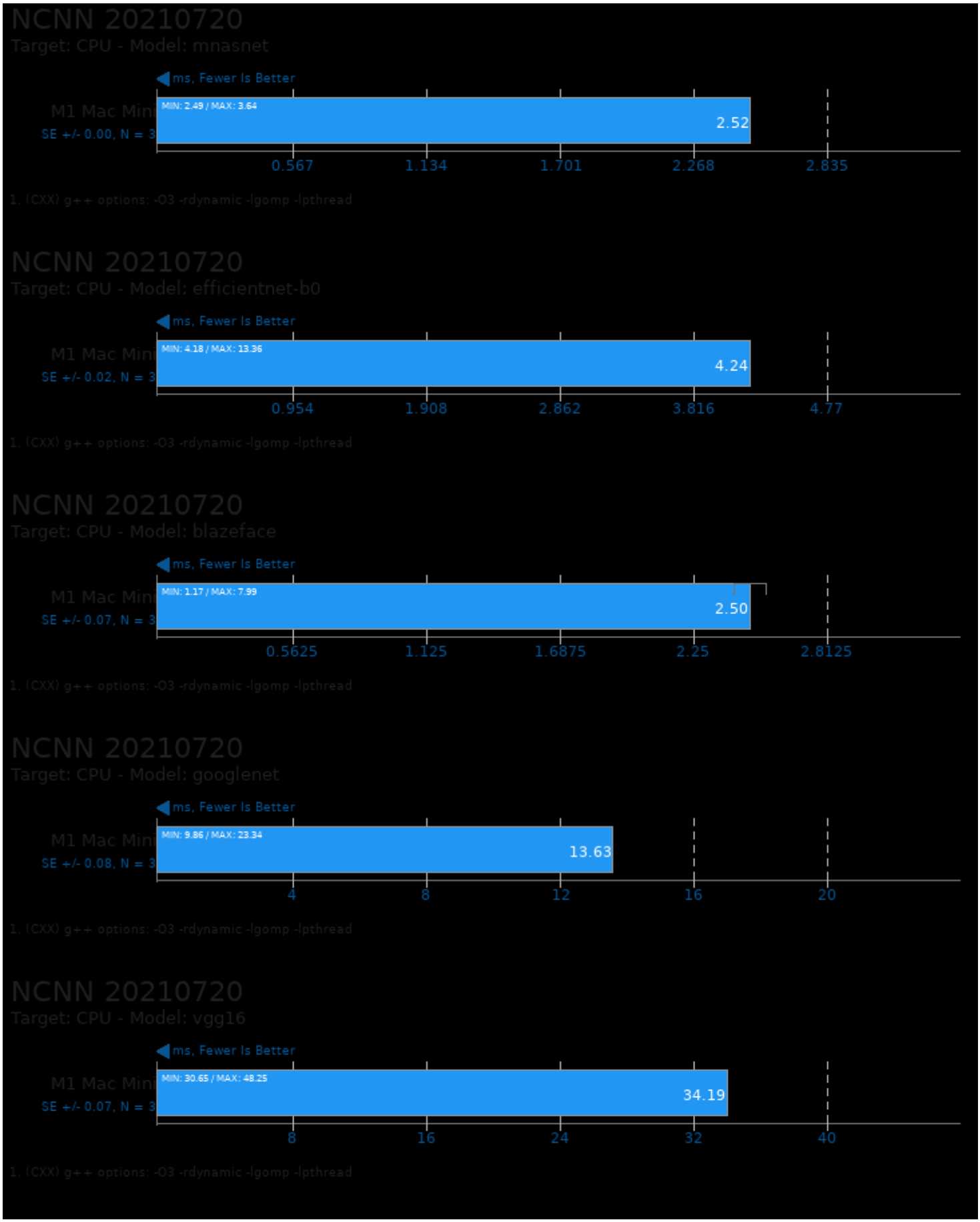
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

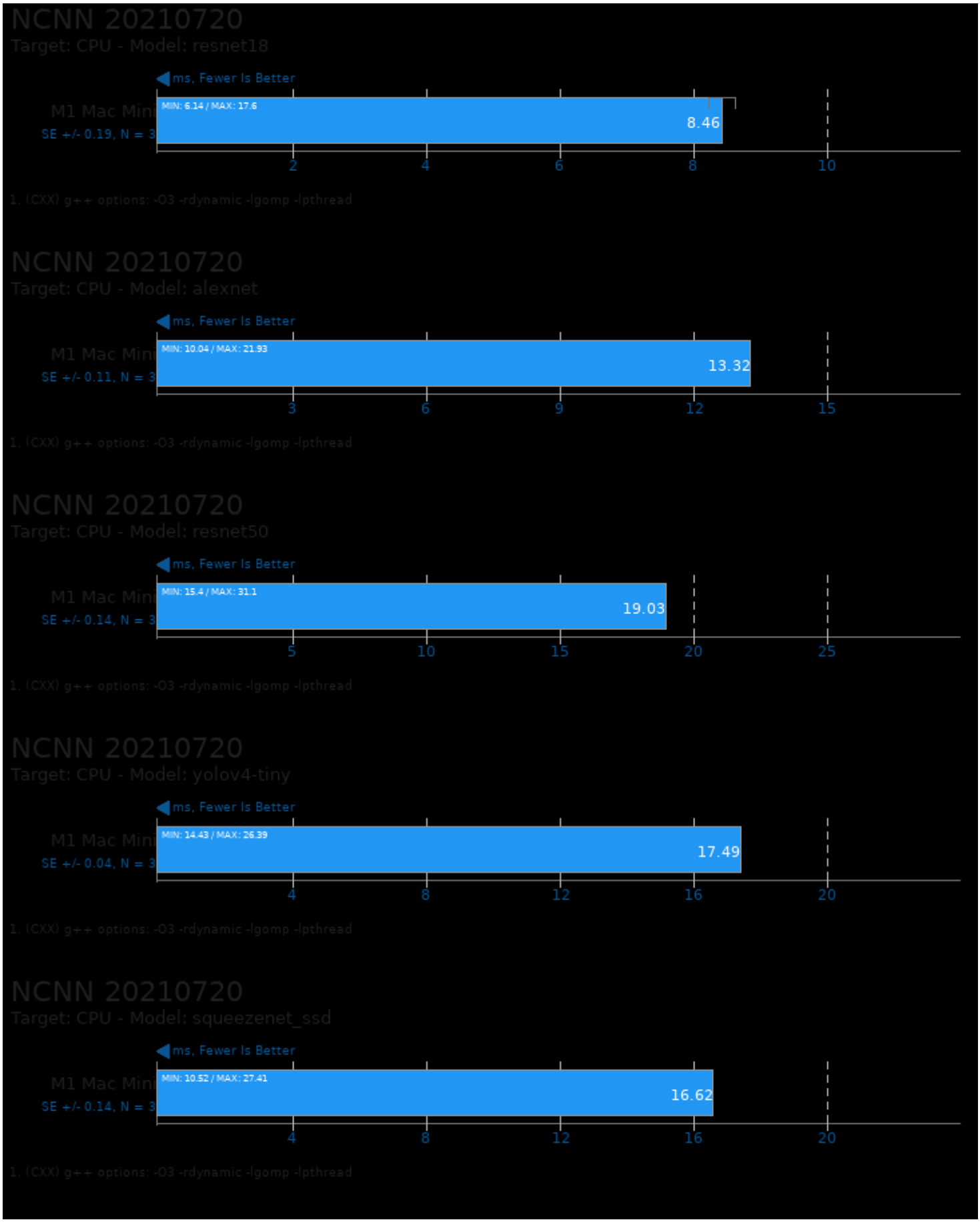
NCNN 20210720

Target: CPU - Model: shufflenet-v2



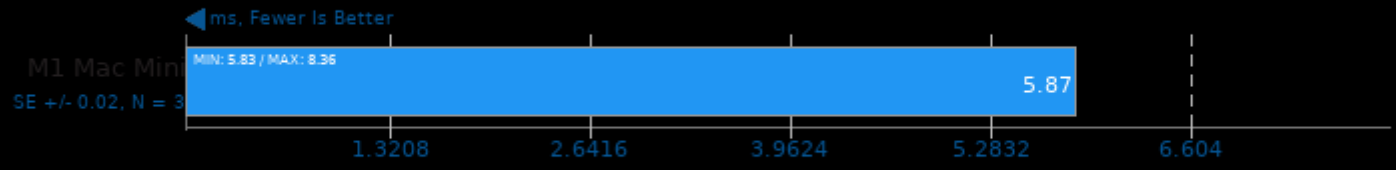
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread


NCNN 20210720
Target: CPU - Model: mnasnet
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.00, N = 3
MIN: 2.49 / MAX: 3.64
2.52
0.567
1.134
1.701
2.268
2.835
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: efficientnet-b0
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.02, N = 3
MIN: 4.18 / MAX: 13.36
4.24
0.954
1.908
2.862
3.816
4.77
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: blazeface
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.07, N = 3
MIN: 1.17 / MAX: 7.99
2.50
0.5625
1.125
1.6875
2.25
2.8125
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: googlenet
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.08, N = 3
MIN: 9.86 / MAX: 23.34
13.63
4
8
12
16
20
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: vgg16
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.07, N = 3
MIN: 30.65 / MAX: 48.25
34.19
8
16
24
32
40
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread


NCNN 20210720
Target: CPU - Model: resnet18
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.19, N = 3
MIN: 6.14 / MAX: 17.6
8.46
2
4
6
8
10
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: alexnet
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.11, N = 3
MIN: 10.04 / MAX: 21.93
13.32
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: resnet50
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.14, N = 3
MIN: 15.4 / MAX: 31.1
19.03
5
10
15
20
25
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: yolov4-tiny
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.04, N = 3
MIN: 14.43 / MAX: 26.39
17.49
4
8
12
16
20
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: squeezenet_ssd
ms, Fewer Is Better
M1 Mac Mini
SE +/- 0.14, N = 3
MIN: 10.52 / MAX: 27.41
16.62
4
8
12
16
20
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20210720

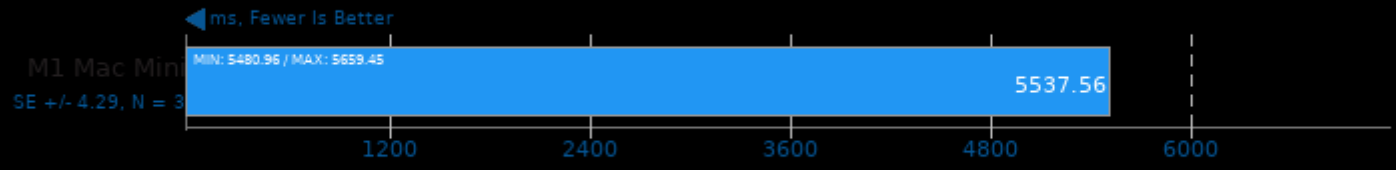
Target: CPU - Model: regnety_400m



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

TNN 0.3

Target: CPU - Model: DenseNet



1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -fvisibility=default -O3 -rdynamic -ldl

TNN 0.3

Target: CPU - Model: MobileNet v2

1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -fvisibility=default -O3 -rdynamic -ldl

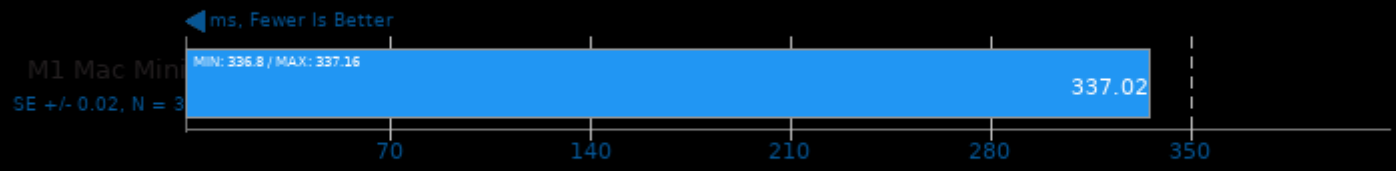
TNN 0.3

Target: CPU - Model: SqueezeNet v2

1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -fvisibility=default -O3 -rdynamic -ldl

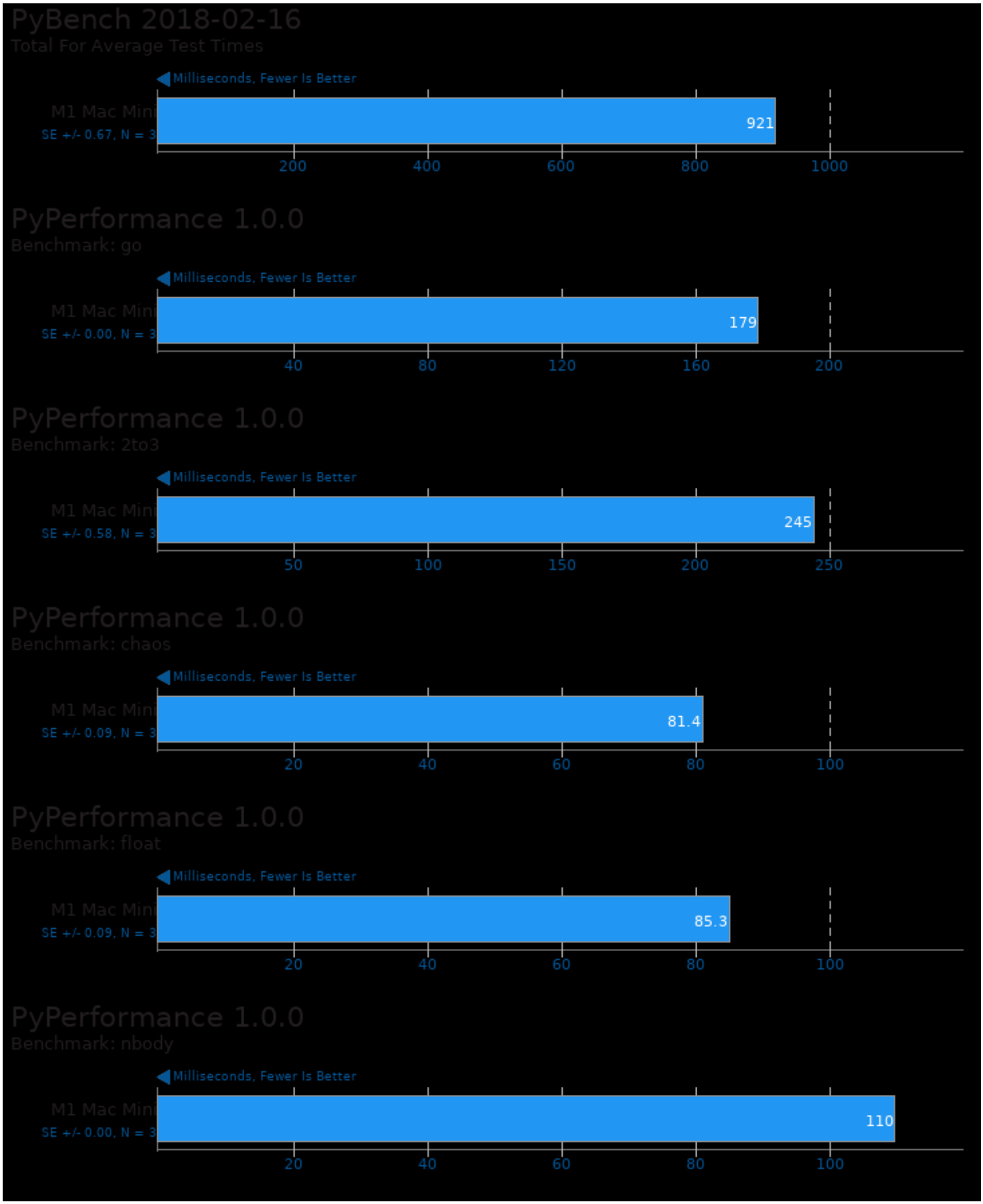
TNN 0.3

Target: CPU - Model: SqueezeNet v1.1

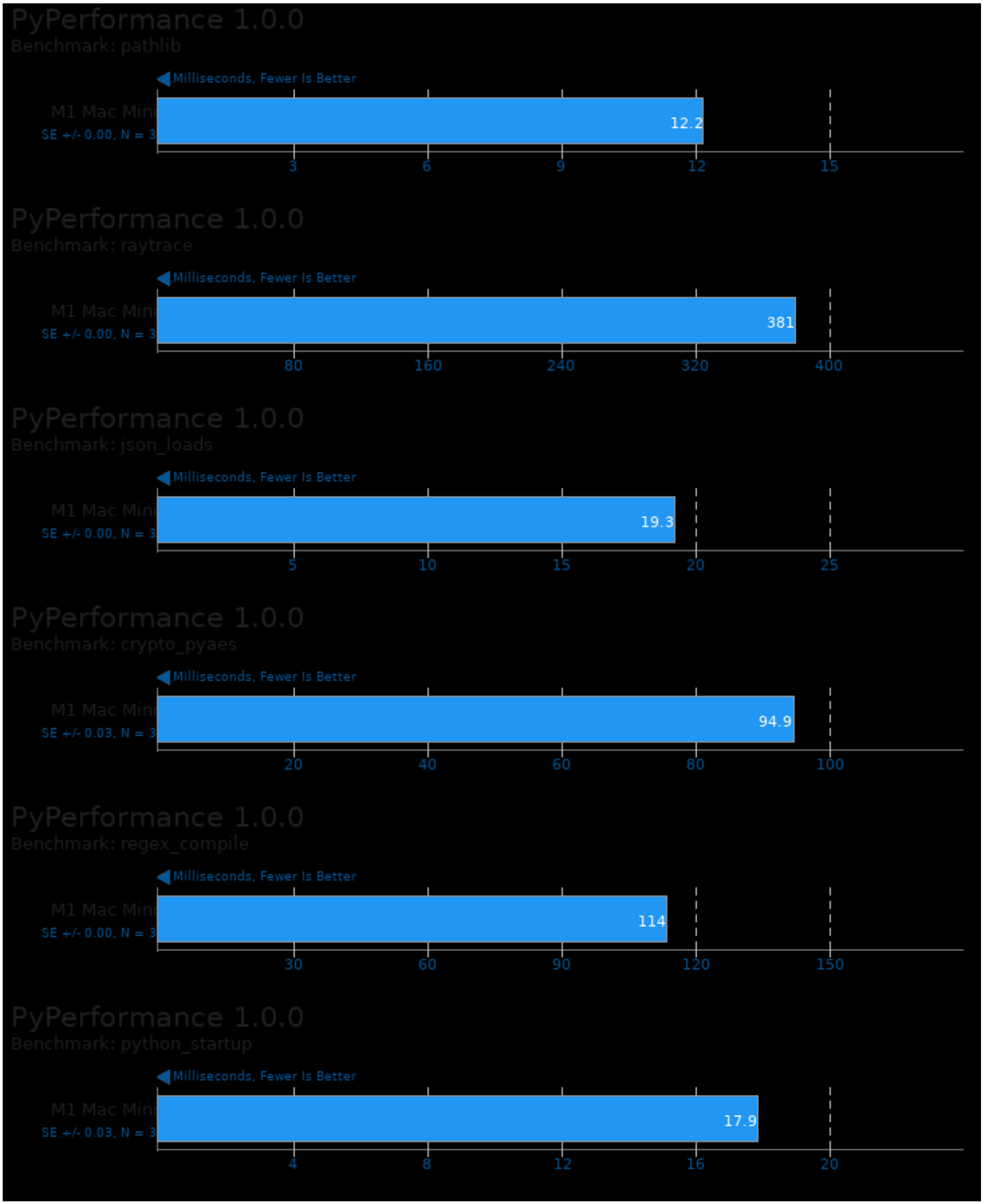


1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -fvisibility=default -O3 -rdynamic -ldl

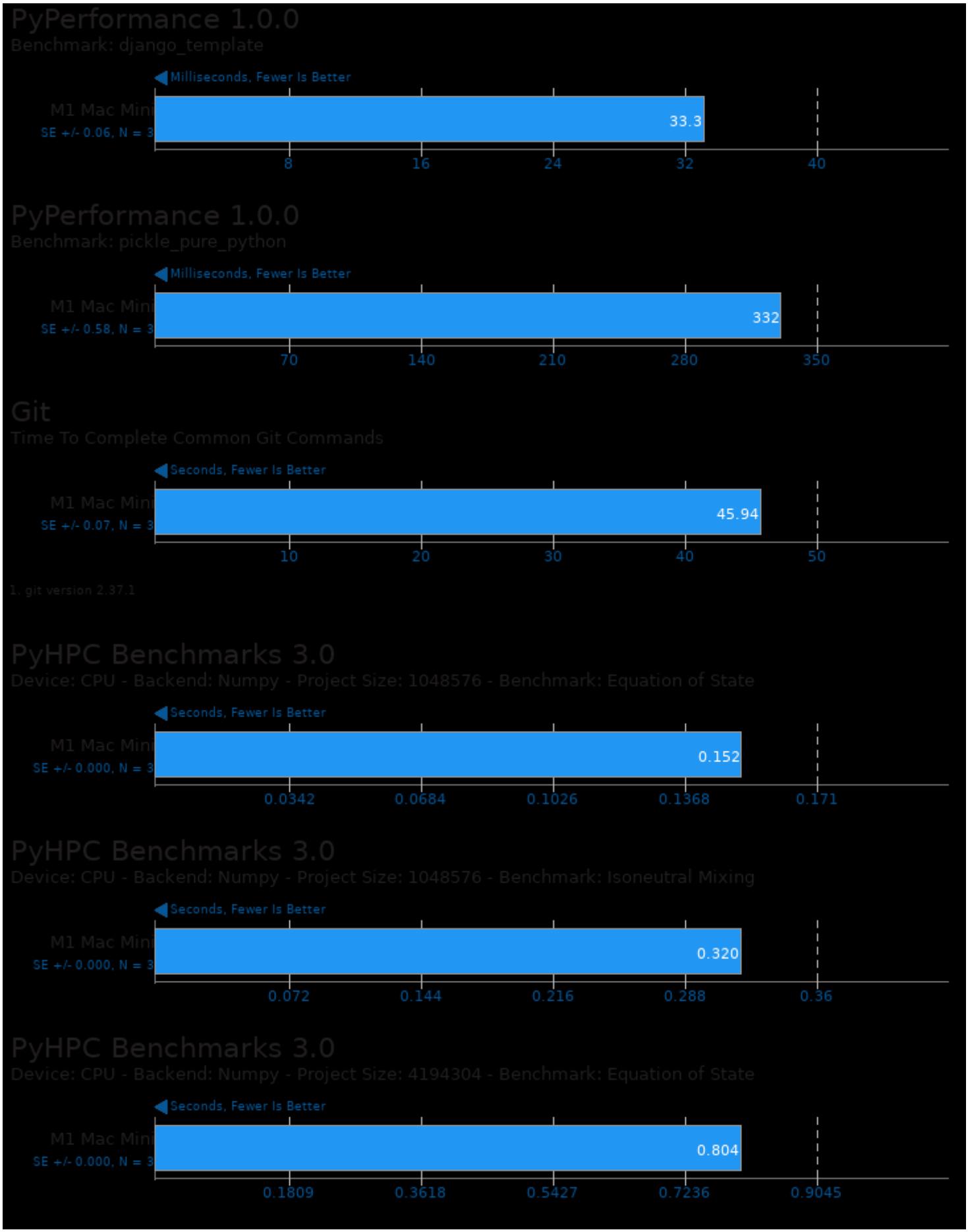
Apple M1 Mac Mini

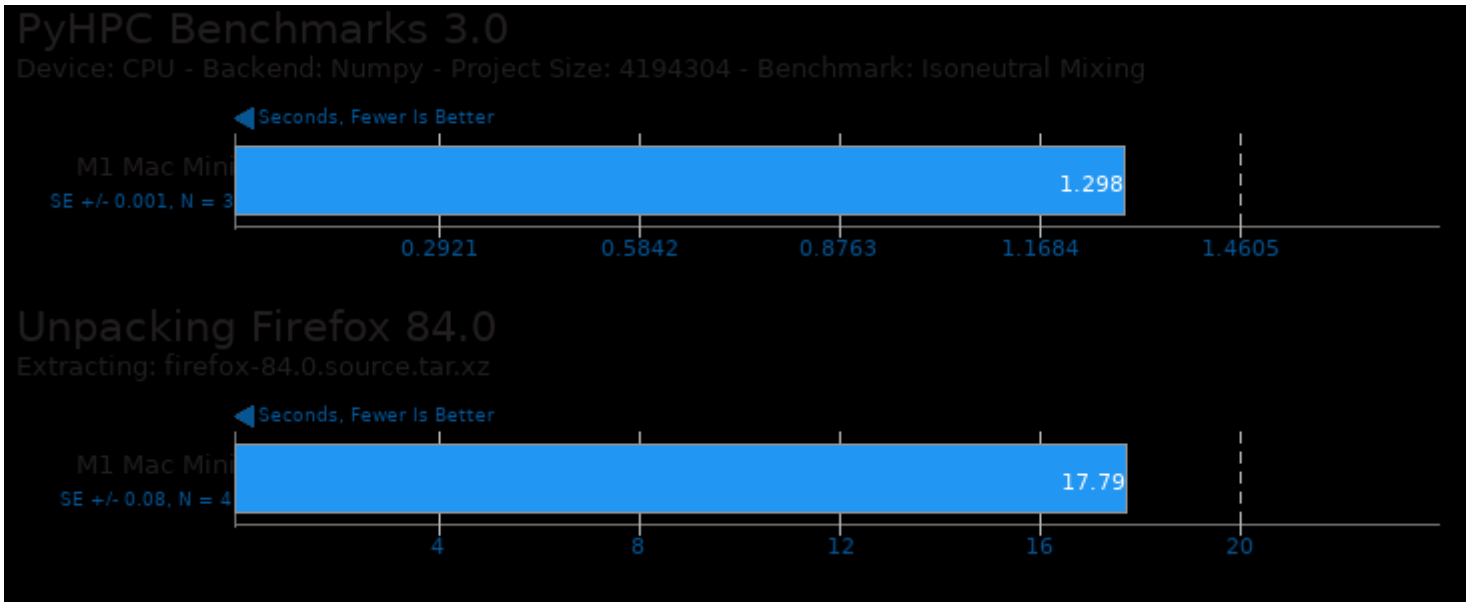


Apple M1 Mac Mini



Apple M1 Mac Mini





This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 09:27.