www.phoronix-test-suite.com

720_R32_4_4

ARMv8 rev 0 testing with a Jetson-AGX and NVIDIA Tegra Xavier on Ubuntu 18.04 via the Phoronix Test Suite.

Test Systems:

eMMC

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 62GB Ultra USB 3.0 + 31GB HBG4a2, Graphics: NVIDIA TEGRA, Monitor: PHL 247E6, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Disk Notes: CFQ / data=ordered,relatime,rw / Block Size: 4096
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

USB 3.0_inno

USB 2.0

SD Card innodisk

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 62GB Ultra USB 3.0 + 31GB HBG4a2, Graphics: NVIDIA TEGRA, Monitor: PHL 247E6, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Disk Notes: CFQ / data=ordered,relatime,rw / Block Size: 4096
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

mSATA

Typec C

LPDDR4

CPU Stress

CUDA Nbody

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 63GB M.2 (S80) 3MG2-P + 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

Graphics Test

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 63GB M.2 (S80) 3MG2-P + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: B287K, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: always
Processor Notes: Scaling Governor: tegra_cpufreq schedutil
Python Notes: Python 2.7.17 + Python 3.6.9

M.2 M SSD

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB PLEXTOR PX-256M9PeGN + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: B287K, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Disk Notes: none / data=ordered,relatime,rw / Block Size: 4096
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

LAN 1

LAN 1 run 2

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: B287K, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

LAN 1 run 3

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 31GB HBG4a2, Graphics: NVIDIA Tegra Xavier, Monitor: EDIIG0219, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

LAN 2

LAN 3

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 62GB Ultra USB 3.0 + 31GB HBG4a2, Graphics: NVIDIA Tegra Xavier, Monitor: EDIIG0219, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

WLAN AC8265

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: B287K, Network: 2 x Intel I210 + Intel 8265 / 8275

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only -v
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

RS232UART

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: B287K, Network: 2 x Intel I210

OS: Ubuntu 18.04, Kernel: 4.9.140-tegra (aarch64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.6, Display Driver: NVIDIA 32.4.4, OpenGL: 4.6.0, Vulkan: 1.2.131, Compiler: GCC 7.5.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

	eMMC	USB 3.0_inno	USB 2.0	SD Card inno disk	mSATA	Type c C	LPDDR4	CPU Stress	CUDA Nbody	Graphics Test	M.2 M SSD	LAN 1	LAN 1 run 2	LAN 1 run 3	LAN 2	LAN 3	WLAN AC8265	RS232UART

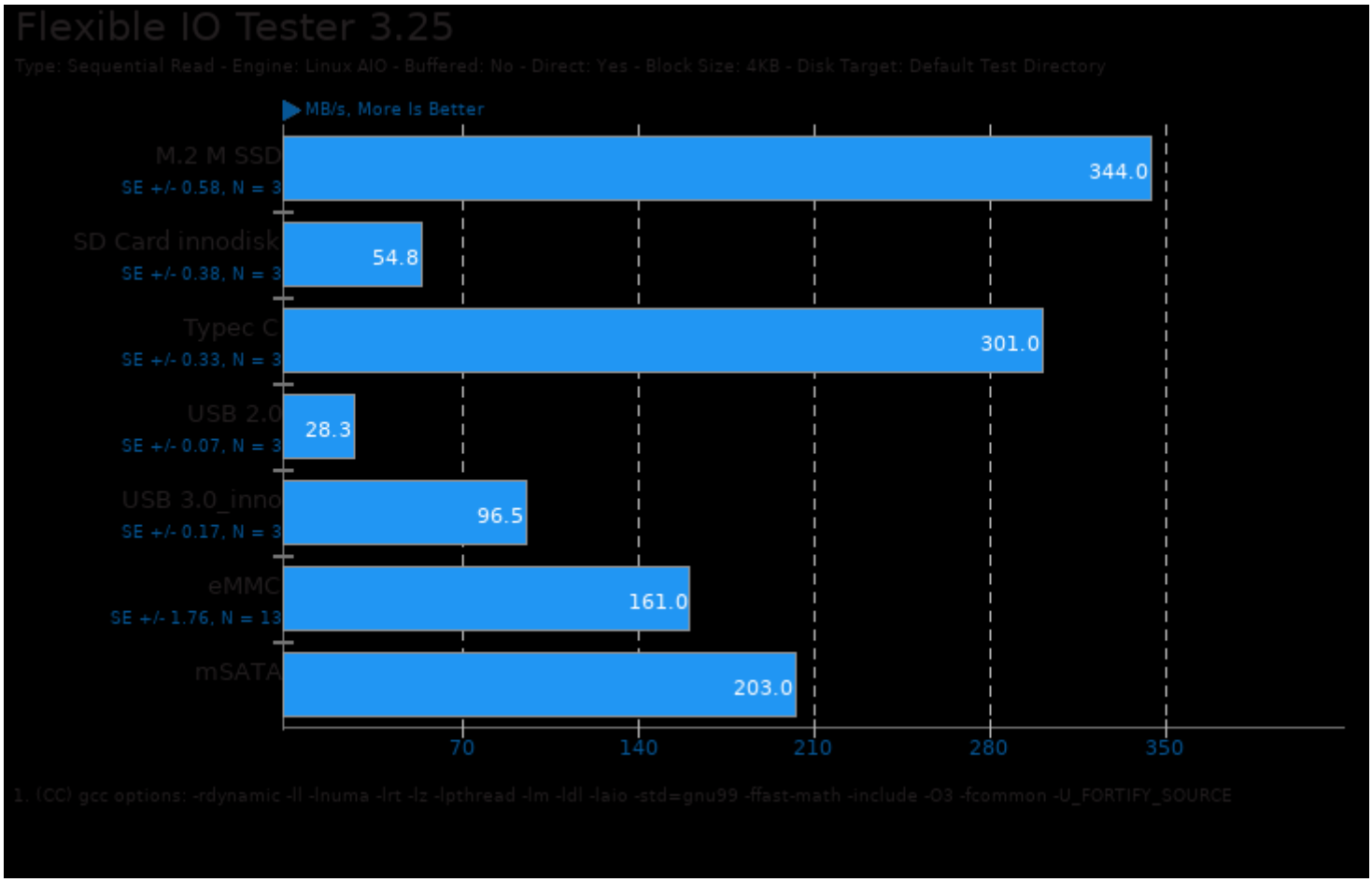
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (MB/s)	161	96.5	**28.3**	54.8	203	301		**344**
Normalized	46.8%	28.05%	8.23%	15.93%	59.01%	87.5%		100%
Standard Deviation	4%	0.3%	0.4%	1.2%		0.2%		0.3%
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (IOPS)	41231	24700	**7243**	14100	51900	77200		**88067**
Normalized	46.82%	28.05%	8.22%	16.01%	58.93%	87.66%		100%
Standard Deviation	3.9%	0.4%	0.4%			0.2%		0.3%
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (MB/s)	302	121	**52.7**	102	427	816		**1973**
Normalized	15.31%	6.13%	2.67%	5.17%	21.64%	41.36%		100%
Standard Deviation	2.4%		1.3%			0.1%		15.2%
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (IOPS)	34	12	**3**	9	50	98		**243**
Normalized	13.99%	4.94%	1.23%	3.7%	20.58%	40.33%		100%
Standard Deviation	3.3%							15.4%
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 4KB (MB/s)	94.0	24.3	24.9	**23.1**	84.4	**255**		246
Normalized	36.86%	9.53%	9.76%	9.06%	33.1%	100%		96.47%
Standard Deviation	2.1%	2.9%	1%	3.8%	0.1%	0.8%		4.4%

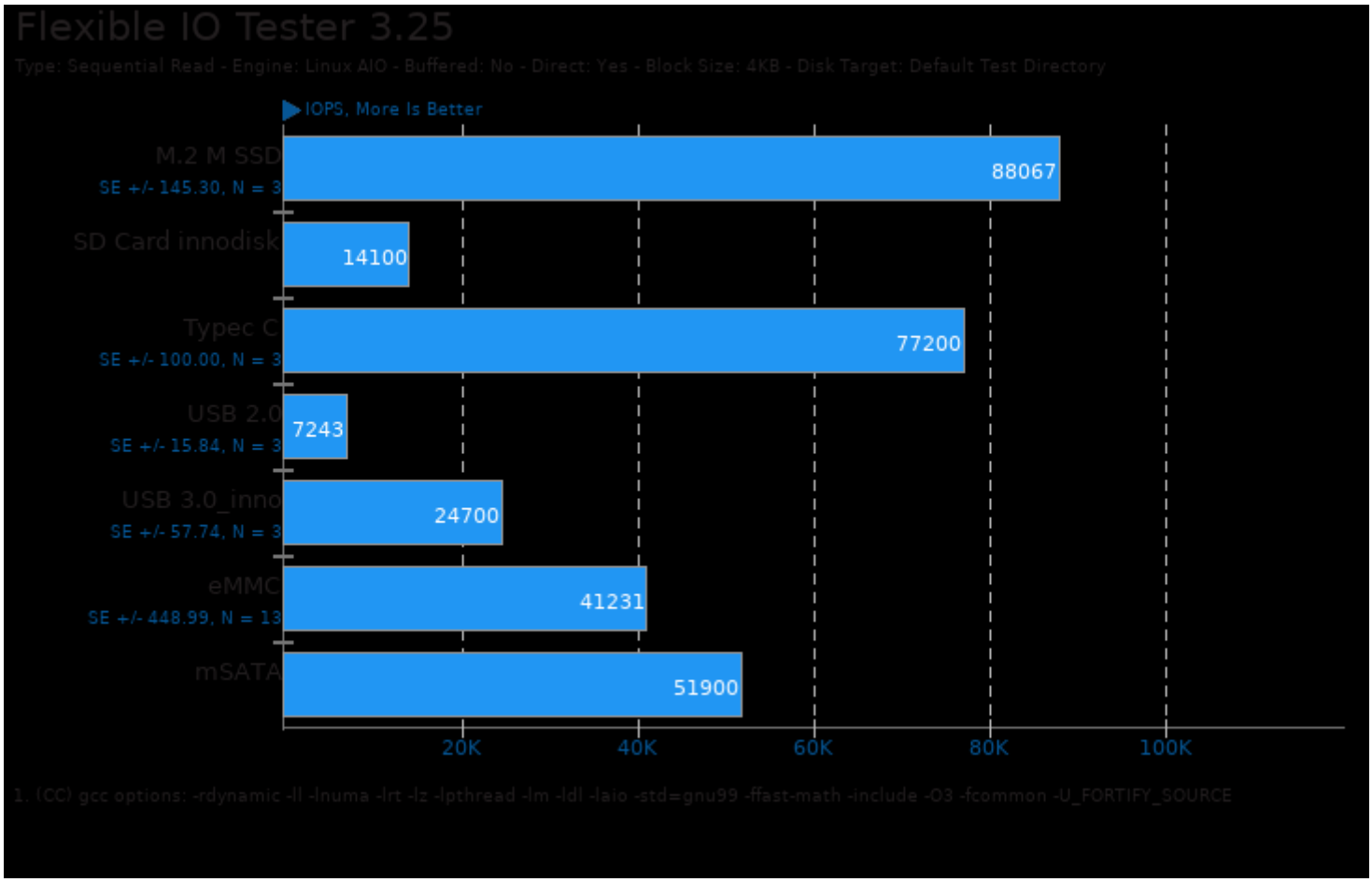
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 4KB (IOPS)	24133	6219	6362	**5911**	21600	**65300**			62960
Normalized	36.96%	9.52%	9.74%	9.05%	33.08%	100%			96.42%
Standard Deviation	1.5%	2.9%	1.1%	3.8%		0.9%			4.6%
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (MB/s)	135	**38.3**	48.8	65.9	103	**285**			**285**
Normalized	47.37%	13.44%	17.12%	23.12%	36.14%	100%			100%
Standard Deviation	1.1%	2.3%	0.8%	1.2%		0.4%			0.5%
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (IOPS)	13	**2**	3	5	9	**32**			**32**
Normalized	40.63%	6.25%	9.38%	15.63%	28.13%	100%			100%
Standard Deviation	4.3%								
Stream - Copy							70439		
Standard Deviation							0.8%		
Stream - Scale (MB/s)							70831		
Standard Deviation							0.8%		
Stream - Triad							63301		
Standard Deviation							0.6%		
Stream - Add (MB/s)							62395		
Standard Deviation							0.7%		

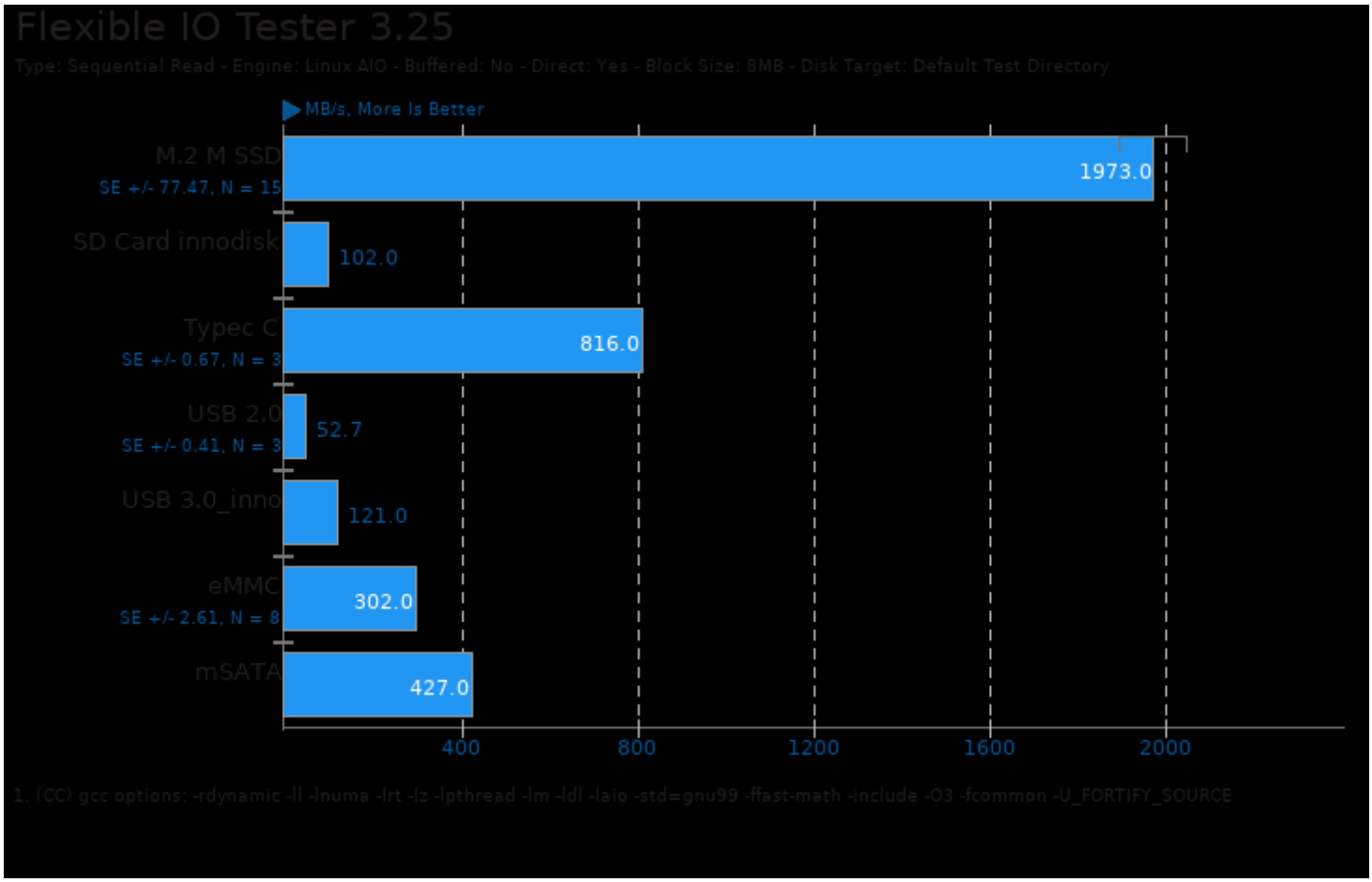
Stress-NG - Crypto (Bogo Ops/s)	1192
Standard Deviation	1.1%
Stress-NG - Forking (Bogo Ops/s)	6418
Standard Deviation	0.9%
Stress-NG - CPU Stress (Bogo Ops/s)	904.97
Standard Deviation	2.4%
Stress-NG - Matrix Math (Bogo Ops/s)	12435
Standard Deviation	0.1%
Stress-NG - Vector Math (Bogo Ops/s)	49101
Standard Deviation	0.4%
Stress-NG - Memory Copying (Bogo Ops/s)	3232
Standard Deviation	0.6%
Stress-NG - G.C.S.F (Bogo Ops/s)	24431
Standard Deviation	2.9%
Stress-NG - G.Q.D.S (Bogo Ops/s)	37.99
Standard Deviation	10.2%

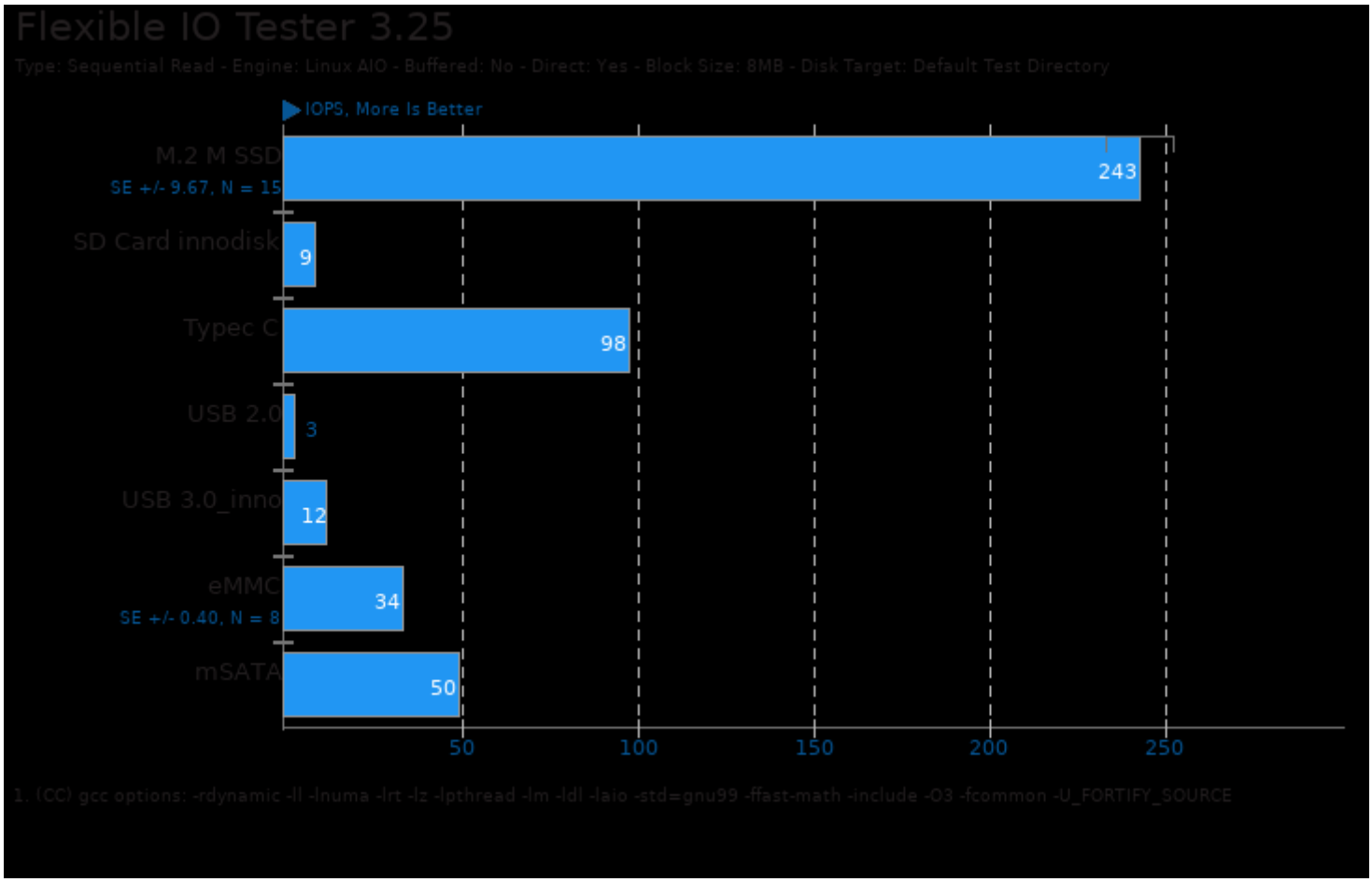
CUDA Mini-Nbody - Original ((NBody^2)/s)	51.532	
Standard Deviation	0.1%	
CUDA Mini-Nbody - Cache Blocking ((NBody^2)/s)	53.296	
Standard Deviation	0%	
CUDA Mini-Nbody - Loop Unrolling ((NBody^2)/s)	53.360	
Standard Deviation	0%	
CUDA Mini-Nbody - SOA Data Layout ((NBody^2)/s)	53.007	
Standard Deviation	0.2%	
CUDA Mini-Nbody - F.D.T.Z ((NBody^2)/s)	53.231	
Standard Deviation	0.2%	
GLmark2 - 800 x 600 (Score)		6638
GLmark2 - 1024 x 768 (Score)		5177
GLmark2 - 1280 x 1024 (Score)		3732

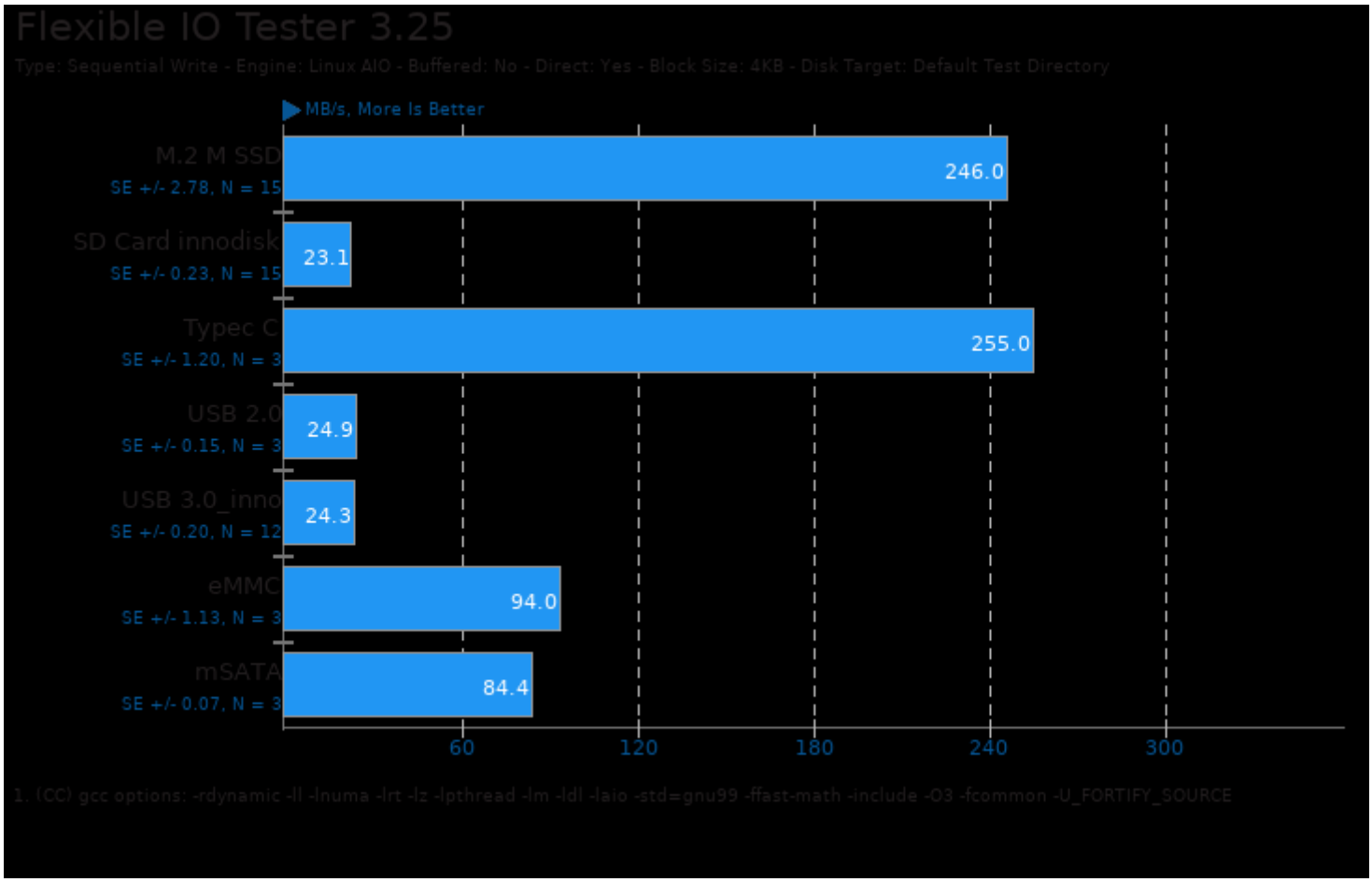
GLmark2 - 1600 x 1200 (Score)	2952							
GLmark2 - 1920 x 1080 (Score)	2716							
GLmark2 - 1920 x 1200 (Score)	2378							
GLmark2 - 2560 x 1440 (Score)	1639							
GLmark2 - 3840 x 2160 (Score)	832							
iPerf - 192.168.1.5 - 5201 - 10 Seconds - UDP - 100Mbit Objective - 1 (Mbits/s)		95.7		100	100	100	100.0
Normalized		95.7%		100%	100%	100%	100%
Standard Deviation		0%					0.1%
iPerf - 192.168.1.5 - 5201 - 10 Seconds - UDP - 1000Mbit Objective - 1 (Mbits/s)		95.7	95.7	949	956	956	124.4
Normalized		10.01 %	10.01 %	99.27 %	100%	100%	13.01 %
Standard Deviation		0%	0%	0.2%			8.3%

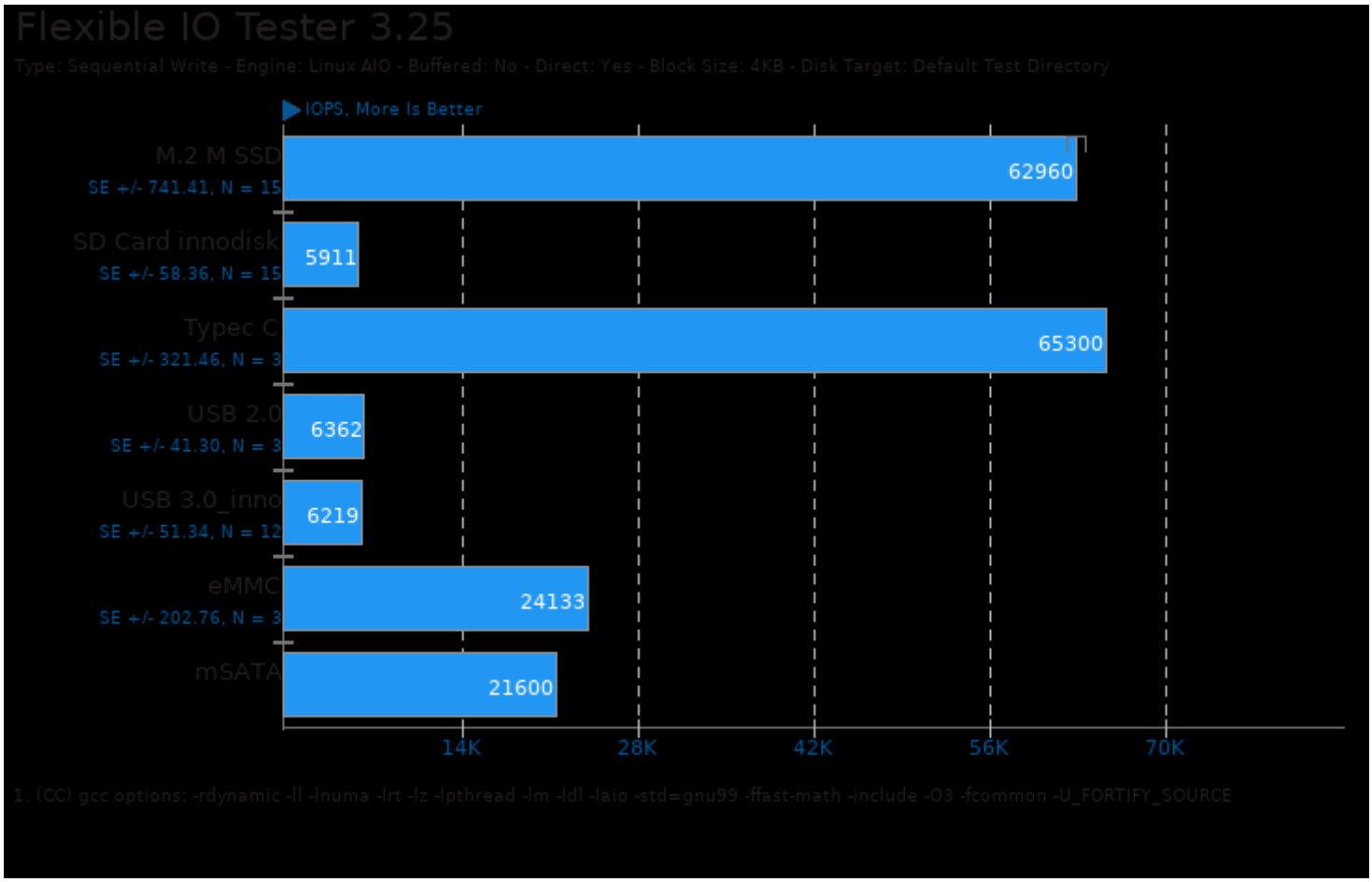

Flexible IO Tester 3.25
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
M.2 M SSD
SE +/- 0.58, N = 3
344.0
SD Card innodisk
SE +/- 0.38, N = 3
54.8
Typec C
SE +/- 0.33, N = 3
301.0
USB 2.0
SE +/- 0.07, N = 3
28.3
USB 3.0_inno
SE +/- 0.17, N = 3
96.5
eMMC
SE +/- 1.76, N = 13
161.0
mSATA
203.0
70
140
210
280
350
1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE

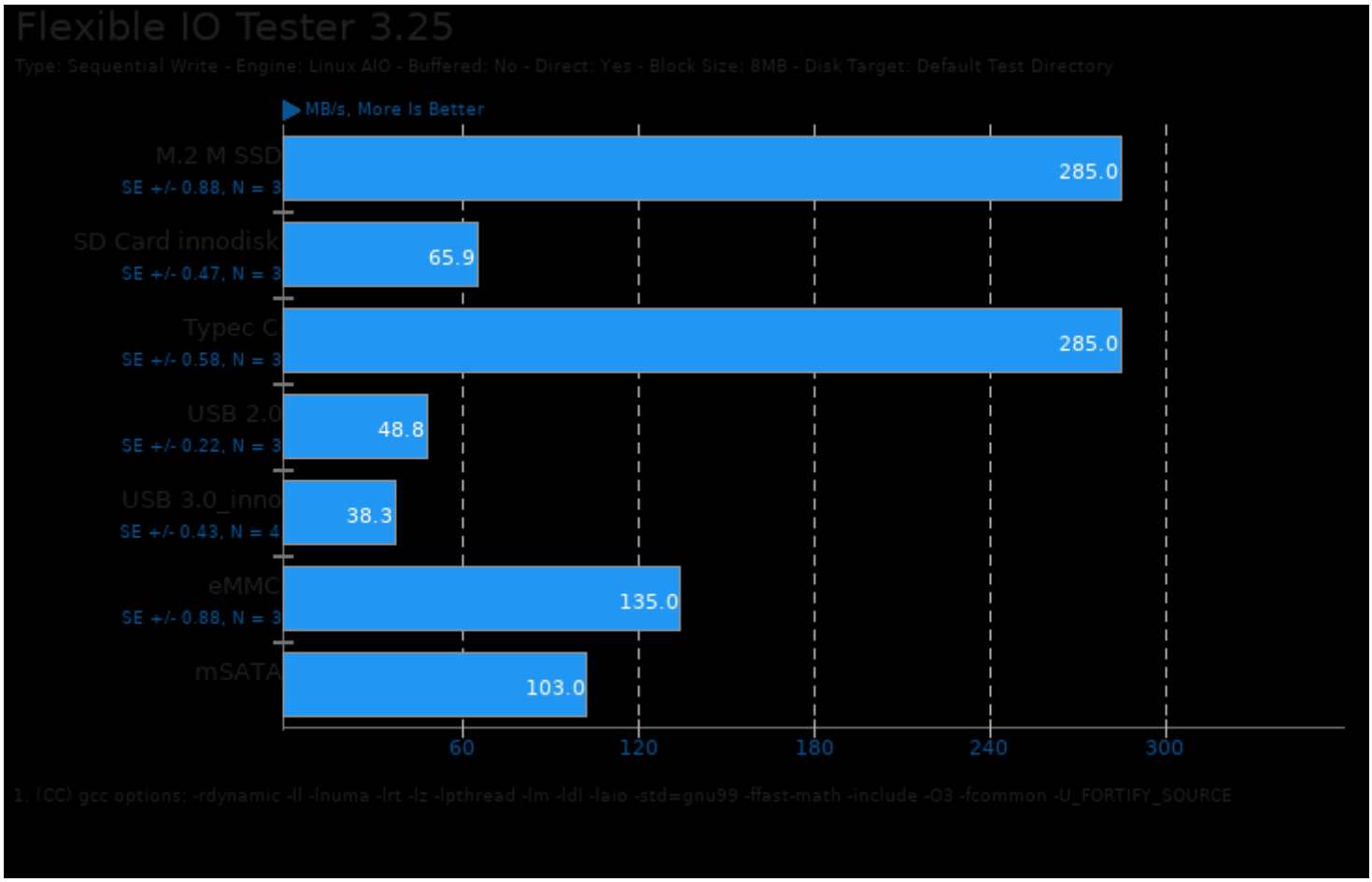

Flexible IO Tester 3.25
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
M.2 M SSD
SE +/- 145.30, N = 3
88067
SD Card innodisk
14100
Typec C
SE +/- 100.00, N = 3
77200
USB 2.0
SE +/- 15.84, N = 3
7243
USB 3.0_inno
SE +/- 57.74, N = 3
24700
eMMC
SE +/- 448.99, N = 13
41231
mSATA
51900
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE


Flexible IO Tester 3.25
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
M.2 M SSD
SE +/- 77.47, N = 15
1973.0
SD Card innodisk
102.0
Typec C
SE +/- 0.67, N = 3
816.0
USB 2.0
SE +/- 0.41, N = 3
52.7
USB 3.0_inno
121.0
eMMC
SE +/- 2.61, N = 8
302.0
mSATA
427.0
400
800
1200
1600
2000
1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE


Flexible IO Tester 3.25
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
M.2 M SSD
SE +/- 9.67, N = 15
243
SD Card innodisk
9
Typec C
98
USB 2.0
3
USB 3.0_inno
12
eMMC
SE +/- 0.40, N = 8
34
mSATA
50
50
100
150
200
250
1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE

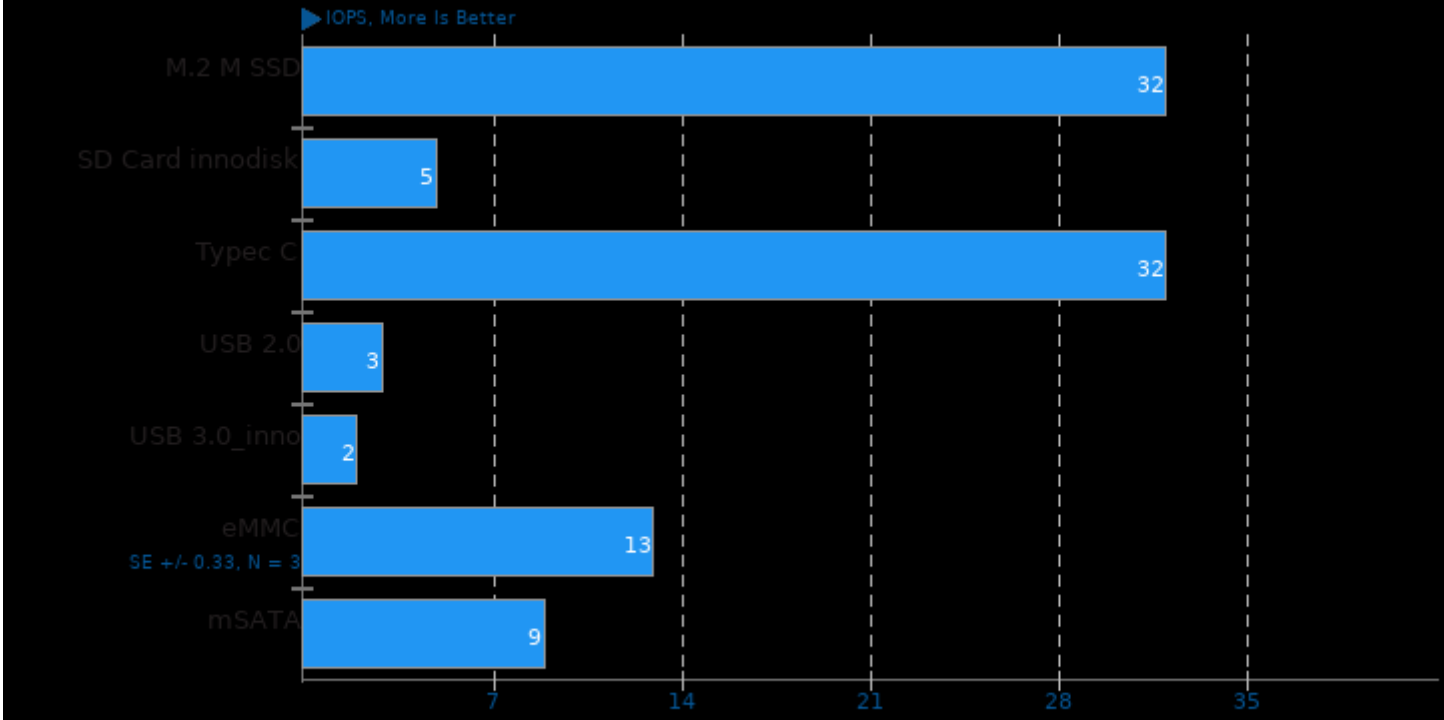

Flexible IO Tester 3.25
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
M.2 M SSD
SE +/- 2.78, N = 15
246.0
SD Card innodisk
SE +/- 0.23, N = 15
23.1
Typec C
SE +/- 1.20, N = 3
255.0
USB 2.0
SE +/- 0.15, N = 3
24.9
USB 3.0_inno
SE +/- 0.20, N = 12
24.3
eMMC
SE +/- 1.13, N = 3
94.0
mSATA
SE +/- 0.07, N = 3
84.4
60
120
180
240
300
1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE


Flexible IO Tester 3.25
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
M.2 M SSD
SE +/- 741.41, N = 15
62960
SD Card innodisk
SE +/- 58.36, N = 15
5911
Typec C
SE +/- 321.46, N = 3
65300
USB 2.0
SE +/- 41.30, N = 3
6362
USB 3.0_inno
SE +/- 51.34, N = 12
6219
eMMC
SE +/- 202.76, N = 3
24133
mSATA
21600
14K
28K
42K
56K
70K
1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE


Flexible IO Tester 3.25
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
M.2 M SSD
SE +/- 0.88, N = 3
285.0
SD Card innodisk
SE +/- 0.47, N = 3
65.9
Typec C
SE +/- 0.58, N = 3
285.0
USB 2.0
SE +/- 0.22, N = 3
48.8
USB 3.0_inno
SE +/- 0.43, N = 4
38.3
eMMC
SE +/- 0.88, N = 3
135.0
mSATA
103.0
60
120
180
240
300
1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE

Flexible IO Tester 3.25

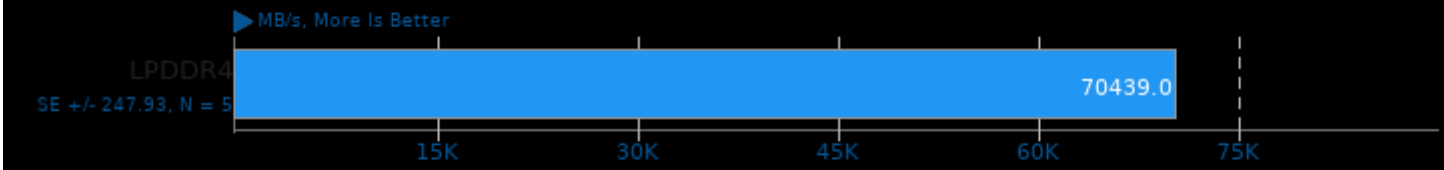
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory



1. (CC) gcc options: -rdynamic -ll -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE

Stream 2013-01-17

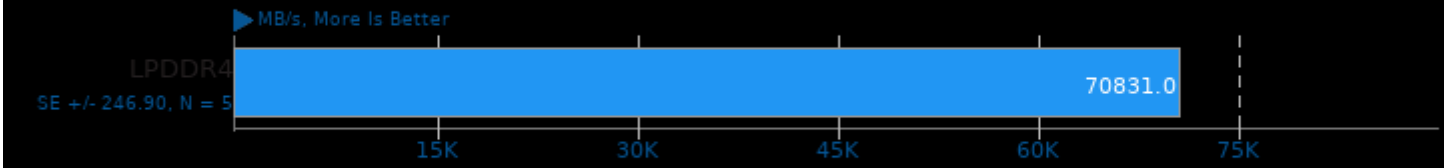
Type: Copy



1. (CC) gcc options: -O3 -march=native -fopenmp

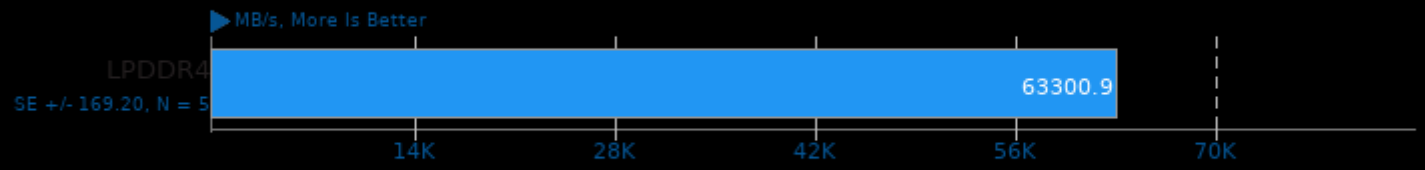
Stream 2013-01-17

Type: Scale



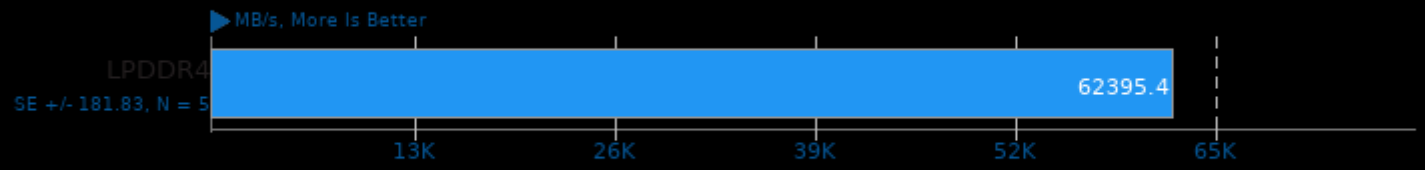
1. (CC) gcc options: -O3 -march=native -fopenmp

Stream 2013-01-17
Type: Triad



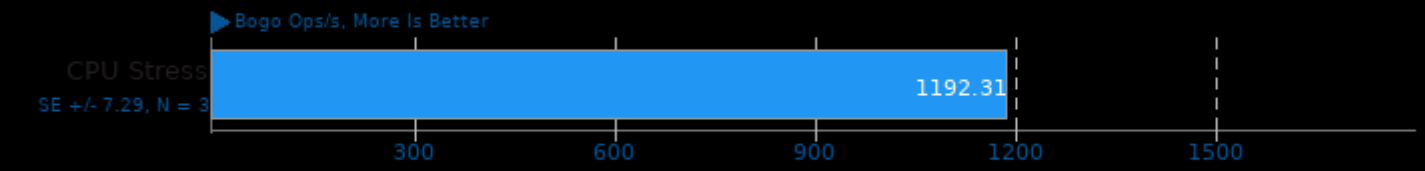
1. (CC) gcc options: -O3 -march=native -fopenmp

Stream 2013-01-17
Type: Add



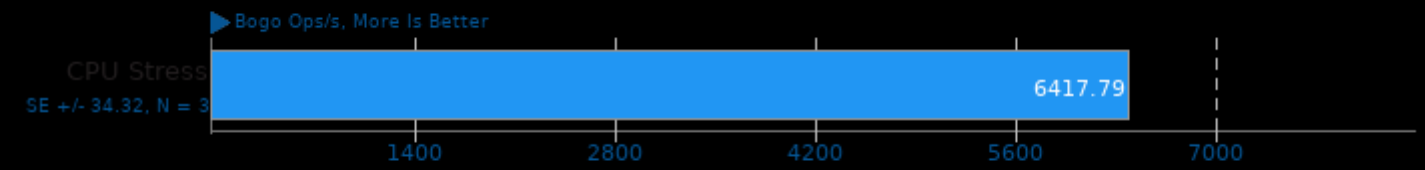
1. (CC) gcc options: -O3 -march=native -fopenmp

Stress-NG 0.11.07
Test: Crypto



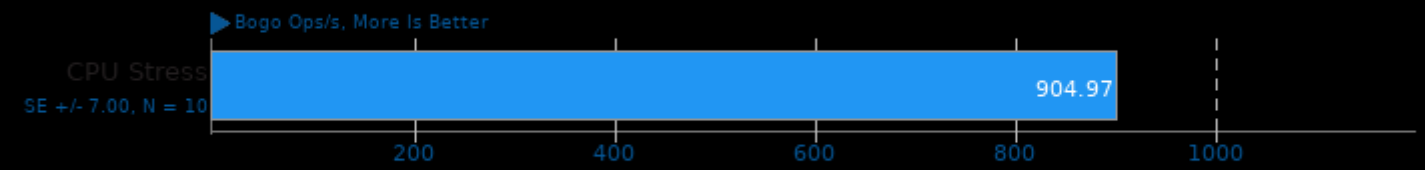
1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc

Stress-NG 0.11.07
Test: Forking



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc

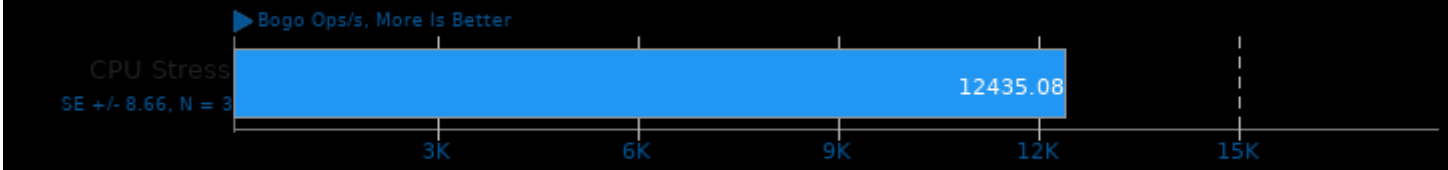
Stress-NG 0.11.07
Test: CPU Stress



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc

Stress-NG 0.11.07

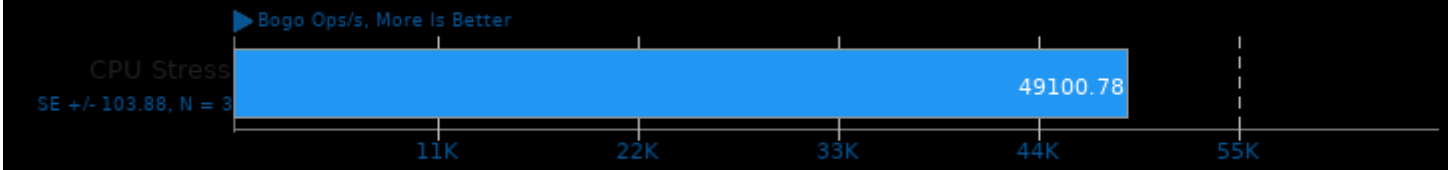
Test: Matrix Math



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc

Stress-NG 0.11.07

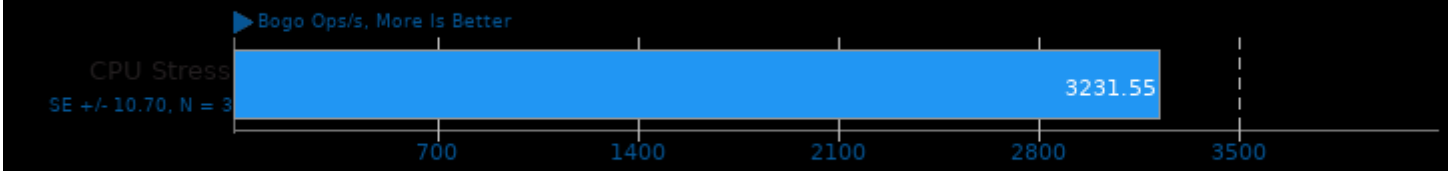
Test: Vector Math



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc

Stress-NG 0.11.07

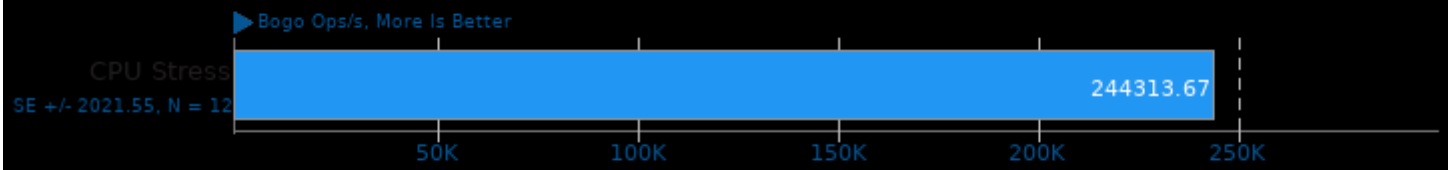
Test: Memory Copying



1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc

Stress-NG 0.11.07

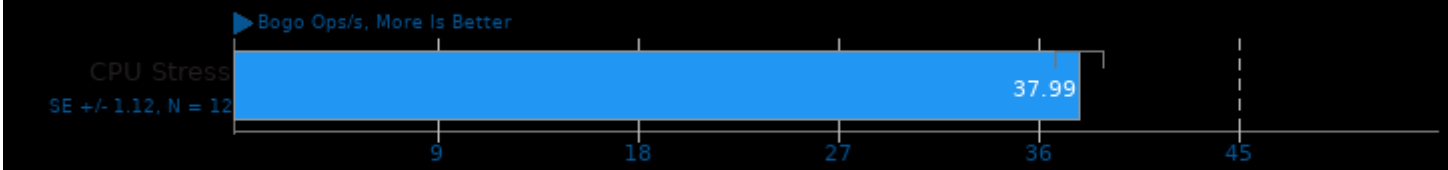
Test: Glibc C String Functions



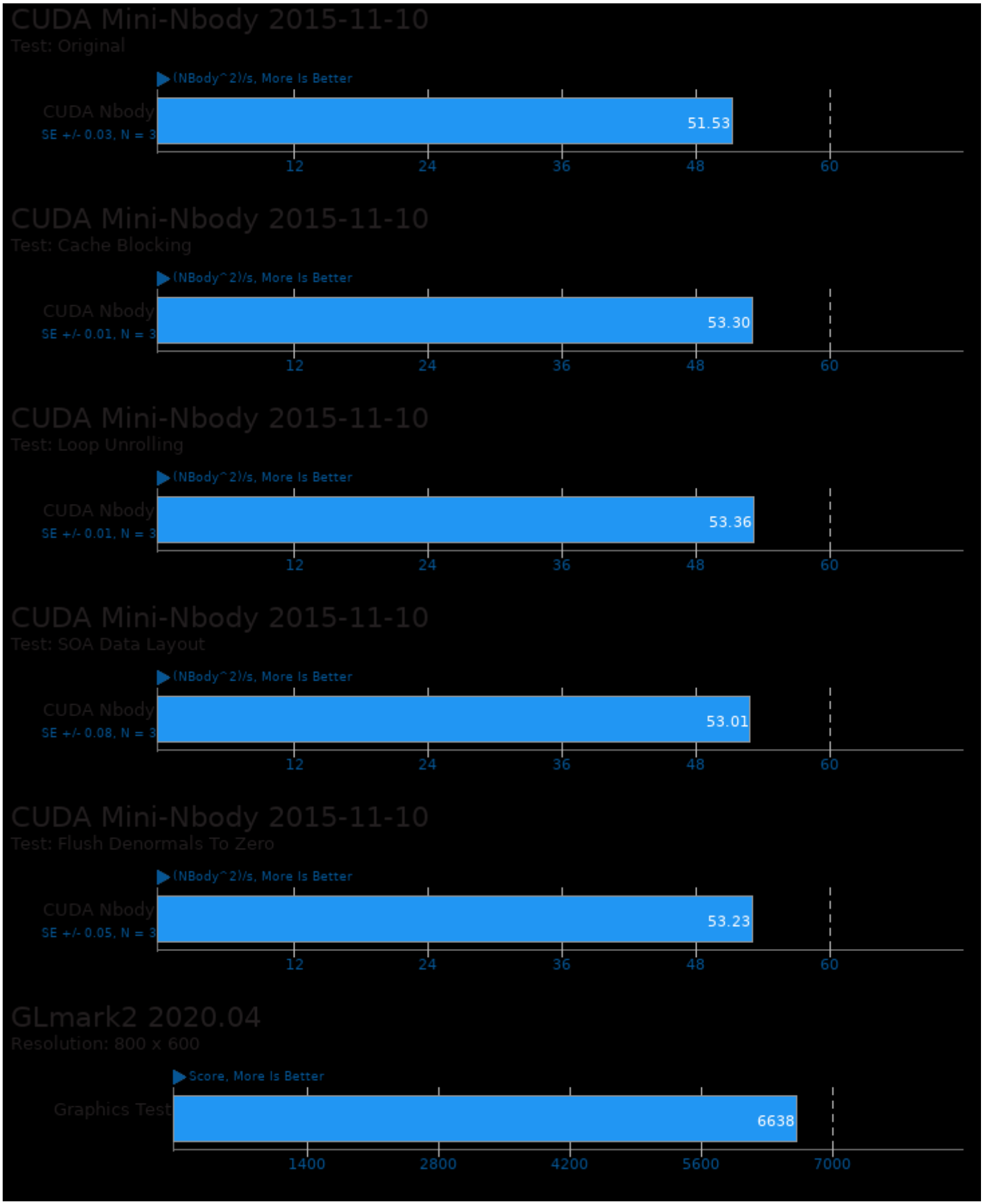
1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc

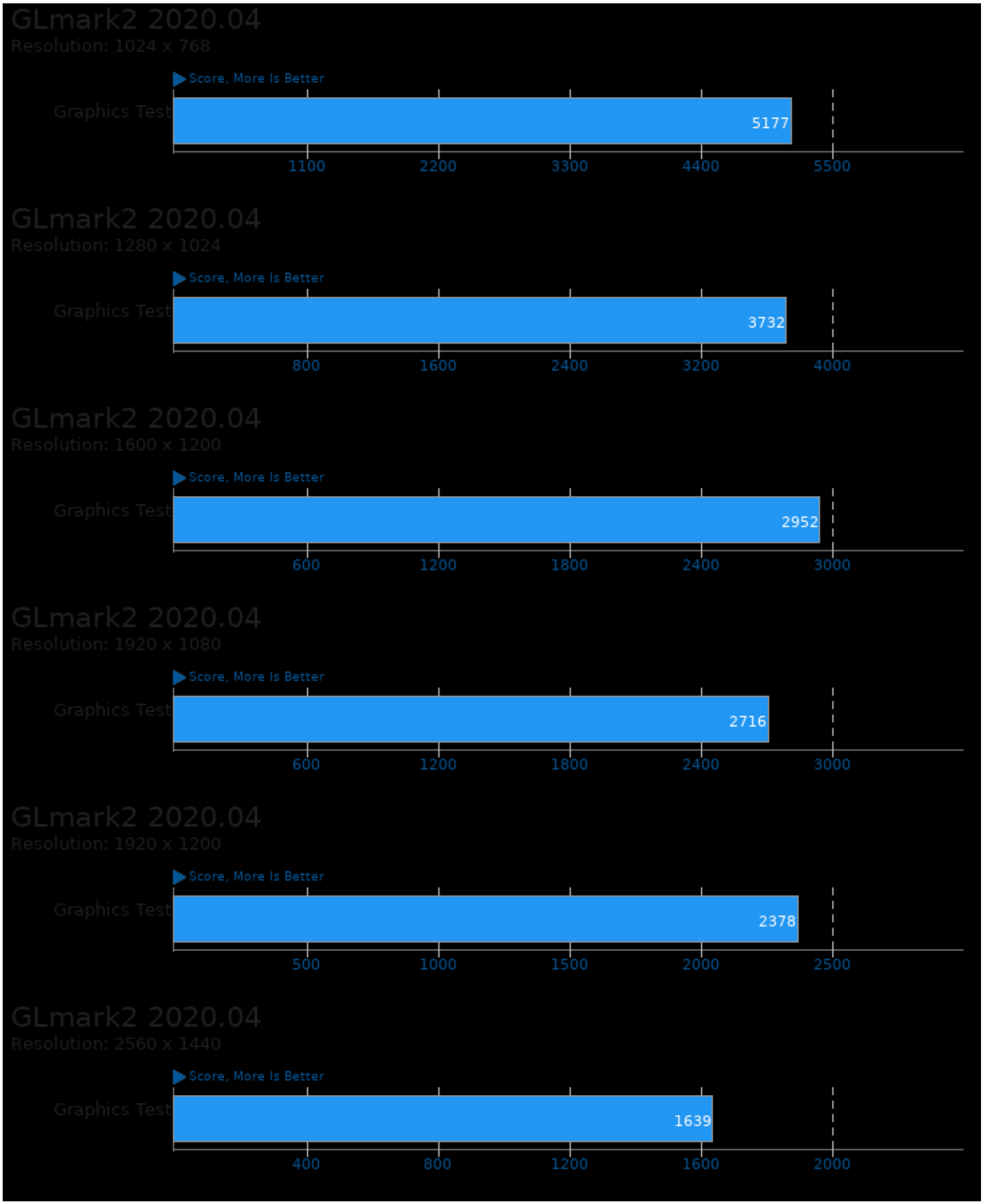
Stress-NG 0.11.07

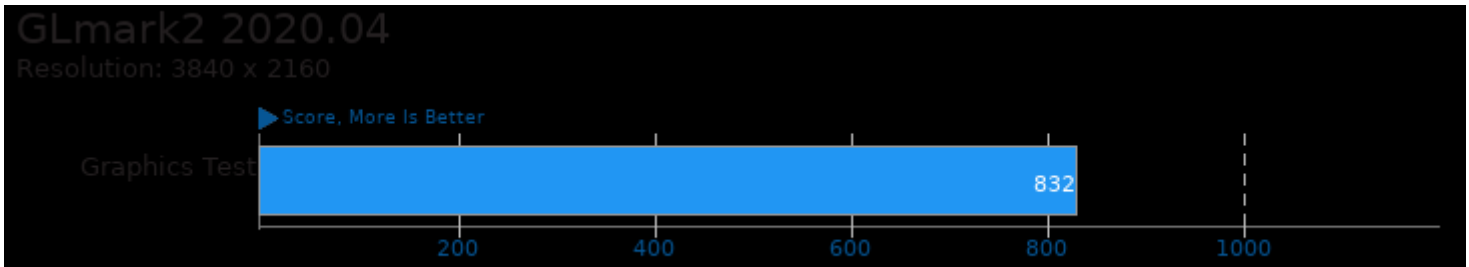
Test: Glibc Qsort Data Sorting

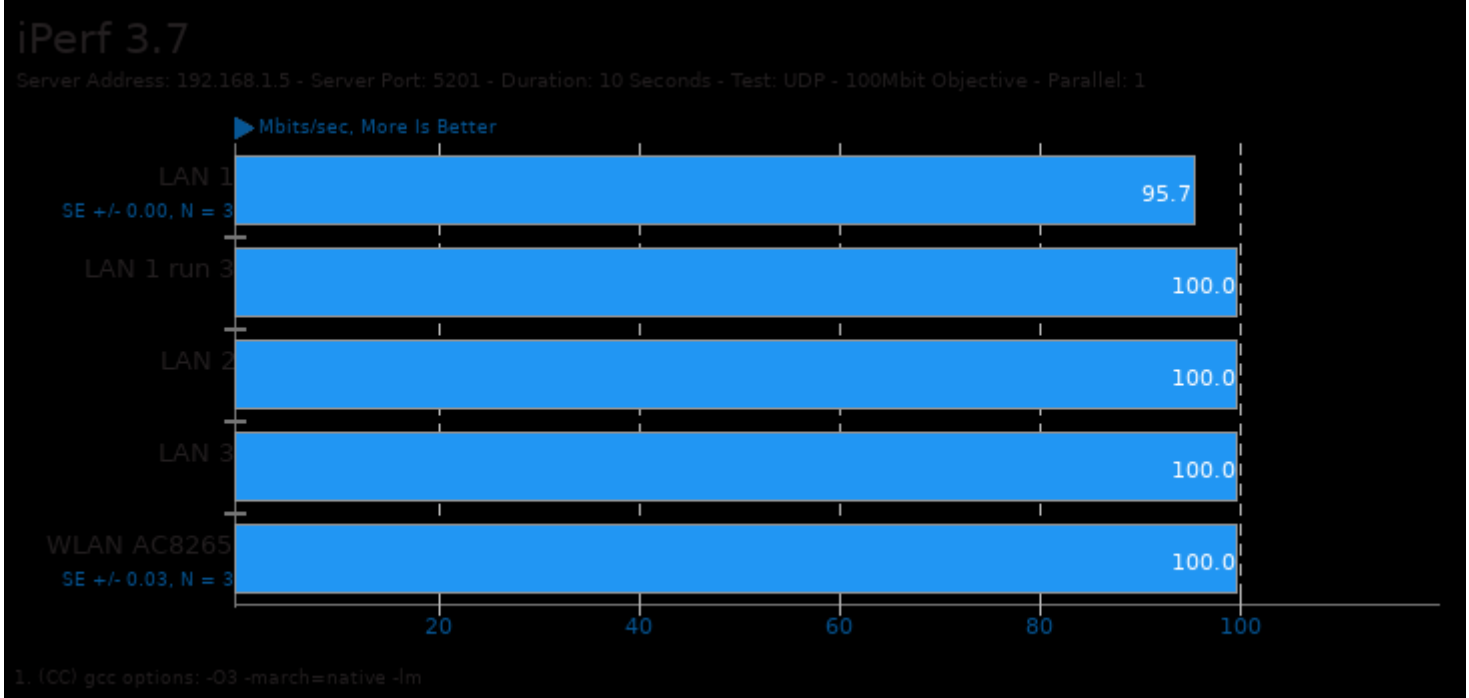


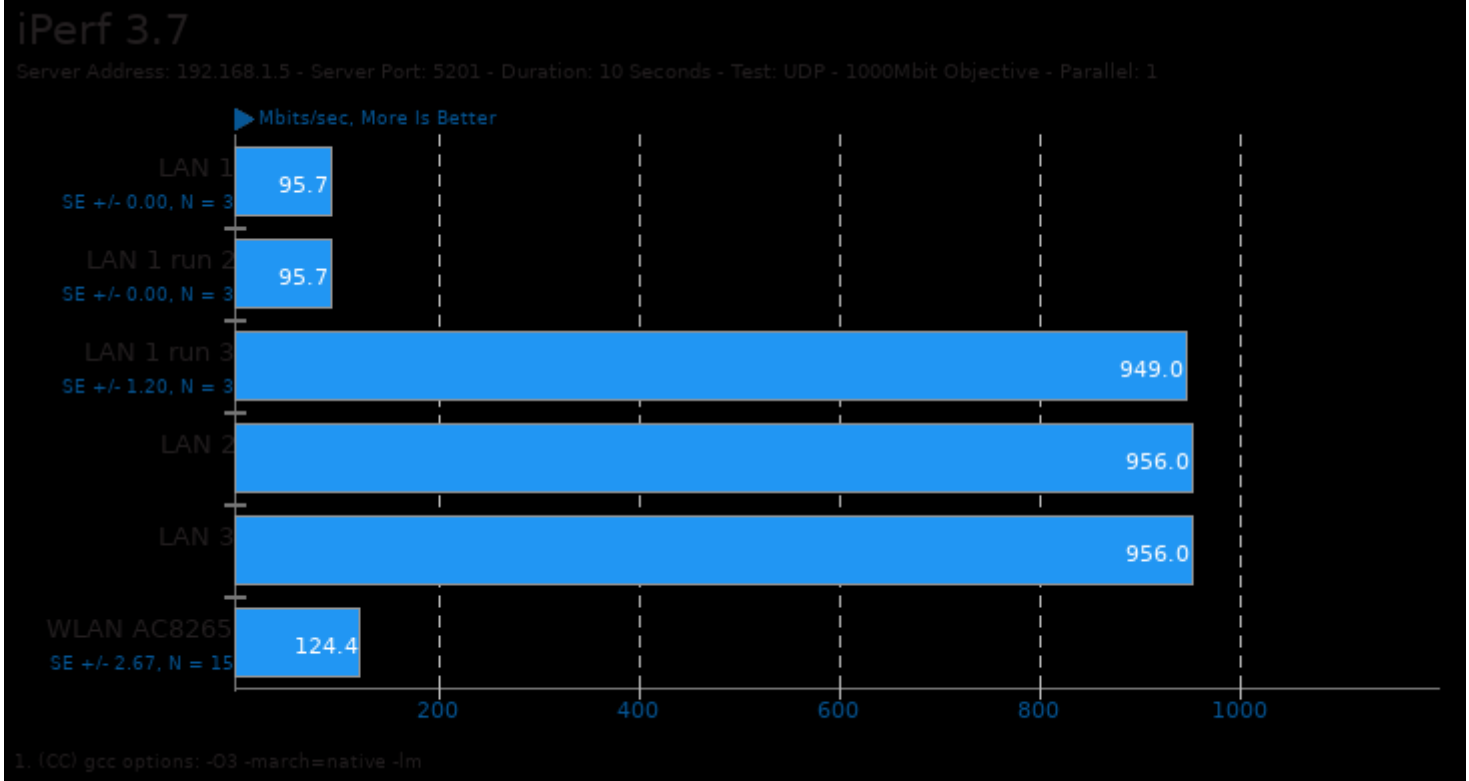
1. (CC) gcc options: -O2 -std=gnu99 -lm -laio -lcrypt -lrt -lz -ldl -lpthread -lc


CUDA Mini-Nbody 2015-11-10
Test: Original
(NBody^2)/s, More Is Better
CUDA Nbody
SE +/- 0.03, N = 3
51.53
12
24
36
48
60
CUDA Mini-Nbody 2015-11-10
Test: Cache Blocking
(NBody^2)/s, More Is Better
CUDA Nbody
SE +/- 0.01, N = 3
53.30
12
24
36
48
60
CUDA Mini-Nbody 2015-11-10
Test: Loop Unrolling
(NBody^2)/s, More Is Better
CUDA Nbody
SE +/- 0.01, N = 3
53.36
12
24
36
48
60
CUDA Mini-Nbody 2015-11-10
Test: SOA Data Layout
(NBody^2)/s, More Is Better
CUDA Nbody
SE +/- 0.08, N = 3
53.01
12
24
36
48
60
CUDA Mini-Nbody 2015-11-10
Test: Flush Denormals To Zero
(NBody^2)/s, More Is Better
CUDA Nbody
SE +/- 0.05, N = 3
53.23
12
24
36
48
60
GLmark2 2020.04
Resolution: 800 x 600
Score, More Is Better
Graphics Test
6638
1400
2800
4200
5600
7000


GLmark2 2020.04
Resolution: 1024 x 768
Score, More Is Better
Graphics Test
5177
1100
2200
3300
4400
5500
GLmark2 2020.04
Resolution: 1280 x 1024
Score, More Is Better
Graphics Test
3732
800
1600
2400
3200
4000
GLmark2 2020.04
Resolution: 1600 x 1200
Score, More Is Better
Graphics Test
2952
600
1200
1800
2400
3000
GLmark2 2020.04
Resolution: 1920 x 1080
Score, More Is Better
Graphics Test
2716
600
1200
1800
2400
3000
GLmark2 2020.04
Resolution: 1920 x 1200
Score, More Is Better
Graphics Test
2378
500
1000
1500
2000
2500
GLmark2 2020.04
Resolution: 2560 x 1440
Score, More Is Better
Graphics Test
1639
400
800
1200
1600
2000


GLmark2 2020.04
Resolution: 3840 x 2160
Score, More Is Better
Graphics Test
832
200
400
600
800
1000


iPerf 3.7
Server Address: 192.168.1.5 - Server Port: 5201 - Duration: 10 Seconds - Test: UDP - 100Mbit Objective - Parallel: 1
Mbits/sec, More Is Better
LAN 1
SE +/- 0.00, N = 3
95.7
LAN 1 run 3
100.0
LAN 2
100.0
LAN 3
100.0
WLAN AC8265
SE +/- 0.03, N = 3
100.0
20
40
60
80
100
1. (CC) gcc options: -O3 -march=native -lm


iPerf 3.7
Server Address: 192.168.1.5 - Server Port: 5201 - Duration: 10 Seconds - Test: UDP - 1000Mbit Objective - Parallel: 1
Mbits/sec, More Is Better
LAN 1
SE +/- 0.00, N = 3
95.7
LAN 1 run 2
SE +/- 0.00, N = 3
95.7
LAN 1 run 3
SE +/- 1.20, N = 3
949.0
LAN 2
956.0
LAN 3
956.0
WLAN AC8265
SE +/- 2.67, N = 15
124.4
200
400
600
800
1000
1. (CC) gcc options: -O3 -march=native -lm

This file was automatically generated via the Phoronix Test Suite benchmarking software on Wednesday, 15 January 2025 09:06.