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JS-E02_AX720_R32_3_1

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

Automated Executive Summary

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

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

Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory) at 567.322x
Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory) at 542.673x
Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 94.257x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 71.333x
Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 50.5x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 33.061x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk

Target: Default Test Directory) at 11.824x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory) at 11.809x
Stress-NG (Test: CPU Stress) at 1.017x
Stress-NG (Test: Forking) at 1.015x.

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, Display Driver: NVIDIA 1.0.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

USB3.0 Innodisk

USB2.0 Innodisk

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 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

mSATA Innodisk

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: 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

Digifusion M.2 SSD

Micro AB USB2.0_inno

Type C Digifusion

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: 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

Type C Digifusion run 2

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB PLEXTOR PX-256M9PeGN + 256GB Generic + 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

Type C DIGFAST

Type C DIGFAST run 2

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB PLEXTOR PX-256M9PeGN + 256GB Tech + 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

Type c USB3.0

CPU Stress

CPU Stress run

LPDDR4

CPU-7 Zip

CUDA Test

RS-232UART

Type C NST-205C3-SG

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB PLEXTOR PX-256M9PeGN + 62GB Dual Drive + 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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
Processor Notes: Scaling Governor: tegra_cpufreq schedutil

LAN 1

LAN 2

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB PLEXTOR PX-256M9PeGN + 250GB SSD 970 EVO + 16GB USB Drive 3ME + 31GB HBG4a2 + 15GB i-TF, 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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 3

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB PLEXTOR PX-256M9PeGN + 16GB USB Drive 3ME + 31GB HBG4a2 + 15GB i-TF, 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 32.3.1, OpenGL: 4.6.0, Vulkan: 1.1.85, Compiler: GCC 7.5.0 + CUDA 10.0, File-System: ext4, Screen Resolution: 1920x1080

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

	eMMC	USB3.0 Innodisk	USB2.0 Innodisk	SD Card innodisk	mSATA Innodisk	Digifusion M.2 SSD	Micro ABUSB2.0_inno	Type C Digifusion	Type C Digifusion run 2	Type C DIGFAST	Type C DIGFAST run 2	Type c USB3.0	CPU Stress	CPU Stress run	LPDDR4	CPU-7Zip	CUDA Test	RS-232 UART	Type C NST-205C3-SG	LAN 1	LAN 2	LAN 3
CUDA Mini-Nbody - Original ((NBody^2)/s)																	46.883					
Standard Deviation																	0.1%					
CUDA Mini-Nbody - Cache Blocking ((NBody^2)/s)																	55.558					
Standard Deviation																	0.4%					

CUDA Mini-Nbody - Loop Unrolling ((NBody			54.863
Standard Deviation			0%
CUDA Mini-Nbody - SOA Data Layout ((NBody ^2)/s)			47.752
Standard Deviation			0.1%
CUDA Mini-Nbody - F.D.T.Z ((NBody ^2)/s)			55.142
Standard Deviation			0.1%
Stress-NG - Forking (Bogo Ops/s)		**7153**	**7051**
Normalized		100%	98.56%
Standard Deviation		0.5%	0.4%
Stress-NG - CPU Stress (Bogo Ops/s)		**8860.60**	**9010.27**
Normalized		98.37%	100%
Standard Deviation		2.9%	0.1%

Stress-NG - Crypto (Bogo Ops/s)	121
	2
Standard Deviation	1.7%
Stress-NG - Matrix Math (Bogo	140
	12
Standard Deviation	0.3%
Stress-NG - Vector Math (Bogo Ops/s)	521
	80
Standard Deviation	0%
Stress-NG - Memory Copying (Bogo Ops/s)	325
	1
Standard Deviation	0.3%
Stress-NG - G.C.S.F (Bogo Ops/s)	226
	721
Standard Deviation	1.4%
Stress-NG - G.Q.D.S (Bogo Ops/s)	48.
	63
Standard Deviation	16.8
	%

JS-E02_AX720_R32_3_1

Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (IOPS)	243 40	249 67	724 2	142 00	497 33	**853 33**	**721 7**	987 8	781 00	775 33	782 00	283 67	796 33
Normalized	28.5 2%	29.2 6%	8.49 %	16.6 4%	58.2 8%	100 %	8.46 %	11.5 8%	91.5 2%	90.8 6%	91.6 4%	33.2 4%	93.3 2%
Standard Deviation	32%	0.6%	1.1%		0.8%	0.6%	0.4%	0.2%	0.5%	0.7%	0.5%	0.7%	0.8%
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (IOPS)	35	12	**3**	9	50	**214**	**3**	4	99	99	99	18	100
Normalized	16.3 6%	5.61 %	1.4%	4.21 %	23.3 6%	100 %	1.4%	1.87 %	46.2 6%	46.2 6%	46.2 6%	8.41 %	46.7 3%
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 4KB (IOPS)	207 67	632 0	639 9	559 4	218 67	683 00	643 2	999 0	**152**	717 00	720 67	556 6	**862 33**
Normalized	24.0 8%	7.33 %	7.42 %	6.49 %	25.3 6%	79.2 %	7.46 %	11.5 8%	0.18 %	83.1 5%	83.5 7%	6.45 %	100 %
Standard Deviation	0.3%	0.4%	1.2%	1.4%	0.3%	3%	1.2%	0.1%	60.6 %	0.1%	0.2%	11.3 %	0.1%

JS-E02_AX720_R32_3_1

Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (IOPS)	13	2	3	5	9	32	3	4	34	34	4		101
Normalized	12.8	1.98	2.97	4.95	8.91	31.6	2.97	3.96	33.6	33.6	3.96		100
Standard Deviation	7% 4.3%	%	%	%	%	8% 1.8%	%	%	6%	6% 1.7%	%		%
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (MB/s)	95.3	97.5	28.3	55.5	194	333	28.2	38.6	305	304	306	111	312
Normalized	28.6	29.2	8.5%	16.6	58.2	100	8.47	11.5	91.5	91.2	91.8	33.3	93.6
Standard Deviation	2% 31.9 %	8% 0.7%	1.2%	7% 0.1%	6% 1%	% 0.6%	% 0.4%	9% 0.3%	9% 0.4%	9% 0.4%	9% 0.5%	3% 0.9%	9% 0.5%
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (MB/s)	306	121	53.3	102	427	1739	52.6	63.3	822	818	818	169	827
Normalized	17.6	6.96	3.06	5.87	24.5	100	3.02	3.64	47.2	47.0	47.0	9.72	47.5
Standard Deviation	%	%	% 0.1%	%	5%	% 0.8%	% 1.3%	% 0.2%	7% 0.1%	4% 0.1%	4% 0.1%	%	6% 0.1%

JS-E02_AX720_R32_3_1

| | | |

iPerf - 192.168.1.2 - 5201 - 10 Seconds - UDP - 100Mbit Objective - 1 (Mbits/s)			100	100	100
iPerf - 192.168.1.2 - 5201 - 10 Seconds - UDP - 1000Mbit Objective - 1 (Mbits/s)			**951**	952	**956**
Normalized			99.4%	99.5%	100%
Standard Deviation			0.5%	0.5%	
7-Zip Compression - C.S.T (MIPS)	200	72			
Standard Deviation		3%			

Serial Loopback Test

/dev/ttyTHS0, /dev/ttyTHS1, /dev/ttyTHS4



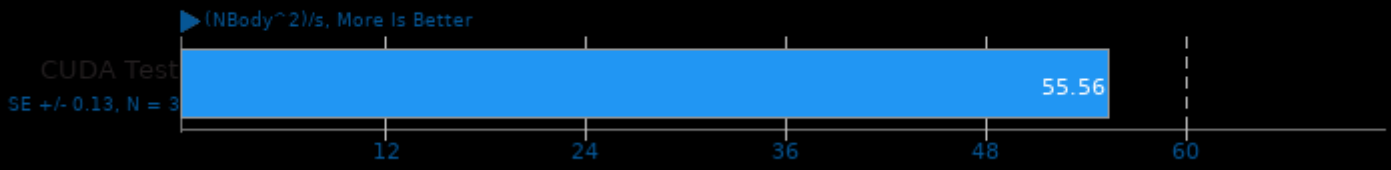
CUDA Mini-Nbody 2015-11-10

Test: Original



CUDA Mini-Nbody 2015-11-10

Test: Cache Blocking



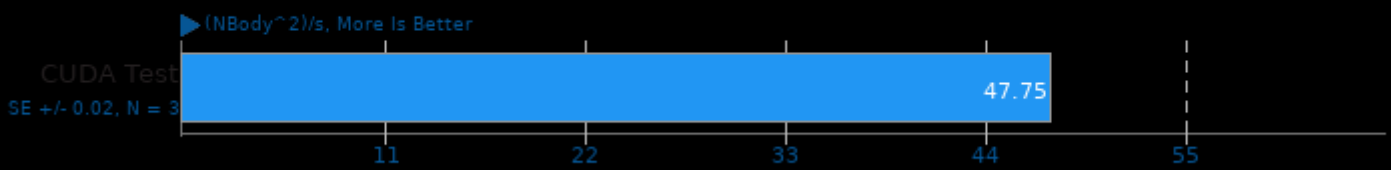
CUDA Mini-Nbody 2015-11-10

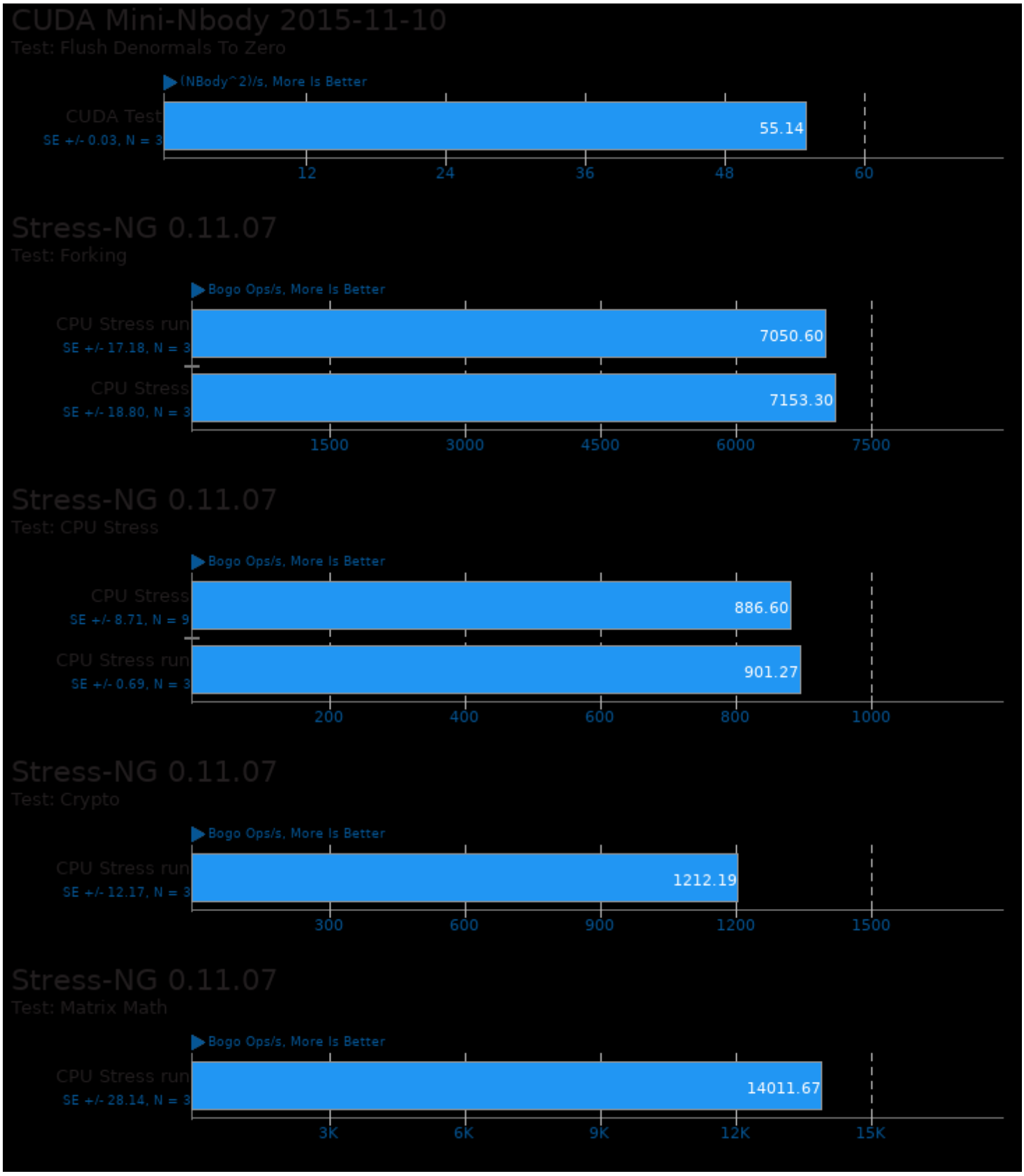
Test: Loop Unrolling

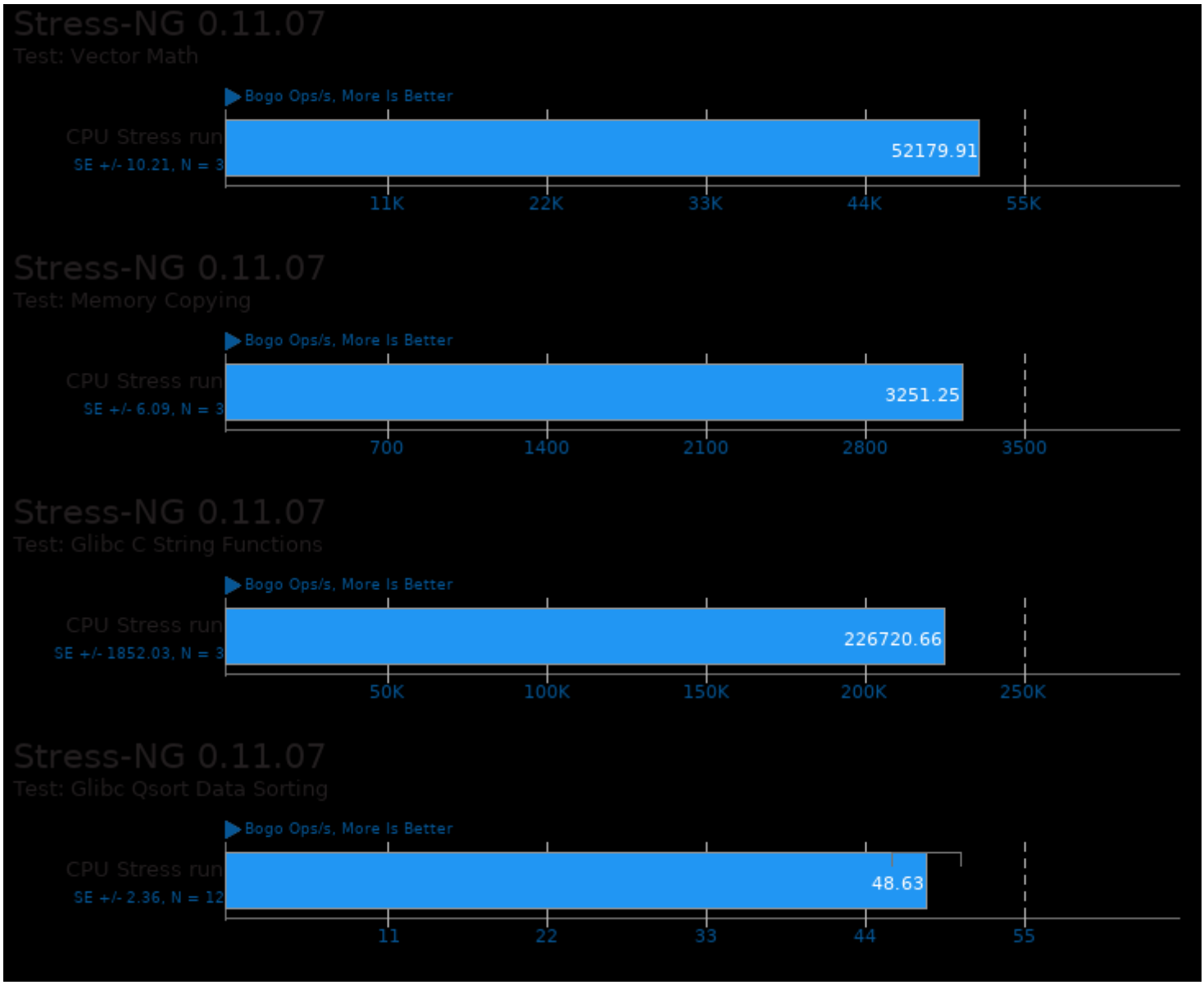


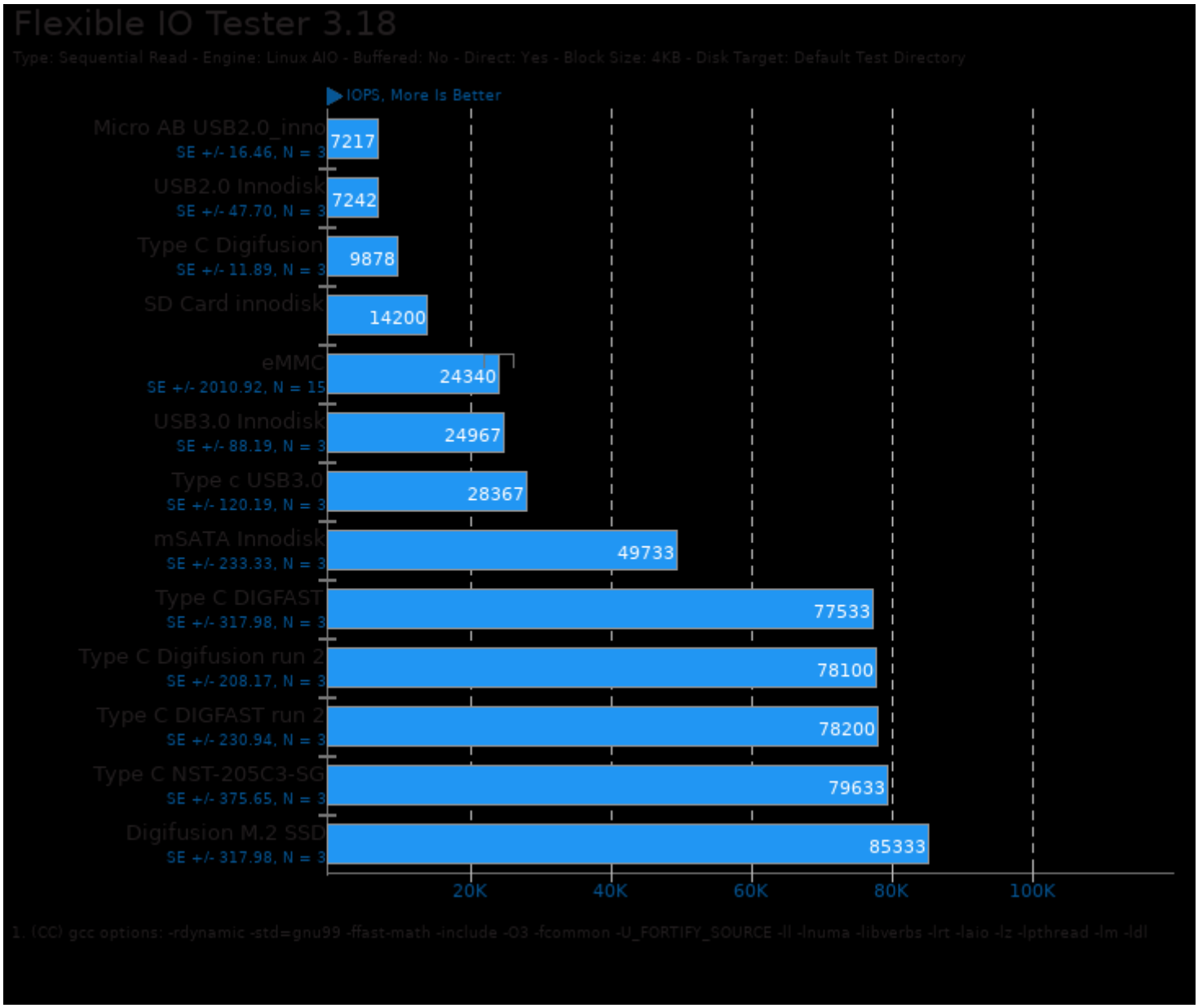
CUDA Mini-Nbody 2015-11-10

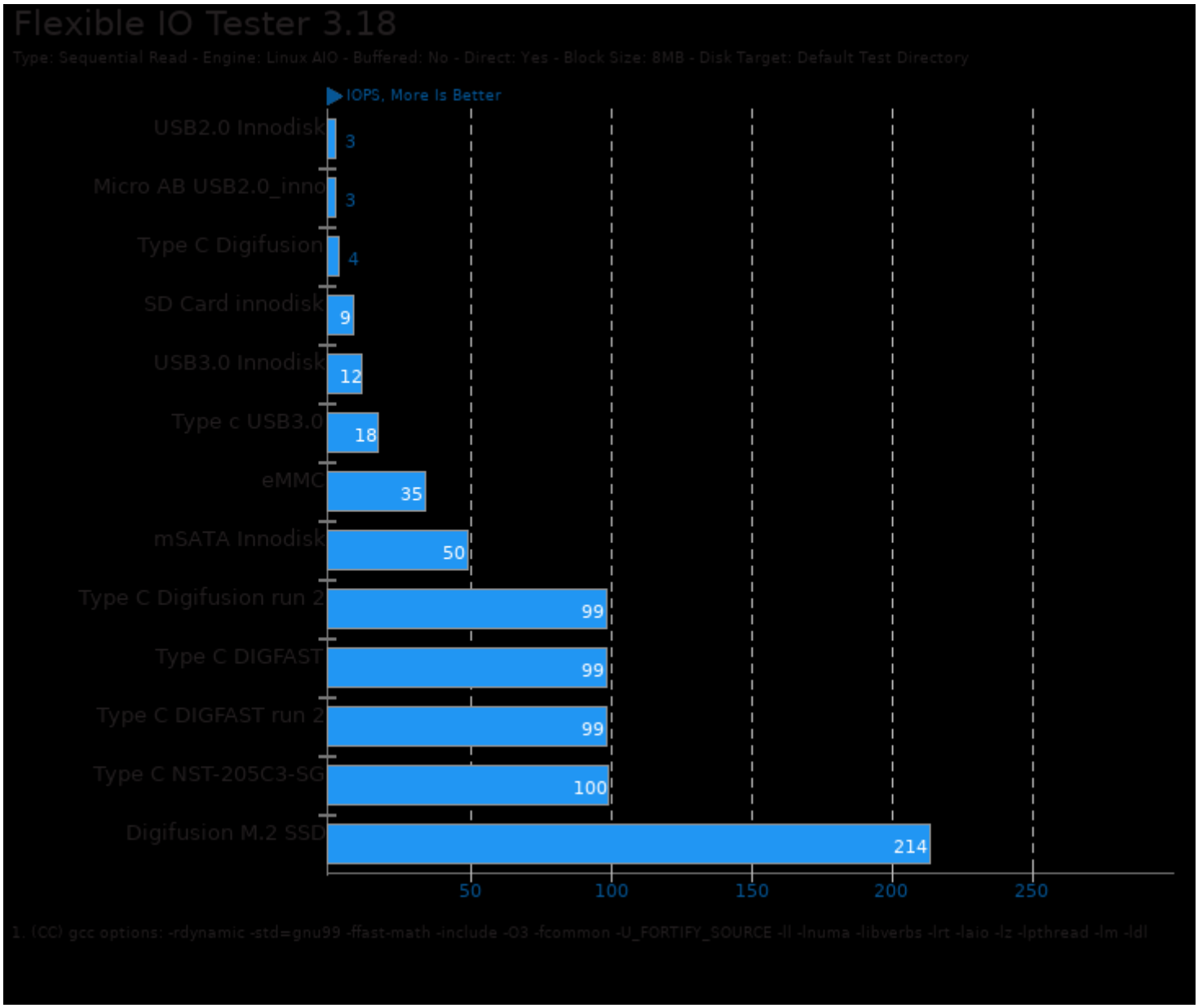
Test: SOA Data Layout

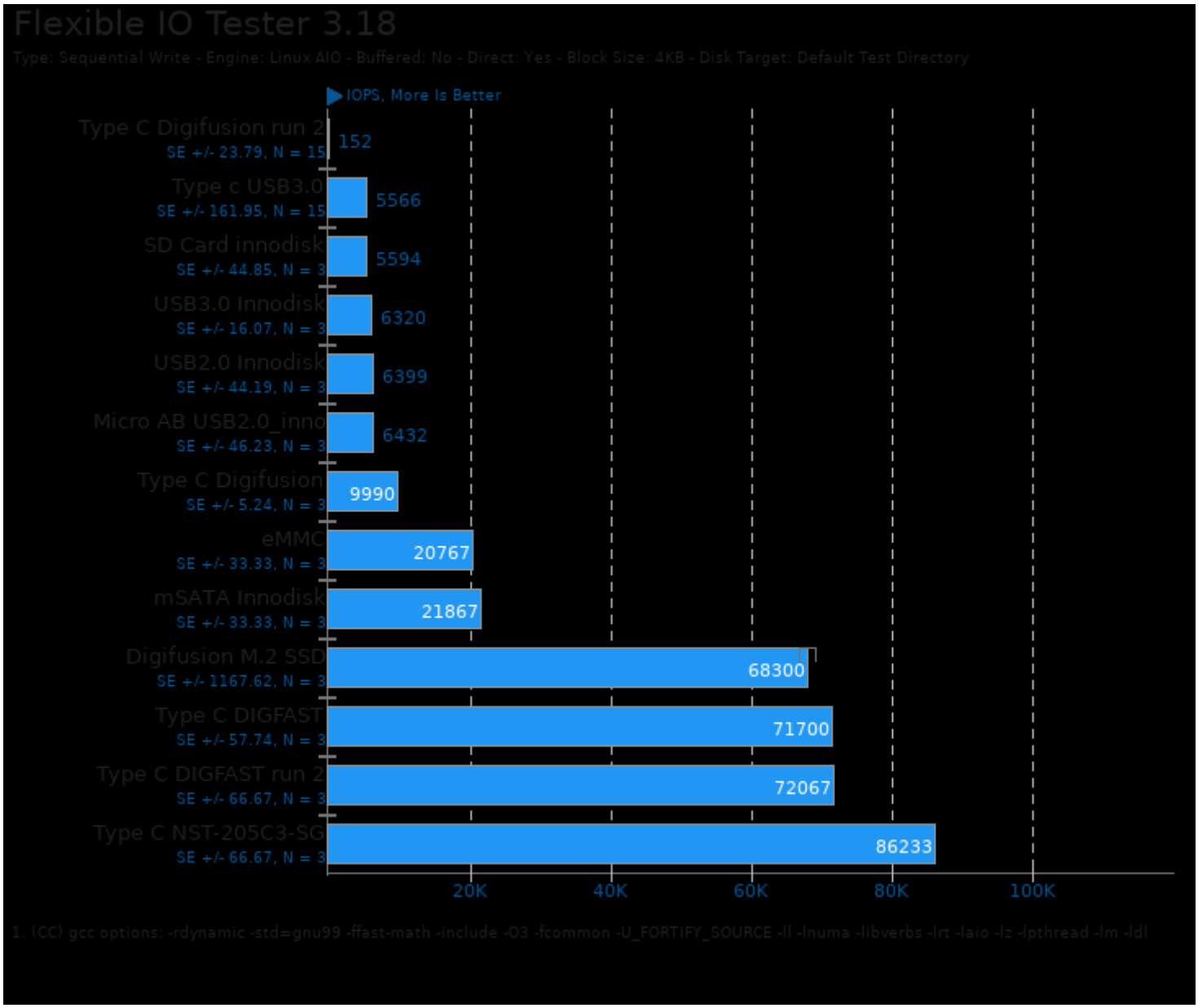


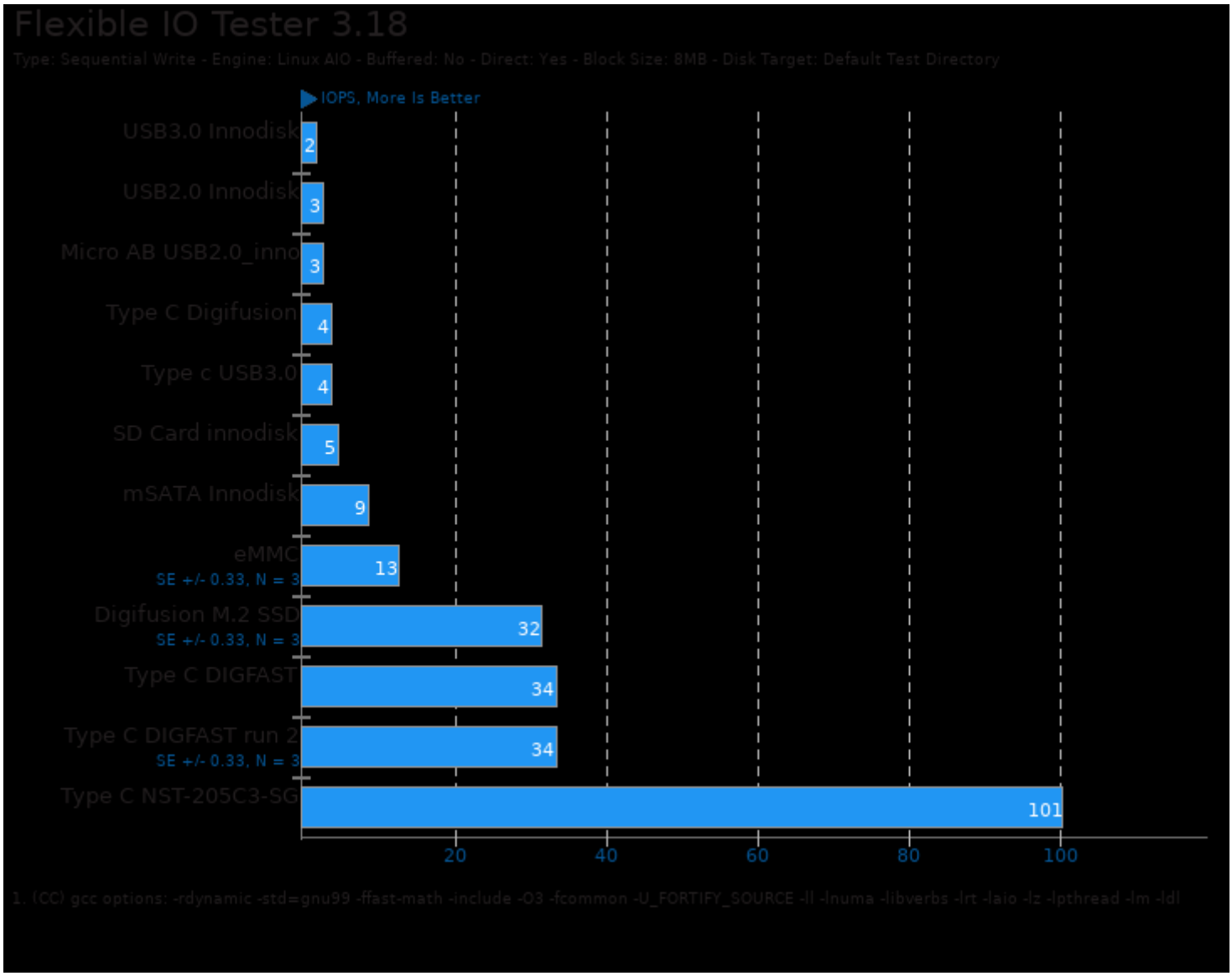

CUDA Mini-Nbody 2015-11-10
Test: Flush Denormals To Zero
(NBody^2)/s, More Is Better
CUDA Test
SE +/- 0.03, N = 3
55.14
12
24
36
48
60
Stress-NG 0.11.07
Test: Forking
Bogo Ops/s, More Is Better
CPU Stress run
SE +/- 17.18, N = 3
7050.60
CPU Stress
SE +/- 18.80, N = 3
7153.30
1500
3000
4500
6000
7500
Stress-NG 0.11.07
Test: CPU Stress
Bogo Ops/s, More Is Better
CPU Stress
SE +/- 8.71, N = 9
886.60
CPU Stress run
SE +/- 0.69, N = 3
901.27
200
400
600
800
1000
Stress-NG 0.11.07
Test: Crypto
Bogo Ops/s, More Is Better
CPU Stress run
SE +/- 12.17, N = 3
1212.19
300
600
900
1200
1500
Stress-NG 0.11.07
Test: Matrix Math
Bogo Ops/s, More Is Better
CPU Stress run
SE +/- 28.14, N = 3
14011.67
3K
6K
9K
12K
15K

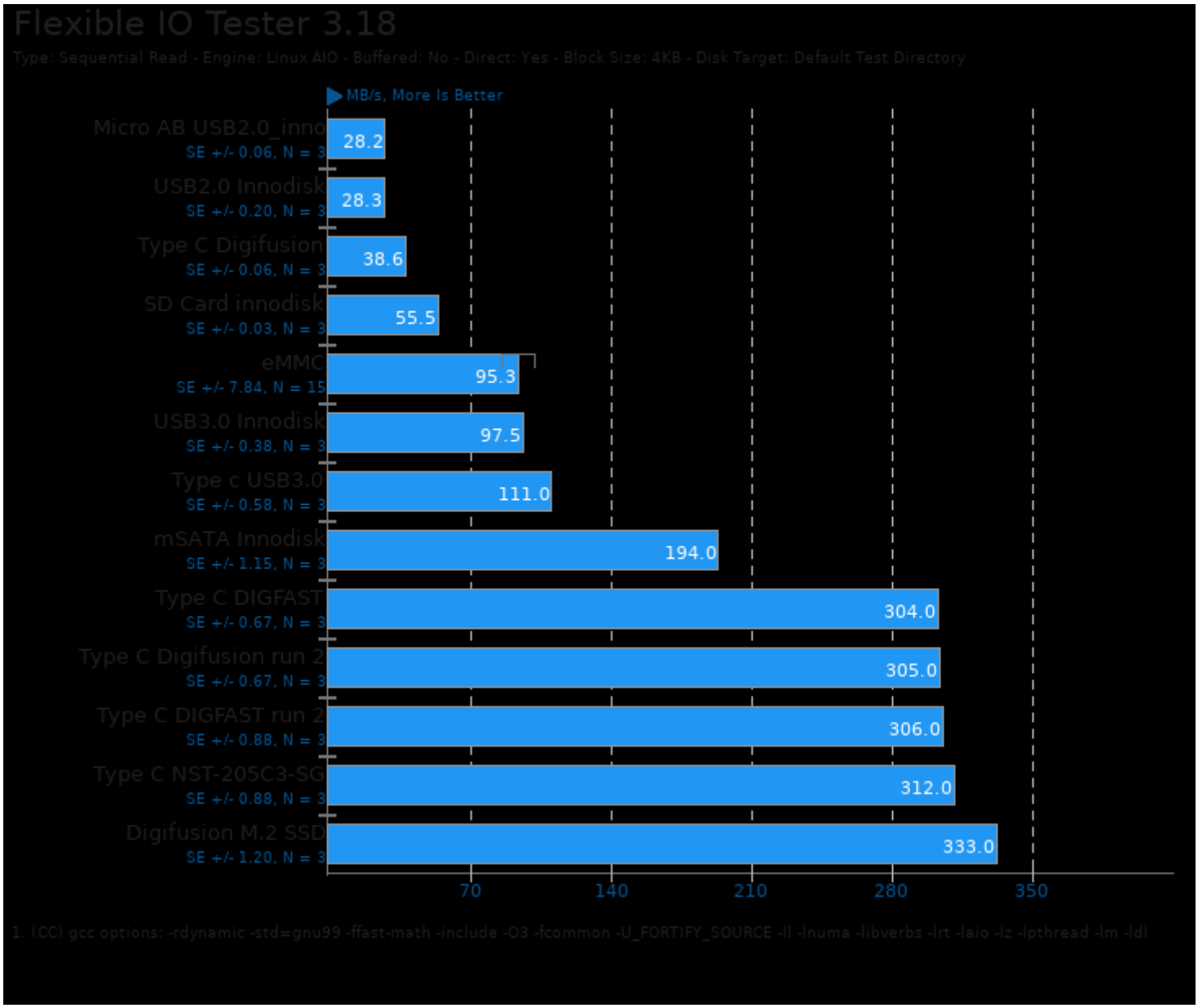

Stress-NG 0.11.07
Test: Vector Math
Bogo Ops/s, More Is Better
CPU Stress run
SE +/- 10.21, N = 3
52179.91
11K
22K
33K
44K
55K
Stress-NG 0.11.07
Test: Memory Copying
Bogo Ops/s, More Is Better
CPU Stress run
SE +/- 6.09, N = 3
3251.25
700
1400
2100
2800
3500
Stress-NG 0.11.07
Test: Glibc C String Functions
Bogo Ops/s, More Is Better
CPU Stress run
SE +/- 1852.03, N = 3
226720.66
50K
100K
150K
200K
250K
Stress-NG 0.11.07
Test: Glibc Qsort Data Sorting
Bogo Ops/s, More Is Better
CPU Stress run
SE +/- 2.36, N = 12
48.63
11
22
33
44
55

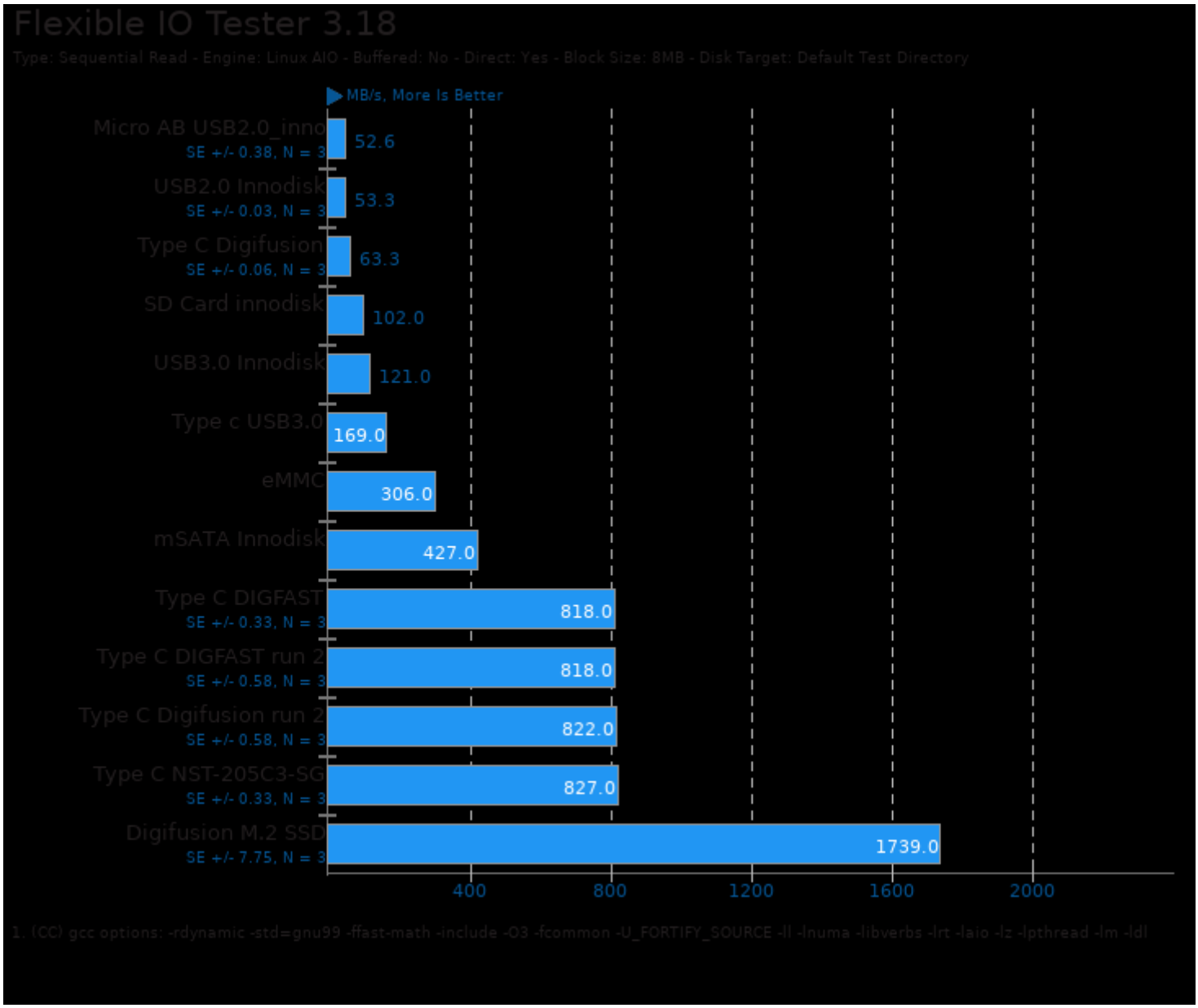

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Micro AB USB2.0_inno
SE +/- 16.46, N = 3
7217
USB2.0 Innodisk
SE +/- 47.70, N = 3
7242
Type C Digifusion
SE +/- 11.89, N = 3
9878
SD Card innodisk
14200
eMMC
SE +/- 2010.92, N = 15
24340
USB3.0 Innodisk
SE +/- 88.19, N = 3
24967
Type c USB3.0
SE +/- 120.19, N = 3
28367
mSATA Innodisk
SE +/- 233.33, N = 3
49733
Type C DIGFAST
SE +/- 317.98, N = 3
77533
Type C Digifusion run 2
SE +/- 208.17, N = 3
78100
Type C DIGFAST run 2
SE +/- 230.94, N = 3
78200
Type C NST-205C3-SG
SE +/- 375.65, N = 3
79633
Digifusion M.2 SSD
SE +/- 317.98, N = 3
85333
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -ll -lnuma -libverbs -lrt -laio -lz -lpthread -lm -ldl

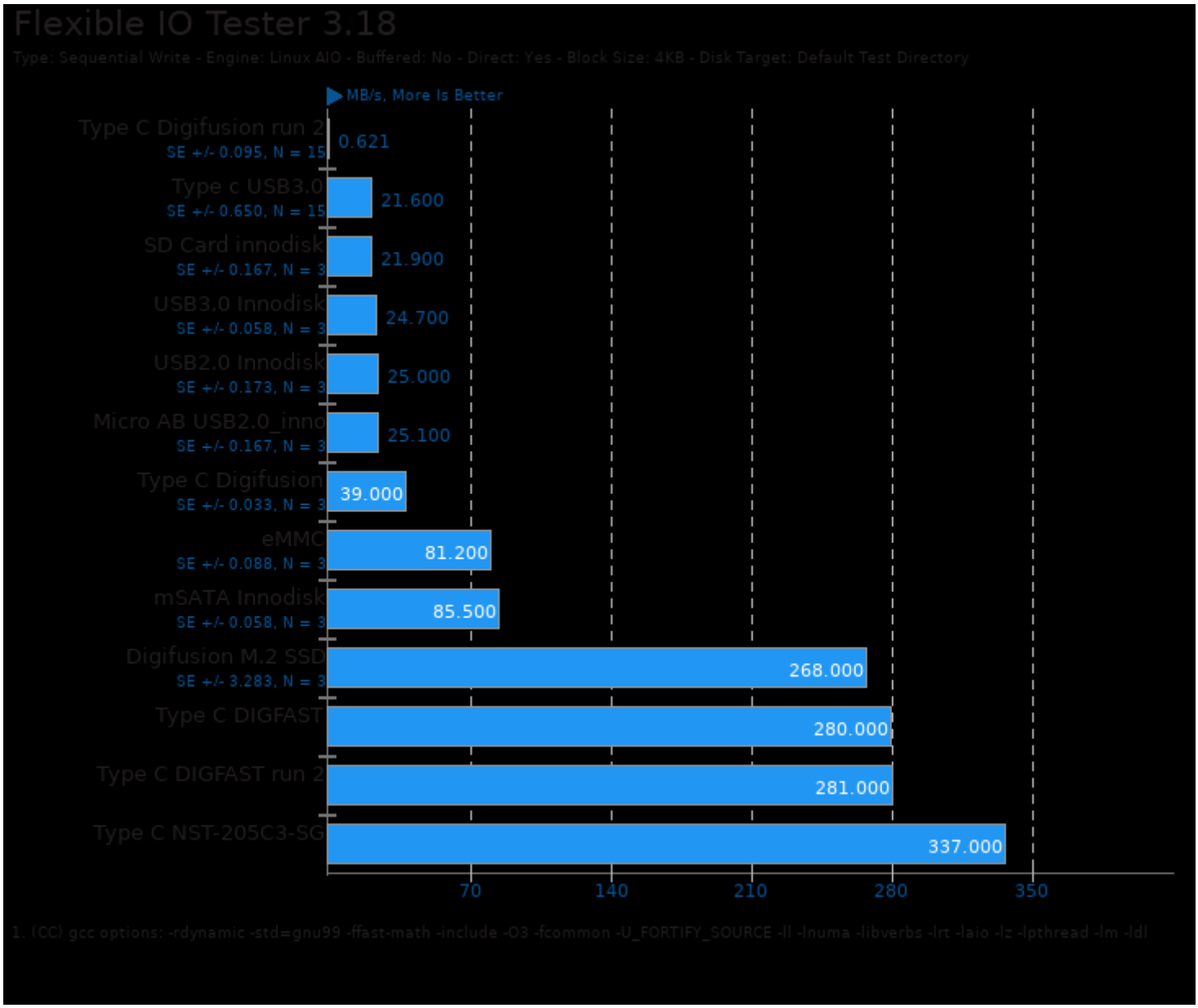

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
USB2.0 Innodisk
3
Micro AB USB2.0_inno
3
Type C Digifusion
4
SD Card innodisk
9
USB3.0 Innodisk
12
Type c USB3.0
18
eMMC
35
mSATA Innodisk
50
Type C Digifusion run 2
99
Type C DIGFAST
99
Type C DIGFAST run 2
99
Type C NST-205C3-SG
100
Digifusion M.2 SSD
214
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -ll -lnuma -libverbs -lrt -laio -lz -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Type C Digifusion run 2
SE +/- 23.79, N = 15
152
Type c USB3.0
SE +/- 161.95, N = 15
5566
SD Card innodisk
SE +/- 44.85, N = 3
5594
USB3.0 Innodisk
SE +/- 16.07, N = 3
6320
USB2.0 Innodisk
SE +/- 44.19, N = 3
6399
Micro AB USB2.0_inno
SE +/- 46.23, N = 3
6432
Type C Digifusion
SE +/- 5.24, N = 3
9990
eMMC
SE +/- 33.33, N = 3
20767
mSATA Innodisk
SE +/- 33.33, N = 3
21867
Digifusion M.2 SSD
SE +/- 1167.62, N = 3
68300
Type C DIGFAST
SE +/- 57.74, N = 3
71700
Type C DIGFAST run 2
SE +/- 66.67, N = 3
72067
Type C NST-205C3-SG
SE +/- 66.67, N = 3
86233
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -ll -lnuma -libverbs -lrt -laio -lz -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
USB3.0 Innodisk
2
USB2.0 Innodisk
3
Micro AB USB2.0_inno
3
Type C Digifusion
4
Type c USB3.0
4
SD Card innodisk
5
mSATA Innodisk
9
eMMC
SE +/- 0.33, N = 3
13
Digifusion M.2 SSD
SE +/- 0.33, N = 3
32
Type C DIGFAST
34
Type C DIGFAST run 2
SE +/- 0.33, N = 3
34
Type C NST-205C3-SG
101
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -ll -lnuma -libverbs -lrt -laio -lz -lpthread -lm -ldl

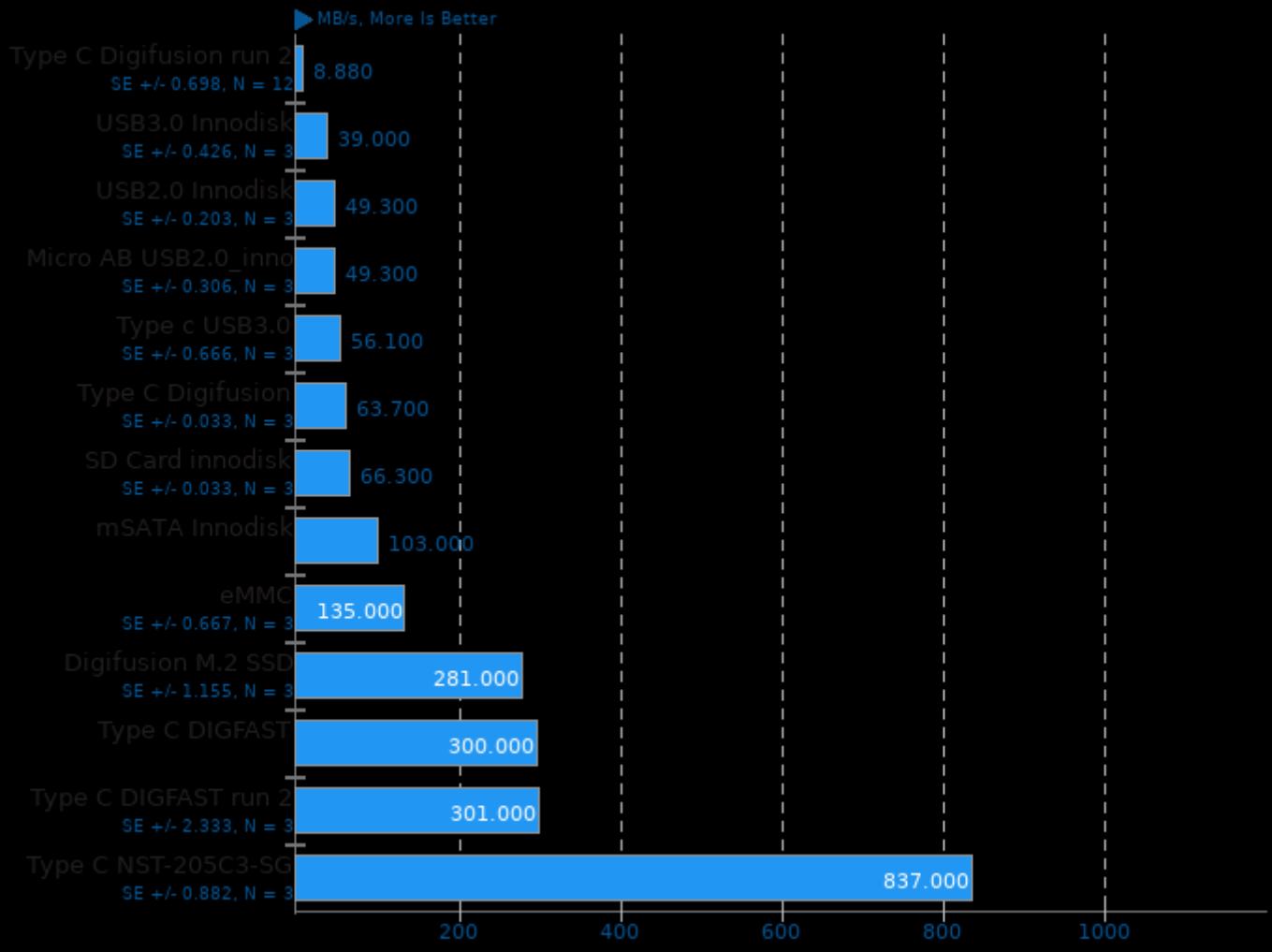

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Micro AB USB2.0_inno
SE +/- 0.06, N = 3
28.2
USB2.0 Innodisk
SE +/- 0.20, N = 3
28.3
Type C Digifusion
SE +/- 0.06, N = 3
38.6
SD Card innodisk
SE +/- 0.03, N = 3
55.5
eMMC
SE +/- 7.84, N = 15
95.3
USB3.0 Innodisk
SE +/- 0.38, N = 3
97.5
Type c USB3.0
SE +/- 0.58, N = 3
111.0
mSATA Innodisk
SE +/- 1.15, N = 3
194.0
Type C DIGFAST
SE +/- 0.67, N = 3
304.0
Type C Digifusion run 2
SE +/- 0.67, N = 3
305.0
Type C DIGFAST run 2
SE +/- 0.88, N = 3
306.0
Type C NST-205C3-SG
SE +/- 0.88, N = 3
312.0
Digifusion M.2 SSD
SE +/- 1.20, N = 3
333.0
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -ll -lnuma -libverbs -lrt -laio -lz -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Micro AB USB2.0_inno
SE +/- 0.38, N = 3
52.6
USB2.0 Innodisk
SE +/- 0.03, N = 3
53.3
Type C Digifusion
SE +/- 0.06, N = 3
63.3
SD Card innodisk
102.0
USB3.0 Innodisk
121.0
Type c USB3.0
169.0
eMMC
306.0
mSATA Innodisk
427.0
Type C DIGFAST
SE +/- 0.33, N = 3
818.0
Type C DIGFAST run 2
SE +/- 0.58, N = 3
818.0
Type C Digifusion run 2
SE +/- 0.58, N = 3
822.0
Type C NST-205C3-SG
SE +/- 0.33, N = 3
827.0
Digifusion M.2 SSD
SE +/- 7.75, N = 3
1739.0
400
800
1200
1600
2000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -ll -lnuma -libverbs -lrt -laio -lz -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Type C Digifusion run 2
SE +/- 0.095, N = 15
0.621
Type c USB3.0
SE +/- 0.650, N = 15
21.600
SD Card innodisk
SE +/- 0.167, N = 3
21.900
USB3.0 Innodisk
SE +/- 0.058, N = 3
24.700
USB2.0 Innodisk
SE +/- 0.173, N = 3
25.000
Micro AB USB2.0_inno
SE +/- 0.167, N = 3
25.100
Type C Digifusion
SE +/- 0.033, N = 3
39.000
eMMC
SE +/- 0.088, N = 3
81.200
mSATA Innodisk
SE +/- 0.058, N = 3
85.500
Digifusion M.2 SSD
SE +/- 3.283, N = 3
268.000
Type C DIGFAST
280.000
Type C DIGFAST run 2
281.000
Type C NST-205C3-SG
337.000
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -ll -lnuma -libverbs -lrt -laio -lz -lpthread -lm -ldl

Flexible IO Tester 3.18

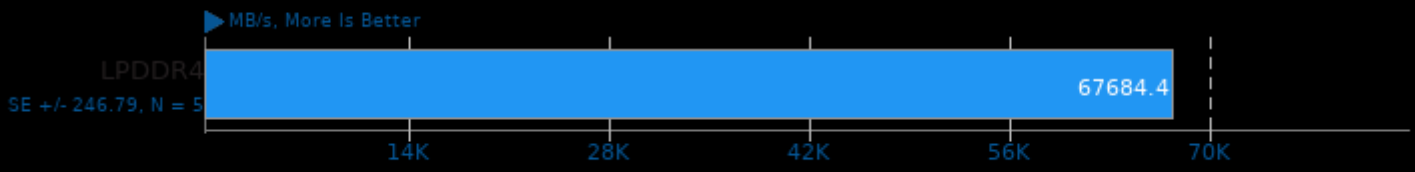
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory



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

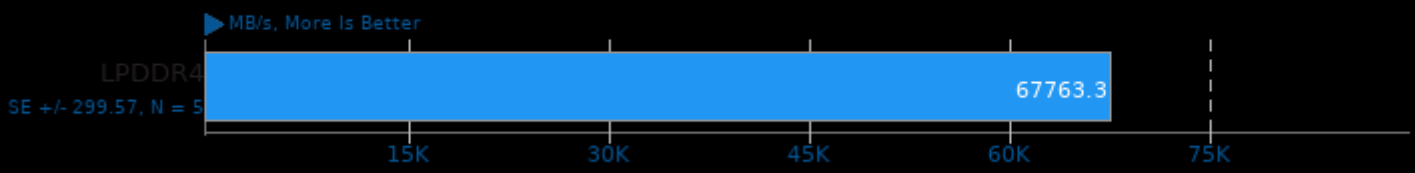
Stream 2013-01-17

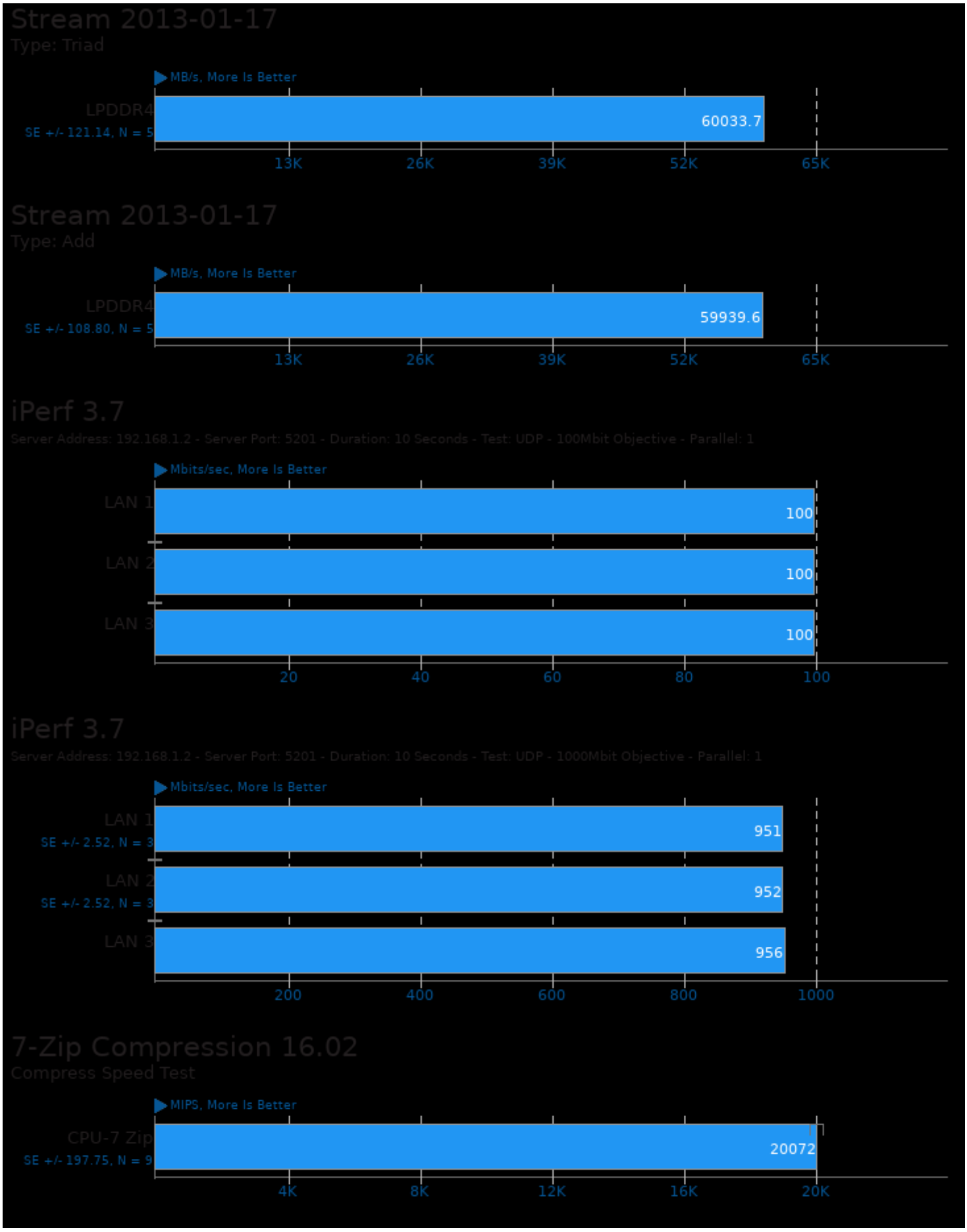
Type: Copy



Stream 2013-01-17

Type: Scale




Stream 2013-01-17
Type: Triad
MB/s, More Is Better
LPDDR4
SE +/- 121.14, N = 5
60033.7
13K
26K
39K
52K
65K
Stream 2013-01-17
Type: Add
MB/s, More Is Better
LPDDR4
SE +/- 108.80, N = 5
59939.6
13K
26K
39K
52K
65K
iPerf 3.7
Server Address: 192.168.1.2 - Server Port: 5201 - Duration: 10 Seconds - Test: UDP - 100Mbit Objective - Parallel: 1
Mbits/sec, More Is Better
LAN 1
100
LAN 2
100
LAN 3
100
20
40
60
80
100
iPerf 3.7
Server Address: 192.168.1.2 - Server Port: 5201 - Duration: 10 Seconds - Test: UDP - 1000Mbit Objective - Parallel: 1
Mbits/sec, More Is Better
LAN 1
SE +/- 2.52, N = 3
951
LAN 2
SE +/- 2.52, N = 3
952
LAN 3
956
200
400
600
800
1000
7-Zip Compression 16.02
Compress Speed Test
MIPS, More Is Better
CPU-7 Zip
SE +/- 197.75, N = 9
20072
4K
8K
12K
16K
20K

JS-E02_AX720_R32_3_1

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 06:10.