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# Xavier_012_32_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**

*SSD_760PJ517 had the most wins, coming in first place for 37% of the tests.*

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

*Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 77.25x*
*Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 70x*
*Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 39.777x*
*Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 29.87x*
*Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory) at 13.291x*
*Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory) at 13.279x*
*Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk*

*Target: Default Test Directory) at 1x*
*Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory) at 1x*
*Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory) at 1x*
*Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory) at 1x.*

# Test Systems:

## eMMC

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 16GB USB Drive 3ME + 31GB HBG4a2, Graphics: NVIDIA TEGRA, Monitor: PHL 247E6

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

## USB 3.0 Inno disk

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 16GB USB Drive 3ME + 31GB HBG4a2, Graphics: NVIDIA TEGRA, Monitor: PHL 247E6

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, 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

## Type_C 583

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 31GB HBG4a2, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## Type_c 583

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB + 31GB HBG4a2, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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: fuseblk, 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

## Type_C 583 Run3

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB + 31GB HBG4a2, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## Type_C 583 Run4

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB Generic + 31GB HBG4a2, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## USB 2.0_inno disk

## SD Card Innodisk

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 8GB USB Drive 2SE +

31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## SSD_760P J517

## SSD_760P J1

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB INTEL SSDPEKKW256G8 + 8GB USB Drive 2SE + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## SSD_760PJ517

## SSD_760PJ517 run2

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB INTEL SSDPEKKW256G8 + 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## SSD_PX2569M9PJ517

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB PLEXTOR PX-256M9PeGN + 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## SSD_760PJ517run 5

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB INTEL SSDPEKKW256G8 + 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## SSD_760PJ1

## SSD_760PJ1run 2

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB INTEL SSDPEKKW256G8 + 8GB USB Drive 2SE + 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## SSD_760PJ1run 3

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB INTEL SSDPEKKW256G8 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## Inno_S80_mSATA J1

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

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

## CPU Stress

## LPDDR4

## GPU Stress

## CPU_7ZIP

## CUDA-Mini-nbody

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB INTEL SSDPEKKW256G8 + 256GB PLEXTOR PX-256M9PeGN + 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## CPU-TTSIOD

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB INTEL SSDPEKKW256G8 + 256GB PLEXTOR PX-256M9PeGN + 16GB USB Drive 3ME + 62GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## Type_C SANDISK SDDDC2

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 62GB Ultra USB 3.0 + 31GB Ultra USB 3.0 + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

## Type_C 583 run5

## Type_C 593 Run 6

## Type_C 583 run 6

Processor: ARMv8 rev 0 @ 2.27GHz (8 Cores), Motherboard: Jetson-AGX, Memory: 16GB, Disk: 256GB + 31GB HBG4a2 + 15GB i-TF, Graphics: NVIDIA Tegra Xavier, Monitor: PHL 247E6

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

# Xavier_012_32_3_1

| | eMMC | USB 3.0 Inno disk | Type_C583 | Type_c583 | Type_C583 Run 3 | Type_C583 Run 4 | USB 2.0_inno disk | SDCard Inno disk | SSD_760PJ517 | SSD_760PJ517 | SSD_760PJ517 | SSD_760PJ517 run2 | SSD_PX2569M 9PJ517 | SSD_760PJ517run5 | SSD_760PJ1 | SSD_760PJ1run2 | SSD_760PJ1run3 | Inno_S80_mSATAJ1 | CPU Stress | LPDDR4 | GPU Stress | CPU_ZIP | CUDA-Mini-nbody | CPU-TTSIOD | Type_CSANDISKSDDDC2 | Type_C583 run5 | Type_C593 Run 6 | Type_C583 run6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (MB/s)** | 98.0 | 97.7 | | 152 | **27.9** | 96.4 | 98.3 | 96.9 | 94.9 | 97.1 | 35 5 | 97.9 | 344 | 364 | 373 | **383** | 372 | 200 | | | | | | | 127 | | | |
| **Normalized** | 25.59% | 25.51% | | 39.69% | 7.28% | 25.17% | 25.67% | 25.3% | 24.78% | 25.35% | 92.69% | 25.56% | 89.82% | 95.04% | 97.39% | 100% | 97.13% | 52.22% | | | | | | | 33.16% | | |
| **Standard Deviation** | 28.7% | 0.2% | | 2.8% | 0.2% | 28.1% | 26% | 20.4% | 24.9% | 30.1% | 1.3% | 30.5% | 2.9% | 0.9% | 1% | 2.7% | 3% | 1.3% | | | | | | | | | | |

# Xavier_012_32_3_1

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (IOPS)** | 25 | 24 | 38 | **71** | 24 | 25 | 24 | 24 | 24 | 90 | 24 | 88 | 92 | 95 | **97** | 95 | 51 | 32 | |
| | 09 | 66 | 92 | **52** | 58 | 17 | 83 | 19 | 79 | 60 | 87 | 00 | 96 | 50 | **90** | 27 | 23 | 56 | |
| | 3 | 7 | 5 | | 0 | 3 | 3 | 3 | 3 | 0 | 3 | 0 | 7 | 0 | **0** | 1 | 3 | 7 | |
| **Normalized** | 25.63 | 25.2% | 39.76 | 7.3% | 25.11 | 25.71 | 25.37 | 24.71 | 25.32 | 92.54 | 25.41 | 89.89 | 94.96 | 97.55 | 10 0% | 97.31 | 52.33 | 33.27 | |
| **Standard Deviation** | 28.6% | 2.3% | 3% | 0.2% | 28% | 25.9% | 20.5% | 25.3% | 30.2% | 1% | 30.6% | 3% | 1.3% | 0.9% | 2.5% | 3.1% | 1.3% | 0.2% | |
| **Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (MB/s)** | 30 | 12 | 23 | **62** | 31 | 29 | 30 | 30 | 30 | **25** | 30 | 20 | 25 | 15 | 15 | 15 | 42 | 18 | 10 |
| | 0 | 2 | 87 | **.9** | 1 | 7 | 7 | 4 | 9 | **02** | 5 | 40 | 00 | 54 | 53 | 54 | 7 | 3 | 12 |
| **Normalized** | 11.99 | 4.8% | 95.4% | 2.5% | 12.43 | 11.87 | 12.27 | 12.15 | 12.35 | 10 0% | 12.19 | 81.53 | 99.92 | 62.11 | 62.07 | 62.11 | 17.07 | 7.3 1% | 40.45 |
| **Standard Deviation** | 0.8% | 0.5% | 0.8% | 0% | | 0.6% | | | | 0.1% | 0.7% | | 0.2% | 0.4% | 0.2% | 0.4% | | | 0.1% |

# Xavier_012_32_3_1

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (IOPS)** | 34 | 12 | 295 | 4 | 35 | 34 | 35 | 34 | 35 | 309 | 35 | 251 | 309 | 191 | 191 | 191 | 50 | 19 | 123 |
| **Normalized** | 11.8% | 3.8% | 95.47% | 1.29% | 11.33% | 11% | 11.33% | 11% | 11.33% | 100% | 11.33% | 81.23% | 100% | 61.81% | 61.81% | 61.81% | 16.18% | 6.15% | 39.81% |
| **Standard Deviation** | | | 0.7% | | | 1.7% | | | | | 1.7% | | 0.2% | | 0.3% | 0.3% | | | |
| **Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 4KB (MB/s)** | 80.1 | 24.7 | 68.7 | 28.4 | 90.1 | 91.6 | 93.2 | 93.7 | 96.3 | 302 | 92.7 | 311 | 318 | 328 | 323 | 320 | 85.4 | 29.6 | |
| **Normalized** | 24.42% | 7.53% | 20.95% | 8.66% | 27.47% | 27.93% | 28.41% | 28.57% | 29.36% | 92.07% | 28.26% | 94.82% | 96.95% | 100% | 98.48% | 97.56% | 26.04% | 9.02% | |
| **Standard Deviation** | 0.5% | 0.2% | 1.6% | 0.2% | 6.3% | 0.6% | 2.2% | 2.6% | 2.6% | 3.7% | 1.7% | 0.5% | 2.9% | 2.8% | | 3% | 0.1% | 1.7% | |

# Xavier_012_32_3_1

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 4KB (IOPS)** | 20 | 63 | 17 | 72 | 22 | 23 | 23 | 23 | 24 | 77 | 23 | 79 | 81 | 83 | 82 | 81 | 21 | 75 | |
| | 50 | 14 | 56 | 54 | 98 | 46 | 90 | 96 | 66 | 37 | 73 | 50 | 30 | 91 | 76 | 56 | 90 | 81 | |
| | 0 | | 7 | | 3 | 7 | 0 | 7 | 7 | 3 | 3 | 0 | 0 | 7 | 7 | 7 | 0 | | |
| **Normalized** | 24.43% | 7.52% | 20.93% | 8.64% | 27.39% | 27.96% | 28.48% | 28.56% | 29.39% | 92.2% | 28.28% | 94.74% | 96.88% | 100% | 98.63% | 97.2% | 26.1% | 9.03% | |
| **Standard Deviation** | 0.5% | 0.4% | 1.7% | 0.2% | 6.2% | 0.7% | 2.2% | 2.5% | 2.7% | 3.7% | 1.6% | 0.5% | 3% | 2.8% | 0.4% | 3.8% | | 1.8% | |
| **Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (MB/s)** | 13 | 38 | | 66 | 13 | 13 | 13 | 13 | 13 | 11 | 13 | 10 | 11 | 10 | 11 | 11 | 10 | 45 | 94 |
| | 6 | .5 | | .2 | 5 | 4 | 6 | 6 | 4 | 47 | 6 | 21 | 50 | 89 | 01 | 06 | 3 | .9 | 1 |
| **Normalized** | 11.83% | 3.35% | | 5.76% | 11.74% | 11.65% | 11.83% | 11.83% | 11.65% | 99.74% | 11.83% | 88.78% | 10 | 94.7% | 95.74% | 96.17% | 8.96% | 3.99% | 81.83% |
| **Standard Deviation** | 0.4% | 1.4% | | 0% | 2.1% | 1.5% | 0.8% | | 1.1% | 1.6% | 0.8% | 0.1% | 1.1% | 1.9% | 0.2% | 1.8% | | 7.5% | |

# Xavier_012_32_3_1

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (IOPS)** | 13 | 2 | | 5 | 14 | 13 | 14 | 13 | 13 | 14 | 14 | 12 | 14 | 13 | 13 | 13 | 9 | 3 | 11 |
| | | | | | | | | | | 0 | | 4 | 0 | 3 | 4 | 5 | | | 4 |
| **Normalized** | 9.2 9% | 1.4 3% | | 3.5 7% | 10 % | 9.2 9% | 10 % | 9.2 9% | 9.2 9% | 10 0% | 10 % | 88. 57 | 10 0% | 95 % | 95. 71 | 96. 43 | 6.4 3% | 2.1 4% | 81. 43 |
| **Standard Deviation** | 4.3 % | | | | | | | | | 1.5 % | | | 1.5 % | 1.7 % | | 1.5 % | | 23. 1% | |
| **Flexible IO Tester - Seq Read - Linux AIO - No - No - 4KB (MB/s)** | | | | | | | | | | 36 0 | | | | | | | | | |
| **Standard Deviation** | | | | | | | | | | 3.5 % | | | | | | | | | |

| | |
|---|---|
| **Flexible IO Tester - Seq Read - Linux AIO - No - No - 4KB (IOPS)** | 92<br>20<br>7 |
| **Standard Deviation** | 3.6<br>% |
| **Flexible IO Tester - Seq Read - Linux AIO - No - No - 8MB (MB/s)** | 25<br>04 |
| **Standard Deviation** | 0.1<br>% |

| | |
|---|---|
| Flexible IO Tester - Seq Read - Linux AIO - No - No - 8MB (IOPS) | 30<br>9 |
| Flexible IO Tester - Seq Read - Linux AIO - Yes - No - 4KB (MB/s) | 97<br>1 |
| Standard Deviation | 3% |
| Flexible IO Tester - Seq Read - Linux AIO - Yes - No - 4KB (IOPS) | 24<br>86<br>67 |
| Standard Deviation | 3% |

| | |
|---|---|
| Flexible IO Tester - Seq Read - Linux AIO - Yes - No - 8MB (MB/s) | 15 |
| | 18 |
| Standard Deviation | 0.2 % |
| Flexible IO Tester - Seq Read - Linux AIO - Yes - No - 8MB (IOPS) | 18 |
| | 6 |
| Flexible IO Tester - Seq Write - Linux AIO - No - No - 4KB (MB/s) | 29 |
| | 5 |
| Standard Deviation | 3% |

| | |
|---|---|
| **Flexible IO Tester - Seq Write - Linux AIO - No - No - 4KB (IOPS)** | 75 |
| **Standard Deviation** | 36<br>3% |
| **Flexible IO Tester - Seq Write - Linux AIO - No - No - 8MB (MB/s)** | 7<br>86 |
| **Standard Deviation** | 1<br>16.<br>5% |

| | |
|---|---|
| **Flexible IO Tester - Seq Write - Linux AIO - No - No - 8MB (IOPS)** | 10<br>4 |
| **Standard Deviation** | 16.<br>9% |
| **Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 4KB (MB/s)** | 10<br>07 |
| **Standard Deviation** | 2.8<br>% |

| | |
|---|---|
| **Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 4KB (IOPS)** | 25<br>76<br>67 |
| **Standard Deviation** | 2.7<br>% |
| **Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 8MB (MB/s)** | 15<br>38 |
| **Standard Deviation** | 0.1<br>% |

| | |
|---|---|
| Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 8MB (IOPS) | 18<br>9 |
| Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 4KB (MB/s) | 51<br>2 |
| Standard Deviation | 2.8<br>% |
| Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 4KB (IOPS) | 13<br>13<br>33 |
| Standard Deviation | 2.4<br>% |

| | |
|---|---|
| **Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 8MB (MB/s)** | 84 |
| **Standard Deviation** | 7<br>14.4% |
| **Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 8MB (IOPS)** | 10<br>2 |
| **Standard Deviation** | 14.8% |

| | |
|---|---|
| **Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 4KB (MB/s)** | 51 |
| **Standard Deviation** | 8<br>2.8<br>% |
| **Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 4KB (IOPS)** | 13<br>26<br>67 |
| **Standard Deviation** | 2.6<br>% |

| | | | |
|---|---|---|---|
| Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 8MB (MB/s) | 89 | | |
| Standard Deviation | 2 | | |
| | 7% | | |
| Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 8MB (IOPS) | 10 | | |
| | 8 | | |
| Stress-NG - Crypto (Bogo | | | 12 |
| | | | 55 |
| Standard Deviation | | | 0.9 |
| | | | % |
| Stress-NG - Bsearch (Bogo Ops/s) | | | 19 |
| | | | 90 |
| Standard Deviation | | | 2% |

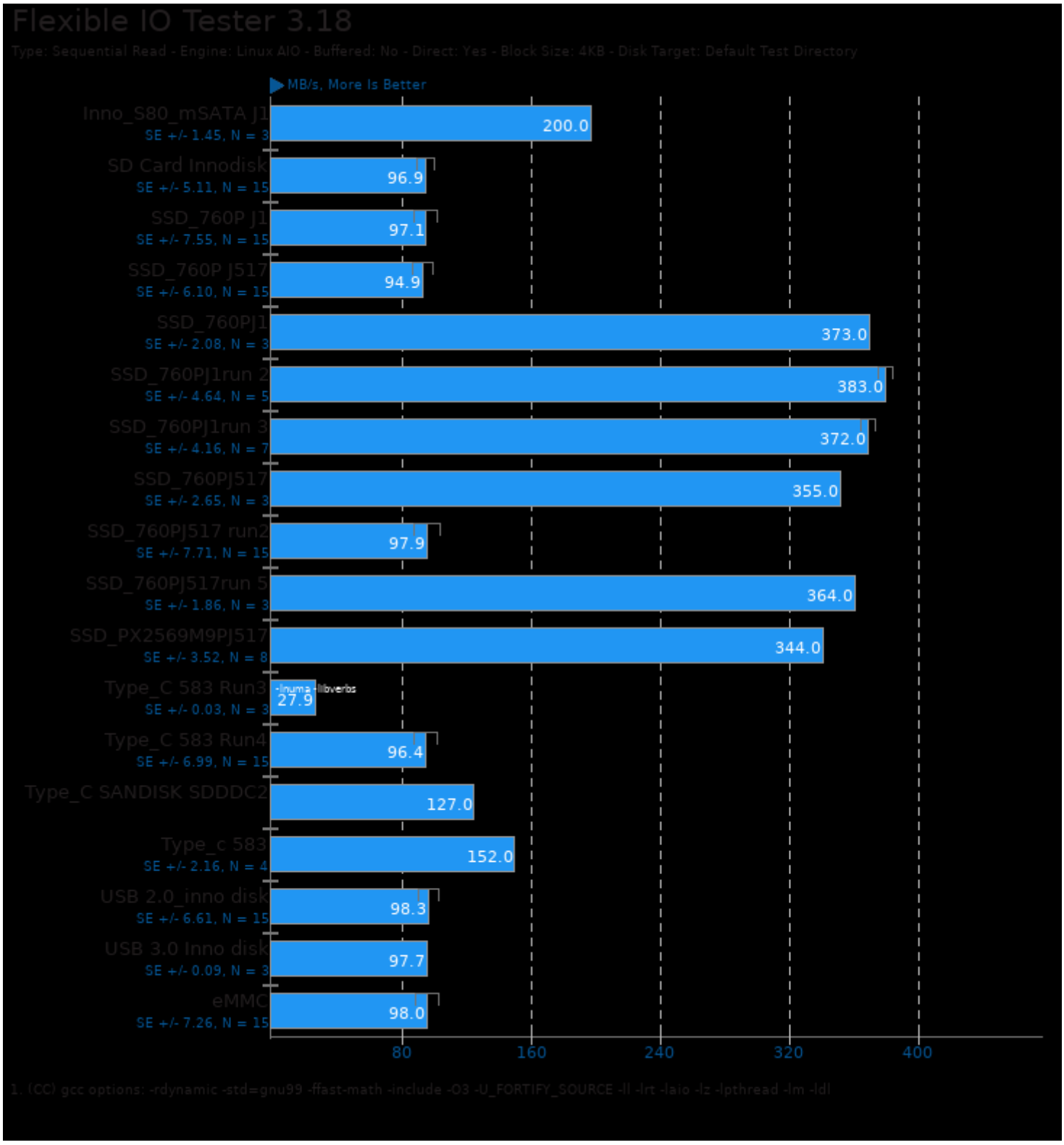
| | |
|---|---|
| **Stress-NG - CPU Stress (Bogo Ops/s)** | 80.16 |
| **Standard Deviation** | 2.9% |
| **Stress-NG - Matrix Math (Bogo Ops/s)** | 1400.2 |
| **Standard Deviation** | 21.8% |
| **Stress-NG - Vector Math (Bogo Ops/s)** | 1176.9 |
| **Standard Deviation** | 0.1% |
| **Stress-NG - Memory Copying (Bogo Ops/s)** | 37.19 |
| **Standard Deviation** | 0.7% |

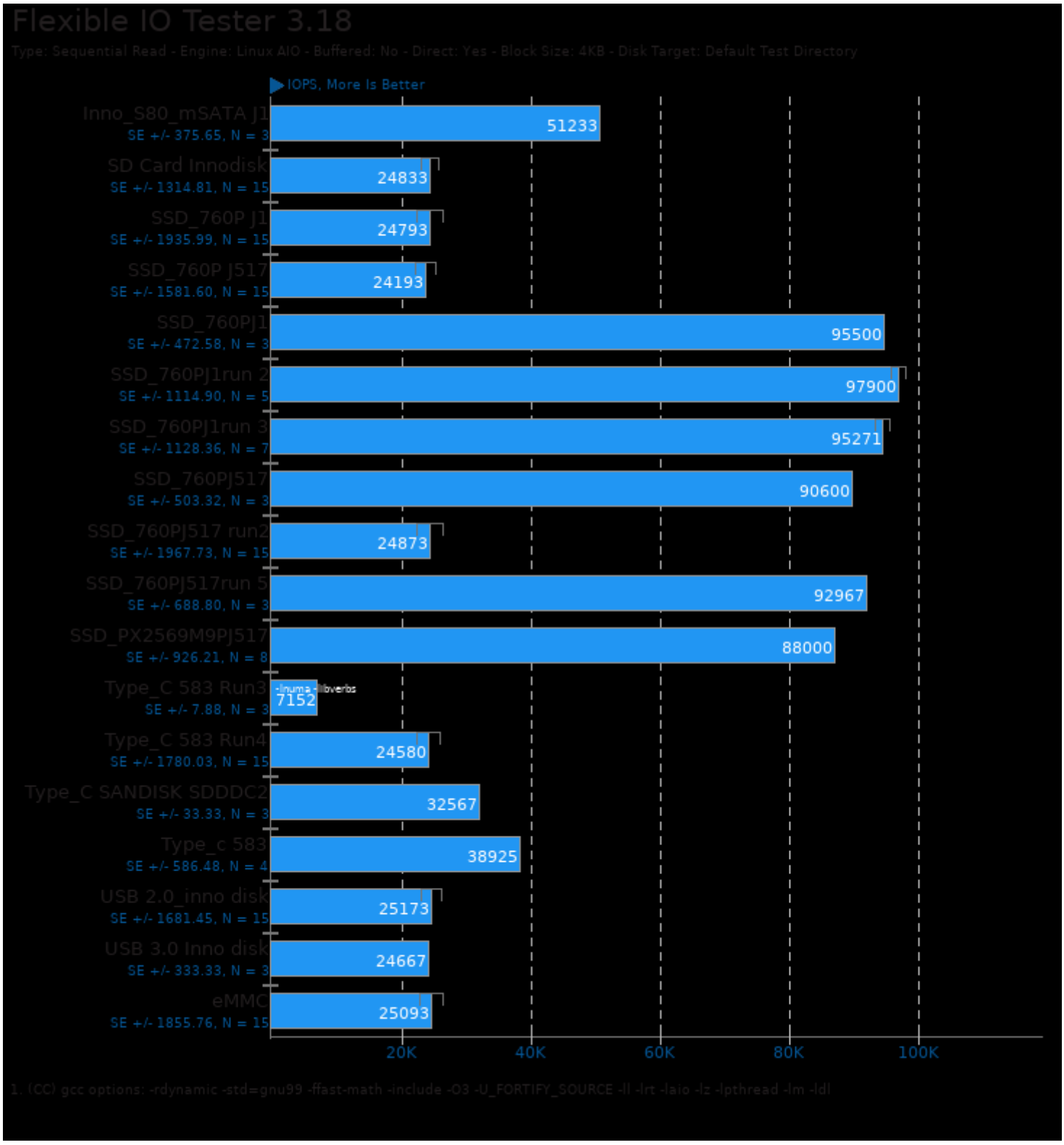
| | |
|---|---|
| **Stress-NG - G.C.S.F (Bogo Ops/s)** | 16<br>25<br>43 |
| **Standard Deviation** | 2.8 % |
| **Stress-NG - G.Q.D.S (Bogo Ops/s)** | 38<br>.9<br>8 |
| **Standard Deviation** | 12.<br>1% |
| **Stream - Copy (MB/s)** | 67<br>02<br>3 |
| **Standard Deviation** | 0.6 % |
| **Stream - Scale (MB/s)** | 66<br>14<br>4 |
| **Standard Deviation** | 0.6 % |
| **Stream - Triad (MB/s)** | 60<br>10<br>9 |
| **Standard Deviation** | 0.4 % |
| **Stream - Add (MB/s)** | 59<br>75<br>3 |

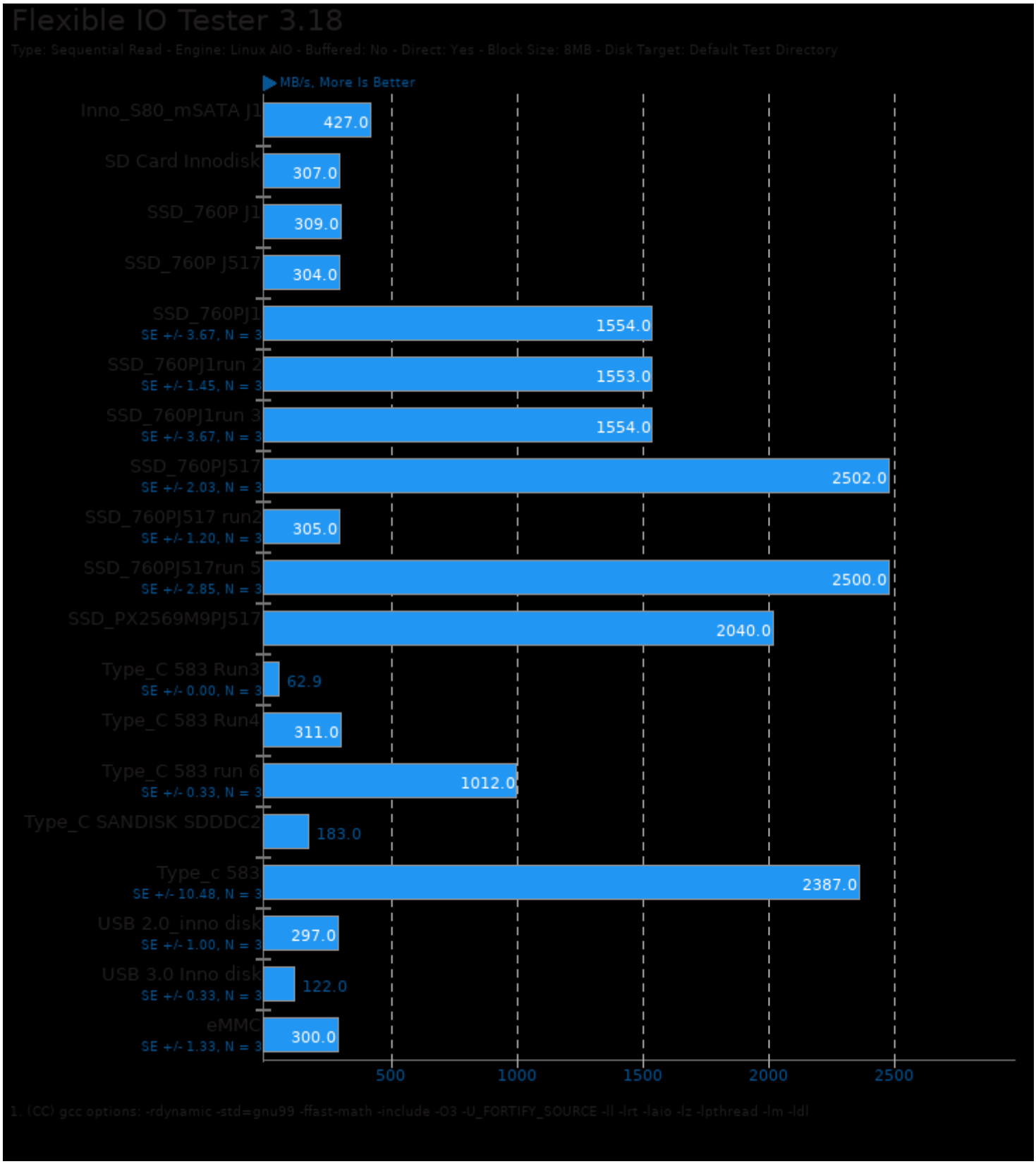
| | | |
|---|---|---|
| Standard Deviation | 0.2 % | |
| GLmark2 - 800 x 600 (Score) | 62 | 51 |
| GLmark2 - 1024 x 768 (Score) | 49 | 63 |
| GLmark2 - 1280 x 1024 (Score) | 35 | 53 |
| GLmark2 - 1920 x 1080 (Score) | 28 | 31 |
| 7-Zip Compression - C.S.T (MIPS) | | 21 02 9 |
| Standard Deviation | | 2.9 % |

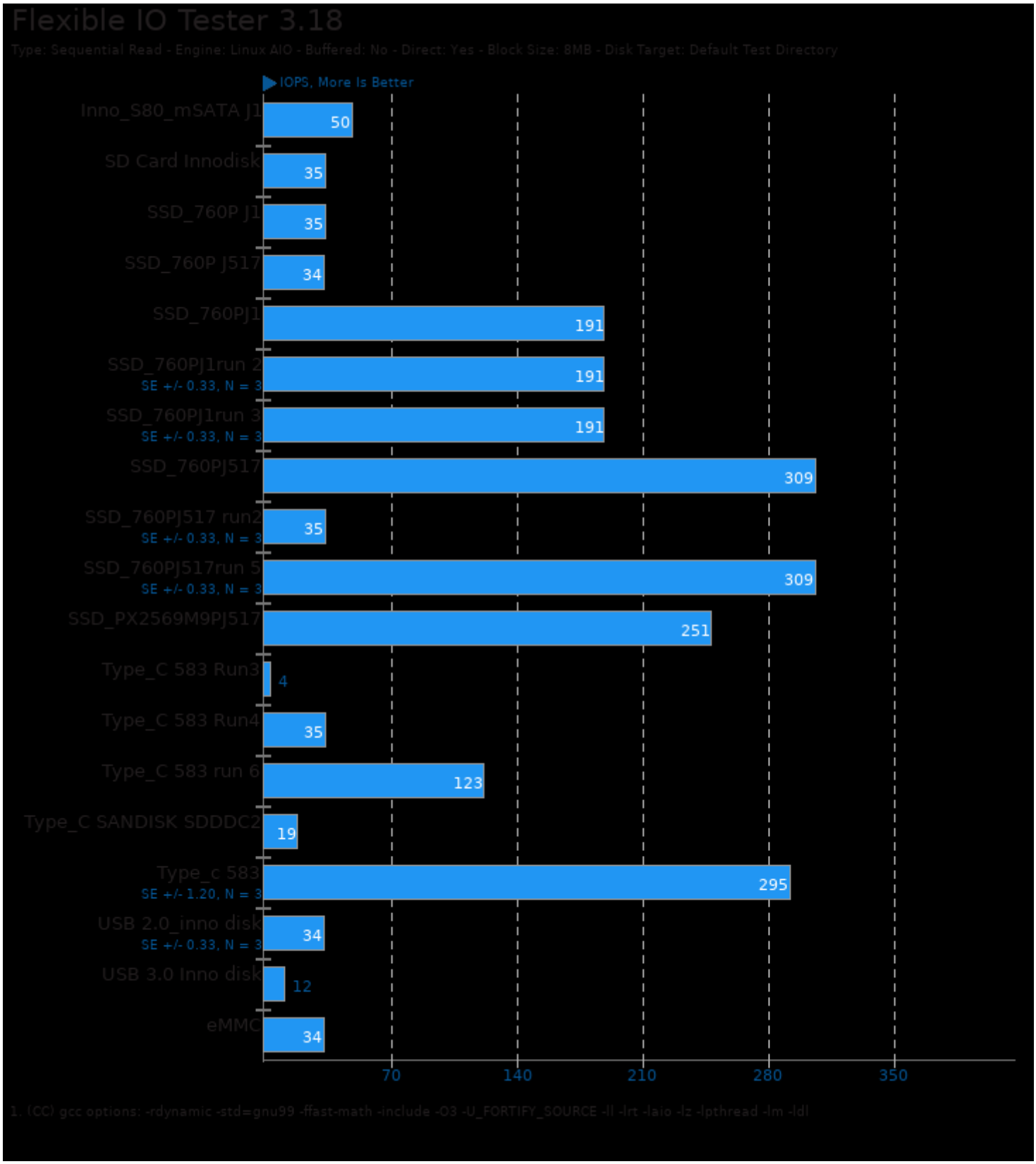
| | |
|---|---|
| **CUDA Mini-Nbody - Original ((NBody^2)/s)** | 46.693 |
| **Standard Deviation** | 0% |
| **CUDA Mini-Nbody - Cache Blocking ((NBody^2)/s)** | 55.546 |
| **Standard Deviation** | 0% |
| **CUDA Mini-Nbody - Loop Unrolling ((NBody^2)/s)** | 54.724 |
| **Standard Deviation** | 0% |

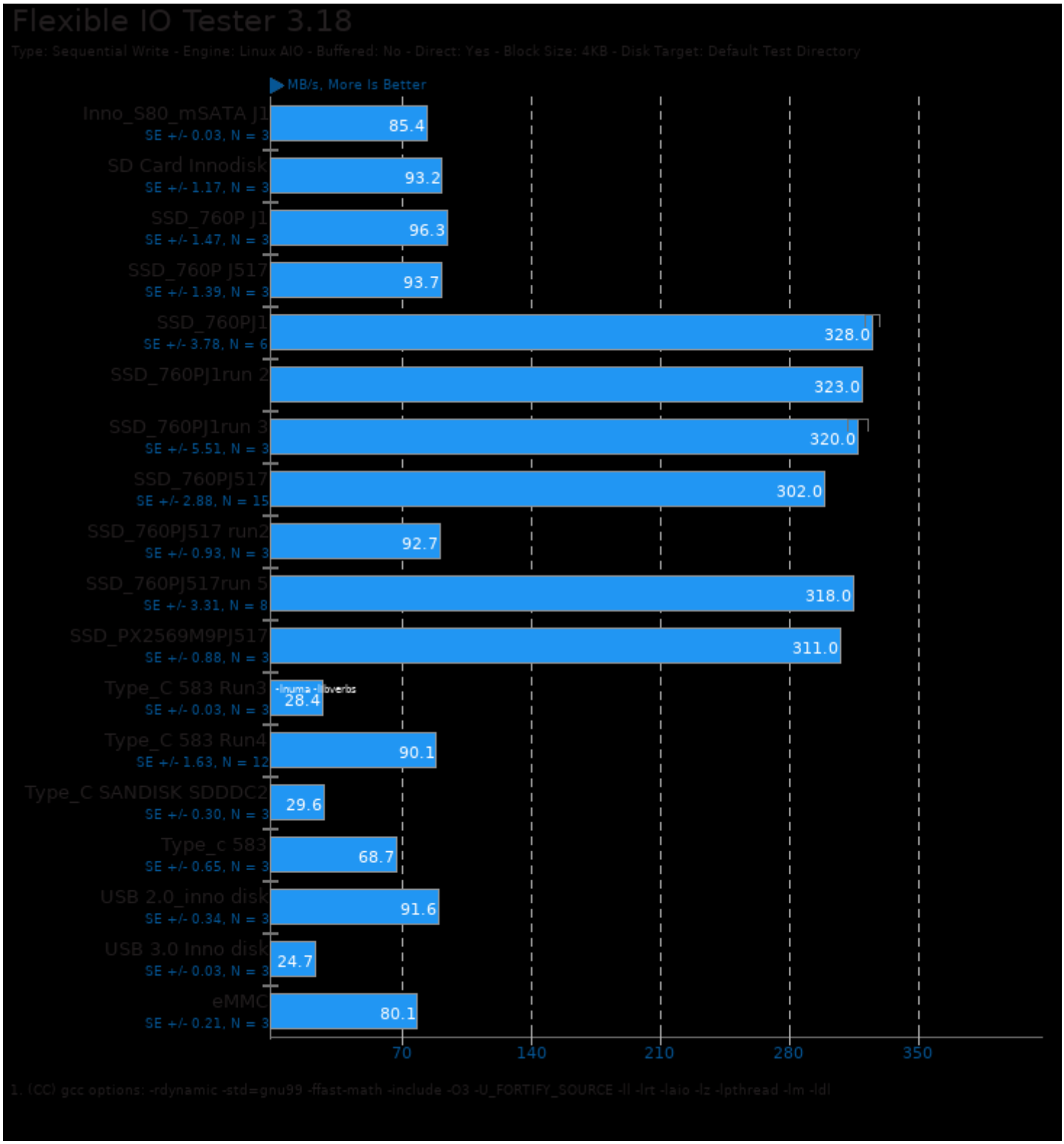
| | |
|---|---|
| **CUDA Mini-Nbody - SOA Data Layout ((NBody^2)/** | 47.639 |
| **Standard Deviation** | 0.2% |
| **CUDA Mini-Nbody - F.D.T.Z ((NBody^2)/s)** | 54.974 |
| **Standard Deviation** | 0.1% |
| **TTSIOD 3D Renderer - P.R.W.S.S.M (FPS)** | 14 4.208 |
| **Standard Deviation** | 0.4% |

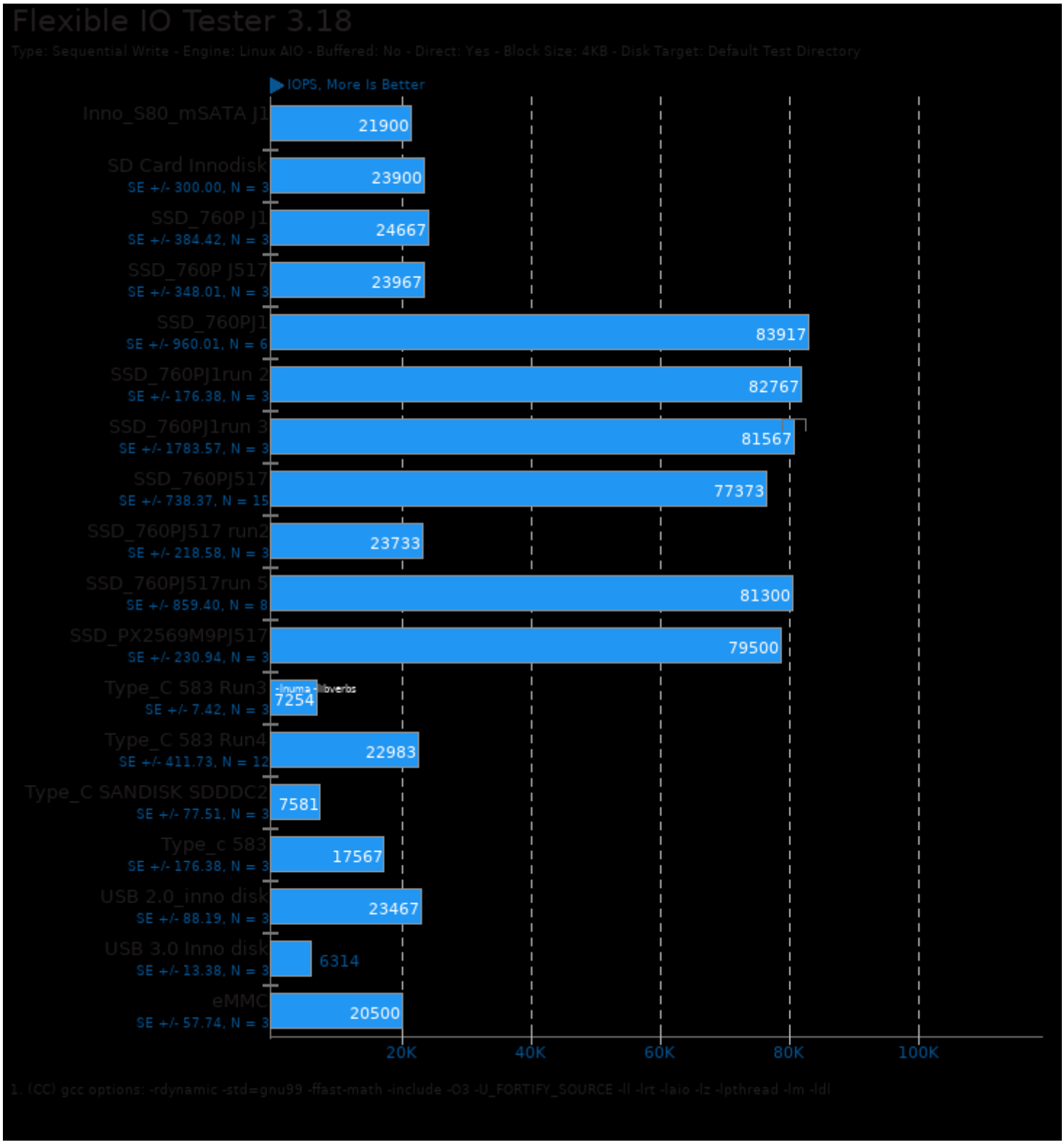

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Inno_S80_mSATA J1
SE +/- 1.45, N = 3
200.0
SD Card Innodisk
SE +/- 5.11, N = 15
96.9
SSD_760P J1
SE +/- 7.55, N = 15
97.1
SSD_760P J517
SE +/- 6.10, N = 15
94.9
SSD_760PJ1
SE +/- 2.08, N = 3
373.0
SSD_760PJ1run 2
SE +/- 4.64, N = 5
383.0
SSD_760PJ1run 3
SE +/- 4.16, N = 7
372.0
SSD_760PJ517
SE +/- 2.65, N = 3
355.0
SSD_760PJ517 run2
SE +/- 7.71, N = 15
97.9
SSD_760PJ517run 5
SE +/- 1.86, N = 3
364.0
SSD_PX2569M9PJ517
SE +/- 3.52, N = 8
344.0
Type_C 583 Run3
SE +/- 0.03, N = 3
-linuma -libverbs
27.9
Type_C 583 Run4
SE +/- 6.99, N = 15
96.4
Type_C SANDISK SDDDC2
127.0
Type_c 583
SE +/- 2.16, N = 4
152.0
USB 2.0_inno disk
SE +/- 6.61, N = 15
98.3
USB 3.0 Inno disk
SE +/- 0.09, N = 3
97.7
eMMC
SE +/- 7.26, N = 15
98.0
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -lrt -laio -lz -lpthread -lm -ldl

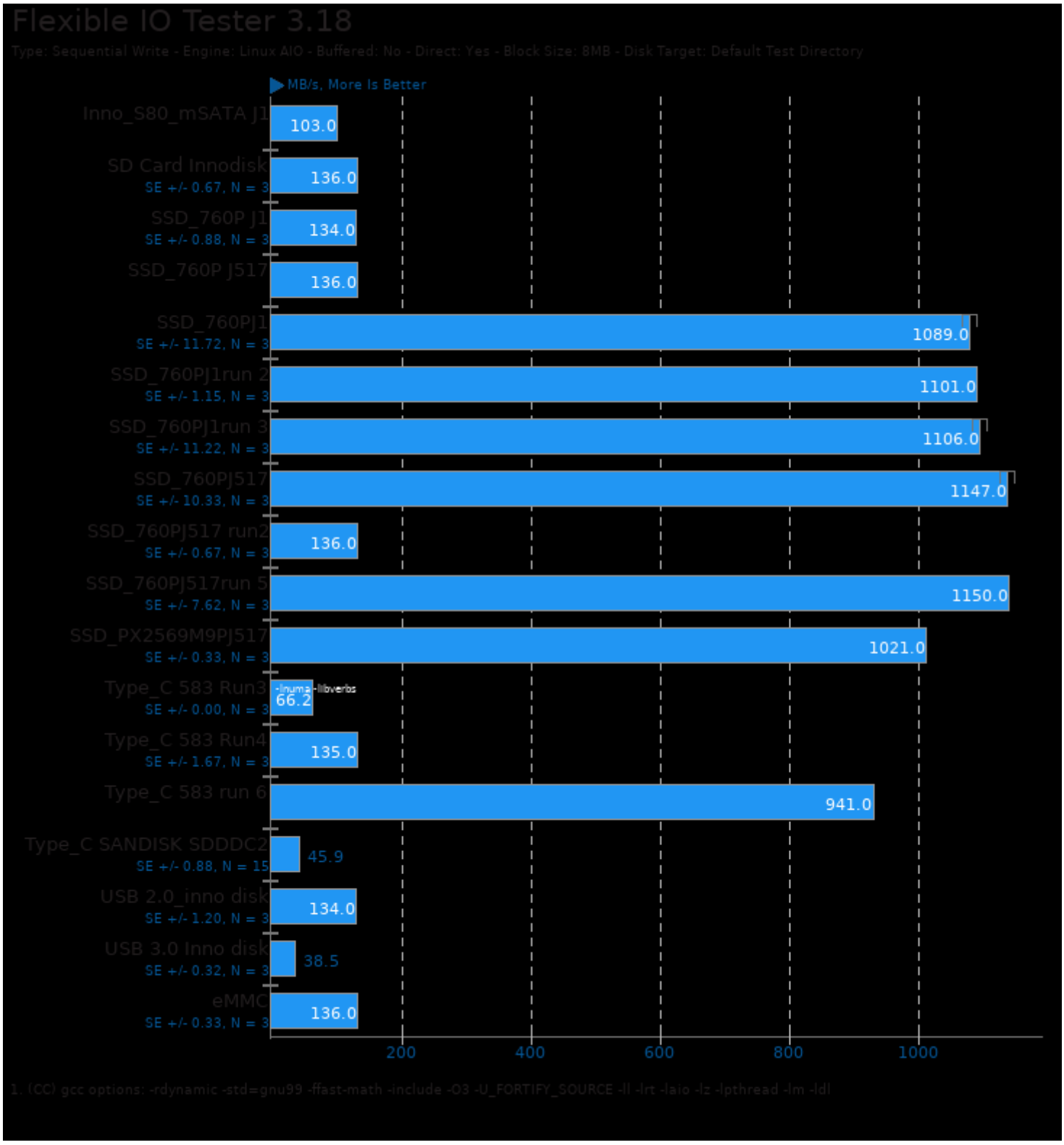

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Inno_S80_mSATA J1
SE +/- 375.65, N = 3
51233
SD Card Innodisk
SE +/- 1314.81, N = 15
24833
SSD_760P J1
SE +/- 1935.99, N = 15
24793
SSD_760P J517
SE +/- 1581.60, N = 15
24193
SSD_760PJ1
SE +/- 472.58, N = 3
95500
SSD_760PJ1run 2
SE +/- 1114.90, N = 5
97900
SSD_760PJ1run 3
SE +/- 1128.36, N = 7
95271
SSD_760PJ517
SE +/- 503.32, N = 3
90600
SSD_760PJ517 run2
SE +/- 1967.73, N = 15
24873
SSD_760PJ517run 5
SE +/- 688.80, N = 3
92967
SSD_PX2569M9PJ517
SE +/- 926.21, N = 8
88000
Type_C 583 Run3
SE +/- 7.88, N = 3
-lnuma -libverbs
7152
Type_C 583 Run4
SE +/- 1780.03, N = 15
24580
Type_C SANDISK SDDDC2
SE +/- 33.33, N = 3
32567
Type_c 583
SE +/- 586.48, N = 4
38925
USB 2.0_inno disk
SE +/- 1681.45, N = 15
25173
USB 3.0 Inno disk
SE +/- 333.33, N = 3
24667
eMMC
SE +/- 1855.76, N = 15
25093
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -lrt -laio -lz -lpthread -lm -ldl

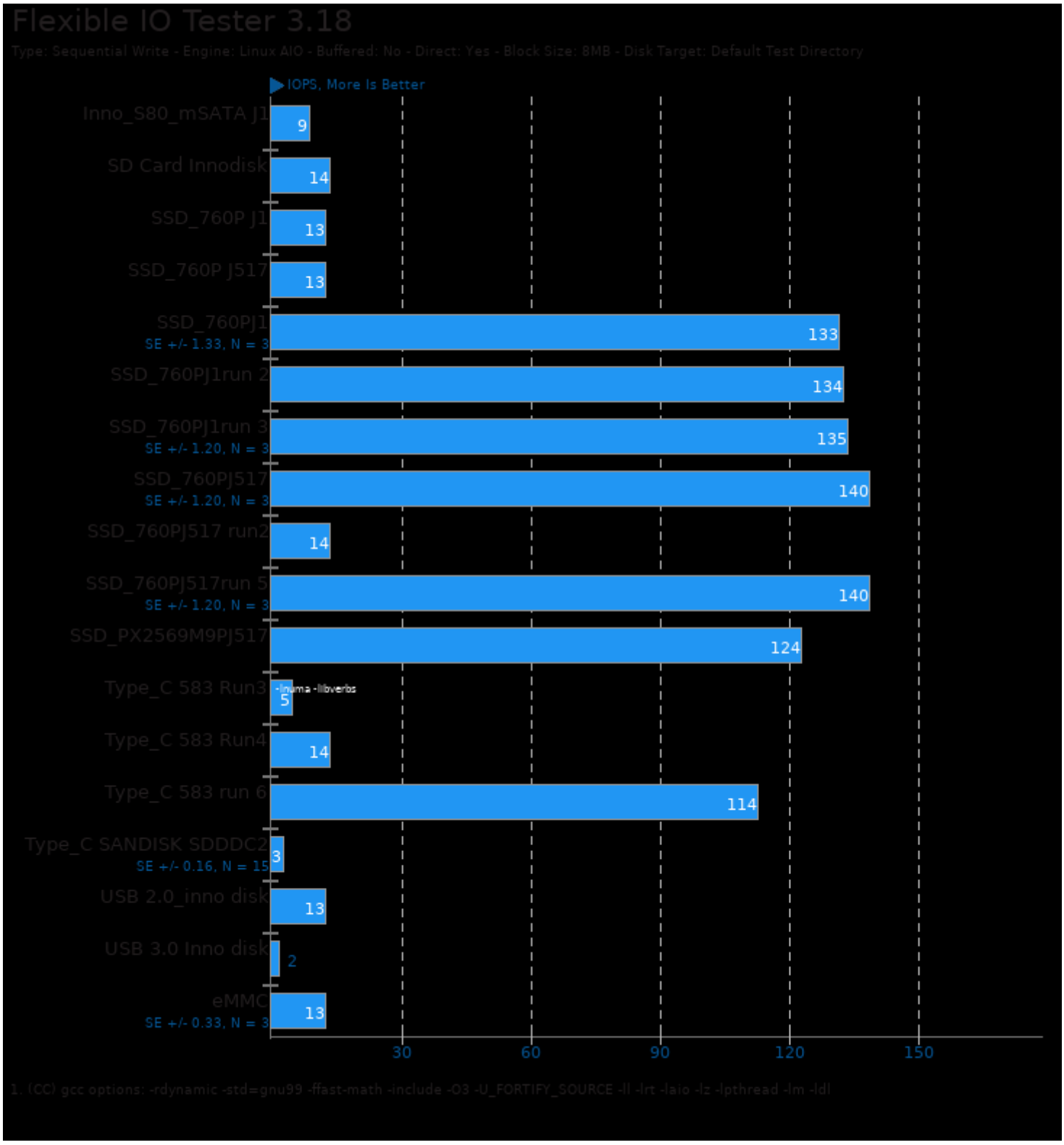

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Inno_S80_mSATA J1
427.0
SD Card Innodisk
307.0
SSD_760P J1
309.0
SSD_760P J517
304.0
SSD_760PJ1
SE +/- 3.67, N = 3
1554.0
SSD_760PJ1run 2
SE +/- 1.45, N = 3
1553.0
SSD_760PJ1run 3
SE +/- 3.67, N = 3
1554.0
SSD_760PJ517
SE +/- 2.03, N = 3
2502.0
SSD_760PJ517 run2
SE +/- 1.20, N = 3
305.0
SSD_760PJ517run 5
SE +/- 2.85, N = 3
2500.0
SSD_PX2569M9PJ517
2040.0
Type_C 583 Run3
SE +/- 0.00, N = 3
62.9
Type_C 583 Run4
311.0
Type_C 583 run 6
SE +/- 0.33, N = 3
1012.0
Type_C SANDISK SDDDC2
183.0
Type_c 583
SE +/- 10.48, N = 3
2387.0
USB 2.0_inno disk
SE +/- 1.00, N = 3
297.0
USB 3.0 Inno disk
SE +/- 0.33, N = 3
122.0
eMMC
SE +/- 1.33, N = 3
300.0
500
1000
1500
2000
2500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -lrt -laio -lz -lpthread -lm -ldl

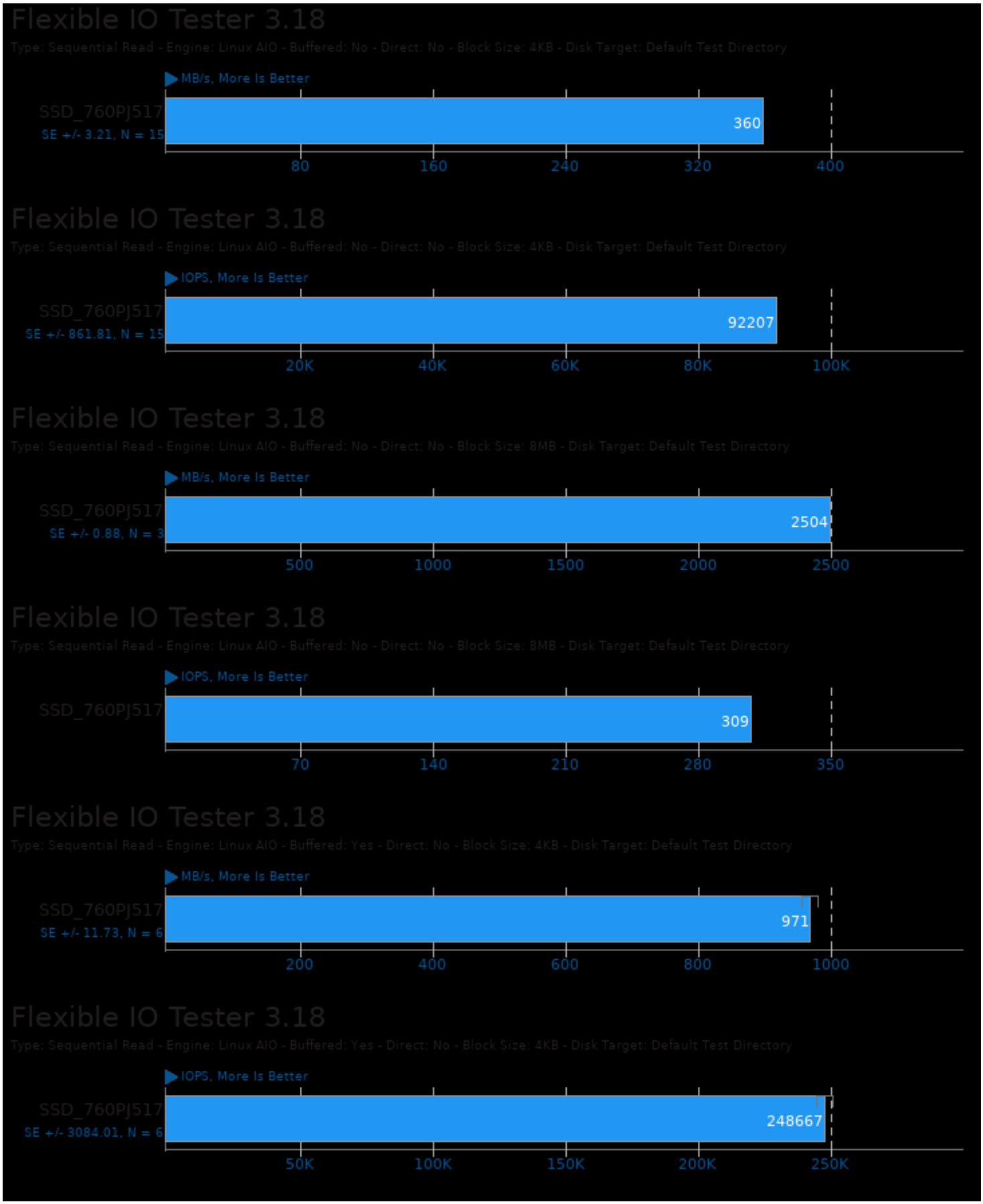

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Inno_S80_mSATA J1
50
SD Card Innodisk
35
SSD_760P J1
35
SSD_760P J517
34
SSD_760PJ1
191
SSD_760PJ1run 2
SE +/- 0.33, N = 3
191
SSD_760PJ1run 3
SE +/- 0.33, N = 3
191
SSD_760PJ517
309
SSD_760PJ517 run2
SE +/- 0.33, N = 3
35
SSD_760PJ517run 5
SE +/- 0.33, N = 3
309
SSD_PX2569M9PJ517
251
Type_C 583 Run3
4
Type_C 583 Run4
35
Type_C 583 run 6
123
Type_C SANDISK SDDDC2
19
Type_c 583
SE +/- 1.20, N = 3
295
USB 2.0_inno disk
SE +/- 0.33, N = 3
34
USB 3.0 Inno disk
12
eMMC
34
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -lrt -laio -lz -lpthread -lm -ldl

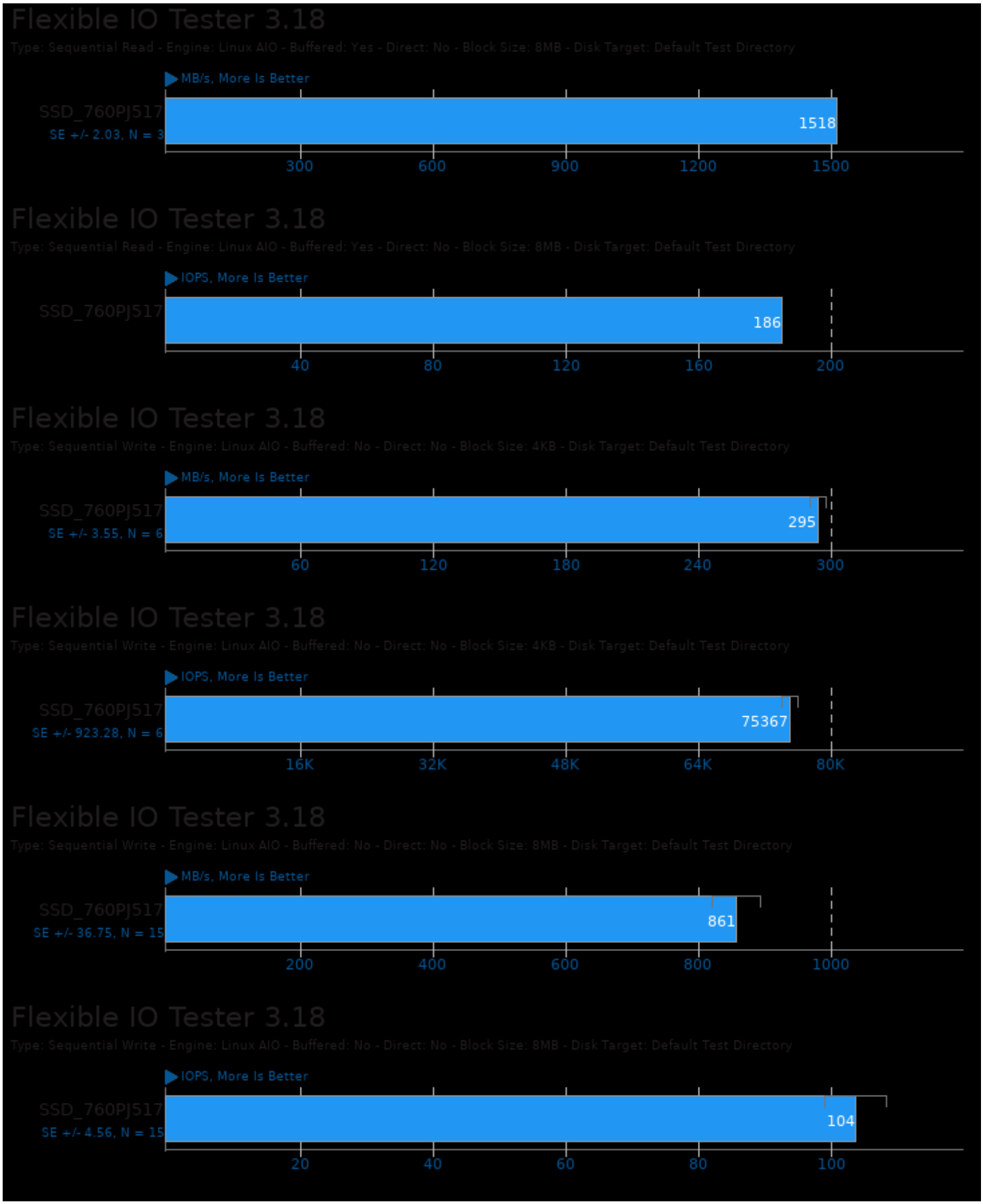

Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Inno_S80_mSATA J1
SE +/- 0.03, N = 3
85.4
SD Card Innodisk
SE +/- 1.17, N = 3
93.2
SSD_760P J1
SE +/- 1.47, N = 3
96.3
SSD_760P J517
SE +/- 1.39, N = 3
93.7
SSD_760PJ1
SE +/- 3.78, N = 6
328.0
SSD_760PJ1run 2
323.0
SSD_760PJ1run 3
SE +/- 5.51, N = 3
320.0
SSD_760PJ517
SE +/- 2.88, N = 15
302.0
SSD_760PJ517 run2
SE +/- 0.93, N = 3
92.7
SSD_760PJ517run 5
SE +/- 3.31, N = 8
318.0
SSD_PX2569M9PJ517
SE +/- 0.88, N = 3
311.0
Type_C 583 Run3
SE +/- 0.03, N = 3
-lnuma -loverbs
28.4
Type_C 583 Run4
SE +/- 1.63, N = 12
90.1
Type_C SANDISK SDDDC2
SE +/- 0.30, N = 3
29.6
Type_c 583
SE +/- 0.65, N = 3
68.7
USB 2.0_inno disk
SE +/- 0.34, N = 3
91.6
USB 3.0 Inno disk
SE +/- 0.03, N = 3
24.7
eMMC
SE +/- 0.21, N = 3
80.1
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -lrt -laio -lz -lpthread -lm -ldl

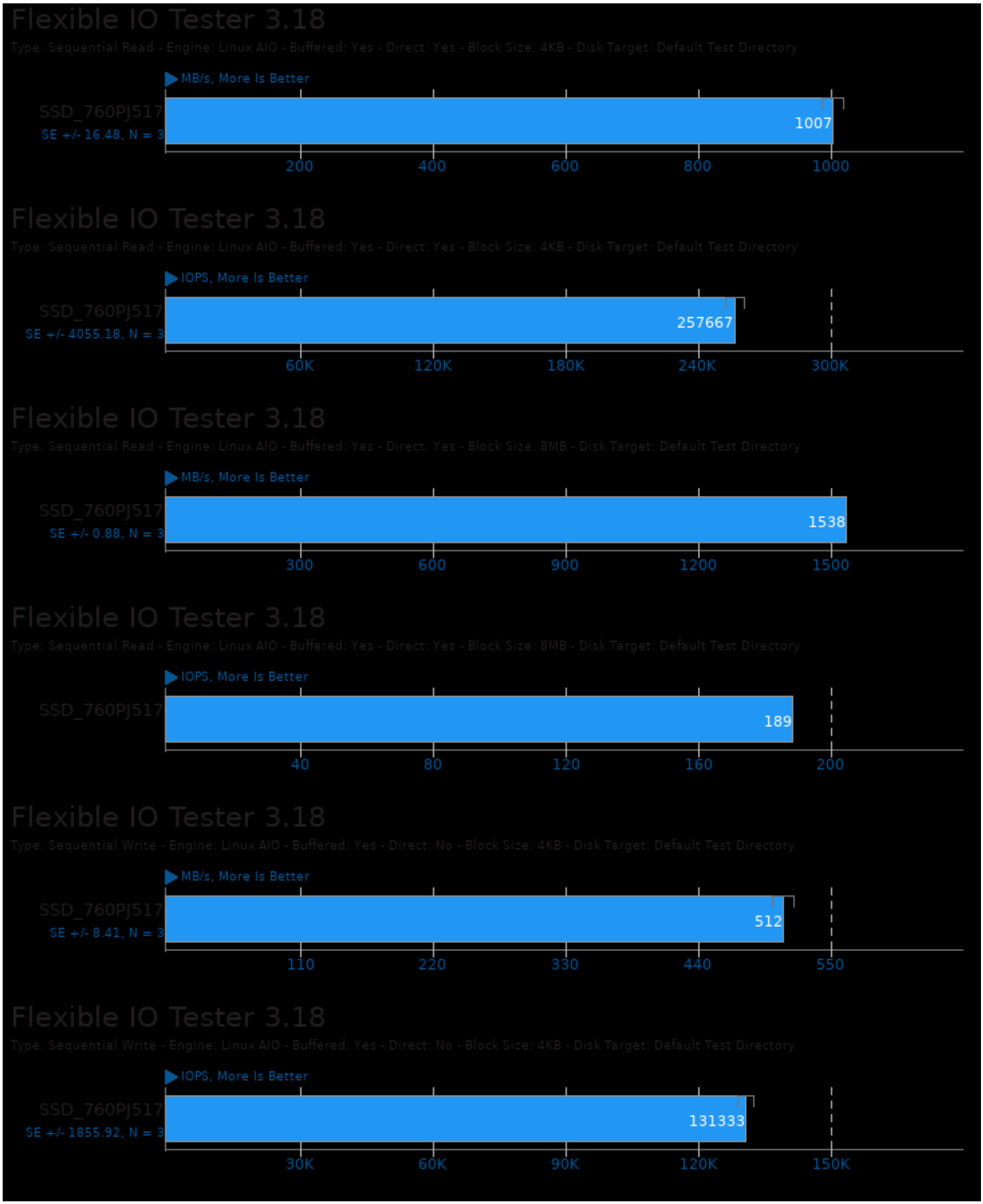

Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Inno_S80_mSATA J1
21900
SD Card Innodisk
SE +/- 300.00, N = 3
23900
SSD_760P J1
SE +/- 384.42, N = 3
24667
SSD_760P J517
SE +/- 348.01, N = 3
23967
SSD_760PJ1
SE +/- 960.01, N = 6
83917
SSD_760PJ1run 2
SE +/- 176.38, N = 3
82767
SSD_760PJ1run 3
SE +/- 1783.57, N = 3
81567
SSD_760PJ517
SE +/- 738.37, N = 15
77373
SSD_760PJ517 run2
SE +/- 218.58, N = 3
23733
SSD_760PJ517run 5
SE +/- 859.40, N = 8
81300
SSD_PX2569M9PJ517
SE +/- 230.94, N = 3
79500
Type_C 583 Run3
SE +/- 7.42, N = 3
7254
Type_C 583 Run4
SE +/- 411.73, N = 12
22983
Type_C SANDISK SDDDC2
SE +/- 77.51, N = 3
7581
Type_c 583
SE +/- 176.38, N = 3
17567
USB 2.0_inno disk
SE +/- 88.19, N = 3
23467
USB 3.0 Inno disk
SE +/- 13.38, N = 3
6314
eMMC
SE +/- 57.74, N = 3
20500
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -lrt -laio -lz -lpthread -lm -ldl

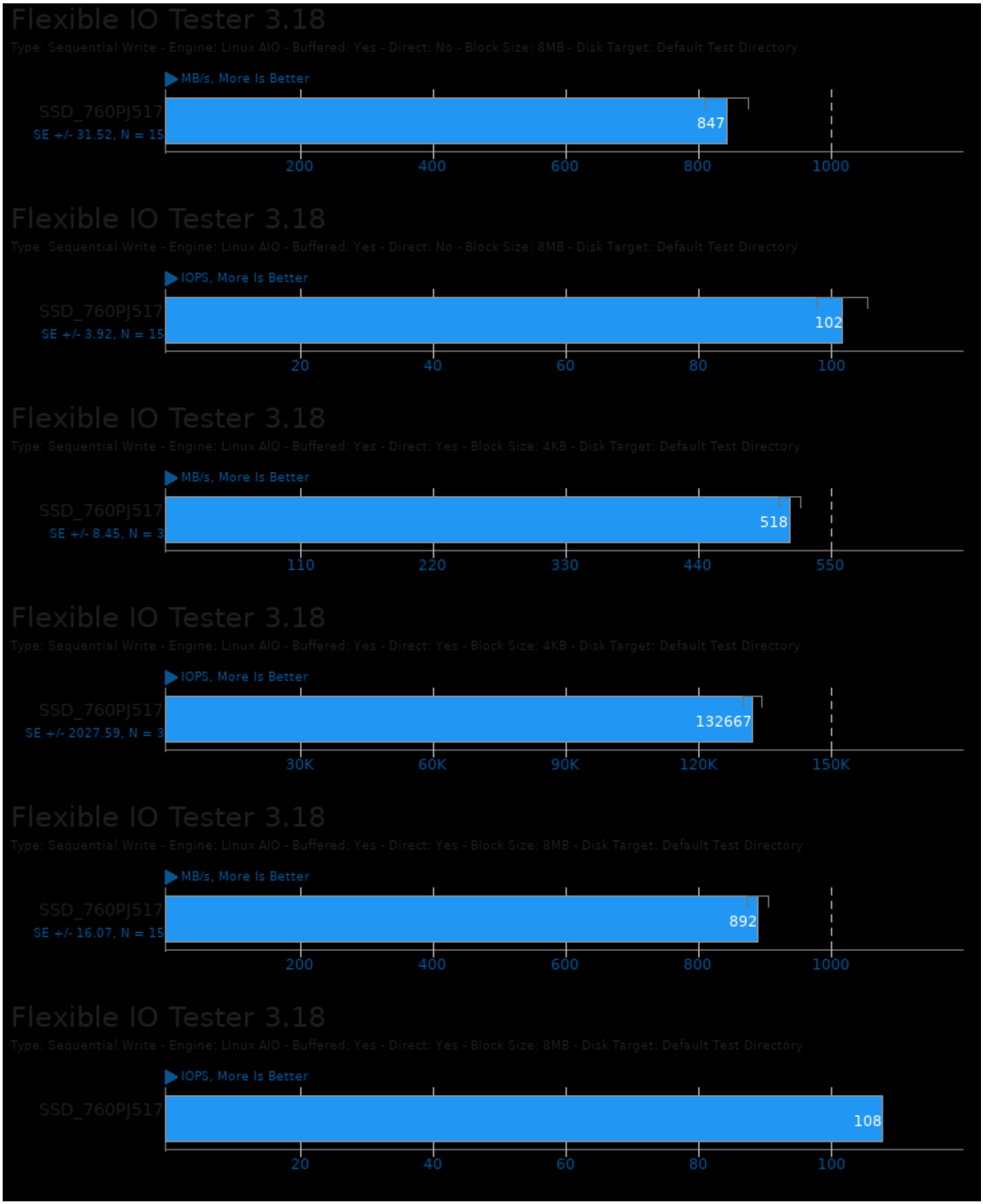

Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Inno_S80_mSATA J1
103.0
SD Card Innodisk
SE +/- 0.67, N = 3
136.0
SSD_760P J1
SE +/- 0.88, N = 3
134.0
SSD_760P J517
136.0
SSD_760PJ1
SE +/- 11.72, N = 3
1089.0
SSD_760PJ1run 2
SE +/- 1.15, N = 3
1101.0
SSD_760PJ1run 3
SE +/- 11.22, N = 3
1106.0
SSD_760PJ517
SE +/- 10.33, N = 3
1147.0
SSD_760PJ517 run2
SE +/- 0.67, N = 3
136.0
SSD_760PJ517run 5
SE +/- 7.62, N = 3
1150.0
SSD_PX2569M9PJ517
SE +/- 0.33, N = 3
1021.0
Type_C 583 Run3
SE +/- 0.00, N = 3
-linuma -libverbs
66.2
Type_C 583 Run4
SE +/- 1.67, N = 3
135.0
Type_C 583 run 6
941.0
Type_C SANDISK SDDDC2
SE +/- 0.88, N = 15
45.9
USB 2.0_inno disk
SE +/- 1.20, N = 3
134.0
USB 3.0 Inno disk
SE +/- 0.32, N = 3
38.5
eMMC
SE +/- 0.33, N = 3
136.0
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -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
Inno_S80_mSATA J1
9
SD Card Innodisk
14
SSD_760P J1
13
SSD_760P J517
13
SSD_760PJ1
SE +/- 1.33, N = 3
133
SSD_760PJ1run 2
134
SSD_760PJ1run 3
SE +/- 1.20, N = 3
135
SSD_760PJ517
SE +/- 1.20, N = 3
140
SSD_760PJ517 run2
14
SSD_760PJ517run 5
SE +/- 1.20, N = 3
140
SSD_PX2569M9PJ517
124
Type_C 583 Run3
5
Type_C 583 Run4
14
Type_C 583 run 6
114
Type_C SANDISK SDDDC2
SE +/- 0.16, N = 15
3
USB 2.0_inno disk
13
USB 3.0 Inno disk
2
eMMC
SE +/- 0.33, N = 3
13
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -ll -lrt -laio -lz -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 3.21, N = 15
360
80
160
240
320
400
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 861.81, N = 15
92207
20K
40K
60K
80K
100K
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 0.88, N = 3
2504
500
1000
1500
2000
2500
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
309
70
140
210
280
350
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 11.73, N = 6
971
200
400
600
800
1000
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 3084.01, N = 6
248667
50K
100K
150K
200K
250K

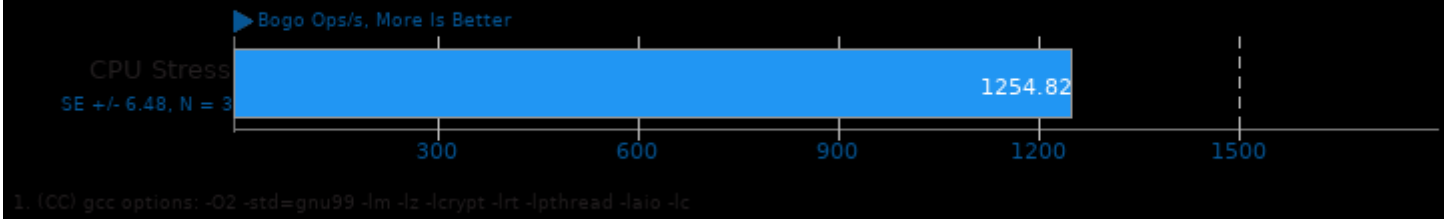

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 2.03, N = 3
1518
300
600
900
1200
1500
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
186
40
80
120
160
200
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 3.55, N = 6
295
60
120
180
240
300
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 923.28, N = 6
75367
16K
32K
48K
64K
80K
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 36.75, N = 15
861
200
400
600
800
1000
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 4.56, N = 15
104
20
40
60
80
100


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 16.48, N = 3
1007
200
400
600
800
1000
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 4055.18, N = 3
257667
60K
120K
180K
240K
300K
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 0.88, N = 3
1538
300
600
900
1200
1500
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
189
40
80
120
160
200
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 8.41, N = 3
512
110
220
330
440
550
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 1855.92, N = 3
131333
30K
60K
90K
120K
150K


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 31.52, N = 15
847
200
400
600
800
1000
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 3.92, N = 15
102
20
40
60
80
100
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 8.45, N = 3
518
110
220
330
440
550
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 2027.59, N = 3
132667
30K
60K
90K
120K
150K
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 16.07, N = 15
892
200
400
600
800
1000
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
108
20
40
60
80
100

## Stress-NG 0.07.26

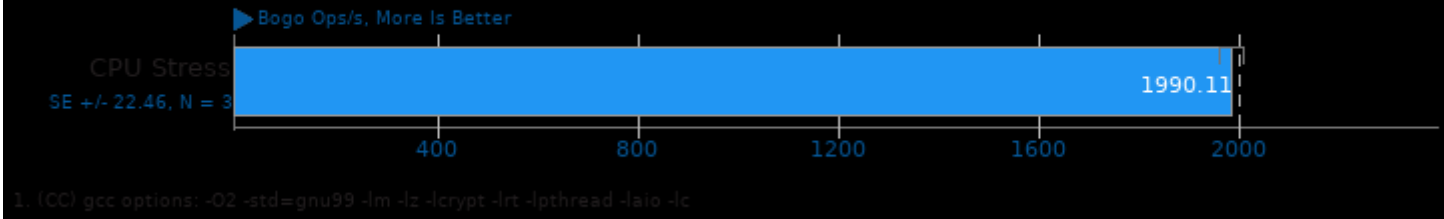
Test: Crypto




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

## Stress-NG 0.07.26

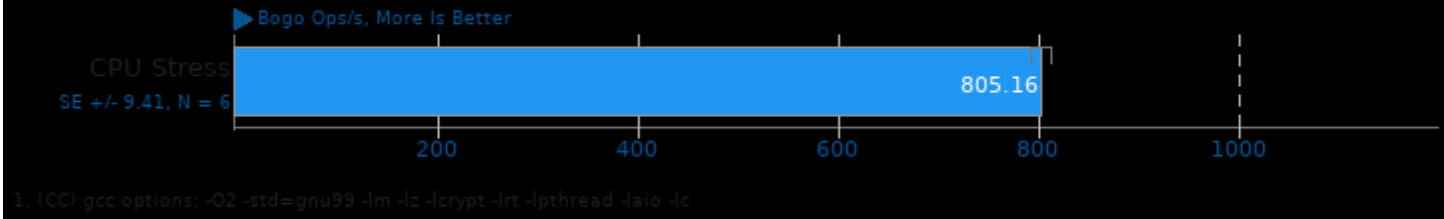
Test: Bsearch




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

## Stress-NG 0.07.26

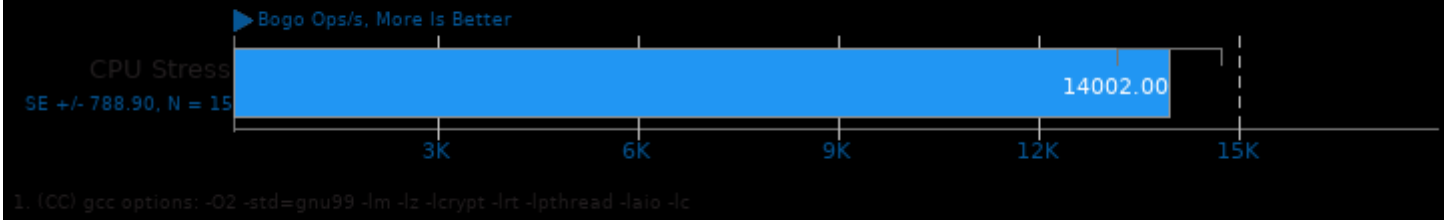
Test: CPU Stress




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

## Stress-NG 0.07.26

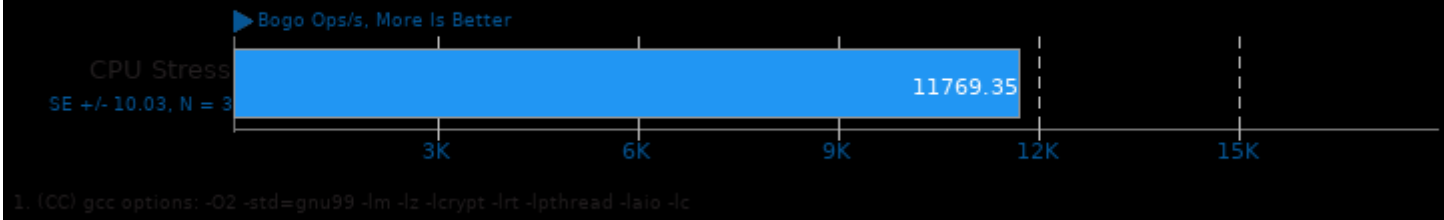
Test: Matrix Math




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

## Stress-NG 0.07.26

Test: Vector Math

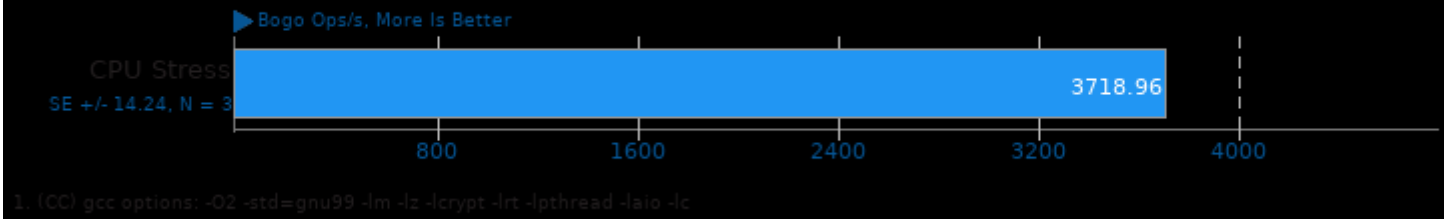



1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc

# Xavier_012_32_3_1

## Stress-NG 0.07.26

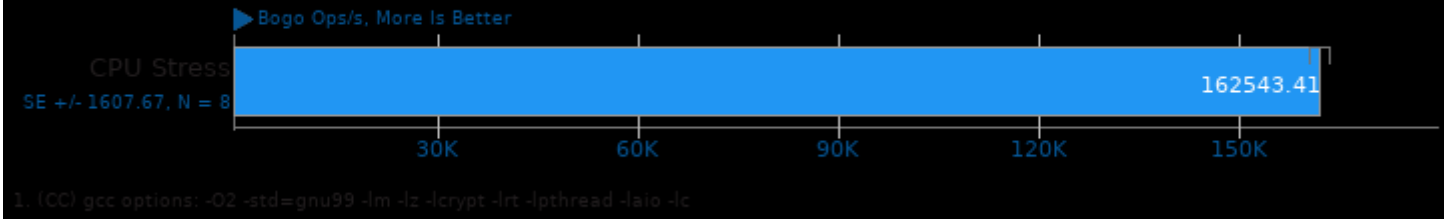
Test: Memory Copying




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

## Stress-NG 0.07.26

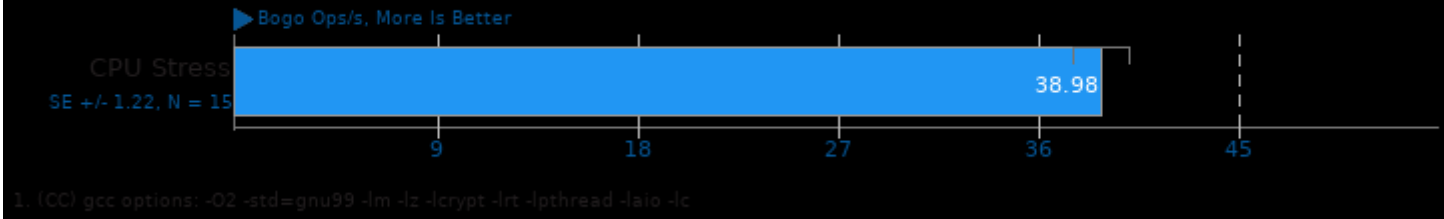
Test: Glibc C String Functions




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

## Stress-NG 0.07.26

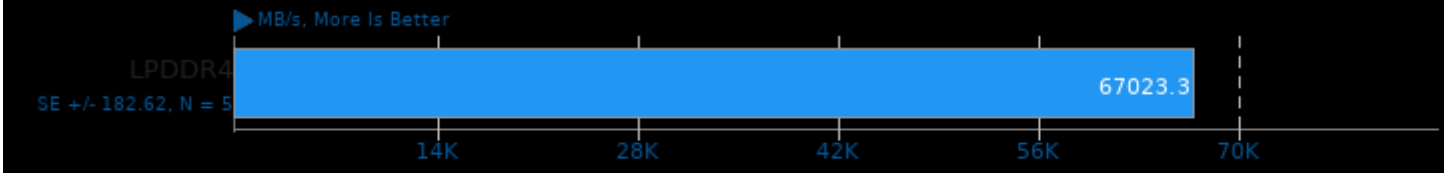
Test: Glibc Qsort Data Sorting




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

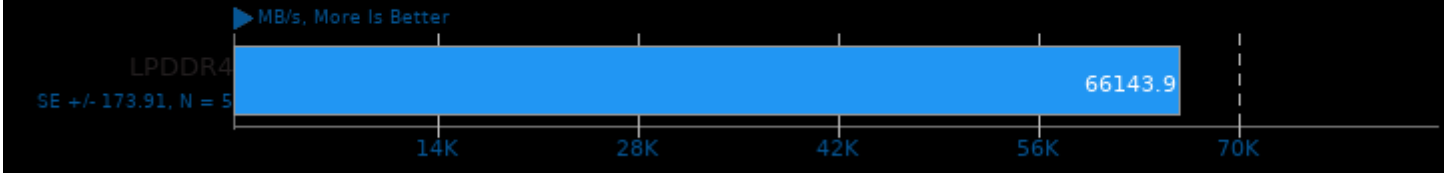
## Stream 2013-01-17

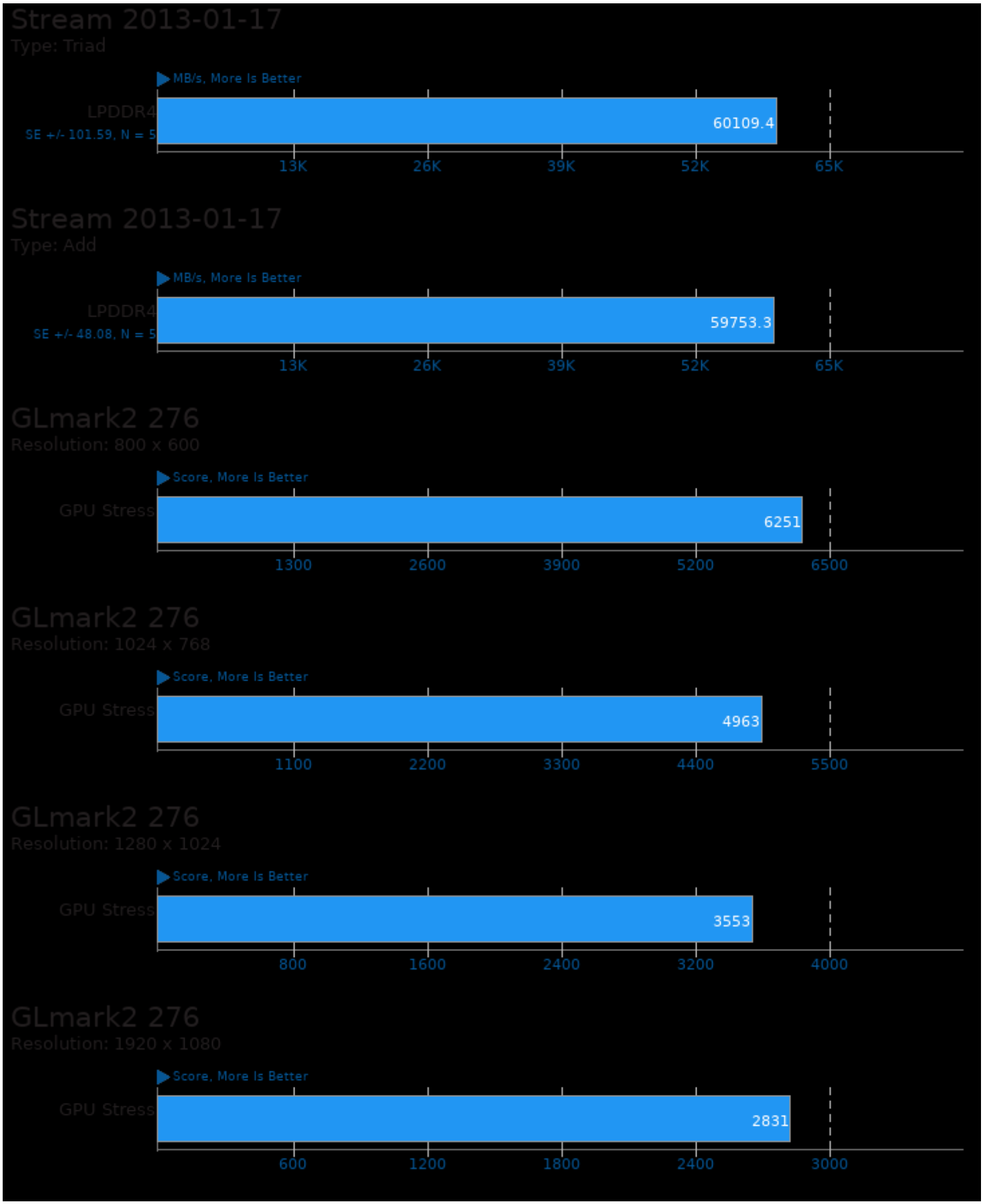
Type: Copy

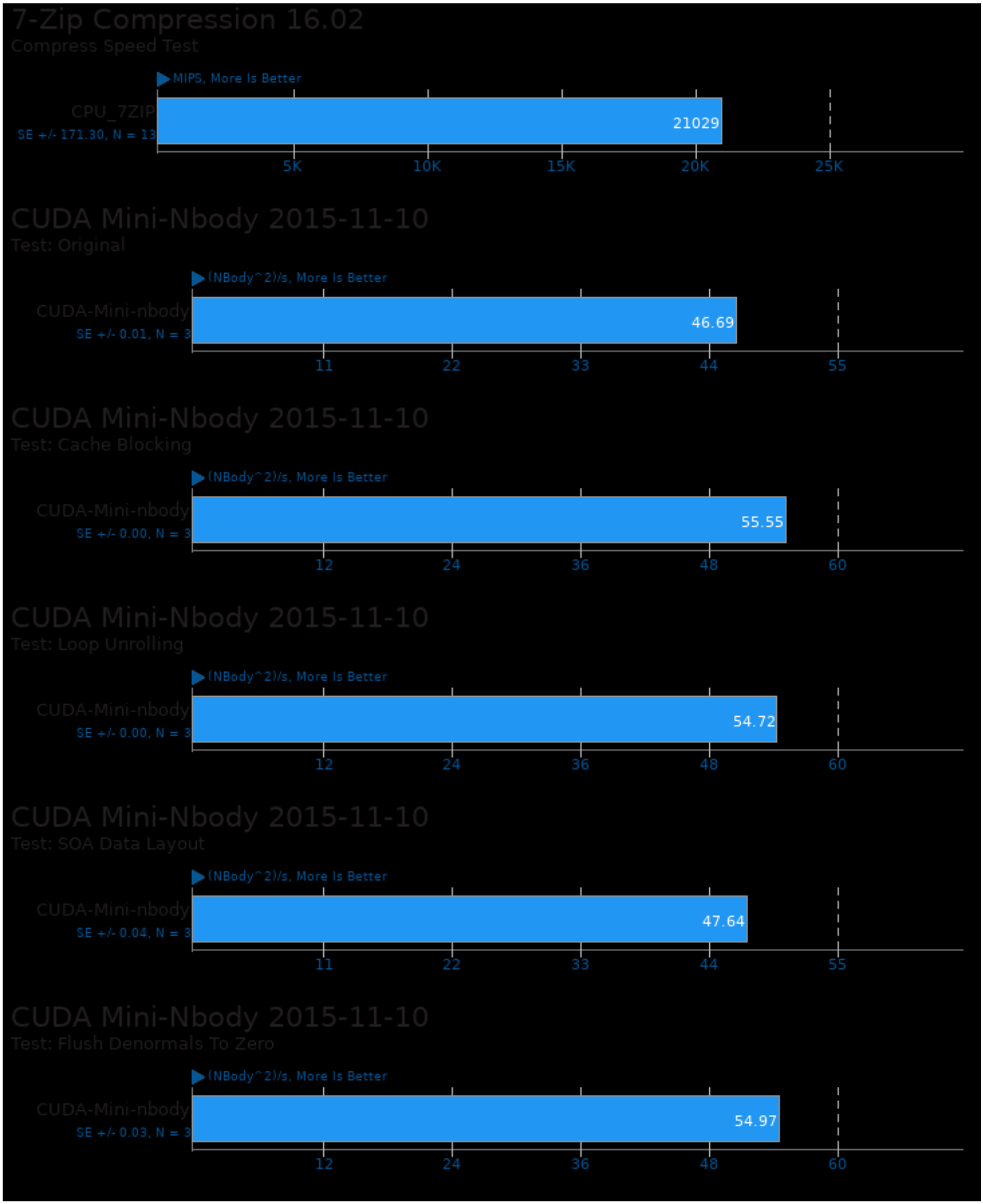



## Stream 2013-01-17

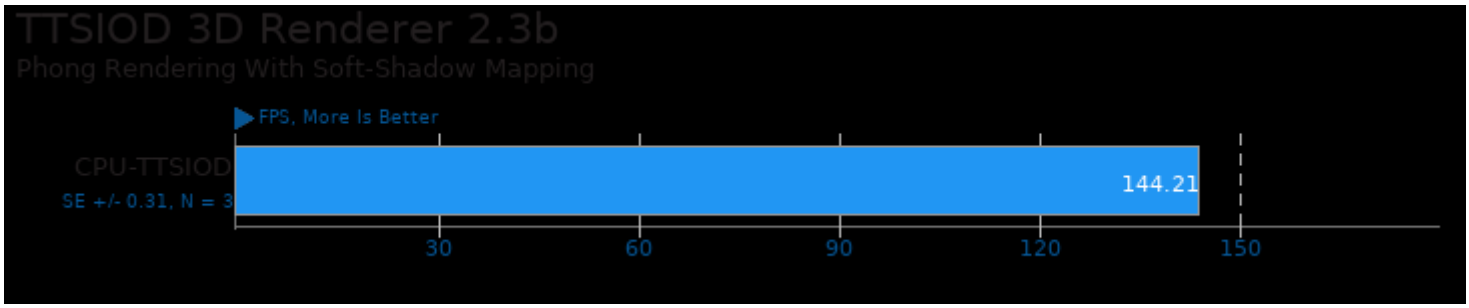
Type: Scale




Stream 2013-01-17
Type: Triad
MB/s, More Is Better
LPDDR4
SE +/- 101.59, N = 5
60109.4
13K
26K
39K
52K
65K
Stream 2013-01-17
Type: Add
MB/s, More Is Better
LPDDR4
SE +/- 48.08, N = 5
59753.3
13K
26K
39K
52K
65K
GLmark2 276
Resolution: 800 x 600
Score, More Is Better
GPU Stress
6251
1300
2600
3900
5200
6500
GLmark2 276
Resolution: 1024 x 768
Score, More Is Better
GPU Stress
4963
1100
2200
3300
4400
5500
GLmark2 276
Resolution: 1280 x 1024
Score, More Is Better
GPU Stress
3553
800
1600
2400
3200
4000
GLmark2 276
Resolution: 1920 x 1080
Score, More Is Better
GPU Stress
2831
600
1200
1800
2400
3000


7-Zip Compression 16.02
Compress Speed Test
MIPS, More Is Better
CPU_7ZIP
SE +/- 171.30, N = 13
21029
5K
10K
15K
20K
25K
CUDA Mini-Nbody 2015-11-10
Test: Original
(NBody^2)/s, More Is Better
CUDA-Mini-nbody
SE +/- 0.01, N = 3
46.69
11
22
33
44
55
CUDA Mini-Nbody 2015-11-10
Test: Cache Blocking
(NBody^2)/s, More Is Better
CUDA-Mini-nbody
SE +/- 0.00, N = 3
55.55
12
24
36
48
60
CUDA Mini-Nbody 2015-11-10
Test: Loop Unrolling
(NBody^2)/s, More Is Better
CUDA-Mini-nbody
SE +/- 0.00, N = 3
54.72
12
24
36
48
60
CUDA Mini-Nbody 2015-11-10
Test: SOA Data Layout
(NBody^2)/s, More Is Better
CUDA-Mini-nbody
SE +/- 0.04, N = 3
47.64
11
22
33
44
55
CUDA Mini-Nbody 2015-11-10
Test: Flush Denormals To Zero
(NBody^2)/s, More Is Better
CUDA-Mini-nbody
SE +/- 0.03, N = 3
54.97
12
24
36
48
60

# Xavier_012_32_3_1




*This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 03:20.*