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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
TTSIOD 3D Renderer (Phong Rendering With Soft-Shadow Mapping) at 1x

CUDA Mini-Nbody (Test: Flush Denormals To Zero) at 1x
CUDA Mini-Nbody (Test: SOA Data Layout) at 1x
CUDA Mini-Nbody (Test: Loop Unrolling) 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 run2	SSD_760PJ517	SSD_P X2569M 9PJ517	SSD_760PJ517r un5	SSD_760PJ1	SSD_760PJ1r un2	SSD_760PJ1r un3	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 run 6
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%	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%										

Xavier_012_32_3_1

Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (IOPS)	13	2		5	14	13	14	13	13	140	14	124	140	133	134	135	9		3		114
Normalized	9.29%	1.43%		3.57%	10%	9.29%	10%	9.29%	9.29%	100%	10%	88.57%	100%	95%	95.71%	96.43%	6.43%		2.14%		81.43%
Standard Deviation	4.3%									1.5%			1.5%	1.7%		1.5%			23.1%		
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (MB/s)	300	122	2387	62.9	311	297	307	304	309	2502	305	2040	2500	1554	1553	1554	427		183		1012
Normalized	11.99%	4.88%	95.4%	2.51%	12.43%	11.87%	12.27%	12.15%	12.35%	100%	12.19%	81.53%	99.92%	62.11%	62.07%	62.11%	17.07%		7.31%		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

Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (MB/s)	136.5	38.5		66.2	135	134	136	136	134	147	136	121	**1150**	1089	1101	1106	103		45.9	94.1
Normalized	11.83%	3.35%		5.76%	11.74%	11.65%	11.83%	11.83%	11.65%	99.74%	11.83%	88.78%	100%	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%	
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 4KB (IOPS)	20500	**63140**		17256	72	22983	23467	23090	23096	24667	77373	23073	79500	81300	**83917**	82767	81756	21090	75	81
Normalized	24.43%	7.52%		20.93%	8.64%	27.39%	27.96%	28.48%	28.56%	29.39%	92.2%	28.74%	94.88%	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%	

Xavier_012_32_3_1

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	30.2	92.7	31.1	31.8	**328**	32.3	32.0	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%

TTSIOD 3D Renderer - P.R.W.S.S.M (FPS)	14	4.20
Standard Deviation		0.4%

CUDA Mini-Nbody - F.D.T.Z ((NBody^2)/s)	54.9
Standard Deviation	0.1%

CUDA Mini-Nbody - SOA Data Layout ((NBody^2)/	47.639
Standard Deviation	0.2%
CUDA Mini-Nbody - Loop Unrolling ((NBody^2)/s)	54.724
Standard Deviation	0%
CUDA Mini-Nbody - Cache Blocking ((NBody^2)/s)	55.546
Standard Deviation	0%

| | | |

GLmark2 - 800 x 600 (Score)				62 51
Stream - Add (MB/s)			59 75 3	
Standard Deviation			0.2 %	
Stream - Triad (MB/s)			60 10 9	
Standard Deviation			0.4 %	
Stream - Scale (MB/s)			66 14 4	
Standard Deviation			0.6 %	
Stream - Copy (MB/s)			67 02 3	
Standard Deviation			0.6 %	
Stress-NG - G.C.S.F (Bogo Ops/s)		16 25 43		
Standard Deviation		2.8 %		

Stress-NG - Memory Copying (Bogo Ops/s)	37 19
Standard Deviation	0.7 %
Stress-NG - Vector Math (Bogo Ops/s)	11 76 9
Standard Deviation	0.1 %
Stress-NG - CPU Stress (Bogo Ops/s)	80 5. 16
Standard Deviation	2.9 %
Stress-NG - Bsearch (Bogo Ops/s)	19 90
Standard Deviation	2%
Stress-NG - Crypto (Bogo Ops/s)	12 55

Standard Deviation		0.9 %
Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 8MB (IOPS)	10 8	
Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 4KB (IOPS)	13 26 67	
Standard Deviation	2.6 %	

Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 4KB (MB/s)	51
Standard Deviation	8 2.8 %
Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 4KB (IOPS)	13 13 33
Standard Deviation	2.4 %

Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 4KB (MB/s)	51
Standard Deviation	2.8 %
Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 8MB (IOPS)	18
Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 8MB (MB/s)	15
Standard Deviation	0.1 %

Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 4KB (IOPS)	25 76 67
Standard Deviation	2.7 %
Flexible IO Tester - Seq Read - Linux AIO - Yes - Yes - 4KB (MB/s)	10 07
Standard Deviation	2.8 %

Flexible IO Tester - Seq Write - Linux AIO - No - No - 4KB (IOPS)	75 36 7
Standard Deviation	3%
Flexible IO Tester - Seq Write - Linux AIO - No - No - 4KB (MB/s)	29 5
Standard Deviation	3%

Flexible IO Tester - Seq Read - Linux AIO - Yes - No - 8MB (IOPS)	18 6
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 - 4KB (IOPS)	24 86 67
Standard Deviation	3%

Flexible IO Tester - Seq Read - Linux AIO - Yes - No - 4KB (MB/s)	97
Standard Deviation	1 3%
Flexible IO Tester - Seq Read - Linux AIO - No - No - 8MB (IOPS)	30
Standard Deviation	9
Flexible IO Tester - Seq Read - Linux AIO - No - No - 8MB (MB/s)	25
Standard Deviation	04 0.1 %

Flexible IO Tester - Seq Read - Linux AIO - No - No - 4KB (IOPS)	92 20 7		
Standard Deviation	3.6 %		
Flexible IO Tester - Seq Read - Linux AIO - No - No - 4KB (MB/s)	36 0		
Standard Deviation	3.5 %		
Stress-NG - G.Q.D.S (Bogo Ops/s)		38 .9 8	
Standard Deviation		12. 1%	

Stress-NG - Matrix Math (Bogo Ops/s)		1400 2
Standard Deviation		21.8%
Flexible IO Tester - Seq Write - Linux AIO - Yes - Yes - 8MB (MB/s)	892	
Standard Deviation	7%	
Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 8MB (IOPS)	102	
Standard Deviation	14.8%	

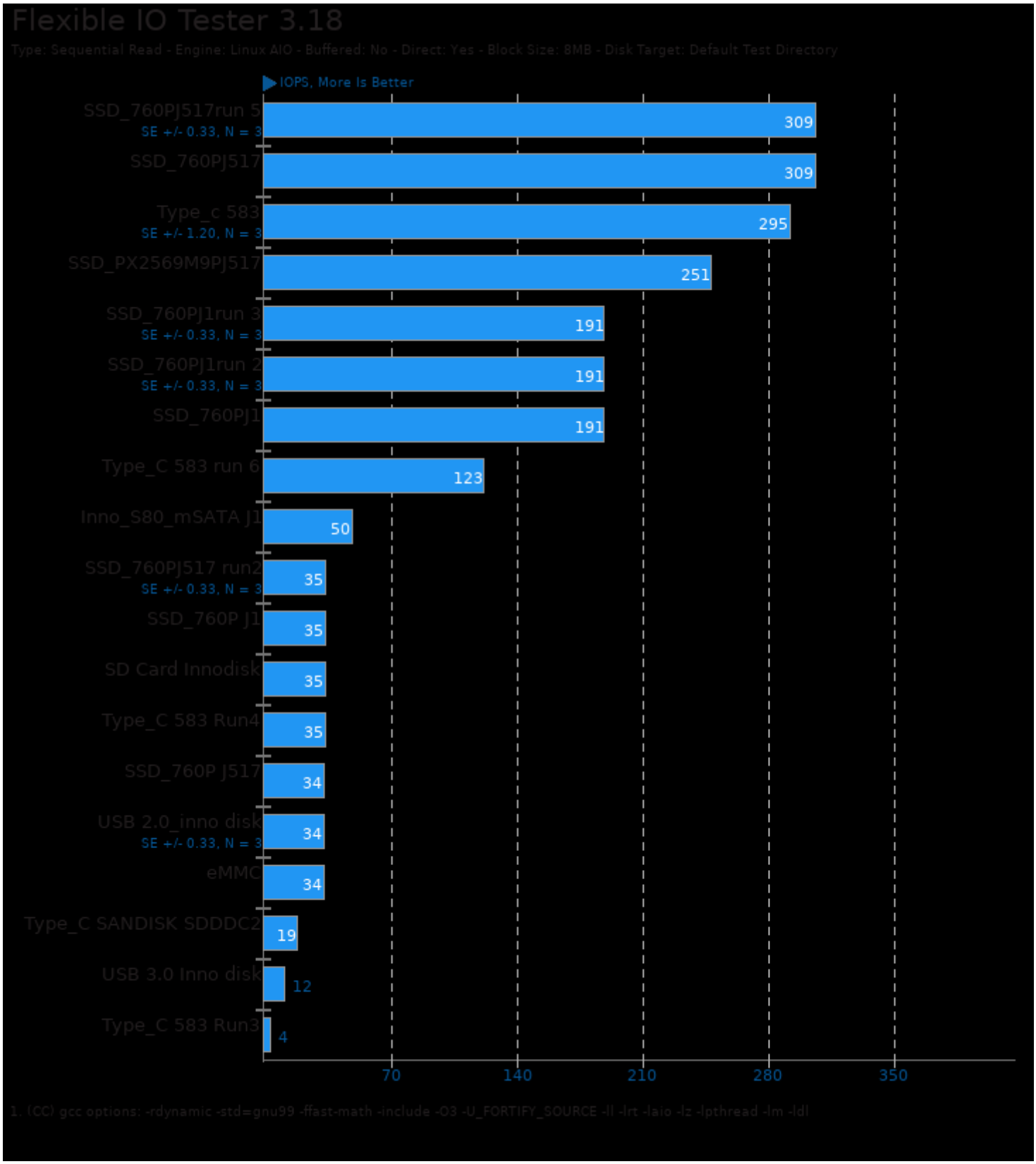
Flexible IO Tester - Seq Write - Linux AIO - Yes - No - 8MB (MB/s)	84
Standard Deviation	7 14.4%
Flexible IO Tester - Seq Write - Linux AIO - No - No - 8MB (IOPS)	10 4
Standard Deviation	16.9%

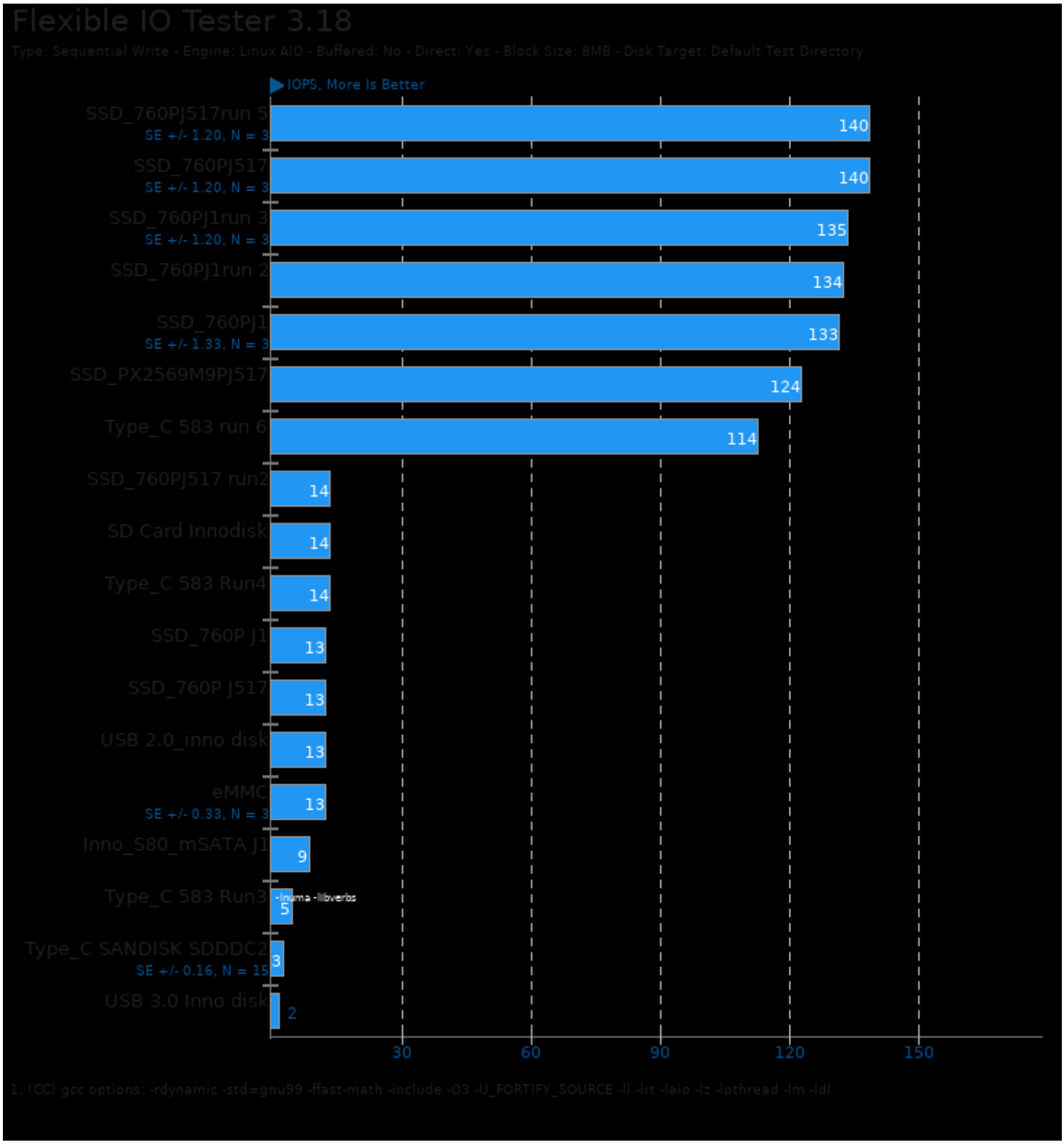
Xavier_012_32_3_1

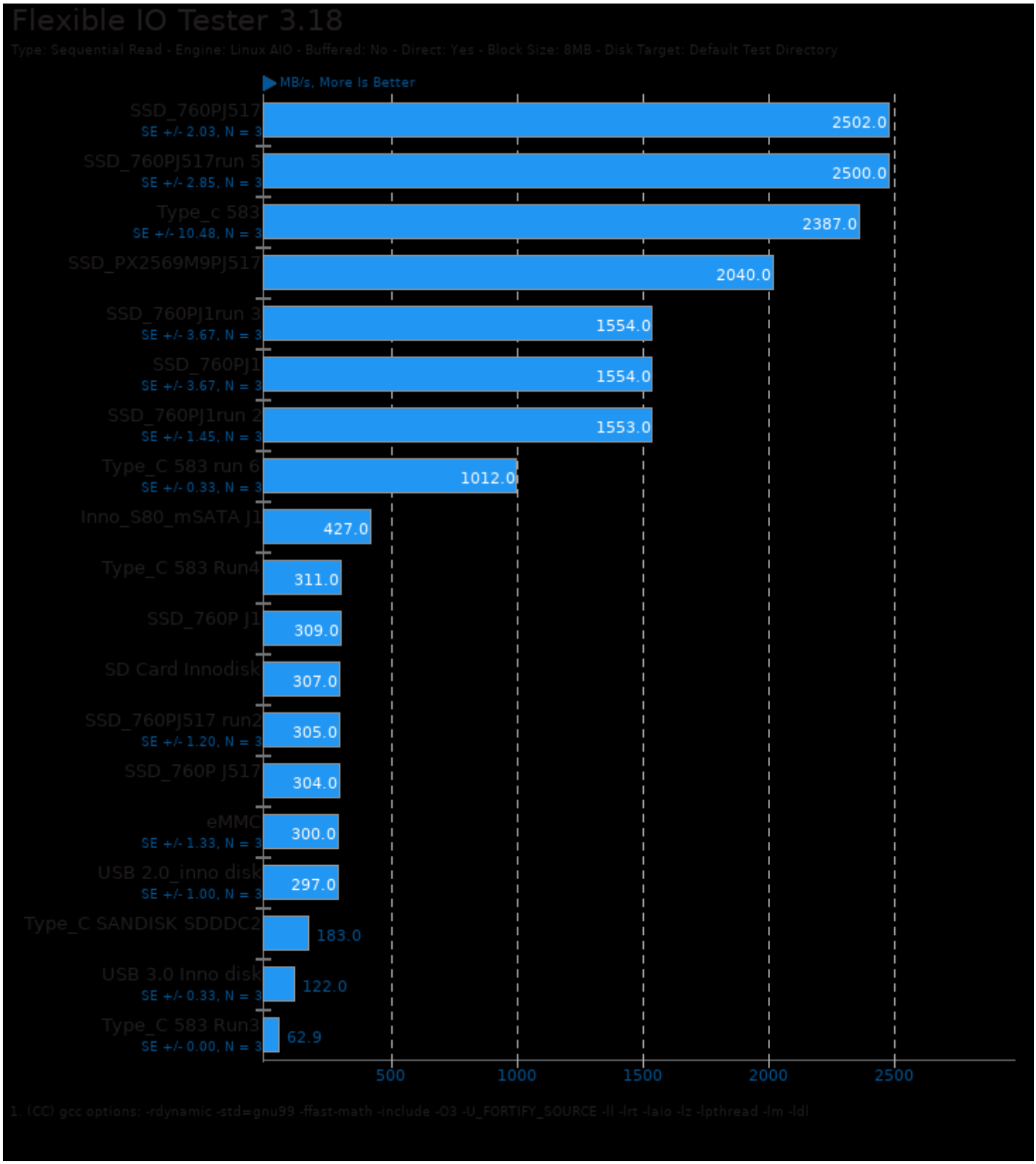
Flexible IO Tester - Seq Write - Linux AIO - No - No - 8MB (MB/s)										86 1								
Standard Deviation										16. 5%								
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (IOPS)	25 09 3	24 66 7	38 92 5	71 52	24 58 0	25 17 3	24 83 3	24 19 3	24 79 3	90 60 0	24 87 3	88 00 0	92 96 7	95 50 0	97 90 0	95 27 1	51 23 3	32 56 7
Normalized	25. 63 %	25. 2%	39. 76 %	7.3 1%	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 %

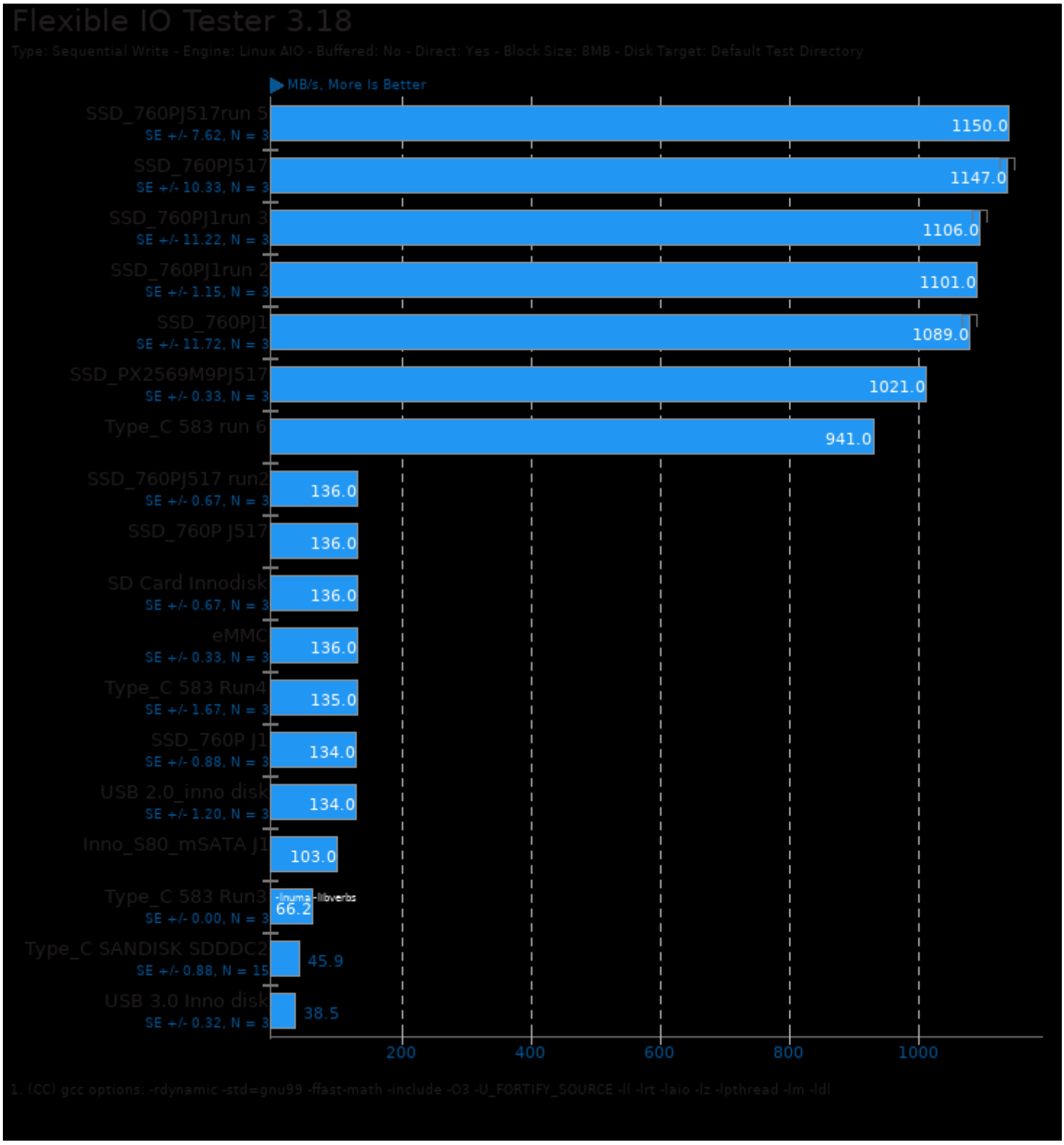
Xavier_012_32_3_1

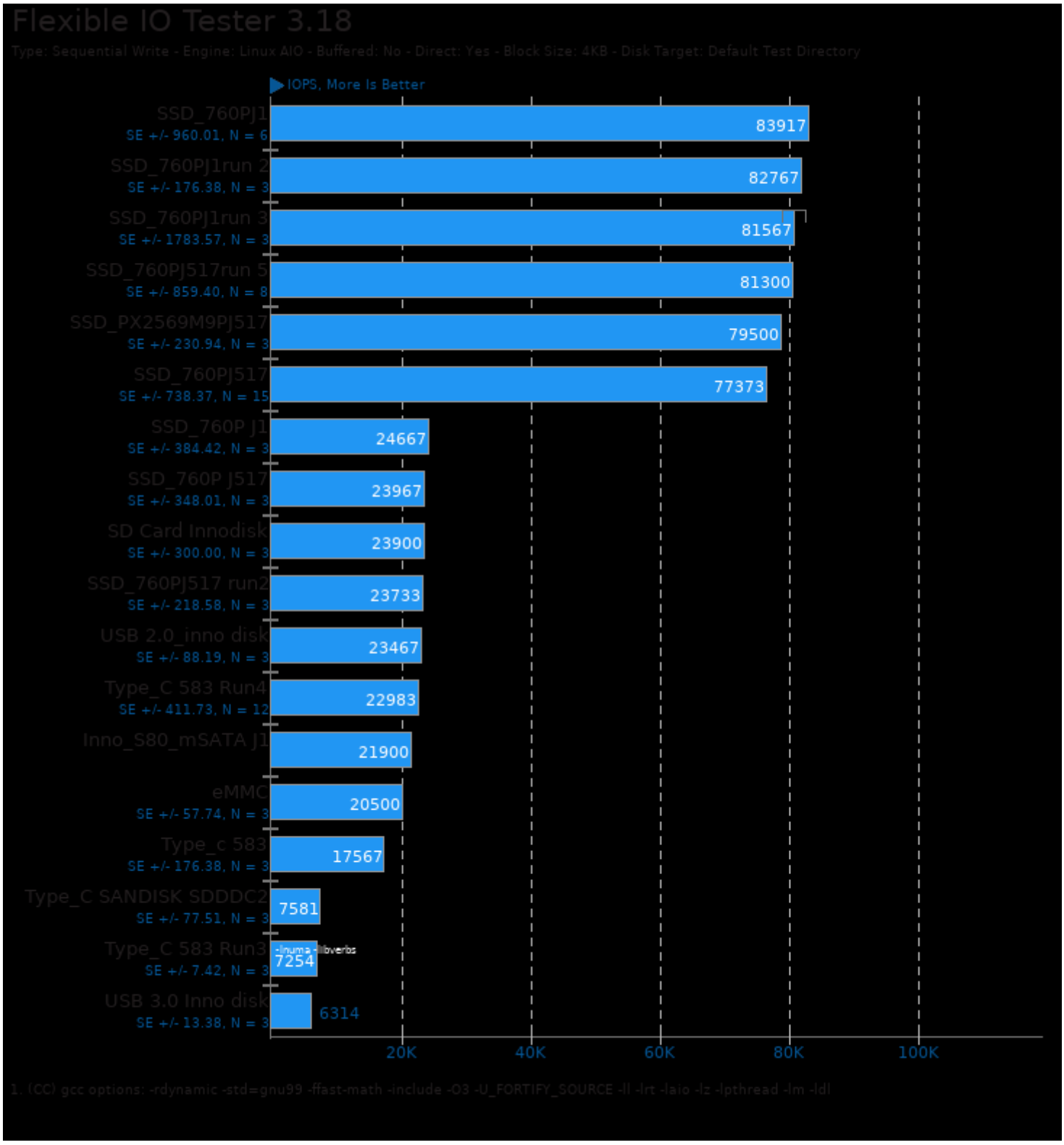
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 4KB (MB/s)	98.0	97.7	152	27.9	96.4	98.3	96.9	94.9	97.1	355	97.9	344	364	373	383	372	200	127
Normalized	25.59%	25.51%	39.69%	7.28%	25.17%	25.67%	25.3%	24.78%	25.35%	92.69%	25.56%	89.82%	95.04%	97.39%	100%	97.13%	52.22%	33.16%
Standard Deviation	28.7%	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%	

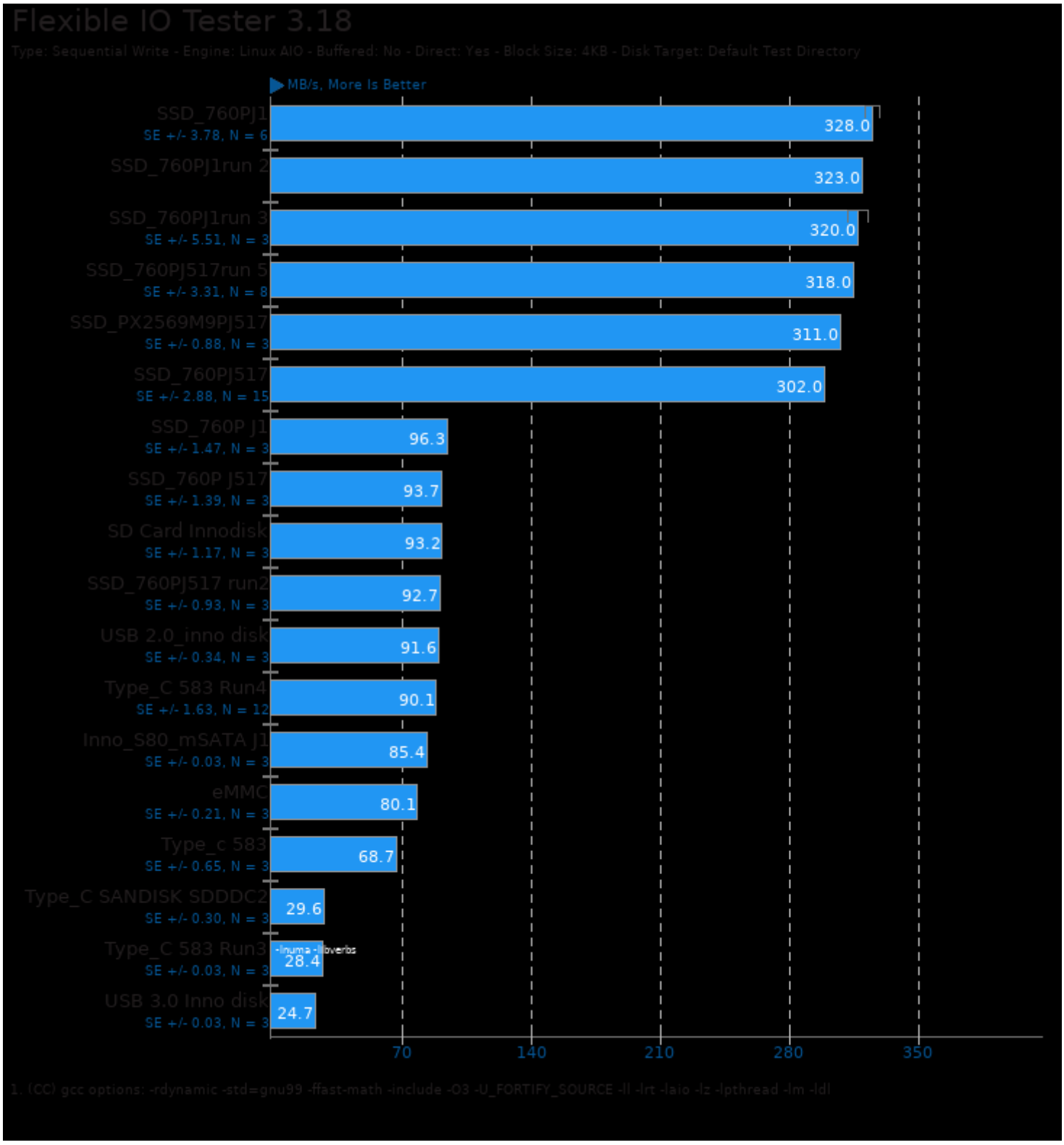

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517run 5
SE +/- 0.33, N = 3
309
SSD_760PJ517
309
Type_c 583
SE +/- 1.20, N = 3
295
SSD_PX2569M9PJ517
251
SSD_760PJ1run 3
SE +/- 0.33, N = 3
191
SSD_760PJ1run 2
SE +/- 0.33, N = 3
191
SSD_760PJ1
191
Type_C 583 run 6
123
Inno_S80_mSATA J1
50
SSD_760PJ517 run2
SE +/- 0.33, N = 3
35
SSD_760P J1
35
SD Card Innodisk
35
Type_C 583 Run4
35
SSD_760P J517
34
USB 2.0_inno disk
SE +/- 0.33, N = 3
34
eMMC
34
Type_C SANDISK SDDDC2
19
USB 3.0 Inno disk
12
Type_C 583 Run3
4
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

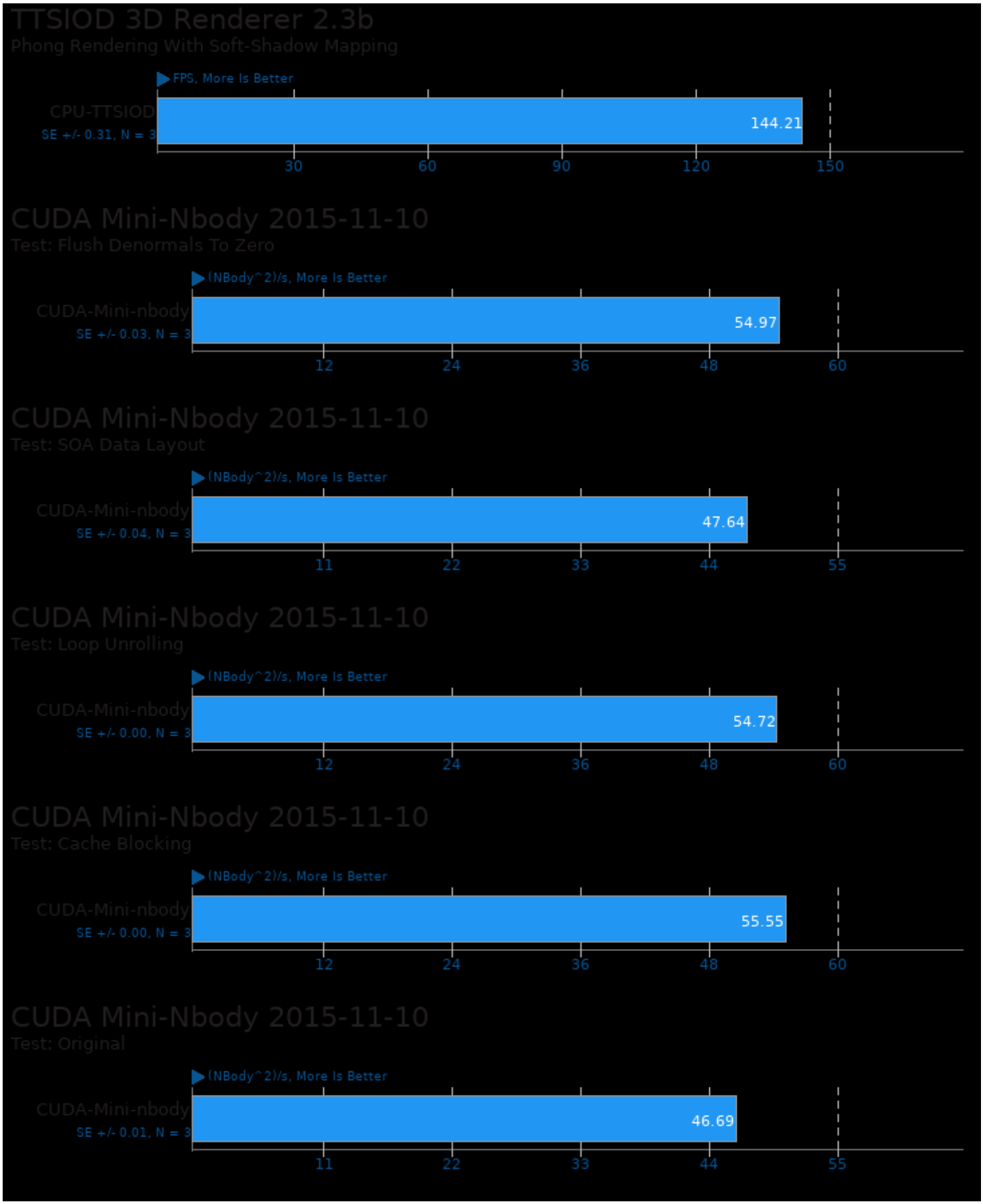

Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517run 5
SE +/- 1.20, N = 3
140
SSD_760PJ517
SE +/- 1.20, N = 3
140
SSD_760PJ1run 3
SE +/- 1.20, N = 3
135
SSD_760PJ1run 2
134
SSD_760PJ1
SE +/- 1.33, N = 3
133
SSD_PX2569M9PJ517
124
Type_C 583 run 6
114
SSD_760PJ517 run2
14
SD Card Innodisk
14
Type_C 583 Run4
14
SSD_760P J1
13
SSD_760P J517
13
USB 2.0_inno disk
13
eMMC
SE +/- 0.33, N = 3
13
Inno_S80_mSATA J1
9
Type_C 583 Run3
-lnuma -libverbs
5
Type_C SANDISK SDDDC2
SE +/- 0.16, N = 15
3
USB 3.0 Inno disk
2
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

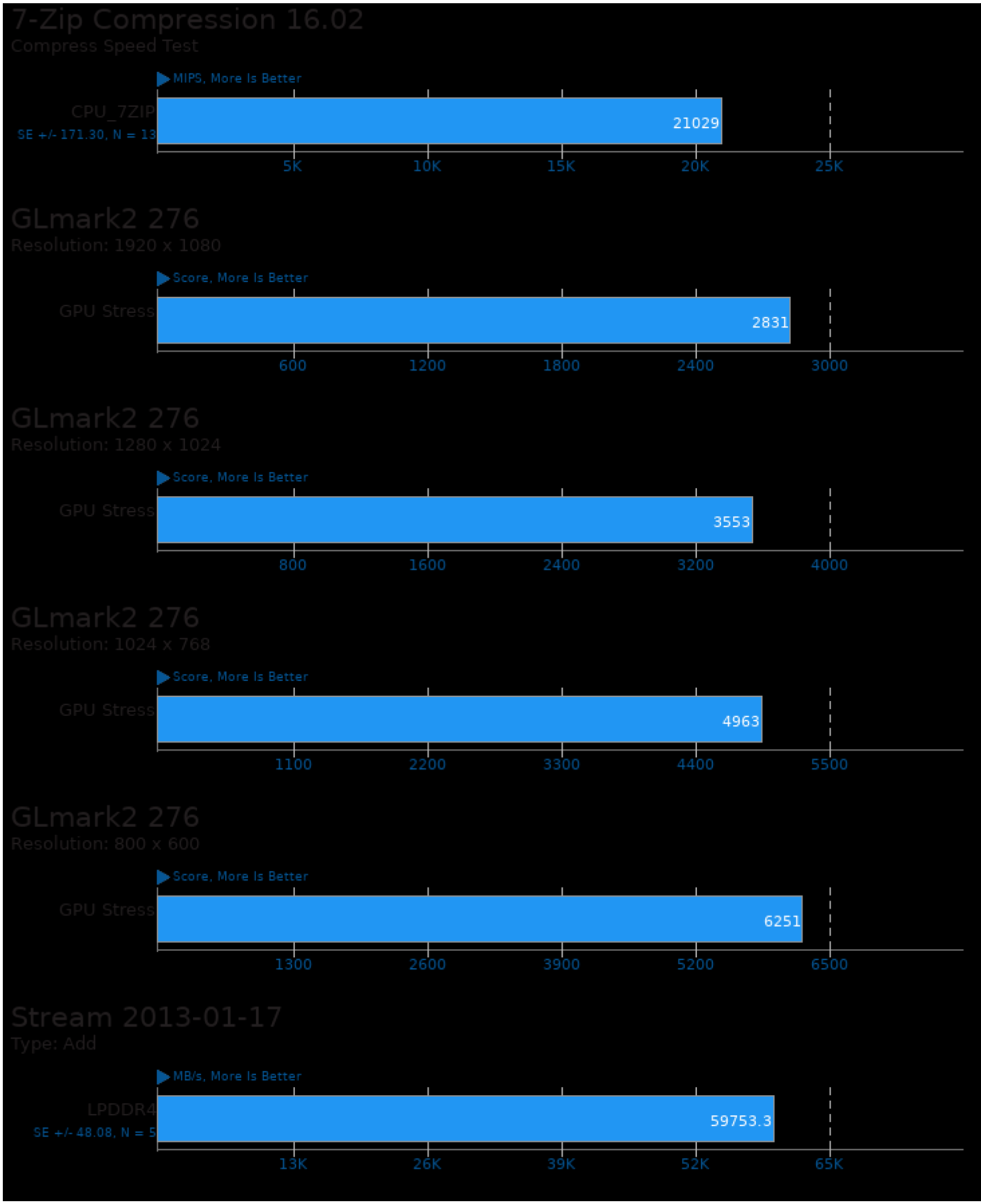

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 2.03, N = 3
2502.0
SSD_760PJ517run 5
SE +/- 2.85, N = 3
2500.0
Type_c 583
SE +/- 10.48, N = 3
2387.0
SSD_PX2569M9PJ517
2040.0
SSD_760PJ1run 3
SE +/- 3.67, N = 3
1554.0
SSD_760PJ1
SE +/- 3.67, N = 3
1554.0
SSD_760PJ1run 2
SE +/- 1.45, N = 3
1553.0
Type_C 583 run 6
SE +/- 0.33, N = 3
1012.0
Inno_S80_mSATA J1
427.0
Type_C 583 Run4
311.0
SSD_760P J1
309.0
SD Card Innodisk
307.0
SSD_760PJ517 run2
SE +/- 1.20, N = 3
305.0
SSD_760P J517
304.0
eMMC
SE +/- 1.33, N = 3
300.0
USB 2.0_inno disk
SE +/- 1.00, N = 3
297.0
Type_C SANDISK SDDDC2
183.0
USB 3.0 Inno disk
SE +/- 0.33, N = 3
122.0
Type_C 583 Run3
SE +/- 0.00, N = 3
62.9
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

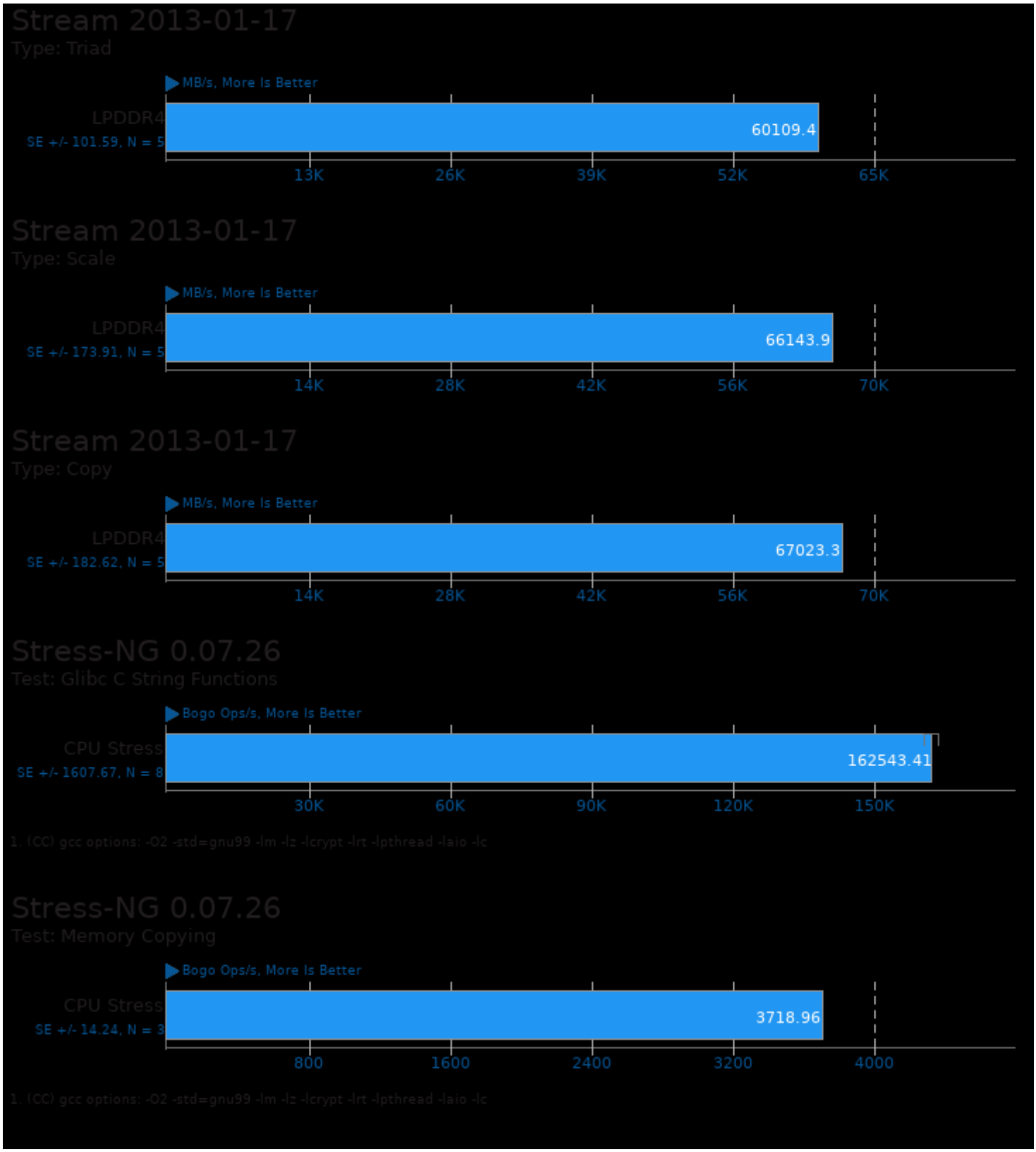

Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517run 5
SE +/- 7.62, N = 3
1150.0
SSD_760PJ517
SE +/- 10.33, N = 3
1147.0
SSD_760PJ1run 3
SE +/- 11.22, N = 3
1106.0
SSD_760PJ1run 2
SE +/- 1.15, N = 3
1101.0
SSD_760PJ1
SE +/- 11.72, N = 3
1089.0
SSD_PX2569M9PJ517
SE +/- 0.33, N = 3
1021.0
Type_C 583 run 6
941.0
SSD_760PJ517 run2
SE +/- 0.67, N = 3
136.0
SSD_760P J517
136.0
SD Card Innodisk
SE +/- 0.67, N = 3
136.0
eMMC
SE +/- 0.33, N = 3
136.0
Type_C 583 Run4
SE +/- 1.67, N = 3
135.0
SSD_760P J1
SE +/- 0.88, N = 3
134.0
USB 2.0_inno disk
SE +/- 1.20, N = 3
134.0
Inno_S80_mSATA J1
103.0
Type_C 583 Run3
SE +/- 0.00, N = 3
-lnuma -libverbs
66.2
Type_C SANDISK SDDDC2
SE +/- 0.88, N = 15
45.9
USB 3.0 Inno disk
SE +/- 0.32, N = 3
38.5
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: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
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_760PJ517run 5
SE +/- 859.40, N = 8
81300
SSD_PX2569M9PJ517
SE +/- 230.94, N = 3
79500
SSD_760PJ517
SE +/- 738.37, N = 15
77373
SSD_760P J1
SE +/- 384.42, N = 3
24667
SSD_760P J517
SE +/- 348.01, N = 3
23967
SD Card Innodisk
SE +/- 300.00, N = 3
23900
SSD_760PJ517 run2
SE +/- 218.58, N = 3
23733
USB 2.0_inno disk
SE +/- 88.19, N = 3
23467
Type_C 583 Run4
SE +/- 411.73, N = 12
22983
Inno_S80_mSATA J1
21900
eMMC
SE +/- 57.74, N = 3
20500
Type_c 583
SE +/- 176.38, N = 3
17567
Type_C SANDISK SDDDC2
SE +/- 77.51, N = 3
7581
Type_C 583 Run3
SE +/- 7.42, N = 3
-lnuma -loverbs
7254
USB 3.0 Inno disk
SE +/- 13.38, N = 3
6314
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: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
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_760PJ517run 5
SE +/- 3.31, N = 8
318.0
SSD_PX2569M9PJ517
SE +/- 0.88, N = 3
311.0
SSD_760PJ517
SE +/- 2.88, N = 15
302.0
SSD_760P J1
SE +/- 1.47, N = 3
96.3
SSD_760P J517
SE +/- 1.39, N = 3
93.7
SD Card Innodisk
SE +/- 1.17, N = 3
93.2
SSD_760PJ517 run2
SE +/- 0.93, N = 3
92.7
USB 2.0_inno disk
SE +/- 0.34, N = 3
91.6
Type_C 583 Run4
SE +/- 1.63, N = 12
90.1
Inno_S80_mSATA J1
SE +/- 0.03, N = 3
85.4
eMMC
SE +/- 0.21, N = 3
80.1
Type_c 583
SE +/- 0.65, N = 3
68.7
Type_C SANDISK SDDDC2
SE +/- 0.30, N = 3
29.6
Type_C 583 Run3
SE +/- 0.03, N = 3
-lnuma -loverbs
28.4
USB 3.0 Inno disk
SE +/- 0.03, N = 3
24.7
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

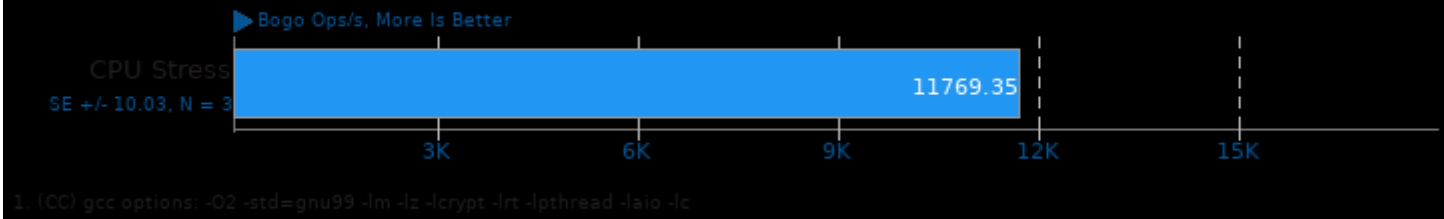

TTSIOD 3D Renderer 2.3b
Phong Rendering With Soft-Shadow Mapping
FPS, More Is Better
CPU-TTSIOD
SE +/- 0.31, N = 3
144.21
30
60
90
120
150
CUDA Mini-Nbody 2015-11-10
Test: Flush Denormals To Zero
(NBody^2)/s, More Is Better
CUDA-Mini-nbody
SE +/- 0.03, N = 3
54.97
12
24
36
48
60
CUDA Mini-Nbody 2015-11-10
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: 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: 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: Original
(NBody^2)/s, More Is Better
CUDA-Mini-nbody
SE +/- 0.01, N = 3
46.69
11
22
33
44
55


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


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: Scale
MB/s, More Is Better
LPDDR4
SE +/- 173.91, N = 5
66143.9
14K
28K
42K
56K
70K
Stream 2013-01-17
Type: Copy
MB/s, More Is Better
LPDDR4
SE +/- 182.62, N = 5
67023.3
14K
28K
42K
56K
70K
Stress-NG 0.07.26
Test: Glibc C String Functions
Bogo Ops/s, More Is Better
CPU Stress
SE +/- 1607.67, N = 8
162543.41
30K
60K
90K
120K
150K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc
Stress-NG 0.07.26
Test: Memory Copying
Bogo Ops/s, More Is Better
CPU Stress
SE +/- 14.24, N = 3
3718.96
800
1600
2400
3200
4000
1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc

Stress-NG 0.07.26

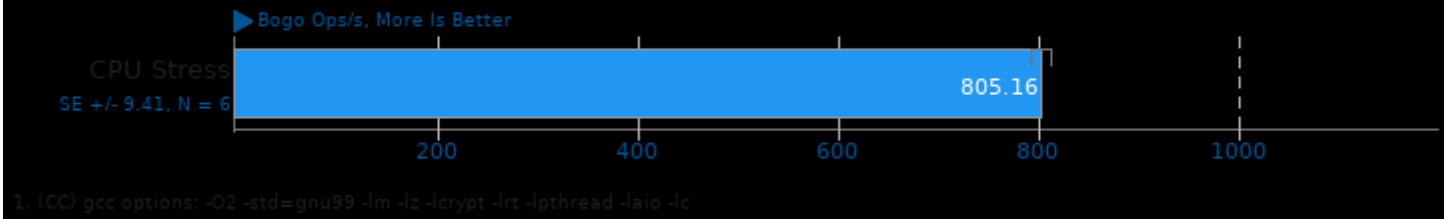
Test: Vector Math



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

Stress-NG 0.07.26

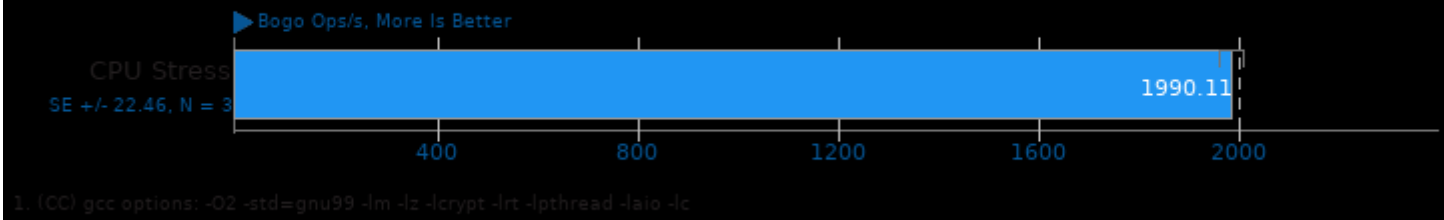
Test: CPU Stress



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

Stress-NG 0.07.26

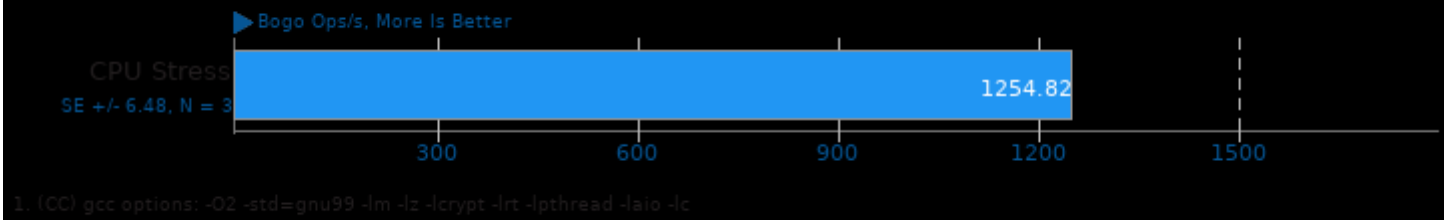
Test: Bsearch



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

Stress-NG 0.07.26

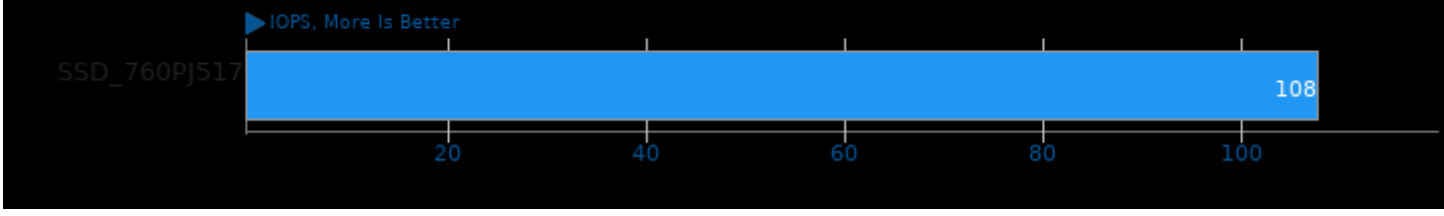
Test: Crypto

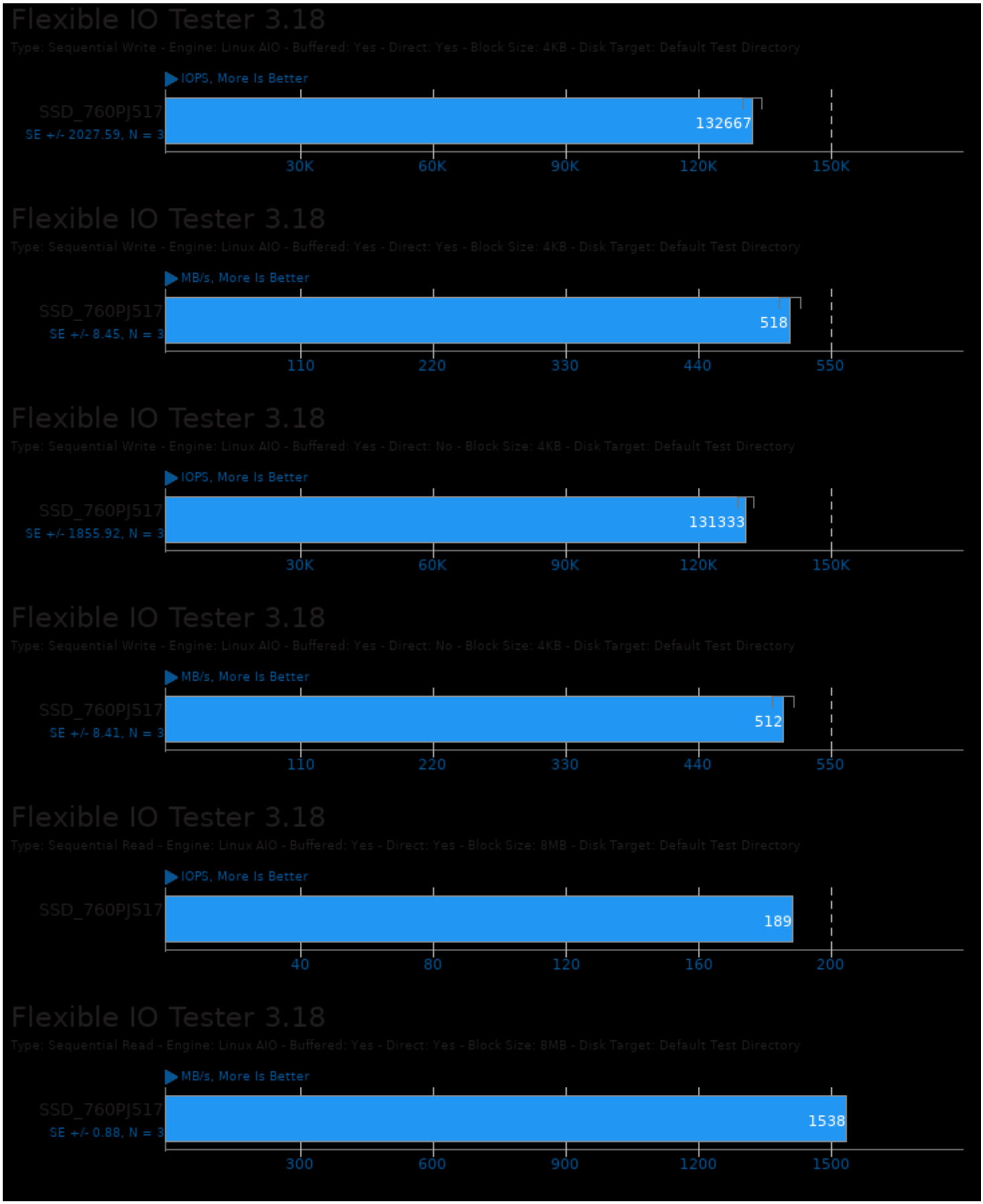


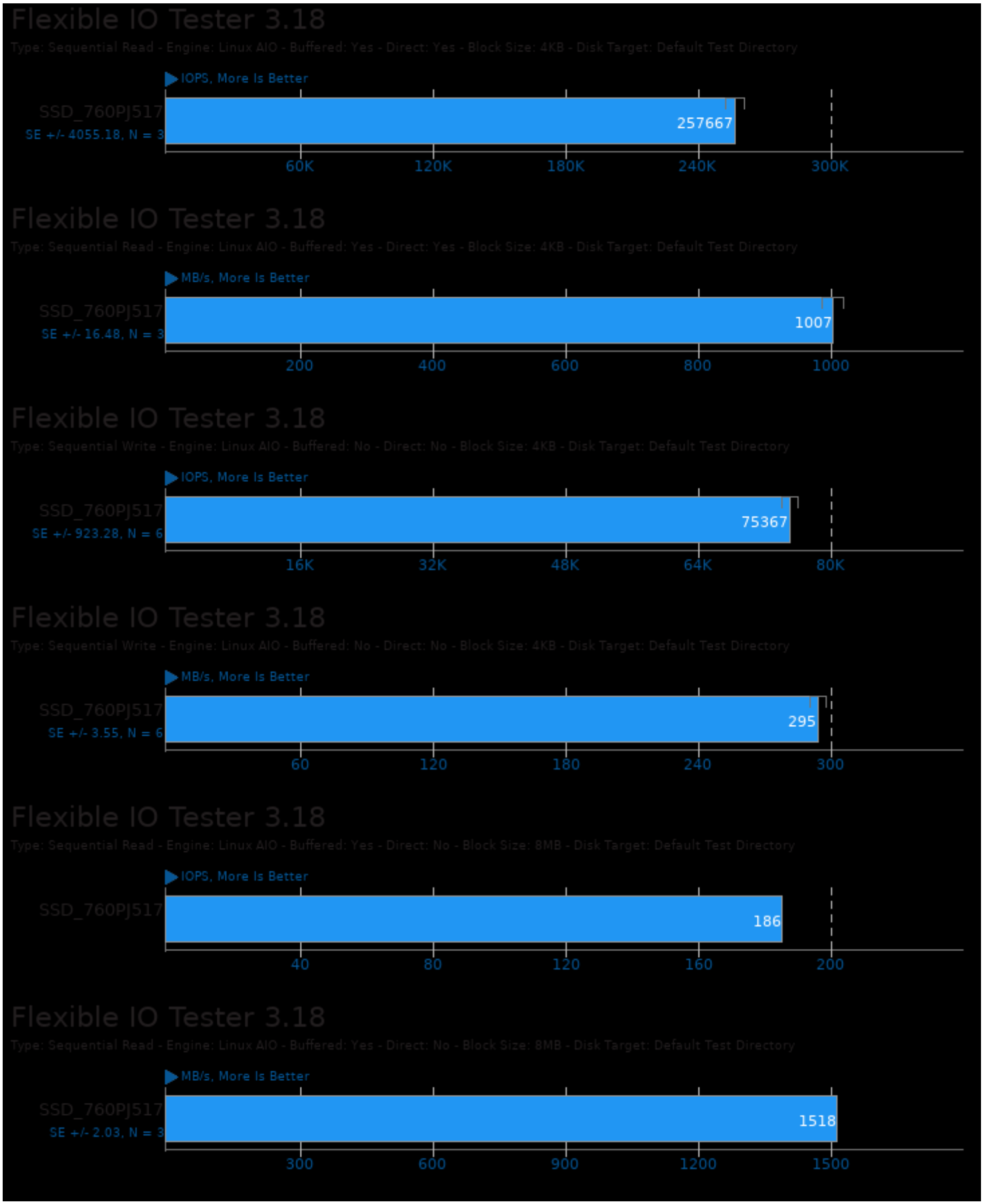
1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc

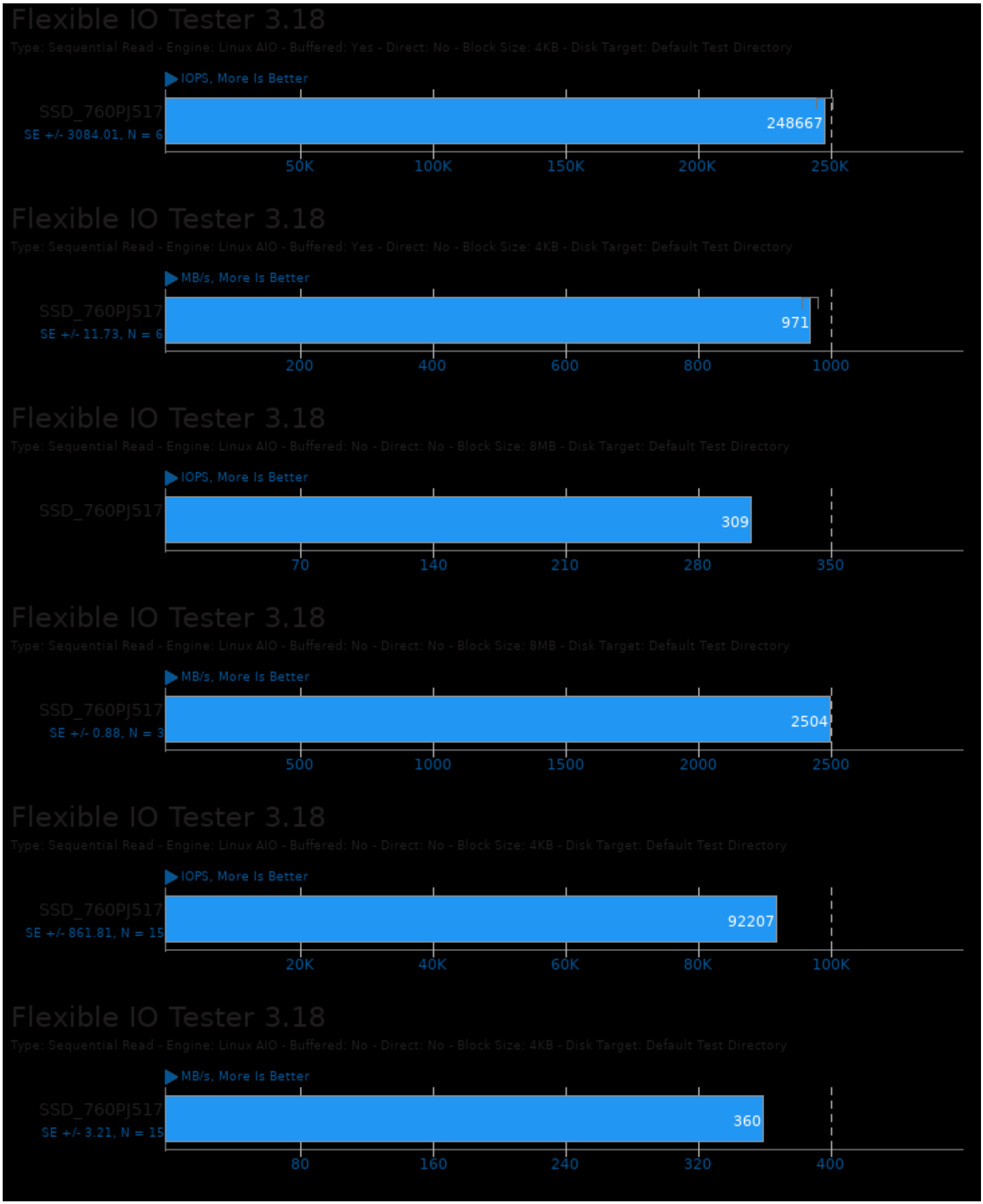
Flexible IO Tester 3.18

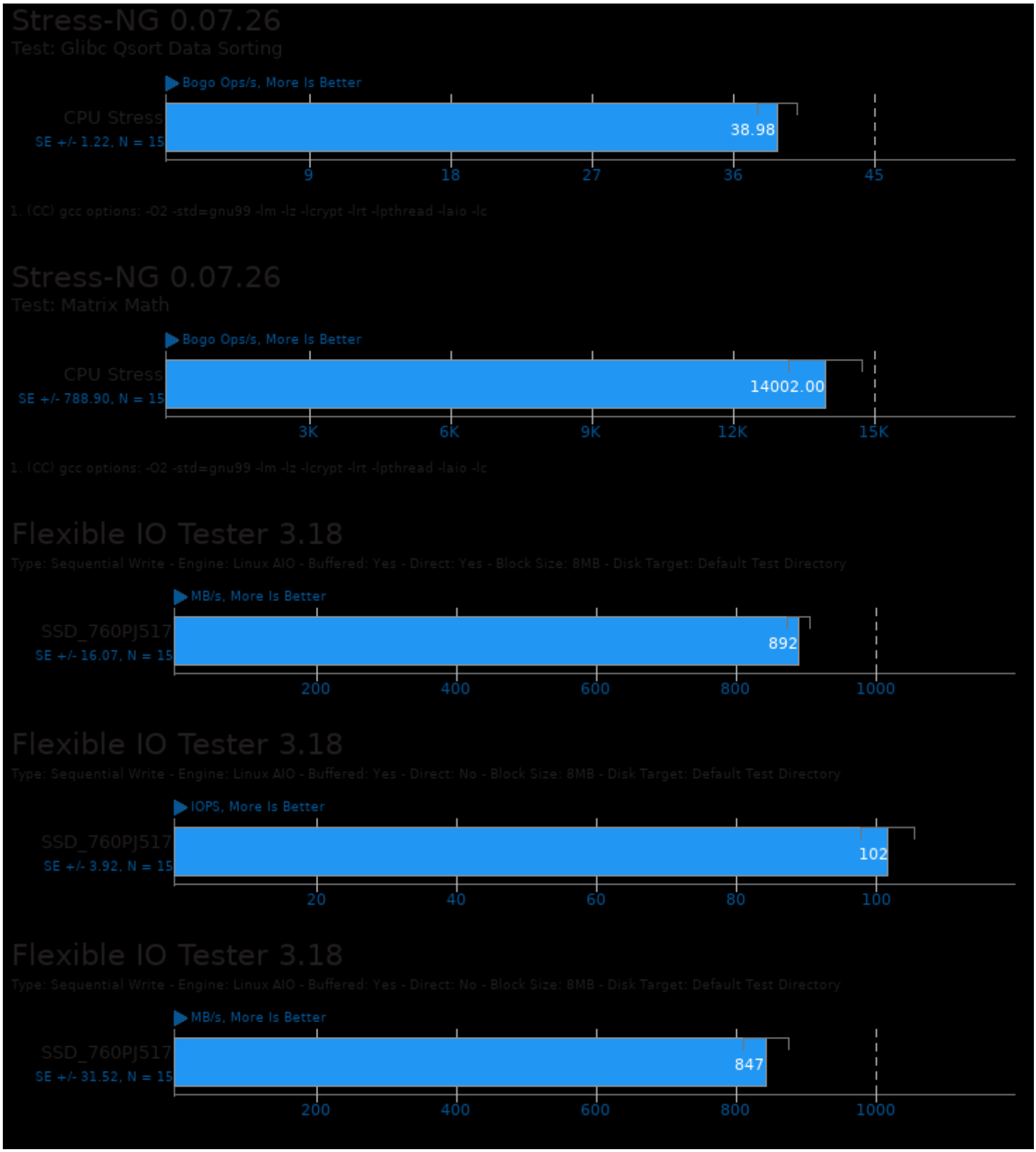
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory

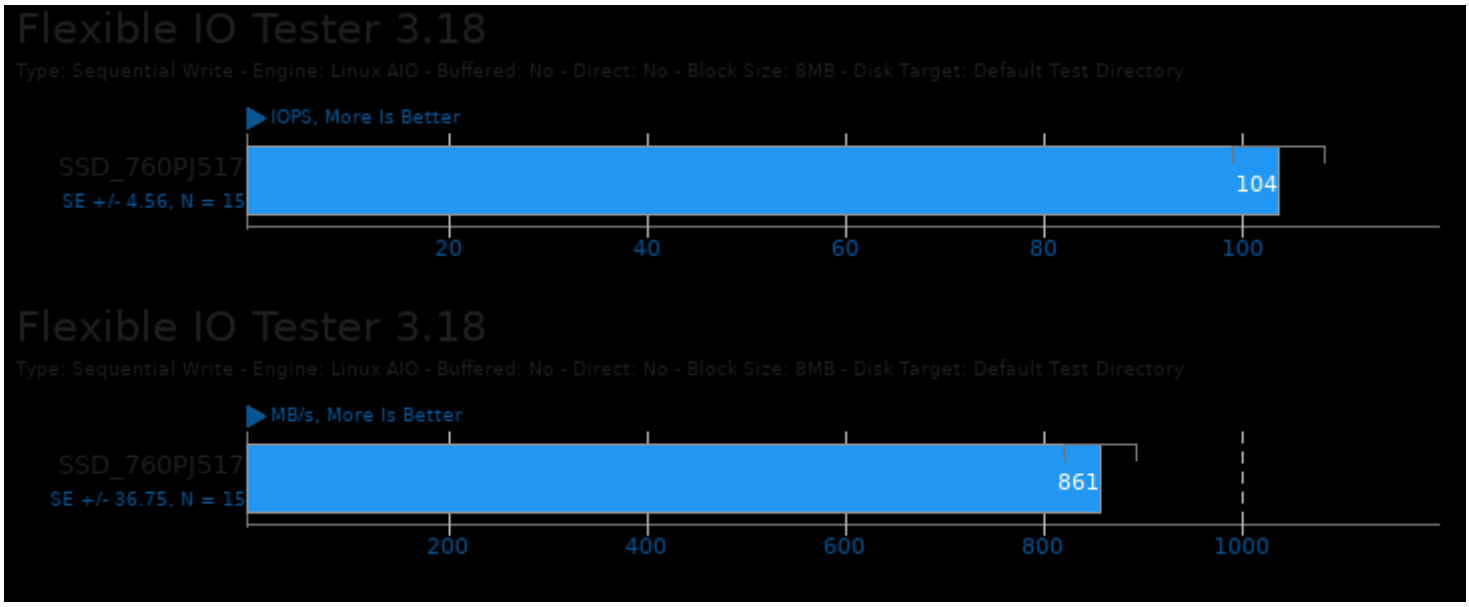


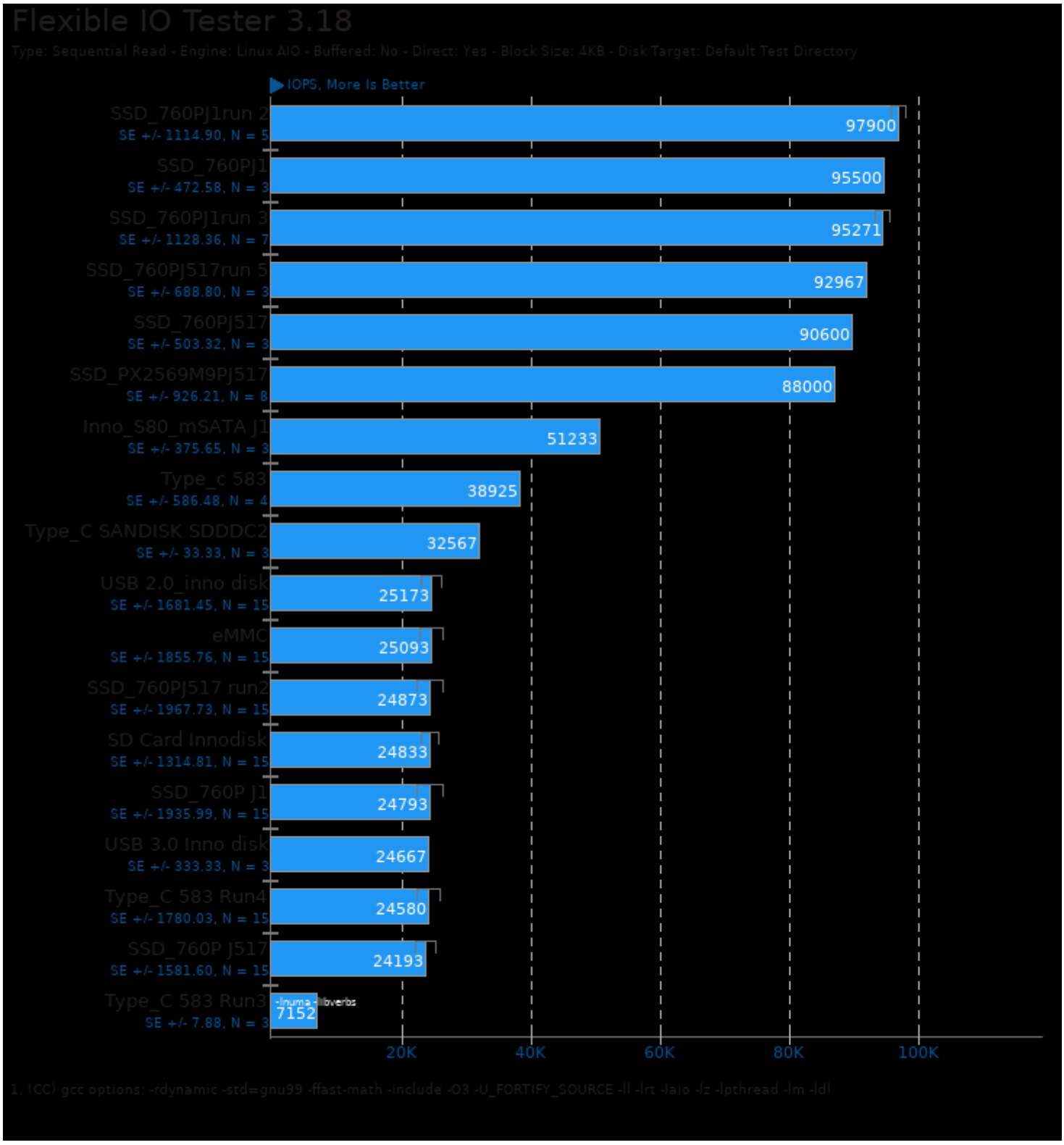

Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 2027.59, N = 3
132667
30K
60K
90K
120K
150K
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 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: 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: 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 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 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

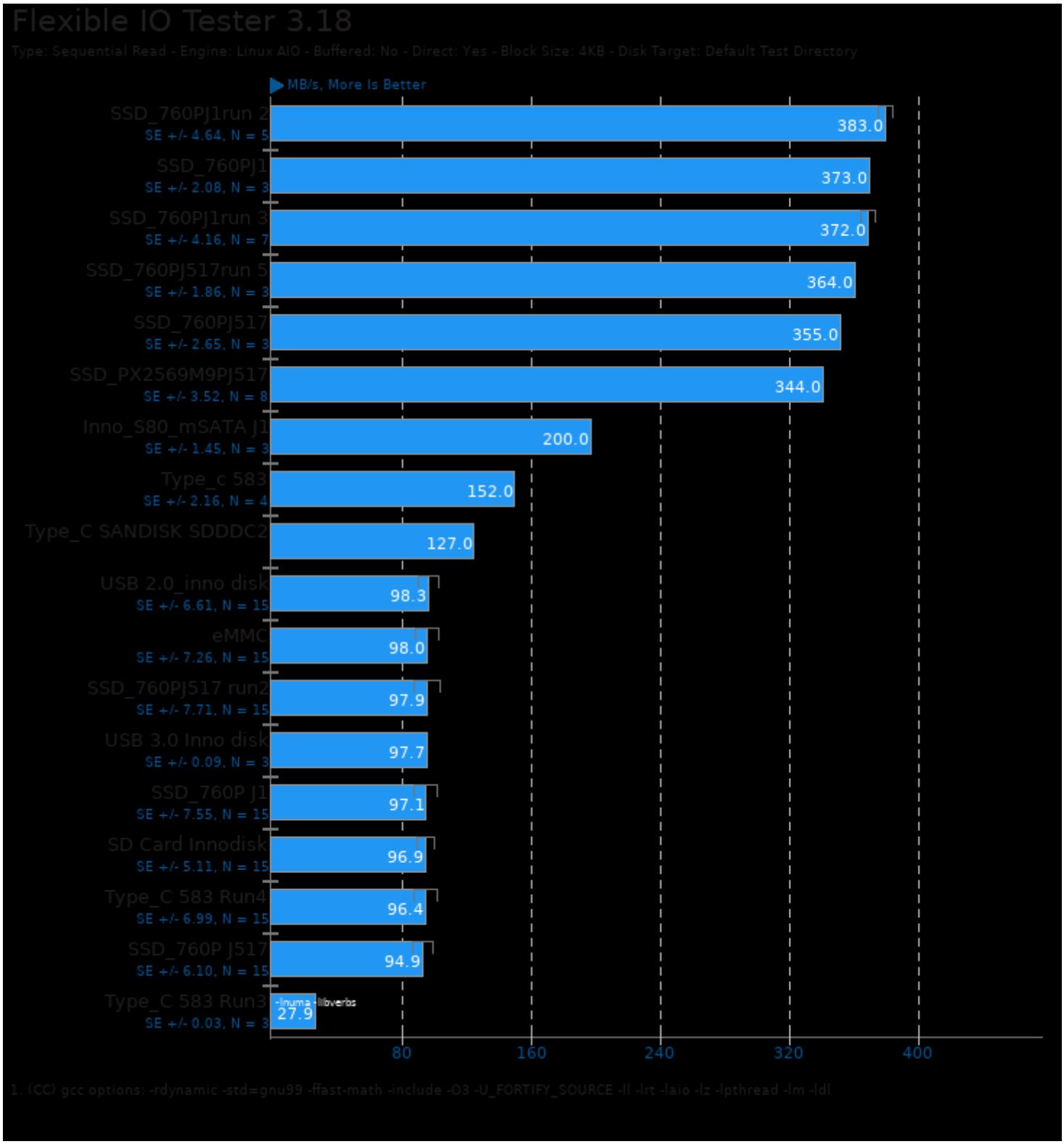

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ517
SE +/- 4055.18, N = 3
257667
60K
120K
180K
240K
300K
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Linux AIO - Buffered: Yes - Direct: Yes - Block Size: 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 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: 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 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 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: 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: 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: 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: 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: 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: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
SSD_760PJ517
SE +/- 3.21, N = 15
360
80
160
240
320
400


Stress-NG 0.07.26
Test: Glibc Qsort Data Sorting
Bogo Ops/s, More Is Better
CPU Stress
SE +/- 1.22, N = 15
38.98
9
18
27
36
45
1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc
Stress-NG 0.07.26
Test: Matrix Math
Bogo Ops/s, More Is Better
CPU Stress
SE +/- 788.90, N = 15
14002.00
3K
6K
9K
12K
15K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc
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: 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: 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: 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 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 Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
SSD_760PJ1run 2
SE +/- 1114.90, N = 5
97900
SSD_760PJ1
SE +/- 472.58, N = 3
95500
SSD_760PJ1run 3
SE +/- 1128.36, N = 7
95271
SSD_760PJ517run 5
SE +/- 688.80, N = 3
92967
SSD_760PJ517
SE +/- 503.32, N = 3
90600
SSD_PX2569M9PJ517
SE +/- 926.21, N = 8
88000
Inno_S80_mSATA J1
SE +/- 375.65, N = 3
51233
Type_c 583
SE +/- 586.48, N = 4
38925
Type_C SANDISK SDDDC2
SE +/- 33.33, N = 3
32567
USB 2.0_inno disk
SE +/- 1681.45, N = 15
25173
eMMC
SE +/- 1855.76, N = 15
25093
SSD_760PJ517 run2
SE +/- 1967.73, N = 15
24873
SD Card Innodisk
SE +/- 1314.81, N = 15
24833
SSD_760P J1
SE +/- 1935.99, N = 15
24793
USB 3.0 Inno disk
SE +/- 333.33, N = 3
24667
Type_C 583 Run4
SE +/- 1780.03, N = 15
24580
SSD_760P J517
SE +/- 1581.60, N = 15
24193
Type_C 583 Run3
SE +/- 7.88, N = 3
-lnuma -libverbs
7152
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



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 02:33.