



watersramspeed

ARMv8 Cortex-A72 testing with a Waters IGX8QM Orion and imx-drmdrmfb on waters-orion-xwayland 5.4-zeus via the Phoronix Test Suite.

Automated Executive Summary

ARMv8 Cortex-A72 - *imx-drmdrmfb* - *Waters IGX8QM Orion* had the most wins, coming in first place for 60% of the tests.

Based on the geometric mean of all complete results, the fastest (ARMv8 Cortex-A72 - *imx-drmdrmfb* - *Waters IGX8QM Orion*) was 1.046x the speed of the slowest (*ramspeed_suitcase*). *mekramspeed* was 0.998x the speed of ARMv8 Cortex-A72 - *imx-drmdrmfb* - *Waters IGX8QM Orion* and *ramspeed_suitcase* was 0.958x the speed of *mekramspeed*.

Test Systems:

ARMv8 Cortex-A72 - imx-drmdrmfb - Waters IGX8QM Orion

Processor: ARMv8 Cortex-A72 @ 1.20GHz (6 Cores), Motherboard: Waters IGX8QM Orion, Memory: 6144MB, Disk:

32GB G1J37E + 2 x 31GB SD32G, Graphics: imx-drmdrmfb

OS: waters-orion-xwayland 5.4-zeus, Kernel: 5.4.70-2.3.0+g4f2631b022d8 (aarch64), Display Server: Wayland Weston 9.0.0 + X Server, Vulkan: 1.1.82, Compiler: GCC 9.2.0, File-System: ext4, Screen Resolution: 1280x800

Compiler Notes: --bindir=/usr/bin --build=x86_64-linux --datadir=/usr/share --disable-bootstrap --disable-dependency-tracking --disable-libmudflap --disable-libssp --disable-silent-rules --disable-static --enable_cxa_atexit --enable-c99 --enable-headers=c_global --enable-checking=release --enable-default-pie --enable-initfini-array --enable-languages=c,c++ --enable-libitm --enable-libstdcxx-pch --enable-long-long --enable-lto --enable-multilib --enable-nls --enable-shared --enable-symvers=gnu --enable-threads=posix --exec_prefix=/usr --host=aarch64-poky-linux --includedir=/usr/include --localstatedir=/var --mandir=/usr/share/man --oldincludedir=/usr/include --program-prefix=aarch64-poky-linux- --sbindir=/usr/sbin --sharedstatedir=/com --sysconfdir=/etc --target=aarch64-poky-linux --with-build-sysroot=/ --with-glibc-version=2.28 --with-gnu-ld --with-libtool-sysroot=/ --with-linker-hash-style=gnu --with-ppl=no --without-isl --without-local-prefix

Processor Notes: Scaling Governor: cpufreq-dt schedutil

Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Not affected + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Mitigation of Branch predictor hardening + srbs: Not affected + tsx_async_abort: Not affected

mekramspeed

Processor: ARMv8 Cortex-A72 @ 1.20GHz (6 Cores), Motherboard: Freescale i.MX8QM MEK, Memory: 6144MB, Disk: 512GB MTFDHBK512TDP + 31GB R1J57L + 31GB SD32G, Graphics: imx-drmdrmfb, Monitor: ELO ET1002L

OS: waters-orion-xwayland 5.4-zeus, Kernel: 5.4.70-2.3.0+g4f2631b022d8 (aarch64), Display Server: Wayland Weston 9.0.0 + X Server, Vulkan: 1.1.82, Compiler: GCC 9.2.0, File-System: ext4, Screen Resolution: 1280x800

Compiler Notes: --bindir=/usr/bin --build=x86_64-linux --datadir=/usr/share --disable-bootstrap --disable-dependency-tracking --disable-libmudflap --disable-libssp --disable-silent-rules --disable-static --enable_cxa_atexit --enable-c99 --enable-headers=c_global --enable-checking=release --enable-default-pie --enable-initfini-array --enable-languages=c,c++ --enable-libitm --enable-libstdcxx-pch --enable-long-long --enable-lto --enable-multilib --enable-nls --enable-shared --enable-symvers=gnu --enable-threads=posix --exec_prefix=/usr --host=aarch64-poky-linux --includedir=/usr/include --localstatedir=/var --mandir=/usr/share/man --oldincludedir=/usr/include --program-prefix=aarch64-poky-linux- --sbindir=/usr/sbin --sharedstatedir=/com --sysconfdir=/etc --target=aarch64-poky-linux --with-build-sysroot=/ --with-glibc-version=2.28 --with-gnu-ld --with-libtool-sysroot=/ --with-linker-hash-style=gnu --with-ppl=no --without-isl --without-local-prefix

Processor Notes: Scaling Governor: cpufreq-dt schedutil

Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Not affected + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Mitigation of Branch predictor hardening + srbs: Not affected + tsx_async_abort: Not affected

ramspeed_suitcase

Processor: ARMv8 Cortex-A72 @ 1.20GHz (6 Cores), Motherboard: Waters IGX8QM Orion, Memory: 6144MB, Disk: 512GB KINGSTON OM3PDP3512B-A01 + 31GB TX2932, Graphics: imx-drmdrmfb

OS: waters-orion-xwayland 5.4-zeus, Kernel: 5.4.70 (aarch64), Display Server: Wayland Weston 9.0.0 + X Server, Vulkan: 1.1.82, Compiler: GCC 9.2.0, File-System: ext4, Screen Resolution: 1280x800

Compiler Notes: --bindir=/usr/bin --build=x86_64-linux --datadir=/usr/share --disable-bootstrap --disable-dependency-tracking --disable-libmudflap --disable-libssp --disable-silent-rules --disable-static --enable_cxa_atexit --enable-c99 --enable-headers=c_global --enable-checking=release --enable-default-pie --enable-initfini-array --enable-languages=c,c++ --enable-libitm --enable-libstdcxx-pch --enable-long-long --enable-lto --enable-multilib --enable-nls --enable-shared --enable-symvers=gnu --enable-threads=posix --exec_prefix=/usr --host=aarch64-poky-linux --includedir=/usr/include --localstatedir=/var --mandir=/usr/share/man --oldincludedir=/usr/include --program-prefix=aarch64-poky-linux- --sbindir=/usr/sbin --sharedstatedir=/com --sysconfdir=/etc --target=aarch64-poky-linux --with-build-sysroot=/ --with-glibc-version=2.28 --with-gnu-ld --with-libtool-sysroot=/ --with-linker-hash-style=gnu --with-ppl=no --without-isl --without-local-prefix

Processor Notes: Scaling Governor: cpufreq-dt schedutil

Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Not affected + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Mitigation of Branch predictor hardening + srbs: Not affected + tsx_async_abort: Not affected

	ARMv8 Cortex-A72 - mekramspeed	ramspeed_suitcase
RAMspeed SMP - Add - Integer (MB/s)	5608	5313
Normalized	100%	99.84%

	Standard Deviation	1.4%	1.2%	2.2%
RAMspeed SMP - Copy - Integer (MB/s)	6898	6967	6627	
Normalized	99.01%	100%	95.12%	
Standard Deviation	0.5%	1.6%	0.6%	
RAMspeed SMP - Scale - Integer (MB/s)	6407	6467	6268	
Normalized	99.07%	100%	96.92%	
Standard Deviation	0.7%	0.2%	1%	
RAMspeed SMP - Triad - Integer (MB/s)	4486	4484	4171	
Normalized	100%	99.96%	92.98%	
Standard Deviation	1.3%	0.9%	4%	
RAMspeed SMP - Average - Integer (MB/s)	5835	5909	5635	
Normalized	98.75%	100%	95.36%	
Standard Deviation	1.1%	0.8%	0.7%	
RAMspeed SMP - Add - Floating Point (MB/s)	5611	5571	5350	
Normalized	100%	99.29%	95.35%	
Standard Deviation	0.6%	0.9%	2.2%	
RAMspeed SMP - Copy - Floating Point	6898	6866	6643	
Normalized	100%	99.54%	96.3%	
Standard Deviation	0.9%	0.1%	1.5%	
RAMspeed SMP - Scale - Floating Point	5562	5515	5234	
Normalized	100%	99.15%	94.1%	
Standard Deviation	1.8%	0.4%	0%	
RAMspeed SMP - Triad - Floating Point	2954	2873	2834	
Normalized	100%	97.26%	95.94%	
Standard Deviation	7.7%	4.8%	4.6%	
RAMspeed SMP - Average - Floating Point	5202	5206	5013	
(MB/s)				
Normalized	99.92%	100%	96.29%	
Standard Deviation	0.8%	0.5%	0.8%	

RAMspeed SMP 3.5.0

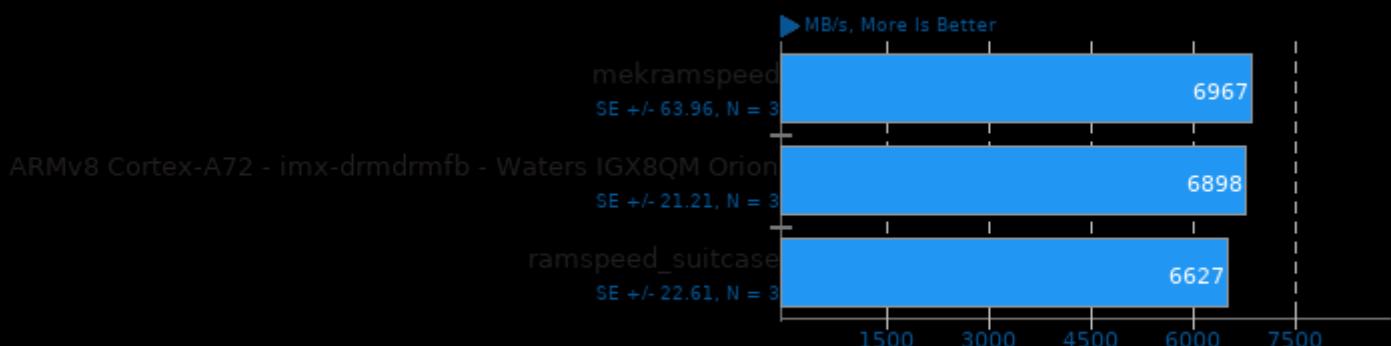
Type: Add - Benchmark: Integer



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

RAMspeed SMP 3.5.0

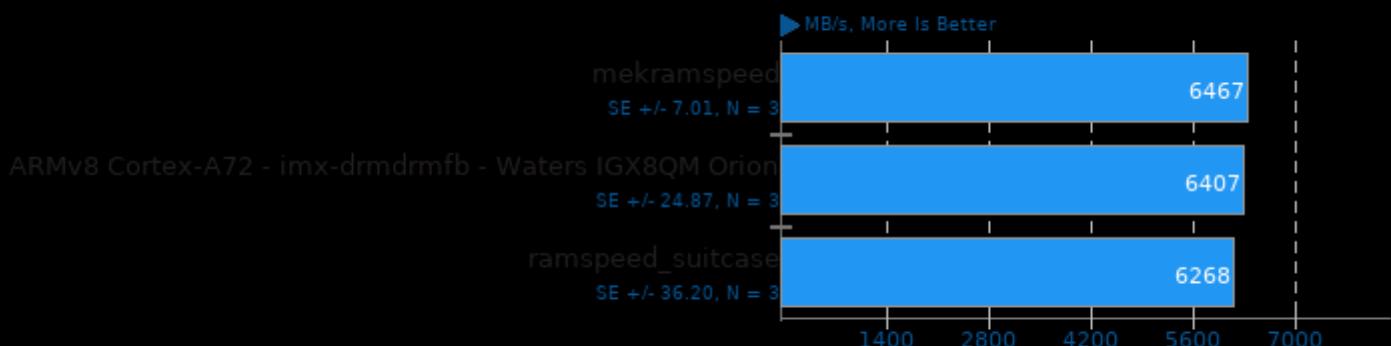
Type: Copy - Benchmark: Integer



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

RAMspeed SMP 3.5.0

Type: Scale - Benchmark: Integer



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

RAMspeed SMP 3.5.0

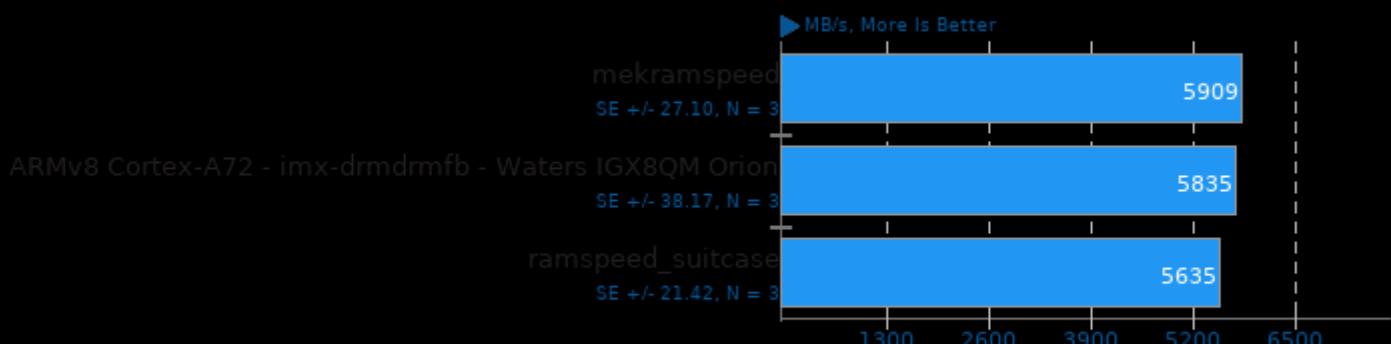
Type: Triad - Benchmark: Integer



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

RAMspeed SMP 3.5.0

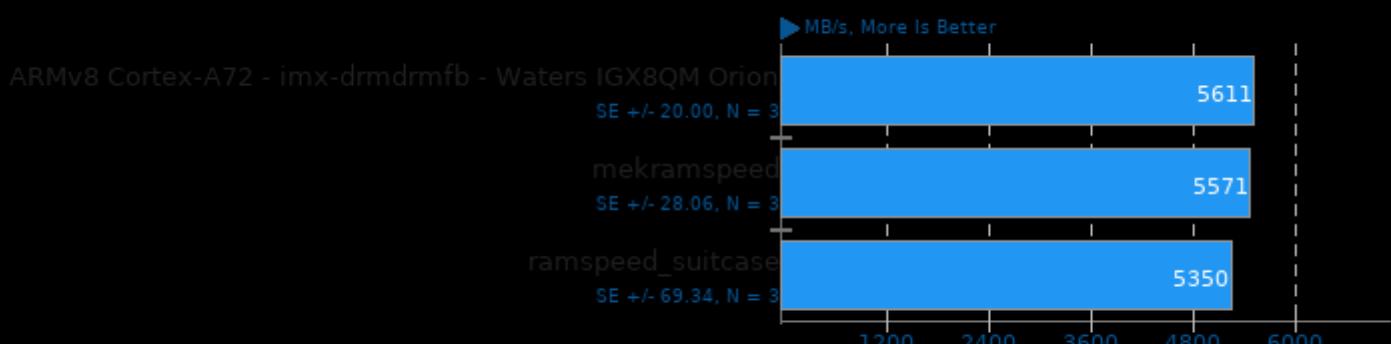
Type: Average - Benchmark: Integer



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

RAMspeed SMP 3.5.0

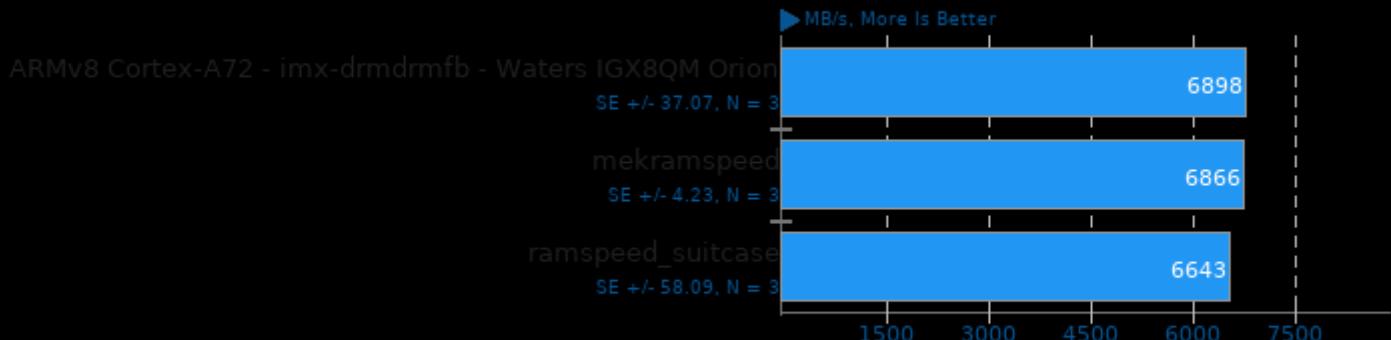
Type: Add - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

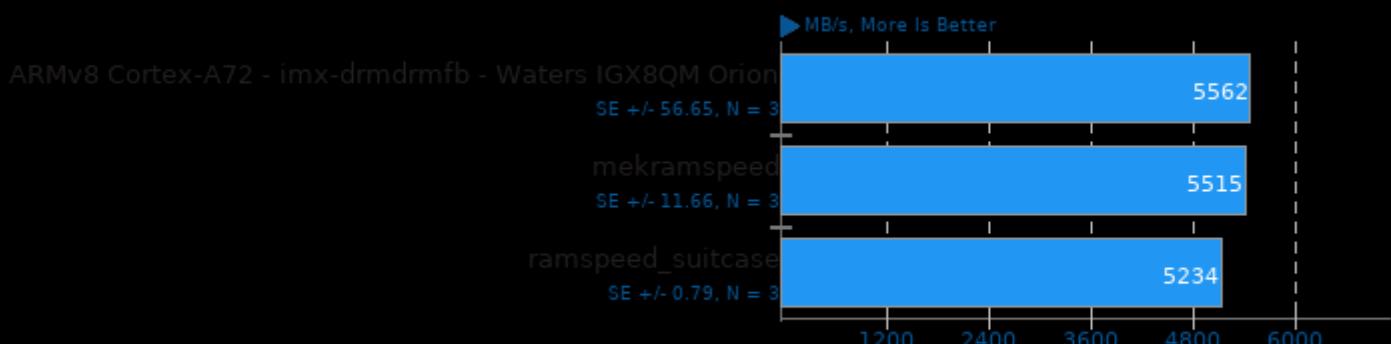
Type: Copy - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

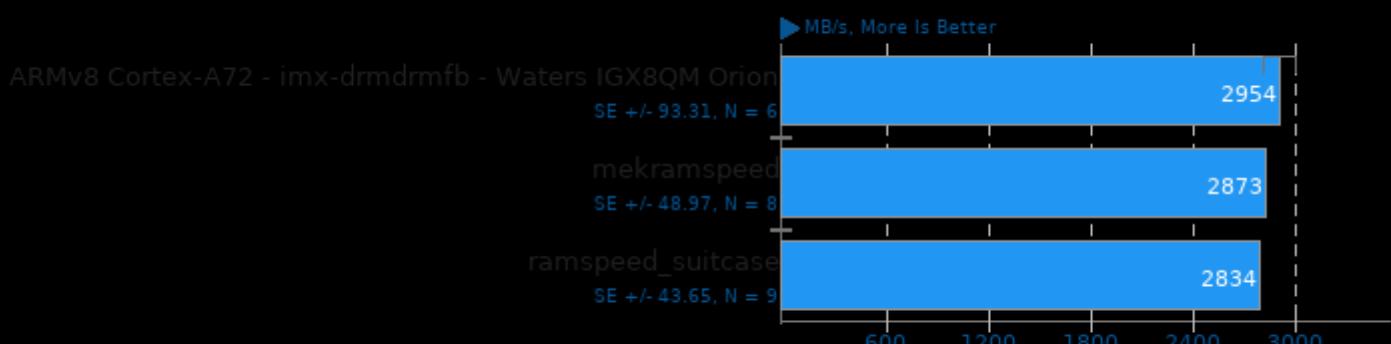
Type: Scale - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

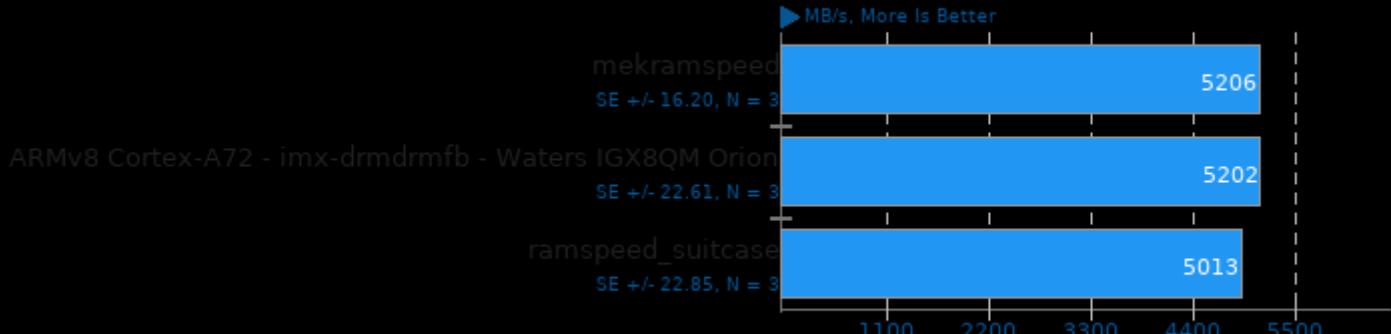
Type: Triad - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

Type: Average - Benchmark: Floating Point



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

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 08:25.