



www.phoronix-test-suite.com

babysched

Intel Core i7-4600U testing with a LENOVO 20A7CTO1WW (GRET40WW 1.17 BIOS) and Intel HD 4400 2GB on Ubuntu 20.04 via the Phoronix Test Suite.

Automated Executive Summary

baby524be had the most wins, coming in first place for 37% of the tests.

Test Systems:

baby72a20 #1

baby72a20 #2

Processor: Intel Core i7-4600U @ 3.30GHz (2 Cores / 4 Threads), Motherboard: LENOVO 20A7CTO1WW (GRET40WW 1.17 BIOS), Chipset: Intel Haswell-ULT DRAM, Memory: 8GB, Disk: 128GB TOSHIBA THNSNJ12, Graphics: Intel HD 4400 2GB (1100MHz), Audio: Intel Haswell-ULT HD Audio, Network: Intel I218-LM + Intel 7260

OS: Ubuntu 20.04, Kernel: 5.14.9-Baby+ (x86_64), Display Server: X Server 1.20.11, OpenGL: 4.5 Mesa 21.0.3, Vulkan: 1.2.145, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 2560x1440

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEA/gcc-9.3.0/debian/tmp-nvptx/usr.hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_cpfred performance - CPU Microcode: 0x26 - ThermalD 1.9.1
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbd: Mitigation of Microcode + tsx_async_abort: Not affected

baby524be

Processor: Intel Core i7-4600U @ 3.30GHz (2 Cores / 4 Threads), Motherboard: LENOVO 20A7CTO1WW (GRET40WW 1.17 BIOS), Chipset: Intel Haswell-ULT DRAM, Memory: 8GB, Disk: 128GB TOSHIBA THNSNJ12, Graphics: Intel HD 4400 2GB (1100MHz), Audio: Intel Haswell-ULT HD Audio, Network: Intel I218-LM + Intel 7260

OS: Ubuntu 20.04, Kernel: 5.14.9-Baby-dev+ (x86_64), Display Server: X Server 1.20.11, OpenGL: 4.5 Mesa 21.0.3, Vulkan: 1.2.145, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 2560x1440

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEA/gcc-9.3.0/debian/tmp-nvptx/usr.hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_cpfred performance - CPU Microcode: 0x26 - ThermalD 1.9.1
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbd: Mitigation of Microcode + tsx_async_abort: Not affected

5.11.0-37-generic

Processor: Intel Core i7-4600U @ 3.30GHz (2 Cores / 4 Threads), Motherboard: LENOVO 20A7CTO1WW (GRET40WW 1.17 BIOS), Chipset: Intel Haswell-ULT DRAM, Memory: 8GB, Disk: 128GB TOSHIBA THNSNJ12, Graphics: Intel HD 4400 2GB (1100MHz), Audio: Intel Haswell-ULT HD Audio, Network: Intel I218-LM + Intel 7260

OS: Ubuntu 20.04, Kernel: 5.11.0-37-generic (x86_64), Display Server: X Server 1.20.11, OpenGL: 4.5 Mesa 21.0.3, Vulkan: 1.2.145, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 2560x1440

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEA/gcc-9.3.0/debian/tmp-nvptx/usr.hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_cpfred ondemand - CPU Microcode: 0x26 - ThermalD 1.9.1
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbd: Mitigation of Microcode + tsx_async_abort: Not affected

5.14.6-xanmod1-cacule

Processor: Intel Core i7-4600U @ 3.30GHz (2 Cores / 4 Threads), Motherboard: LENOVO 20A7CTO1WW (GRET40WW 1.17 BIOS), Chipset: Intel Haswell-ULT DRAM, Memory: 8GB, Disk: 128GB TOSHIBA THNSNJ12, Graphics: Intel HD 4400 2GB (1100MHz), Audio: Intel Haswell-ULT HD Audio, Network: Intel I218-LM + Intel 7260

OS: Ubuntu 20.04, Kernel: 5.14.6-xanmod1-cacule (x86_64), Display Server: X Server 1.20.11, OpenGL: 4.5 Mesa

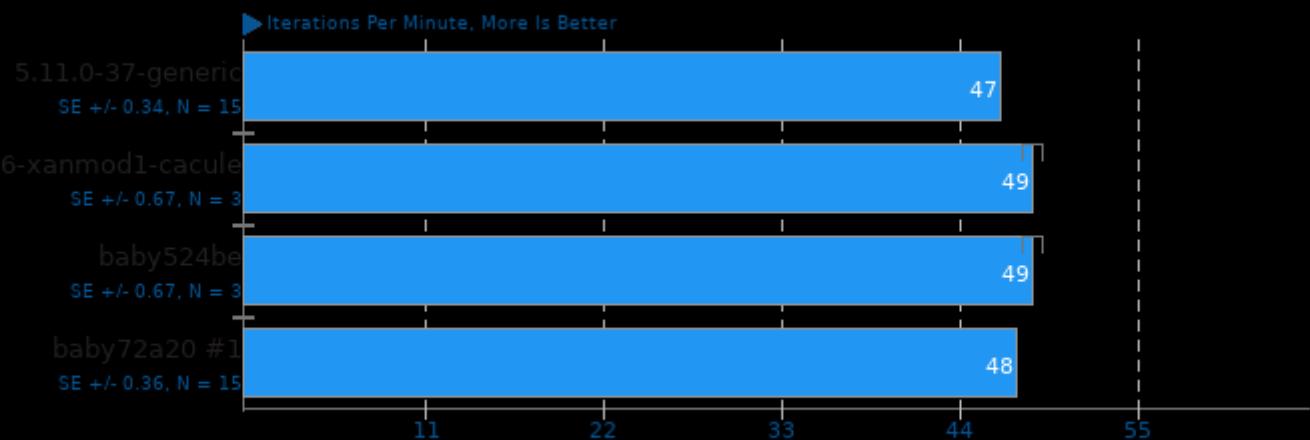
21.0.3, Vulkan: 1.2.145, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 2560x1440

Kernel Notes: Transparent Huge Pages: madvise
 Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9.3.0/debian/tmp-nvptx/usr.hsa --enable-plugin --enable-shared --enable-threads=posix -host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
 Processor Notes: Scaling Governor: intel_cpfufreq performance - CPU Microcode: 0x26 - ThermalD 1.9.1
 Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + I1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapsgs barriers and __user pointer sanitization + spectre_v2: Vulnerable STIBP: disabled + srbds: Mitigation of Microcode + tsx_async_abort: Not affected

	baby72a20 #1	baby72a20 #2	baby524be	5.11.0-37-generic	5.14.6-xanmod1-cacule
GraphicsMagick - Swirl	48		49	47	49
(Iterations/min)					
Normalized	97.96%		100%	95.92%	100%
Standard Deviation	3%		2.4%	2.8%	2.4%
GraphicsMagick - Sharpen	16		16	16	17
(Iterations/min)					
Normalized	94.12%		94.12%	94.12%	100%
Standard Deviation			2.3%		
FLAC Audio Encoding - WAV To FLAC (sec)	25.214		24.459	24.203	23.562
Normalized	93.45%		96.33%	97.35%	100%
Standard Deviation	7.6%		2.1%	2.3%	0.9%
GraphicsMagick - Rotate	604		617	586	593
(Iterations/min)					
Normalized	97.89%		100%	94.98%	96.11%
Standard Deviation	0.3%		1.4%	2.4%	1.5%
GraphicsMagick - Enhanced	20		20	20	20
(Iterations/min)					
Standard Deviation					2.5%
GraphicsMagick - Resizing	35		35	35	35
(Iterations/min)					
Normalized	98.36%		100%	99.18%	100%
Standard Deviation	1.7%		1.2%	1.3%	1.2%
GraphicsMagick - HWB Color Space (Iterations/min)	120		122	121	122
(Iterations/min)					
Normalized	98.36%		100%	99.18%	100%
Standard Deviation	1.7%		1.2%	1.3%	1.2%
GraphicsMagick - HWB Color Space (Iterations/min)	199		199	195	196
(Iterations/min)					
Normalized	100%		100%	97.99%	98.49%
Standard Deviation	1%		1.3%	1.4%	1.2%

GraphicsMagick 1.3.33

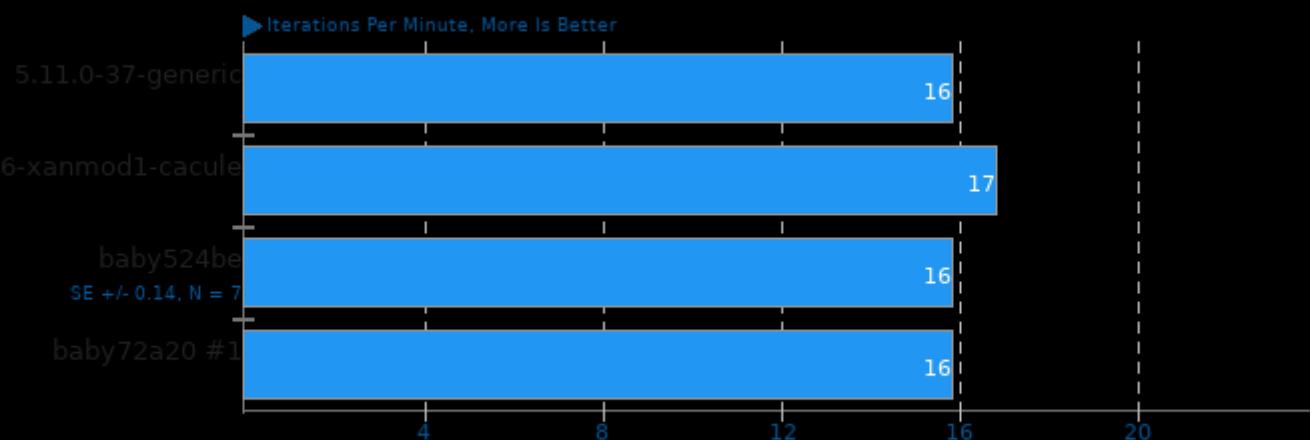
Operation: Swirl



1. (CC) gcc options: -fopenmp -O2 -pthread -ljpeg -lXext -lX11 -lz -lm -lpthread

GraphicsMagick 1.3.33

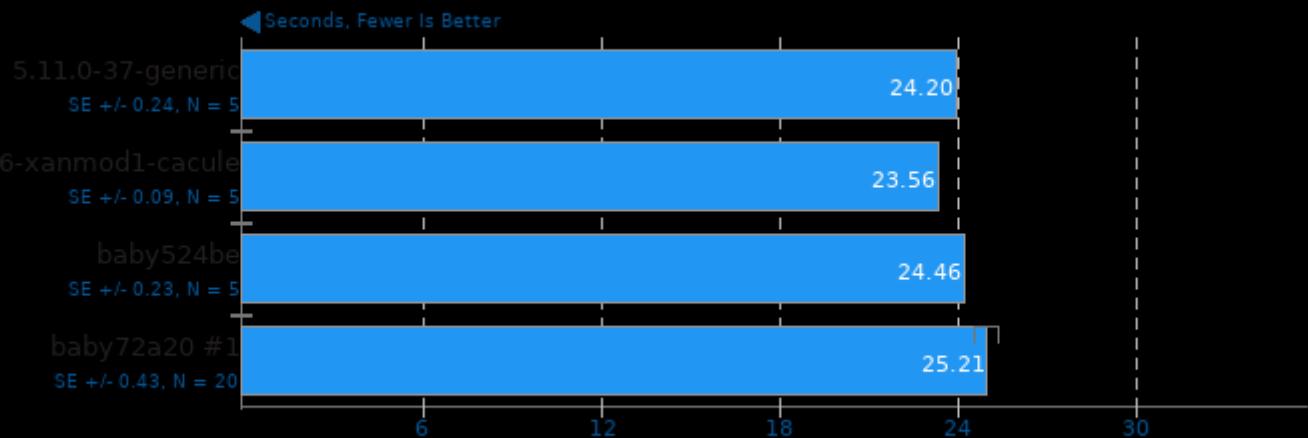
Operation: Sharpen



1. (CC) gcc options: -fopenmp -O2 -pthread -ljpeg -lXext -lX11 -lz -lm -lpthread

FLAC Audio Encoding 1.3.3

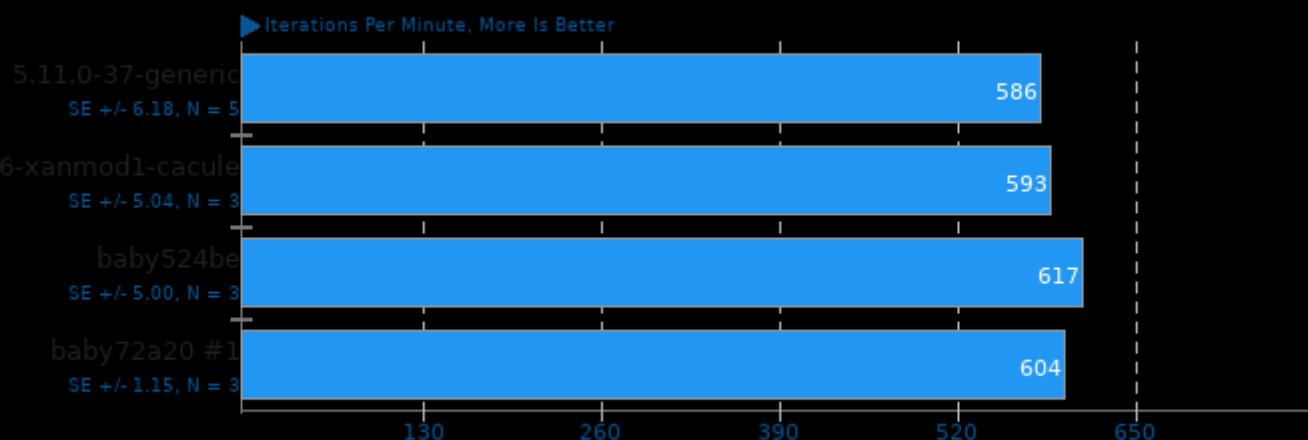
WAV To FLAC



1. (CXX) g++ options: -fvisibility=hidden -lm

GraphicsMagick 1.3.33

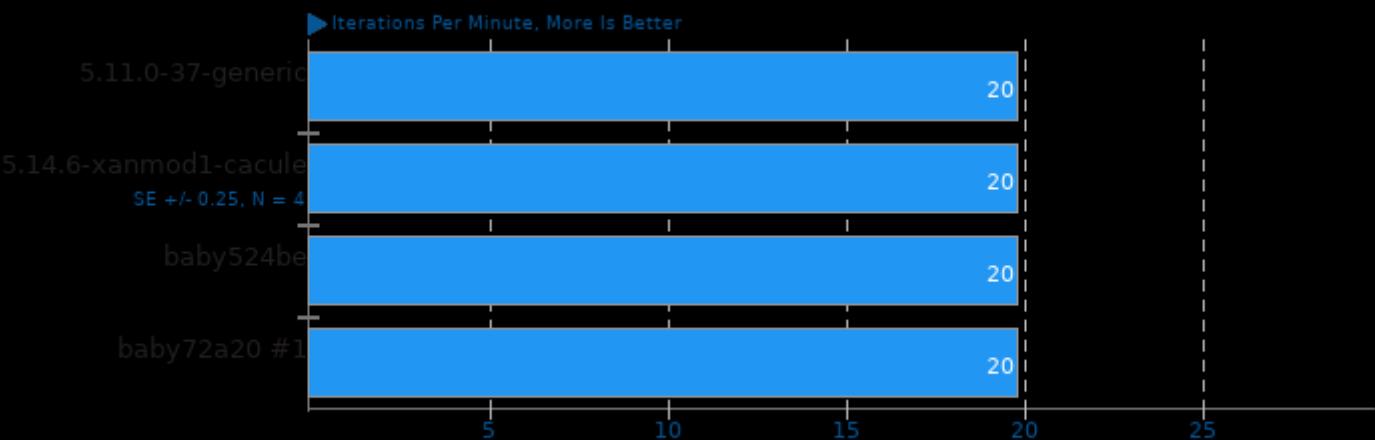
Operation: Rotate



1. (CC) gcc options: -fopenmp -O2 -pthread -ljpeg -lXext -lX11 -lz -lm -lpthread

GraphicsMagick 1.3.33

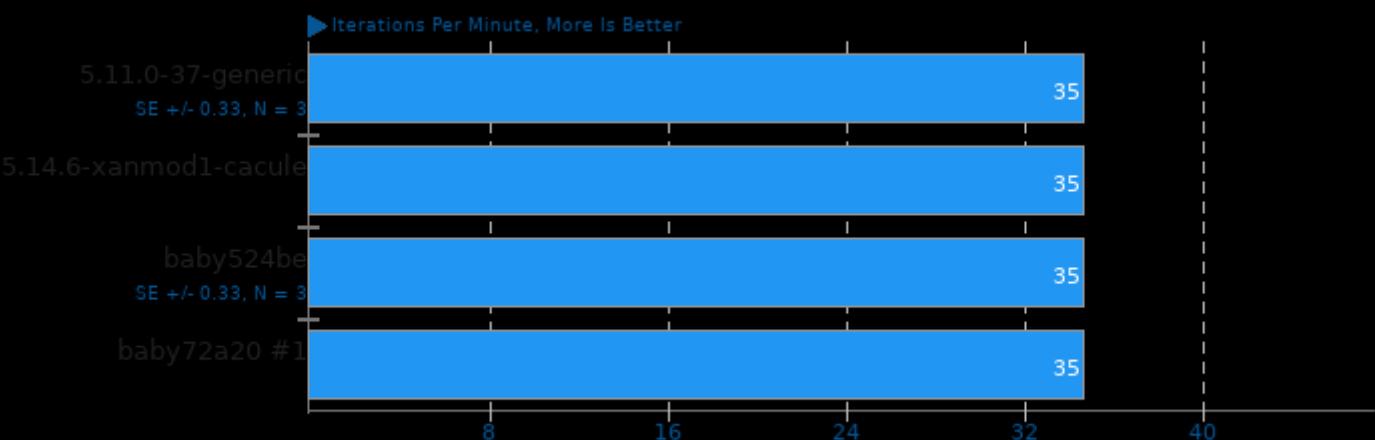
Operation: Enhanced



1. (CC) gcc options: -fopenmp -O2 -pthread -ljpeg -lXext -lX11 -lz -lm -lpthread

GraphicsMagick 1.3.33

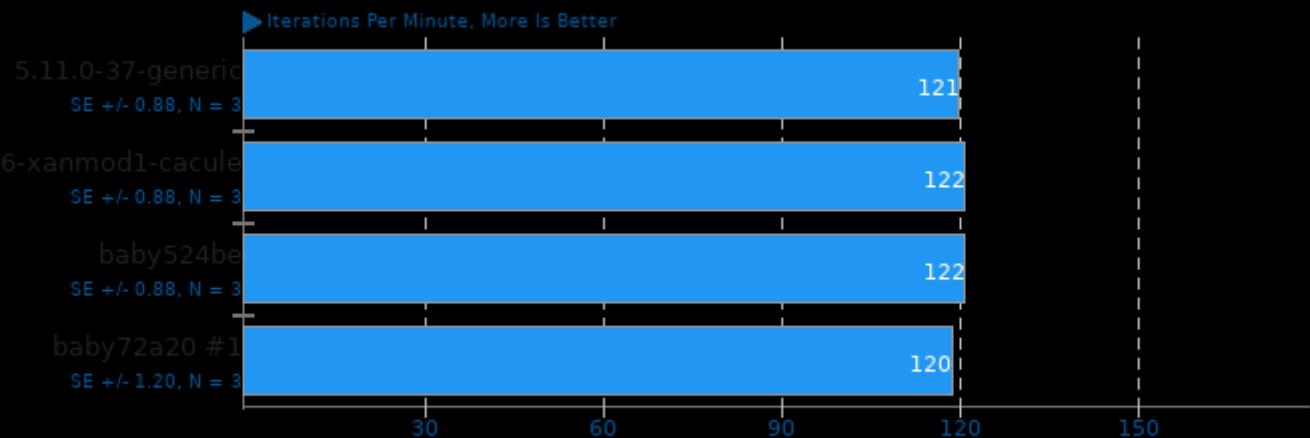
Operation: Noise-Gaussian



1. (CC) gcc options: -fopenmp -O2 -pthread -ljpeg -lXext -lX11 -lz -lm -lpthread

GraphicsMagick 1.3.33

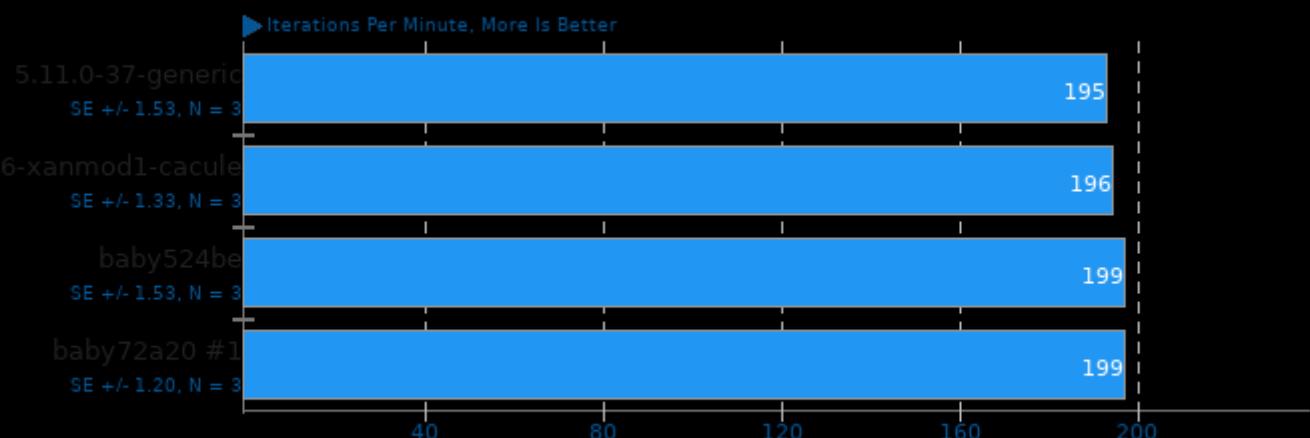
Operation: Resizing



1. (CC) gcc options: -fopenmp -O2 -pthread -ljpeg -lXext -lX11 -lz -lm -lpthread

GraphicsMagick 1.3.33

Operation: HWB Color Space



1. (CC) gcc options: -fopenmp -O2 -pthread -ljpeg -lXext -lX11 -lz -lm -lpthread

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 21:14.