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# Pictures bench

AMD Ryzen 7 PRO 5850U testing with a LENOVO 20X7003WFR (R1KET36W 1.21 BIOS) and AMD Cezanne 1GB on Gentoo 2.8 via the Phoronix Test Suite.

**Automated Executive Summary**

*ClearLinux 36070 GCC 11.2 had the most wins, coming in first place for 50% of the tests.*

*Based on the geometric mean of all complete results, the fastest (ClearLinux 36070 GCC 11.2) was 2.681x the speed of the slowest (OpenMandriva znver1 GCC 11.2).*

## Test Systems:

### WSL2 Ubuntu

Processor: AMD Ryzen 7 PRO 5850U (8 Cores / 16 Threads), Memory: 8GB, Disk: 2 x 275GB Virtual Disk

OS: Ubuntu 20.04, Kernel: 5.10.16.3-microsoft-standard-WSL2 (x86_64), Display Server: Wayland, OpenGL: 3.3 Mesa

21.2.6, Vulkan: 1.1.182, Compiler: GCC 9.4.0, File-System: ext4, System Layer: wsl

Kernel Notes: Transparent Huge Pages: always
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-yTrUTS/gcc-9-9.4.0/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: CPU Microcode: 0xffffffff
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## W11 native

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Memory: 1 x 16384 MB 3200MHz Hynix HMAA2GS6CJR8N-XN, Disk: 477GB SKHynix_HFS512GDE9X081N, Graphics: AMD Radeon 1GB, Audio: AMD HD Audio Device + Realtek HD Audio, Network: MediaTek Wi-Fi 6 MT7921 Wireless LAN Card + Realtek PCIe GbE

OS: Microsoft Windows 11 Professionnel Build 22000, Kernel: 10.0.22000.556 (x86_64), Display Driver: 30.0.13040.13, OpenCL: OpenCL 2.1 AMD-APP (3302.6), File-System: NTFS, Screen Resolution: 1920x1080

Security Notes: __user pointer sanitization: Disabled + Retpoline: Full + IBPB: Always + IBRS: Enabled + STIBP: Enabled + VBS: Enabled and running + HVCI: Running + MBEC: Available

## Ubuntu 21.10

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 16GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK Device 7961

OS: Ubuntu 21.10, Kernel: 5.13.0-35-generic (x86_64), Desktop: MATE 1.26.0, Display Server: X Server 1.20.13, OpenGL: 4.6 Mesa 21.2.6 (LLVM 12.0.1), Vulkan: 1.2.182, Compiler: GCC 11.2.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-cet --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++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-serialization=2 --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-11-ZPT0kp/gcc-11-11.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-11-ZPT0kp/gcc-11-11.2.0/debian/tmp-gcn/usr --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-build-config=bootstrap-lto-lean --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: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of LFENCE IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## VoidLinux Musl GCC 10.2

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir Root Complex, Memory: 16GB, Disk: 512GB SK hynix HFS512GDE9X081N + 4GB USB DISK, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Device 1637, Network: Realtek RTL8111/8168/8411 + MEDIATEK Device 7961

OS: VoidLinux rolling, Kernel: 5.15.28_1 (x86_64), Desktop: Xfce 4.16, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 21.3.7 (LLVM 12.0.1), Compiler: GCC 10.2.1 20201203 + Clang 12.0.1 + LLVM 12.0.1, File-System: f2fs, Screen

Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-musl --disable-gnu-unique-object --disable-libsanitizer --disable-libstdcxx-pch --disable-multilib --disable-nls --disable-sjlj-exceptions --disable-symvers --disable-target-libiberty --disable-werror --enable-__cxa_atexit --enable-checking=release --enable-default-pie --enable-default-ssp --enable-languages=c,c++,objc,obj-c++,fortran,lto,go,ada --enable-lto --enable-plugins --enable-shared --enable-threads=posix --enable-vtable-verify --mandir=/usr/share/man --with-isl --with-linker-hash-style=gnu
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## OpenMandriva znver1 GCC 11.2

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 16GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: OpenMandrivaLinux 4.3, Kernel: 5.16.7-desktop-1omv4003 (x86_64), Desktop: KDE Plasma 5.23.5, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 21.3.7 (LLVM 13.0.0), Vulkan: 1.2.195, Compiler: Clang 13.0.0 + GCC 11.2.0 20210728 + LLVM 13.0.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: dm_mod.use_blk_mq=1 - Transparent Huge Pages: always
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## FreeBSD 13.1 Beta1 Clang 13 Default package

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (16 Cores), Motherboard: LENOVO 20X7003WFR ThinkPad L15 Gen 2a, Chipset: AMD [AMD] Renoir/Cezanne Root Complex, Memory: 16GB, Disk: Generic NVMe Device, Graphics: AMD RENOIR 1GB, Audio: ATI (0x1637) HDA

OS: FreeBSD, Kernel: 13.1-STABLE (x86_64), Display Server: X Server 1.20.13, OpenGL: 4.6 Mesa 21.3.7 (LLVM 13.0.1), Compiler: Clang 13.0.0 + GCC 10.3.0, File-System: zfs, Screen Resolution: 1920x1080

## Manjaro GCC 11.2

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: ManjaroLinux 21.2.5, Kernel: 5.16.14-1-MANJARO (x86_64), Desktop: KDE Plasma 5.24.3, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 21.3.7 (LLVM 13.0.1), Vulkan: 1.2.195, Compiler: GCC 11.2.0 + Clang 13.0.1 + LLVM 13.0.1, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Fedora 36 pre-ver GCC 12

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Fedora Linux 36, Kernel: 5.17.0-300.fc36.x86_64 (x86_64), Desktop: MATE 1.26.0, Display Server: X Server 1.20.14, OpenGL: 4.6 Mesa 21.3.8 (LLVM 13.0.1), Compiler: GCC 12.0.1 20220308, File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Environment Notes: DEBUGINFOD_URLS=https://debuginfod.fedoraproject.org/
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa50000c
Security Notes: SELinux + itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## ClearLinux 36070 GCC 11.2

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir Root Complex, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD RENOIR 1GB (2000/400MHz), Audio: AMD Device 1637, Network: Realtek RTL8111/8168/8411 + MEDIATEK Device 7961

OS: Clear Linux OS 36070, Kernel: 5.16.17-1136.native (x86_64), Desktop: GNOME Shell 42.0, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 22.0.0 (LLVM 13.0.0 DRM 3.44), Vulkan: 1.3.204, Compiler: GCC 11.2.1 20220322 releases/gcc-11.2.0-884-gf45603f39b + Clang 13.0.0 + LLVM 13.0.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Environment Notes: FFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,--enable-new-dtags" CXXFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=native -fvisibility-inlines-hidden -Wl,--enable-new-dtags" MESA_GLSL_CACHE_DISABLE=0 FCFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,-sort-common -Wl,--enable-new-dtags" CFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=native" THEANO_FLAGS="floatX=float32,openmp=true,gcc.cxxflags="-ftree-vectorize -mavx""
Compiler Notes: --build=x86_64-generic-linux --disable-libmpx --disable-libunwind-exceptions --disable-multiarch --disable-vtable-verify --disable-werror --enable-__cxa_atexit --enable-bootstrap --enable-cet --enable-clocale=gnu --enable-default-pie --enable-gnu-indirect-function --enable-host-shared --enable-languages=c,c++,fortran,go,jit --enable-ld=default --enable-libstdcxx-pch --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=x86-64-v3 --with-gcc-major-version-only --with-glibc-version=2.35 --with-gnu-ld --with-isl --with-pic --with-ppl=yes --with-tune=skylake-avx512
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Gentoo Musl Stable W:znver3-O2

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK Device 7961

OS: Gentoo/Linux, Kernel: 5.15.26-gentoo-x86_64 (x86_64), Display Server: X Server 1.21.1.3, Compiler: GCC 11.2.1 20220115 + Clang 13.0.1 + LLVM 13.0.1, File-System: btrfs, Screen Resolution: 1920x1080

Compiler Notes: --bindir=/usr/x86_64-gentoo-linux-musl/gcc-bin/11.2.1 --build=x86_64-gentoo-linux-musl --datadir=/usr/share/gcc-data/x86_64-gentoo-linux-musl/11.2.1 --disable-cet --disable-esp --disable-fixed-point --disable-libada --disable-libsanitizer --disable-libssp --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-libvtv --disable-multilib --disable-nls --disable-systemtap --disable-valgrind-annotations --disable-vtable-verify --disable-werror --enable-__cxa_atexit --enable-checking=release

--enable-default-pie --enable-default-ssp --enable-languages=c,c++,fortran --enable-libgomp --enable-libstdcxx-time --enable-lto --enable-obsolete --enable-secureplt --enable-shared --enable-targets=all --enable-threads=posix --host=x86_64-gentoo-linux-musl --includedir=/usr/lib/gcc/x86_64-gentoo-linux-musl/11.2.1/include --mandir=/usr/share/gcc-data/x86_64-gentoo-linux-musl/11.2.1/man --with-multilib-list=m64 --with-python-dir=/share/gcc-data/x86_64-gentoo-linux-musl/11.2.1/python --with-zstd --without-isl
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Gentoo Musl Edge W:znver3-O2

Processor: AMD Ryzen 7 PRO 5850U @ 4.51GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Gentoo Linux 2.8, Kernel: 5.17.1-gentoo-x86_64 (x86_64), Display Server: X Server 1.21.1.3, Compiler: GCC 11.2.1 20220115 + Clang 14.0.0 + LLVM 14.0.0, File-System: btrfs, Screen Resolution: 1920x1080

Compiler Notes: --bindir=/usr/x86_64-gentoo-linux-musl/gcc-bin/11.2.1 --build=x86_64-gentoo-linux-musl --datadir=/usr/share/gcc-data/x86_64-gentoo-linux-musl/11.2.1 --disable-cet --disable-esp --disable-fixed-point --disable-libada --disable-libsanitizer --disable-libssp --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-libvtv --disable-multilib --disable-nls --disable-systemtap --disable-valgrind-annotations --disable-vtable-verify --disable-werror --enable-__cxa_atexit --enable-checking=release --enable-default-pie --enable-default-ssp --enable-languages=c,c++,fortran --enable-libgomp --enable-libstdcxx-time --enable-lto --enable-obsolete --enable-secureplt --enable-shared --enable-targets=all --enable-threads=posix --host=x86_64-gentoo-linux-musl --includedir=/usr/lib/gcc/x86_64-gentoo-linux-musl/11.2.1/include --mandir=/usr/share/gcc-data/x86_64-gentoo-linux-musl/11.2.1/man --with-build-config=bootstrap-lto --with-multilib-list=m64 --with-python-dir=/share/gcc-data/x86_64-gentoo-linux-musl/11.2.1/python --with-zstd --without-isl
Processor Notes: Scaling Governor: amd-pstate performance (Boost: Enabled) - CPU Microcode: 0xa50000c
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## FreeBSD 13.1 Beta1 Clang 13 port znver3

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (16 Cores), Motherboard: LENOVO 20X7003WFR ThinkPad L15 Gen 2a, Chipset: AMD [AMD] Renoir/Cezanne Root Complex, Memory: 32GB, Disk: Generic NVMe Device, Graphics: AMD RENOIR 1GB, Audio: ATI (0x1637) HDA

OS: FreeBSD, Kernel: 13.1-STABLE (x86_64), Desktop: KDE Plasma 5.24.4, Display Server: X Server 1.20.14, OpenGL: 4.6 Mesa 21.3.8 (LLVM 13.0.1), Vulkan: 1.2.195, Compiler: Clang 13.0.0, File-System: zfs, Screen Resolution: 1920x1080

## Gentoo Glibc Stable W:znver3-O2

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK Device 7961

OS: Gentoo/Linux, Kernel: 5.16.18-gentoo-r1 (x86_64), Desktop: KDE Plasma 5.23.5, Display Server: X Server 1.21.1.3 + Wayland, OpenGL: 4.6 Mesa 21.3.7 (LLVM 13.0.1), Compiler: GCC 11.2.1 20220115 + Clang 13.0.1 + LLVM 13.0.1, File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Gentoo Glibc Edge GCC 11.2 W:znver3-O2

Processor: AMD Ryzen 7 PRO 5850U @ 1.90GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Gentoo 2.8, Kernel: 5.16.18-gentoo-r1 (x86_64), Desktop: KDE Plasma 5.24.4, Display Server: X Server 1.21.1.3 + Wayland, OpenGL: 4.6 Mesa 22.0.1 (LLVM 13.0.1 DRM 3.44), Vulkan: 1.3.204, Compiler: GCC 11.2.1 20220115 + Clang 14.0.1 + LLVM 14.0.1, File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Environment Notes: RUSTFLAGS="-C target-cpu=native"
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Gentoo Glibc Edge Clang 14 W:znver3-O2

Processor: AMD Ryzen 7 PRO 5850U @ 4.51GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Gentoo 2.8, Kernel: 5.17.3-gentoo (x86_64), Desktop: KDE Plasma 5.24.4, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 22.0.1 (LLVM 13.0.1 DRM 3.44), Vulkan: 1.3.204, Compiler: Clang 14.0.1 + GCC 11.2.1 20220115 + LLVM 14.0.1, File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Environment Notes: RUSTFLAGS="-C target-cpu=native"
Compiler Notes: Optimized build; Default target: x86_64-pc-linux-gnu; Host CPU: znver3
Processor Notes: Scaling Governor: amd-pstate performance (Boost: Enabled) - CPU Microcode: 0xa50000c
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Gentoo Glibc Edge Clang 14 W:znver3-O3

Processor: AMD Ryzen 7 PRO 5850U @ 4.51GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Gentoo 2.8, Kernel: 5.17.3-gentoo (x86_64), Desktop: KDE Plasma 5.24.4, Display Server: X Server 1.21.1.3 + Wayland, OpenGL: 4.6 Mesa 22.0.1 (LLVM 13.0.1 DRM 3.44), Vulkan: 1.3.204, Compiler: Clang 14.0.1 + GCC 11.3.0 + LLVM 14.0.1, File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Environment Notes: RUSTFLAGS="-C target-cpu=native"
Compiler Notes: Optimized build with assertions; Default target: x86_64-unknown-linux-gnu; Host CPU: znver3
Processor Notes: Scaling Governor: amd-pstate performance (Boost: Enabled) - CPU Microcode: 0xa50000c
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Gentoo Glibc Edge GCC 11.3 W:clear

Processor: AMD Ryzen 7 PRO 5850U @ 4.51GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR

(R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Gentoo 2.8, Kernel: 5.17.4-xanmod1-xanmod (x86_64), Desktop: KDE Plasma 5.24.4, Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 22.1.0-rc3 (LLVM 14.0.3 DRM 3.44), Vulkan: 1.3.211, Compiler: GCC 11.3.0 + Clang 14.0.3 + LLVM 14.0.3, File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Environment Notes: FFLAGS="-O3 -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,--enable-new-dtags" CXXFLAGS="-march=native -O3 -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=native -fvisibility-inlines-hidden" RUSTFLAGS="-C target-cpu=native" FCFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,-sort-common -Wl,--enable-new-dtags" CFLAGS="-march=native -O3 -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=native" COMMON_FLAGS="-march=native -O3 -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=native"
Processor Notes: Scaling Governor: amd-pstate performance (Boost: Enabled) - CPU Microcode: 0xa50000c
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## Gentoo Glibc Edge GCC 12.1 W:clear

Processor: AMD Ryzen 7 PRO 5850U @ 4.51GHz (8 Cores / 16 Threads), Motherboard: LENOVO 20X7003WFR (R1KET36W 1.21 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 32GB, Disk: 512GB SK hynix HFS512GDE9X081N, Graphics: AMD Cezanne 1GB (2000/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Gentoo 2.8, Kernel: 5.17.7-gentoo (x86_64), Desktop: KDE Plasma 5.24.5, Display Server: X Server 1.21.1.3 + Wayland, OpenGL: 4.6 Mesa 22.1.0 (LLVM 14.0.3 DRM 3.44), Vulkan: 1.3.211, Compiler: GCC 12.1.0 + Clang 14.0.3 + LLVM 14.0.3, File-System: btrfs, Screen Resolution: 1920x1080

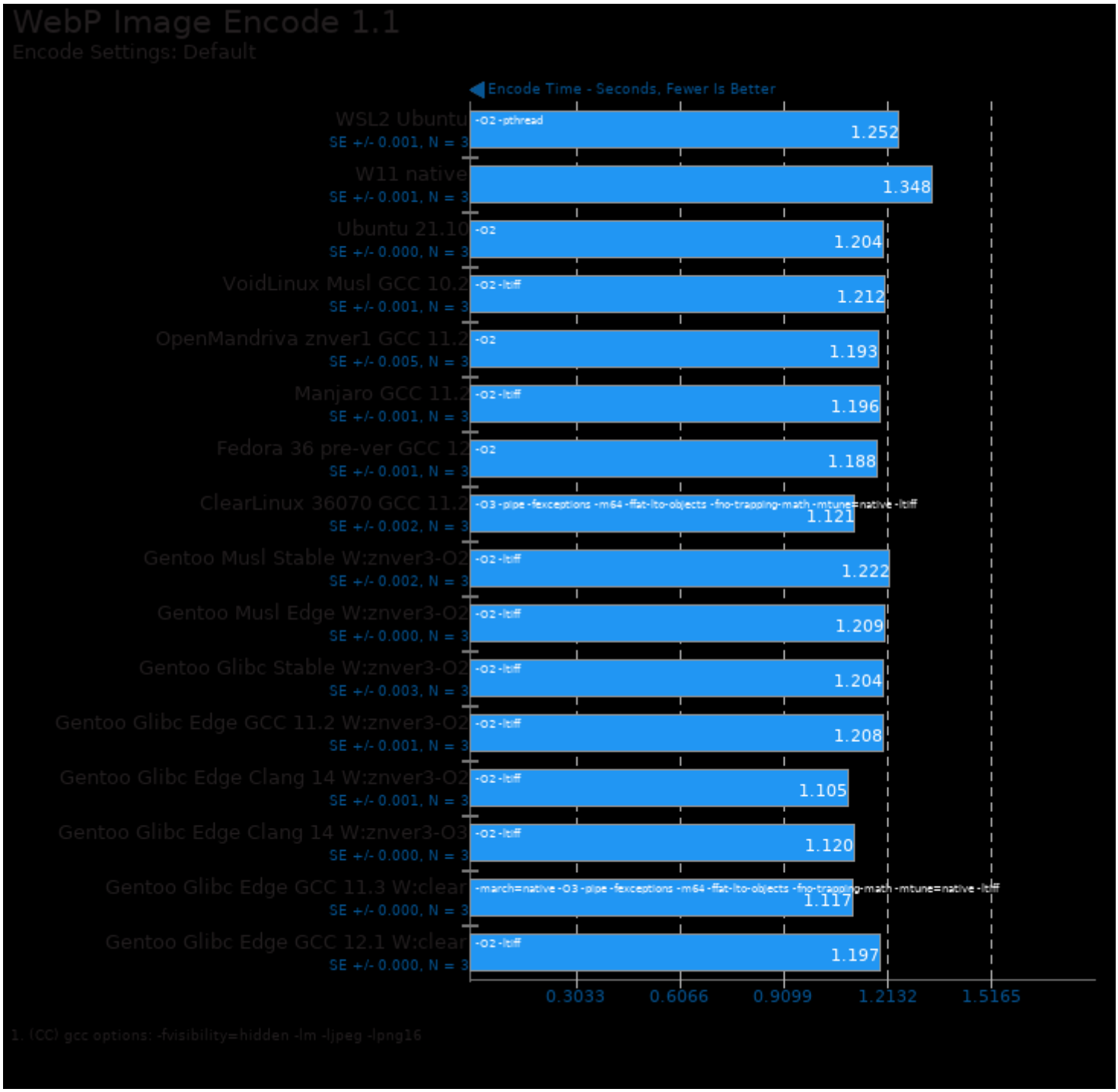
Kernel Notes: Transparent Huge Pages: always
Environment Notes: RUSTFLAGS="-C target-cpu=native"
Processor Notes: Scaling Governor: amd-pstate performance (Boost: Enabled) - CPU Microcode: 0xa50000c
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

# Pictures bench

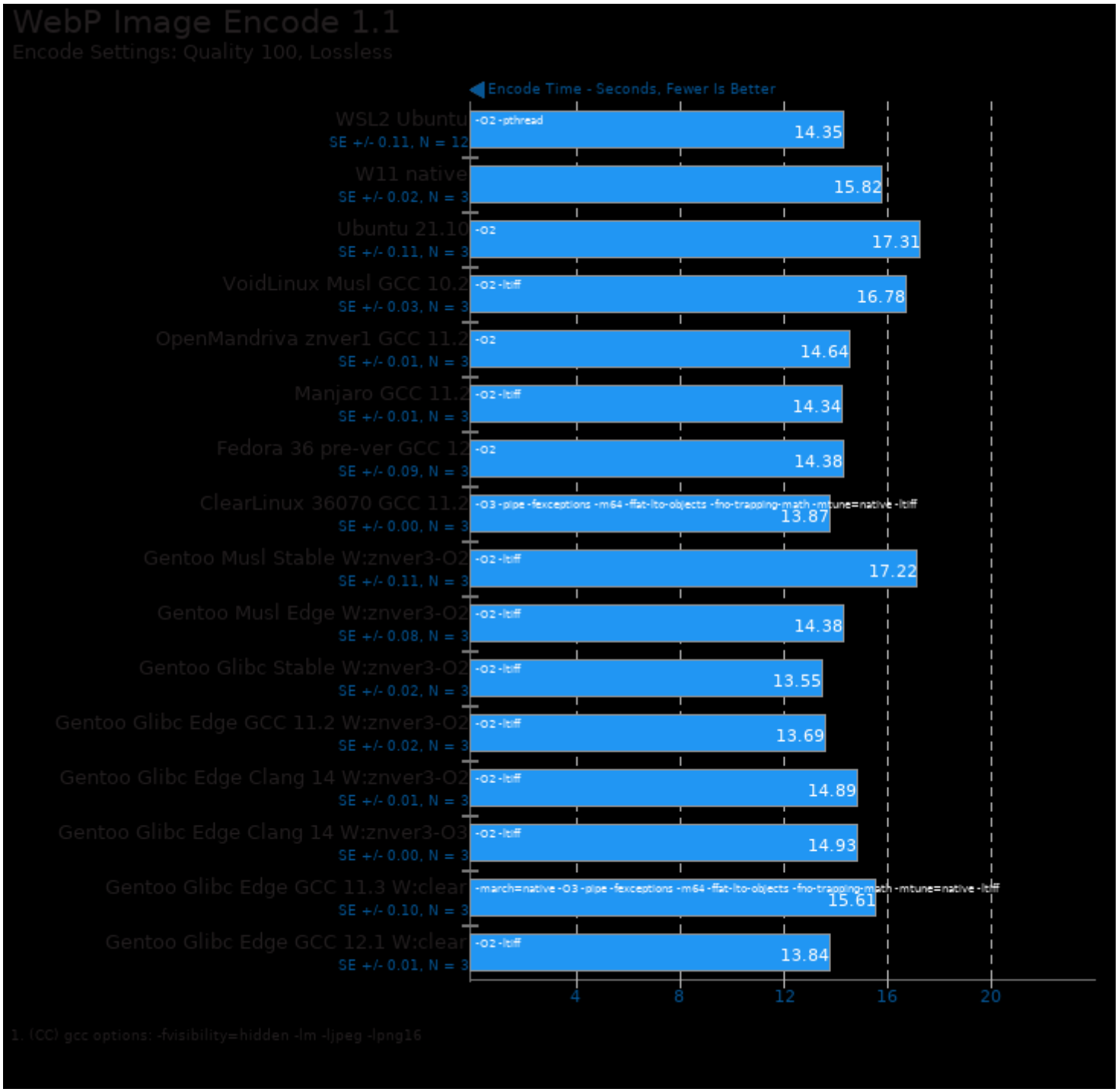
| | WSL 2 Ubuntu | W11 native | Ubuntu 21.10 | Void Linux Musl GCC 10.2 | OpenMandriva znver1 GCC 11.2 | FreeBSD 13.1 Beta 1 Clang 13 Default package | Manjaro GCC 11.2 | Fedora 36 pre-ver GCC 12 | Clear Linux 36070 GCC 11.2 | Gentoo Musl Stable W:znver3-O2 | Gentoo Musl Edge W:znver3-O2 | FreeBSD 13.1 Beta 1 Clang 13 port znver3 | Gentoo Glibc Stable W:znver3-O2 | Gentoo Glibc Edge GCC 11.2 W:znver3-O2 | Gentoo Glibc Edge Clang 14 W:znver3-O2 | Gentoo Glibc Edge Clang 14 W:znver3-O3 | Gentoo Glibc Edge GCC 11.3 W:clear | Gentoo Glibc Edge GCC 12.1 W:clear |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WebP Image Encode - Default (Encode Time - sec)** | 1.252 | 1.348 | 1.204 | 1.212 | 1.193 | | 1.196 | 1.188 | 1.121 | 1.222 | 1.209 | | 1.204 | 1.208 | 1.105 | 1.120 | 1.117 | 1.197 |
| Normalized | 88.26% | 81.97% | 91.78% | 91.17% | 92.62% | | 92.39% | 93.01% | 98.57% | 90.43% | 91.4% | | 91.78% | 91.47% | 100% | 98.66% | 98.93% | 92.31% |
| Standard Deviation | 0.1% | 0.2% | 0% | 0.2% | 0.7% | | 0.2% | 0.1% | 0.4% | 0.2% | 0% | | 0.4% | 0.1% | 0.2% | 0.1% | 0.1% | 0% |
| **WebP Image Encode - Q.1.L (Encode Time - sec)** | 14.348 | 15.824 | 17.305 | 16.781 | 14.642 | | 14.342 | 14.379 | 13.871 | 17.222 | 14.383 | | 13.549 | 13.689 | 14.887 | 14.926 | 15.614 | 13.844 |
| Normalized | 94.43% | 85.62% | 78.3% | 80.74% | 92.54% | | 94.47% | 94.23% | 97.68% | 78.67% | 94.2% | | 100% | 98.98% | 91.01% | 90.77% | 86.77% | 97.87% |
| Standard Deviation | 2.7% | 0.2% | 1.1% | 0.3% | 0.1% | | 0.1% | 1.1% | 0% | 1.2% | 0.9% | | 0.3% | 0.2% | 0.2% | 0% | 1.1% | 0.2% |
| **LibRaw - P.P.B (Mpix/sec)** | 33.64 | 10.44 | 34.65 | 37.13 | 13.33 | 30.27 | 41.41 | 45.89 | 63.02 | 44.06 | 44.97 | 33.08 | 41.50 | 42.76 | 38.25 | 38.07 | 60.91 | 47.13 |
| Normalized | 53.38% | 16.57% | 54.98% | 58.92% | 21.15% | 48.03% | 65.71% | 72.82% | 100% | 69.91% | 71.36% | 52.49% | 65.85% | 67.85% | 60.7% | 60.41% | 96.65% | 74.79% |
| Standard Deviation | 0.3% | 0% | 0.1% | 0.5% | 0.1% | 1.7% | 0.2% | 0.4% | 0.2% | 2.3% | 0.4% | 1.6% | 0.3% | 0.4% | 0.7% | 0.3% | 0.5% | 0.2% |
| **GraphicsMagick - Swirl (Iterations/** | 366 | 297 | 373 | 368 | 61 | 353 | 380 | 381 | 436 | 404 | 394 | 372 | 389 | 401 | 352 | 355 | 420 | 394 |
| Normalized | 83.94% | 68.12% | 85.55% | 84.4% | 13.99% | 80.96% | 87.16% | 87.39% | 100% | 92.66% | 90.37% | 85.32% | 89.22% | 91.97% | 80.73% | 81.42% | 96.33% | 90.37% |
| Standard Deviation | | | 0.3% | 0.2% | 0% | 0.6% | 0.3% | 0.2% | 0.5% | 0.3% | 0.3% | 0.2% | 0.3% | 0.8% | 0% | 0.3% | 0.5% | 0.7% |

# Pictures bench

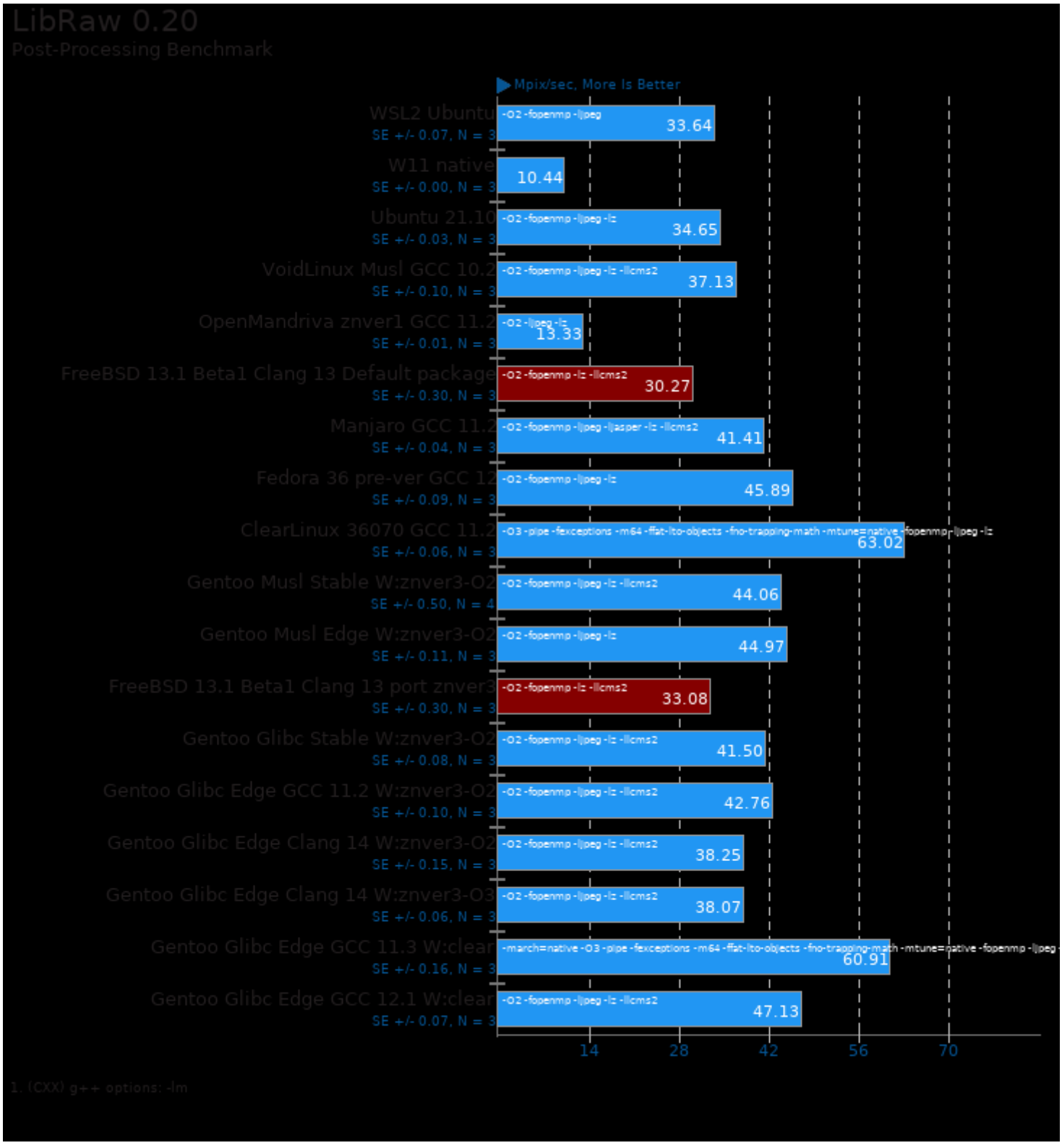
| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GraphicsMagick - Rotate (Iterations/** | 718 | 299 | 602 | 563 | 727 | 658 | 759 | 706 | 846 | 686 | 733 | 505 | 811 | 809 | 744 | 729 | 725 | 816 |
| **Normalized** | 84.87% | 35.34% | 71.16% | 66.55% | 85.93% | 77.78% | 89.72% | 83.45% | 100% | 81.09% | 86.64% | 59.69% | 95.86% | 95.63% | 87.94% | 86.17% | 85.7% | 96.45% |
| **Standard Deviation** | | 0.5% | 0.9% | 1.2% | 0.7% | 0.5% | 0.6% | 0.4% | 0.3% | 0.3% | 0.3% | 3.2% | 0.4% | 0.3% | 0.2% | 1.3% | 0.3% | 0.2% |
| **GraphicsMagick - HWB Color Space (Iterations/** | 782 | 322 | 666 | 760 | 273 | 830 | 735 | 680 | 922 | 901 | 898 | 1206 | 840 | 856 | 585 | 579 | 742 | 861 |
| **Normalized** | 64.84% | 26.7% | 55.22% | 63.02% | 22.64% | 68.82% | 60.95% | 56.38% | 76.45% | 74.71% | 74.46% | 100% | 69.65% | 70.98% | 48.51% | 48.01% | 61.53% | 71.39% |
| **Standard Deviation** | 0.9% | | 0.5% | 0.7% | 0.2% | 0% | 0.1% | 0.1% | 0.5% | 0.3% | 0.7% | 0.5% | 0.6% | 0.8% | 0.4% | 0.2% | 0.3% | 0.9% |
| **libavif avifenc - 6, Lossless (sec)** | 82.819 | 83.523 | 83.022 | 81.999 | 75.648 | | 76.461 | 77.127 | 72.415 | 77.747 | 78.814 | | 76.916 | 75.201 | | | 76.798 | 76.658 |
| **Normalized** | 87.44% | 86.7% | 87.22% | 88.31% | 95.73% | | 94.71% | 93.89% | 100% | 93.14% | 91.88% | | 94.15% | 96.3% | | | 94.29% | 94.47% |
| **Standard Deviation** | 2.5% | 9.9% | 0% | 0.3% | 0.7% | | 0.5% | 0.6% | 0.6% | 0.6% | 0.2% | | 0.4% | 1.1% | | | 0.4% | 0.2% |
| **libjpeg-turbo tjbench - D.T (Megapixels/sec)** | 249.77266 | 234.56451 | 234.14685 | 234.17447 | 238.99282 | 225.33299 | 248.24673 | 257.68817 | 249.27192 | 239.08045 | 238.47159 | 225.70450 | 248.34360 | 245.59778 | 250.26454 | 247.87889 | 247.32641 | 242.78127 |
| **Normalized** | 96.93% | 91.03% | 90.86% | 90.88% | 92.74% | 87.44% | 96.34% | 100% | 96.73% | 92.78% | 92.54% | 87.59% | 96.37% | 95.31% | 97.12% | 96.19% | 95.98% | 94.22% |
| **Standard Deviation** | 0.2% | 0.5% | 1.8% | 0.4% | 0% | 11.7% | 0.1% | 0.6% | 0.1% | 0.1% | 0.1% | 12.3% | 0.2% | 0.2% | 0.2% | 0.3% | 0.2% | 0.2% |


WebP Image Encode 1.1
Encode Settings: Default
Encode Time - Seconds, Fewer Is Better
WSL2 Ubuntu
SE +/- 0.001, N = 3
-O2 -pthread
1.252
W11 native
SE +/- 0.001, N = 3
1.348
Ubuntu 21.10
SE +/- 0.000, N = 3
-O2
1.204
VoidLinux Musl GCC 10.2
SE +/- 0.001, N = 3
-O2 -ltiff
1.212
OpenMandriva znver1 GCC 11.2
SE +/- 0.005, N = 3
-O2
1.193
Manjaro GCC 11.2
SE +/- 0.001, N = 3
-O2 -ltiff
1.196
Fedora 36 pre-ver GCC 12
SE +/- 0.001, N = 3
-O2
1.188
ClearLinux 36070 GCC 11.2
SE +/- 0.002, N = 3
-O3 -pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=native -ltiff
1.121
Gentoo Musl Stable W:znver3-O2
SE +/- 0.002, N = 3
-O2 -ltiff
1.222
Gentoo Musl Edge W:znver3-O2
SE +/- 0.000, N = 3
-O2 -ltiff
1.209
Gentoo Glibc Stable W:znver3-O2
SE +/- 0.003, N = 3
-O2 -ltiff
1.204
Gentoo Glibc Edge GCC 11.2 W:znver3-O2
SE +/- 0.001, N = 3
-O2 -ltiff
1.208
Gentoo Glibc Edge Clang 14 W:znver3-O2
SE +/- 0.001, N = 3
-O2 -ltiff
1.105
Gentoo Glibc Edge Clang 14 W:znver3-O3
SE +/- 0.000, N = 3
-O2 -ltiff
1.120
Gentoo Glibc Edge GCC 11.3 W:clear
SE +/- 0.000, N = 3
-march=native -O3 -pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=native -ltiff
1.117
Gentoo Glibc Edge GCC 12.1 W:clear
SE +/- 0.000, N = 3
-O2 -ltiff
1.197
0.3033
0.6066
0.9099
1.2132
1.5165
1. (CC) gcc options: -fvisibility=hidden -lm -ljpeg -lpng16

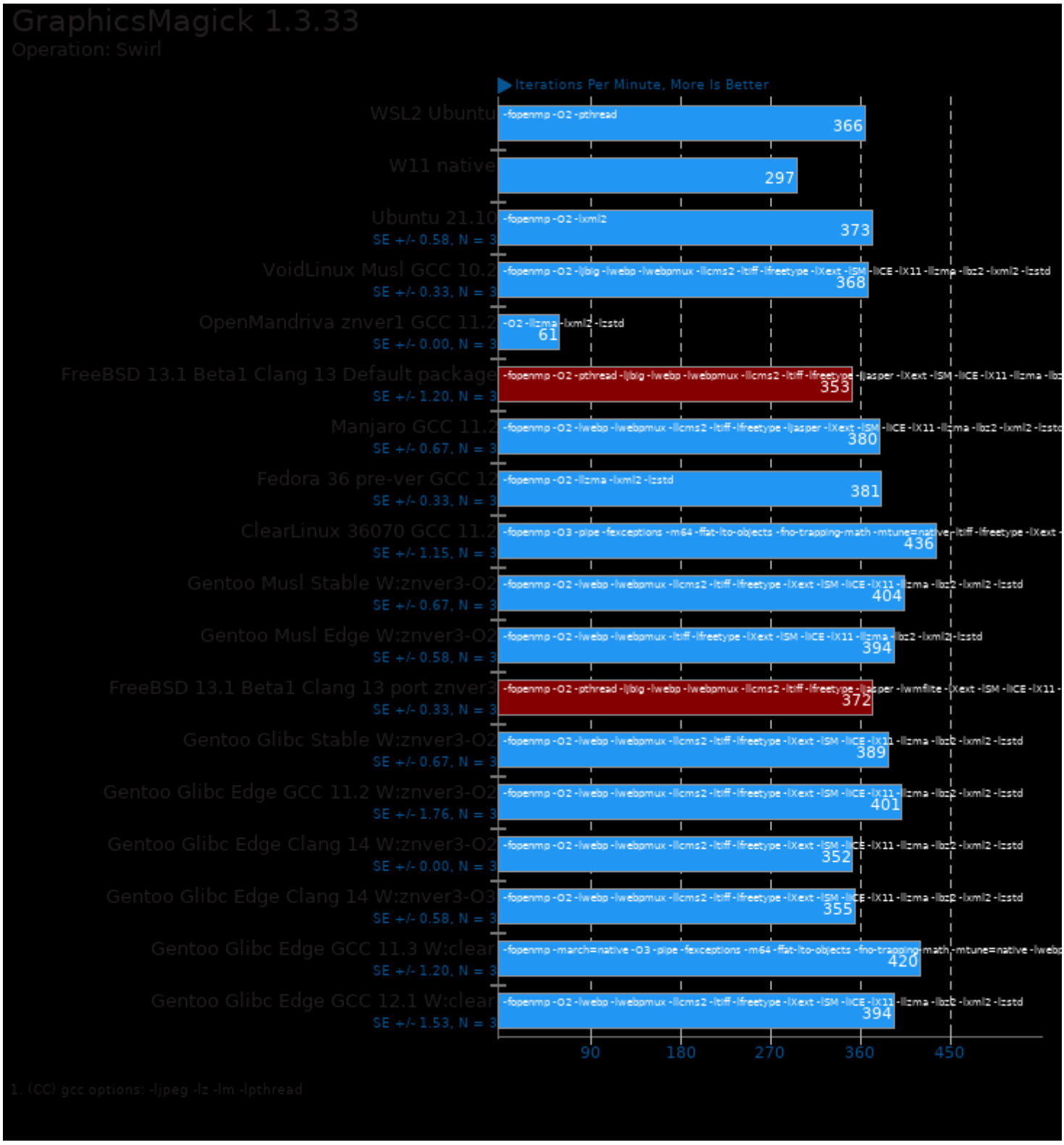
# Pictures bench



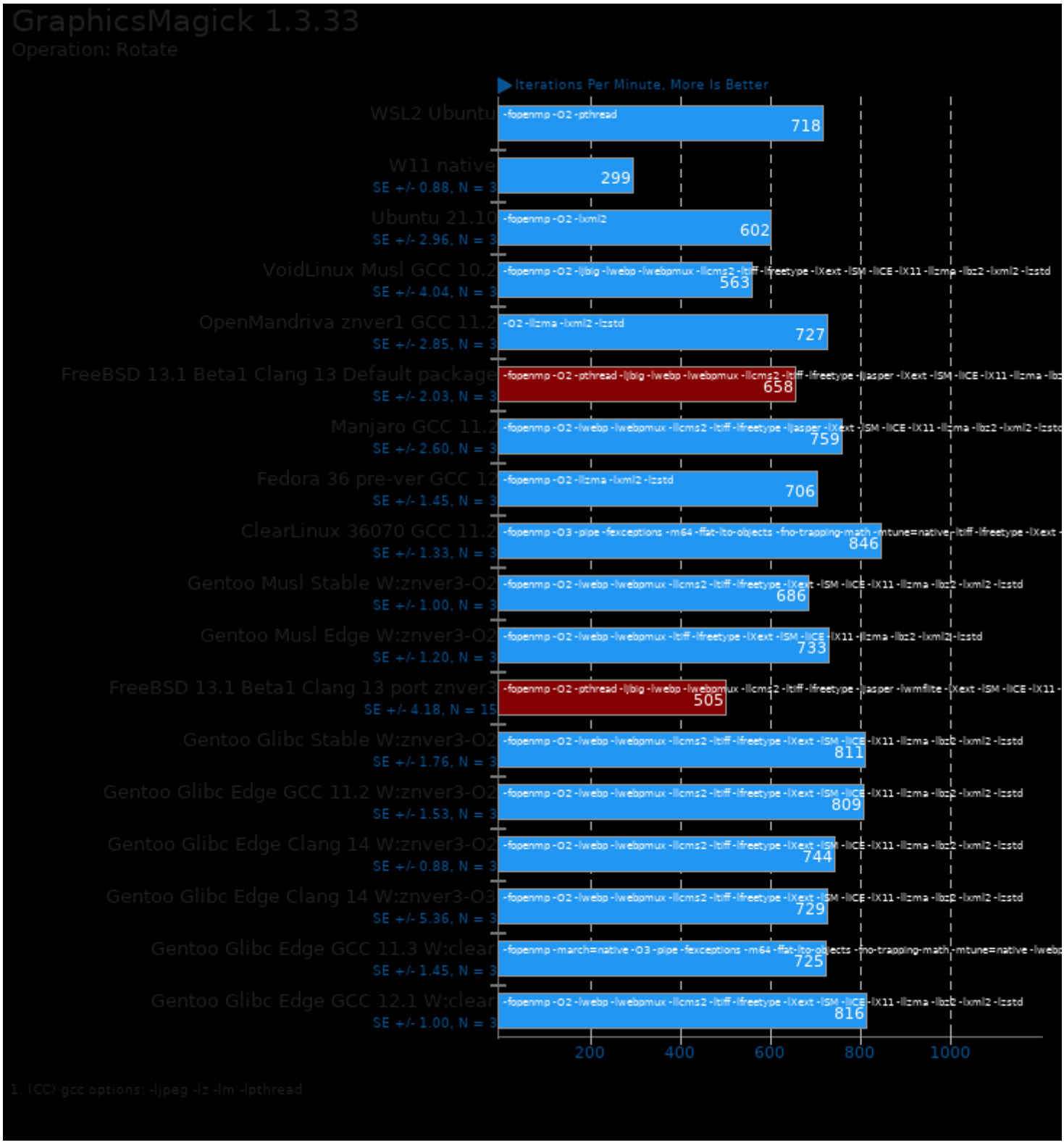
# Pictures bench



# Pictures bench



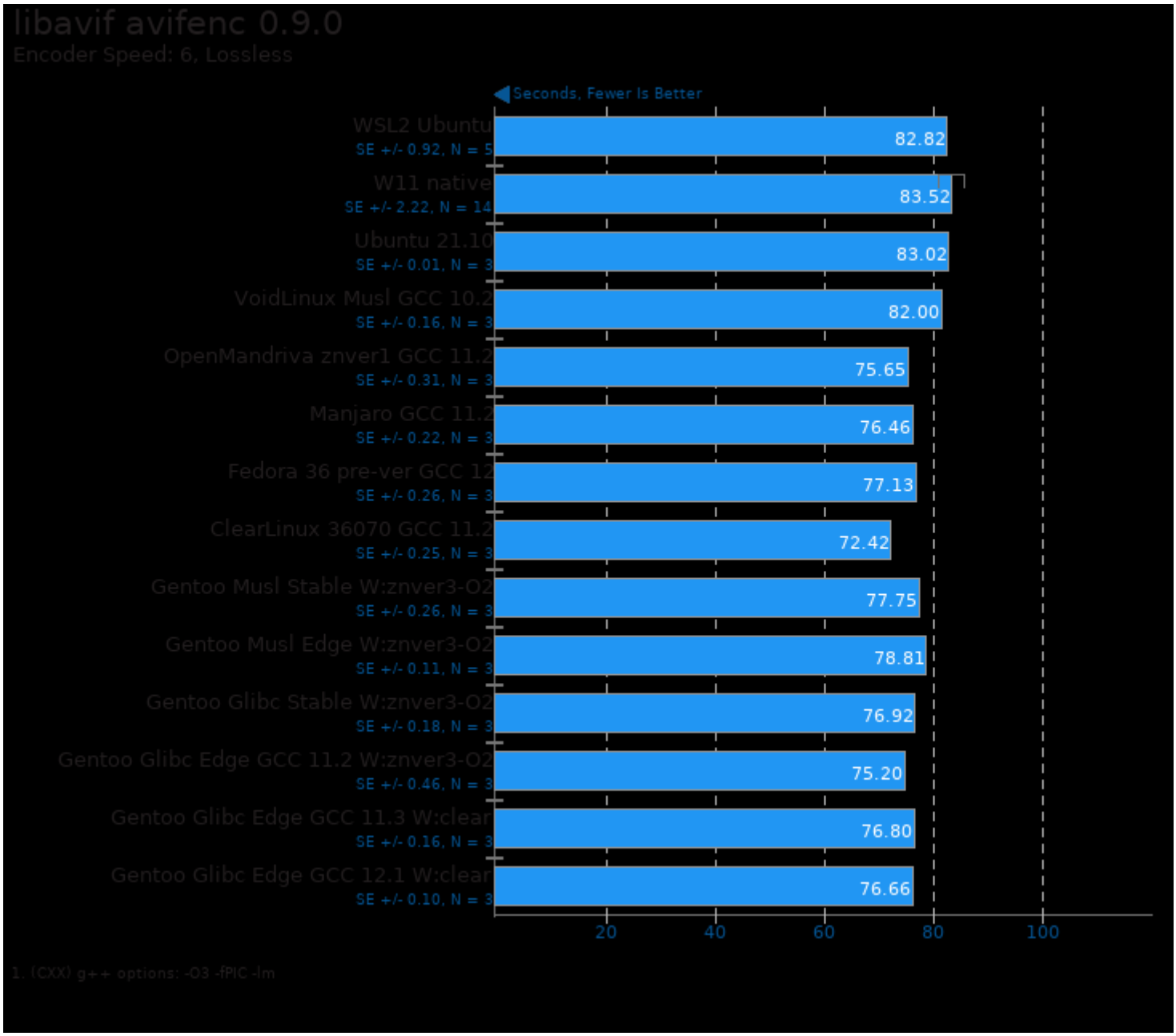
# Pictures bench

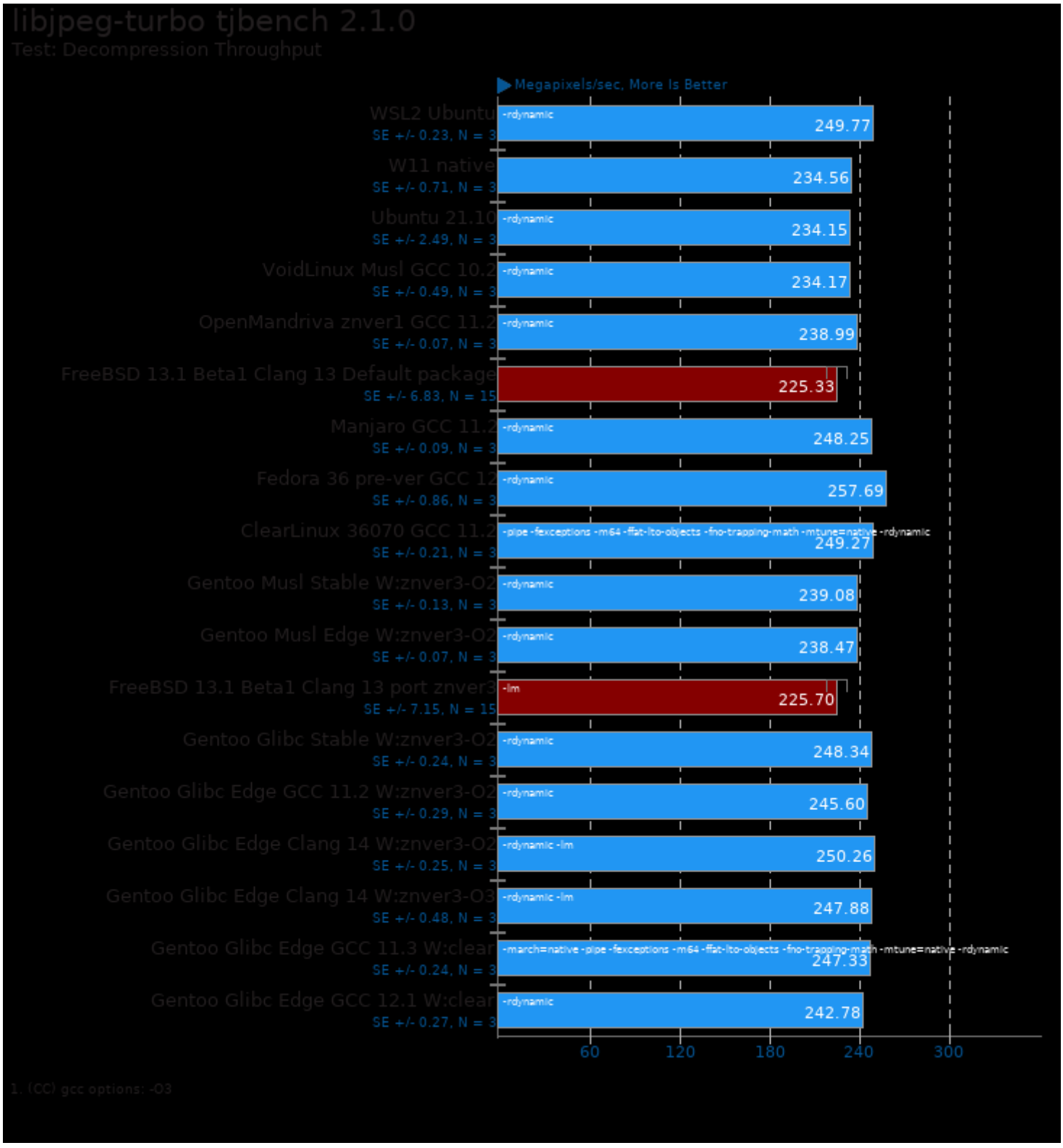


# Pictures bench



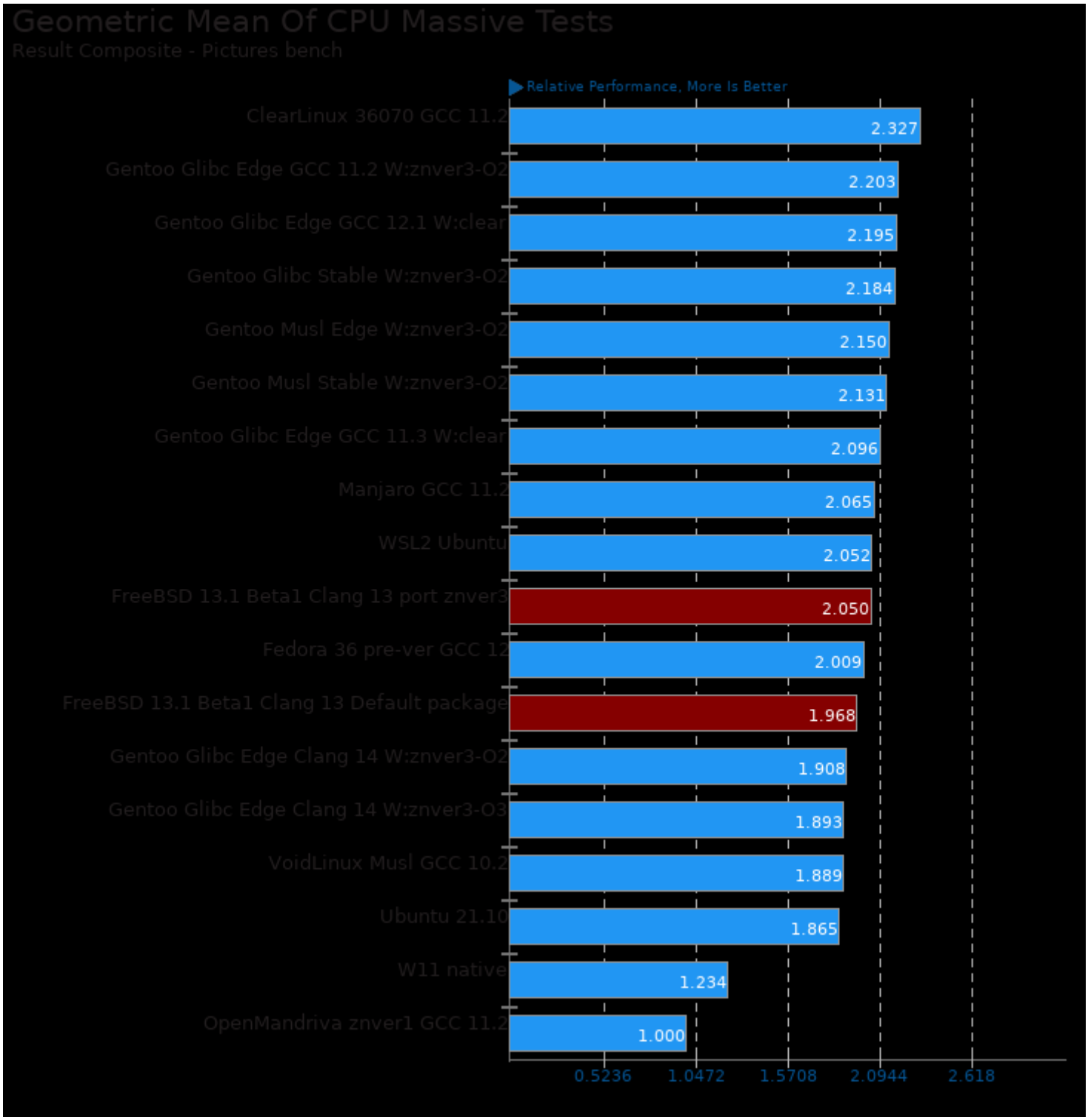
# Pictures bench




libjpeg-turbo tjbench 2.1.0
Test: Decompression Throughput
Megapixels/sec, More Is Better
WSL2 Ubuntu
SE +/- 0.23, N = 3
-rdynamic
249.77
W11 native
SE +/- 0.71, N = 3
234.56
Ubuntu 21.10
SE +/- 2.49, N = 3
-rdynamic
234.15
VoidLinux Musl GCC 10.2
SE +/- 0.49, N = 3
-rdynamic
234.17
OpenMandriva znver1 GCC 11.2
SE +/- 0.07, N = 3
-rdynamic
238.99
FreeBSD 13.1 Beta1 Clang 13 Default package
SE +/- 6.83, N = 15
225.33
Manjaro GCC 11.2
SE +/- 0.09, N = 3
-rdynamic
248.25
Fedora 36 pre-ver GCC 12
SE +/- 0.86, N = 3
-rdynamic
257.69
ClearLinux 36070 GCC 11.2
SE +/- 0.21, N = 3
-pipe -fexceptions -m64 -flat-lto-objects -fno-trapping-math -mtune=native -rdynamic
249.27
Gentoo Musl Stable W:znver3-O2
SE +/- 0.13, N = 3
-rdynamic
239.08
Gentoo Musl Edge W:znver3-O2
SE +/- 0.07, N = 3
-rdynamic
238.47
FreeBSD 13.1 Beta1 Clang 13 port znver3
SE +/- 7.15, N = 15
-lm
225.70
Gentoo Glibc Stable W:znver3-O2
SE +/- 0.24, N = 3
-rdynamic
248.34
Gentoo Glibc Edge GCC 11.2 W:znver3-O2
SE +/- 0.29, N = 3
-rdynamic
245.60
Gentoo Glibc Edge Clang 14 W:znver3-O2
SE +/- 0.25, N = 3
-rdynamic -lm
250.26
Gentoo Glibc Edge Clang 14 W:znver3-O3
SE +/- 0.48, N = 3
-rdynamic -lm
247.88
Gentoo Glibc Edge GCC 11.3 W:clear
SE +/- 0.24, N = 3
-march=native -pipe -fexceptions -m64 -flat-lto-objects -fno-trapping-math -mtune=native -rdynamic
247.33
Gentoo Glibc Edge GCC 12.1 W:clear
SE +/- 0.27, N = 3
-rdynamic
242.78
60
120
180
240
300
1. (CC) gcc options: -O3

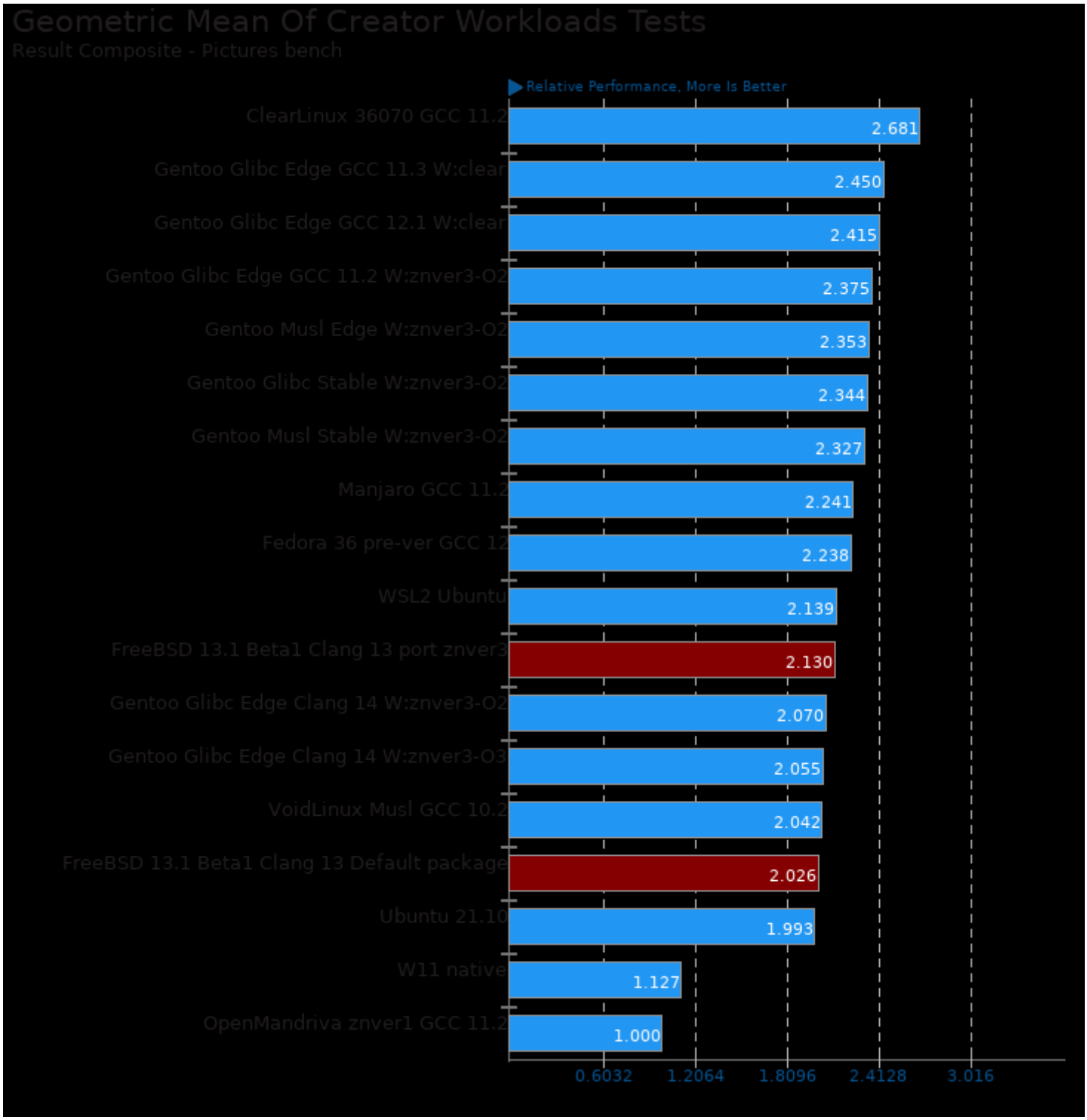
# Pictures bench

These geometric means are based upon test groupings / test suites for this result file.



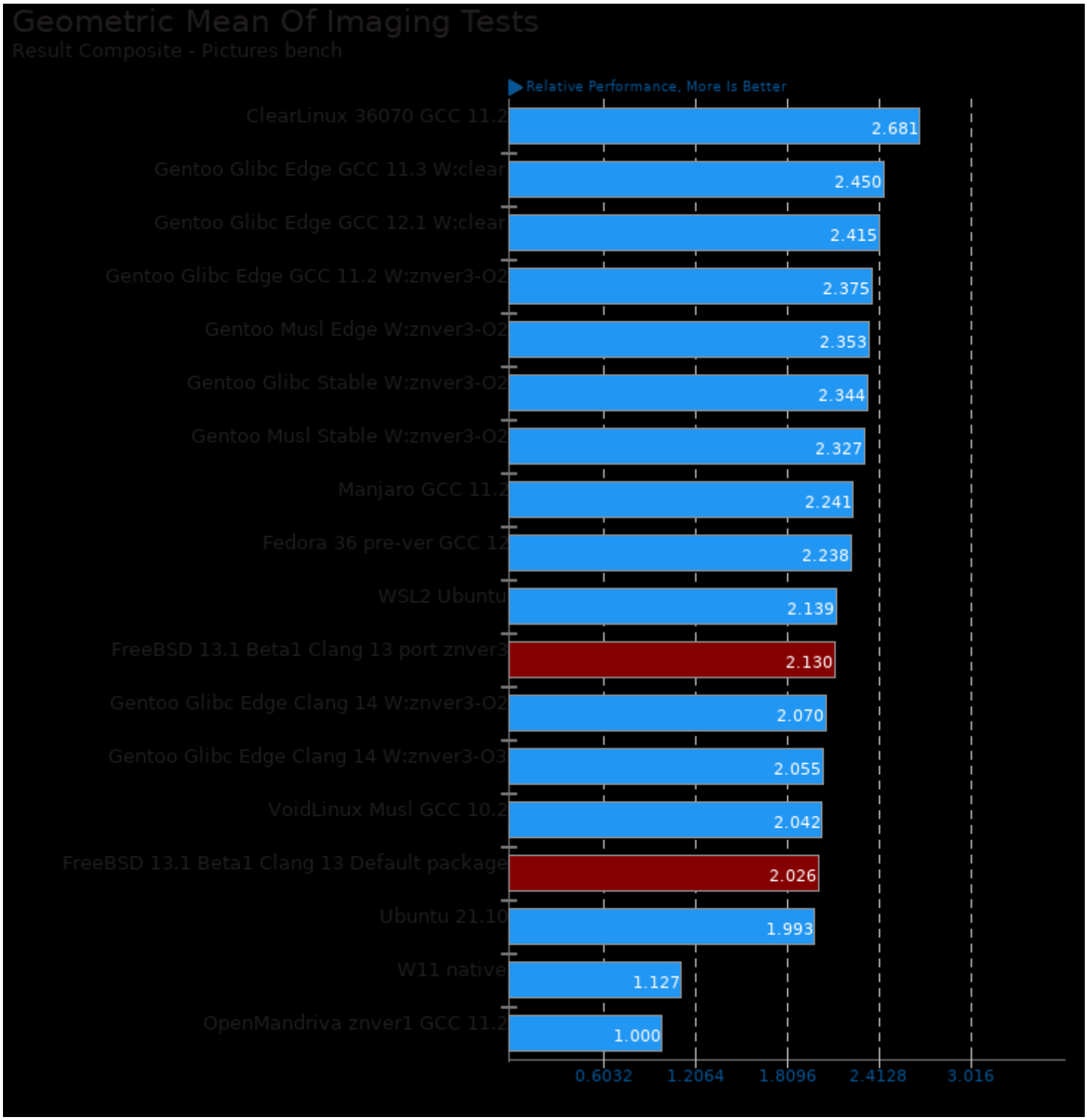

Geometric mean based upon tests: pts/graphics-magick and pts/tjbench

# Pictures bench



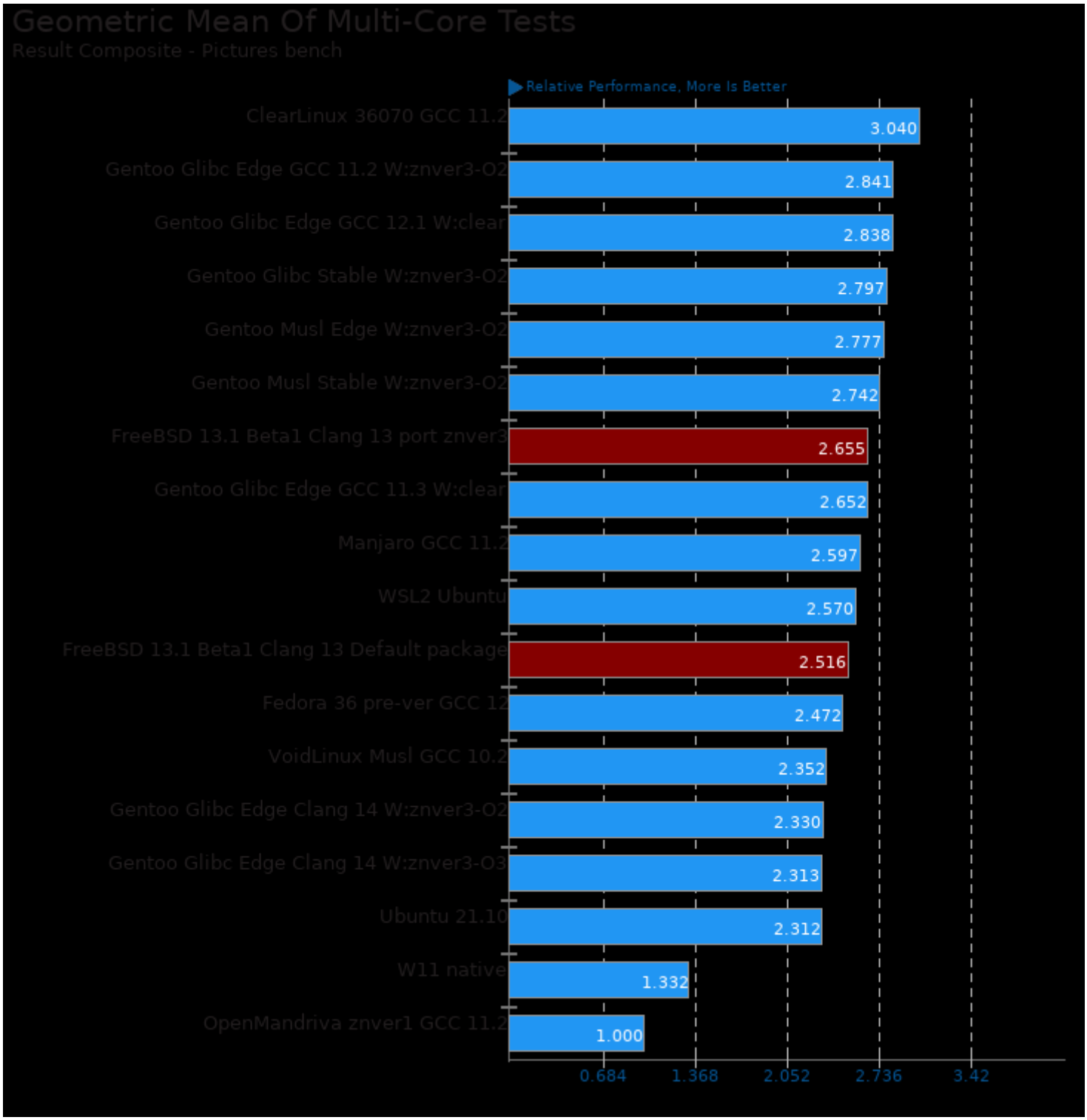

Geometric mean based upon tests: pts/avifenc, pts/graphics-magick, pts/libraw, pts/webp and pts/tjbench

# Pictures bench




Geometric mean based upon tests: pts/graphics-magick, pts/libraw, pts/webp, pts/tjbench and pts/avifenc

# Pictures bench




Geometric mean based upon tests: pts/avifenc and pts/graphics-magick

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 17:54.*