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Benchmark Gentoo after rebuild world

Apple OSX 10.15.7 Default

Automated Executive Summary

Clear Linux OS 33720 no-miti 5.8.9 GCC 10.2 had the most wins, coming in first place for 23% of the tests.

Test Systems:

Gentoo no-mitigation 5.5.4 GCC 9.3 O2 ivybridge

Gentoo no-mitigation 5.5.4 GCC 9.3 O2 ivybridge v2

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.6, Kernel: 5.6.4-gentoo-x86_64 (x86_64), Desktop: LXQt 0.14.1, Display Server: X Server 1.20.7, Display Driver: NVIDIA 440.82, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 10.2.159, Compiler: GCC 9.3.0 + Clang 9.0.1 + LLVM 9.0.1 + CUDA 10.2, File-System: ext4, Screen Resolution: 2880x1800

Disk Notes: MQ-DEADLINE / noatime,rw,stripe=256
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Python Notes: Python 3.6.10
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + tsx_async_abort: Not affected

Gentoo no-mitigation 5.5.4 GCC 9.3 O3 ivybridge

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.6, Kernel: 5.6.4-gentoo-x86_64 (x86_64), Desktop: LXQt 0.14.1, Display Server: X Server 1.20.7, Display Driver: NVIDIA 440.82, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 10.2.159, Compiler: GCC 9.3.0 + Clang 9.0.1 + LLVM 9.0.1 + CUDA 10.2, File-System: ext4, Screen Resolution: 2880x1800

Disk Notes: MQ-DEADLINE / noatime,rw,stripe=256
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + tsx_async_abort: Not affected

Gentoo no-mitigation 5.5.10 GCC 9.3 G-overlay ivybridge

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.6, Kernel: 5.6.10-gentoo-x86_64 (x86_64), Display Server: X Server 1.20.7, Display Driver: NVIDIA 440.82, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 10.2.159, Compiler: GCC 9.3.0 + Clang 10.0.0 + LLVM 10.0.0 + CUDA 10.2, File-System: ext4, Screen Resolution: 2880x1800

Disk Notes: MQ-DEADLINE / noatime,rw,stripe=256
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + tsx_async_abort: Not affected

Gentoo no-mitigation 4.19.128 GCC 10.1 02 ivybridge

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.6, Kernel: 4.19.128-gentoo-x86_64 (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.8, Display Driver: NVIDIA 440.82, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 10.2.159, Compiler: GCC 10.1.0 + Clang 10.0.0 + LLVM 10.0.0, File-System: ext4, Screen Resolution: 2880x1800

Disk Notes: MQ-DEADLINE / noatime,rw,stripe=256

Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Gentoo no-mitigation 4.19.128 GCC 10.1 02 flto ivybridge

Gentoo no-mitigation 5.7.6 GCC 10.1 G-overlay ivybridge

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.6, Kernel: 5.7.6-gentoo-x86_64 (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.8, Display Driver: NVIDIA 450.51, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.0.197, Compiler: GCC 10.1.0 + Clang 10.0.0 + LLVM 10.0.0, File-System: ext4, Screen Resolution: 2880x1800

Disk Notes: MQ-DEADLINE / noatime,rw,stripe=256
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Gentoo no-mitigation GCC 10.2 03 Clear recommendation

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA NVE7 1GB (1200MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.6, Kernel: 5.8.0-xanmod1-x86_64clang (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.8, Display Driver: nouveau 1.0.16, OpenGL: 4.3 Mesa 20.1.5, Compiler: GCC 10.2.0 + Clang 10.0.1 + LLVM 10.0.1, File-System: ext4, Screen Resolution: 2880x1800

Disk Notes: NONE / discard,errors=remount-ro,noatime,rw
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: vulnerable + l1tf: Mitigation of PTE Inversion + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Gentoo 4.19 idem but clang

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA NVE7 1GB (1200MHz), Audio: Intel 7 /C216, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.6, Kernel: 4.19.138-gentootest (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.8, Display Driver: nouveau 1.0.16, OpenGL: 4.3 Mesa 20.2.0-rc1, Compiler: Clang 10.0.1 + GCC 10.2.0 + LLVM 10.0.1, File-System: ext4, Screen Resolution: 2880x1800

Compiler Notes: Optimized build; Default target: x86_64-pc-linux-gnu; Host CPU: ivybridge
Disk Notes: MQ-DEADLINE / noatime,rw,stripe=256
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: vulnerable + l1tf: Mitigation of PTE Inversion + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Gentoo no-mitigation GCC 10.2 G-overlay ivybridge

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA NVE7 1GB (1200MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo 2.7, Kernel: 5.8.5-gentoo-x86_64 (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, OpenGL: 4.3 Mesa 20.2.0-rc3, Compiler: GCC 10.2.0 + Clang 10.0.1 + LLVM 10.0.1, File-System: ext4, Screen Resolution: 2880x1800

Kernel Notes: i915.fastboot=1
Disk Notes: MQ-DEADLINE / discard,noatime,rw
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

FreeBSD 12.1 Default Clang 8.0.1

Processor: Intel Core i7-3615QM @ 2.30GHz (8 Cores), Motherboard: Apple MacBookPro10 1 1.0, Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 218GB, Graphics: Unknown 981MB, Audio: NVIDIA (0x0e1b) HDA

OS: FreeBSD, Kernel: 12.1-RELEASE (x86_64), Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, Compiler: Clang 8.0.1 (SVN 366581), File-System: zfs, Screen Resolution: 2880x1800

Environment Notes: LIBGL_ALWAYS_SOFTWARE=1
Security Notes: KPTI

FreeBSD 12.1 Default Clang 10.0.1

Processor: Intel Core i7-3615QM @ 2.30GHz (8 Cores), Motherboard: Apple MacBookPro10 1 1.0, Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 212GB, Graphics: Unknown 981MB, Audio: NVIDIA (0x0e1b) HDA

OS: FreeBSD, Kernel: 12.1-RELEASE (x86_64), Display Server: X Server 1.20.9, Display Driver: modesetting 1.20.9, Compiler: Clang 8.0.1 (SVN 366581), File-System: zfs, Screen Resolution: 2880x1800

Environment Notes: LIBGL_ALWAYS_SOFTWARE=1

FreeBSD 12.2 beta clang 10.0.1 ivybridge

Processor: Intel Core i7-3615QM @ 2.30GHz (8 Cores), Motherboard: Apple MacBookPro10 1 1.0, Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 211GB, Graphics: Unknown 981MB, Audio: NVIDIA (0x0e1b) HDA

OS: FreeBSD, Kernel: 12.2-BETA1 (x86_64), Display Server: X Server 1.20.9, Display Driver: modesetting 1.20.9, Compiler: Clang 10.0.1, File-System: zfs, Screen Resolution: 2880x1800

Environment Notes: LIBGL_ALWAYS_SOFTWARE=1
Security Notes: KPTI

VoidLinux mitigation 5.8.9 GCC 9.3

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E + 8GB Flash Disk, Graphics: Intel HD 4000, Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom NetXtreme BCM57762 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: VoidLinux rolling, Kernel: 5.8.9_1 (x86_64), Display Server: X Server 1.20.9, Display Driver: intel 2.99.917, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 2880x1800

Compiler Notes: --build=x86_64-linux-musl --disable-libsanitizer --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-multilib --disable-nls --disable-symvers --disable-target-libiberty --disable-werror --enable-__cxa_atexit --enable-checking=release --enable-default-pie --enable-default-ssp --enable-fast-character --enable-languages=c,c++,objc,obj-c++,fortran,lto,go,ada --enable-lto --enable-plugins --enable-serial-configure --enable-shared --enable-threads=posix --enable-vtable-verify --mandir=/usr/share/man --with-isl --with-linker-hash-style=gnu
Disk Notes: MQ-DEADLINE / relatime,rw
Processor Notes: Scaling Governor: intel_cpufreq ondemand - CPU Microcode: 0x21
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/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

VoidLinux no-miti 5.8.9 GCC 9.3

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: Intel HD 4000, Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: VoidLinux rolling, Kernel: 5.8.9_1 (x86_64), Display Server: X Server 1.20.9, Display Driver: intel 2.99.917, Compiler: GCC 9.3.0 + Clang 10.0.0 + LLVM 10.0.0, File-System: ext4, Screen Resolution: 2880x1800

Kernel Notes: i915.enable_rc6=7 i915.enable_fbc=1 i915.fastboot=1
Compiler Notes: --build=x86_64-linux-musl --disable-libsanitizer --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-multilib --disable-nls --disable-symvers --disable-target-libiberty --disable-werror --enable-__cxa_atexit --enable-checking=release --enable-default-pie --enable-default-ssp --enable-fast-character --enable-languages=c,c++,objc,obj-c++,fortran,lto,go,ada --enable-lto --enable-plugins --enable-serial-configure --enable-shared --enable-threads=posix --enable-vtable-verify --mandir=/usr/share/man --with-isl --with-linker-hash-style=gnu
Disk Notes: MQ-DEADLINE / relatime,rw
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

OpenMandrivaLinux 4.1 no-miti 5.5 GCC 9.2

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA NVE7 1GB, Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom NetXtreme BCM57762 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: OpenMandrivaLinux 4.1, Kernel: 5.5.12-desktop-1omv4001 (x86_64), Desktop: KDE Plasma 5.17.5, Display Server: X Server 1.20.7, Display Driver: modesetting 1.20.7, OpenGL: 4.3 Mesa 20.0.7, Compiler: Clang 9.0.1 + GCC 9.2.1 20191207 + LLVM 9.0.1, File-System: ext4, Screen Resolution: 2880x1800

Kernel Notes: dm_mod.use_blk_mq=1
Environment Notes: AMD_DEBUG=nodcc
Disk Notes: MQ-DEADLINE / discard,noatime,rw,stripe=256
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + tsx_async_abort: Not affected

Fedore 33B no-miti 5.8.9 GCC 10.2

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8192MB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA NVE7 1GB, Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom NetXtreme BCM57762 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Fedora 33, Kernel: 5.8.9-301.fc33.x86_64 (x86_64), Desktop: MATE 1.24.1, Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, OpenGL: 4.3 Mesa 20.2.0-rc4, Compiler: GCC 10.2.1 20200826 + Clang 11.0.0 + LLVM 11.0.0, File-System: btrfs, Screen Resolution: 2880x1800

Disk Notes: BFQ / relatime,rw,seclabel,space_cache,ssd,subvol=/home,subvolid=257
Processor Notes: Scaling Governor: intel_cpufreq performance
Security Notes: SELinux + 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/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Ubuntu 20.04 no-miti 5.4 GCC 9.3

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (259.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Ubuntu 20.04, Kernel: 5.4.0-47-generic (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.8, Display Driver: NVIDIA 390.138, OpenGL: 4.6.0, Compiler: GCC 9.3.0, File-System: zfs, Screen Resolution: 2880x1800

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,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_pstate performance - CPU Microcode: 0x21
Disk Scheduler Notes: NONE
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Macos Mojave 10.15.6 Xcode 12

Processor: Intel Core i7 @ 2.30GHz (4 Cores / 8 Threads), Motherboard: Apple MacBook Pro, Chipset: Intel 7, Memory: 2 x 4 GB DDR3-1600MHz, Disk: 251GB APPLE SSD SM256E, Graphics: Intel HD 4000 + NVIDIA GeForce GT 650M 2GB, Monitor: Color LCD

OS: macOS 10.15.6, Kernel: 19.6.0 (x86_64), Compiler: Clang 12.0.0 + GCC 12.0.0 + Xcode 12.0, File-System: APFS, Screen Resolution: 2880x1800

Environment Notes: XPC_FLAGS=0x0

Clear Linux OS 33720 no-miti 5.8.9 GCC 10.2

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (262.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom NetXtreme BCM57762 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Clear Linux OS 33720, Kernel: 5.8.9-986.native (x86_64), Desktop: GNOME Shell 3.36.5, Display Server: X Server 1.20.8, Display Driver: NVIDIA 455.23.04, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.1.70, Vulkan: 1.2.145, Compiler: GCC 10.2.1 20200915 releases/gcc-10.2.0-253-g49b3d88e9d + Clang 10.0.1 + LLVM 10.0.1, File-System: ext4, Screen Resolution: 2880x1800

Environment Notes: FFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -fstack-protector --param=ssp-buffer-size=32 -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 -Wa,-mbranches-within-32B-boundaries" CXXFLAGS="-g -O3

-feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -fstack-protector --param=ssp-buffer-size=32 -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=skylake -Wa,-mbranches-within-32B-boundaries -fvisibility-inlines-hidden -Wl,--enable-new-dtags" FCFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -fstack-protector --param=ssp-buffer-size=32 -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 -fstack-protector --param=ssp-buffer-size=32 -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=skylake -Wa,-mbranches-within-32B-boundaries" 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-languages=c,c++,fortran,go --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=westmere --with-gcc-major-version-only --with-glibc-version=2.19 --with-gnu-ld --with-isl --with-ppl=yes --with-tune=haswell
Disk Notes: BFQ / relatime,rw,stripe=256
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Gentoo Musl no-miti 5.8.11 GCC 9.3 O3 G-Overlay ivy

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (262.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: Intel 3rd Gen Core, Audio: Intel 7 /C216, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo/Linux, Kernel: 5.8.11-gentoo-x86_64 (x86_64), Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, Compiler: GCC 9.3.0 + Clang 10.0.1, File-System: f2fs, Screen Resolution: 2880x1800

Compiler Notes: --bindir=/usr/x86_64-gentoo-linux-musl/gcc-bin/9.3.0 --build=x86_64-gentoo-linux-musl --datadir=/usr/share/gcc-data/x86_64-gentoo-linux-musl/9.3.0 --disable-esp --disable-fixed-point --disable-libada --disable-libsanitizer --disable-libssp --disable-libvtv --disable-multilib --disable-nls --disable-systemtap --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/9.3.0/include --mandir=/usr/share/gcc-data/x86_64-gentoo-linux-musl/9.3.0/man --with-multilib-list=m64 --with-python-dir=/share/gcc-data/x86_64-gentoo-linux-musl/9.3.0/python --without-isl
Disk Notes: MQ-DEADLINE / acl,active_logs=6,alloc_mode=default,background_gc=on,discard,extent_cache,flush_merge,fsync_mode=posix,inline_data,inline_dentry,inline_xattr,lazytime,mode=adaptive,no_heap,noatime,rw,user_xattr
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

FreeBSD 12.2 Default Clang 10.0.1

Processor: Intel Core i7-3615QM @ 2.30GHz (8 Cores), Motherboard: Apple MacBookPro10 1 1.0, Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 215GB, Graphics: NVIDIA GeForce GT 650M 981MB, Audio: NVIDIA (0x0e1b) HDA, Monitor: Color LCD

OS: FreeBSD, Kernel: 12.2-RELEASE-p1 (x86_64), Desktop: Xfce 4.14, Display Server: X Server 1.20.9, Display Driver: NVIDIA 1.0.0, Compiler: Clang 10.0.1, File-System: zfs, Screen Resolution: 2880x1800

Security Notes: KPTI

Gentoo Glibc no-miti 5.10 GCC 10.2 lto-overlay

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (262.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB (797/2508MHz), Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Gentoo/Linux, Kernel: 5.10.2-xanmod1-x86_64-gcc (x86_64), Desktop: Xfce 4.16, Display Server: X Server 1.20.10, Display Driver: NVIDIA 455.45.01, OpenGL: 4.6.0, Compiler: GCC 10.2.0 + Clang 11.0.0Target: + LLVM

11.0.0, File-System: ext4, Screen Resolution: 2880x1800

Kernel Notes: i915.fastboot=1
Disk Notes: NONE / discard,noatime,rw,stripe=256 / Block Size: 4096
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

Fedora 34-RC1 -miti 5.11 GCC 11 clearlinux cflags

Processor: Intel Core i7-3615QM @ 3.30GHz (4 Cores / 8 Threads), Motherboard: Apple Mac-C3EC7CD22292981F (421.0.0.0.0 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 251GB APPLE SSD SM256E, Graphics: NVIDIA GeForce GT 650M 1GB, Audio: Cirrus Logic CS4206, Monitor: Color LCD, Network: Broadcom NetXtreme BCM57786 PCIe + Broadcom BCM4331 802.11a/b/g/n

OS: Fedora 34, Kernel: 5.11.6-300.fc34.x86_64 (x86_64), Desktop: MATE 1.24.1, Display Server: X Server 1.20.10, Display Driver: NVIDIA 460.56, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.2.153 + OpenCL 1.1 Mesa 21.0.0, Compiler: GCC 11.0.0 20210225 + Clang 12.0.0 + LLVM 12.0.0 + CUDA 11.2, File-System: btrfs, Screen Resolution: 2880x1800

Kernel Notes: Transparent Huge Pages: madvise
Disk Notes: MQ-DEADLINE / autodefrag,discard=async,noatime,nodatacow,nodatasum,rw,space_cache,ssd,subvol=/home,subvolid=256 / Block Size: 4096
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Vulnerable: __user pointer sanitization and usercopy barriers only; no swapgs barriers + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled + srbds: Vulnerable: No microcode + tsx_async_abort: Not affected

FreeBSD 13-RC1 KPTI clang 11.0.1

Processor: Intel Core i7-3615QM @ 2.30GHz (8 Cores), Motherboard: Apple MacBookPro10 1 1.0, Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 187GB, Graphics: NVIDIA GeForce GT 650M 981MB, Audio: NVIDIA (0x0e1b) HDA, Monitor: Color LCD

OS: FreeBSD, Kernel: 13.0-RC3 (x86_64), Desktop: MATE 1.24.1, Display Server: X Server 1.20.9, Display Driver: NVIDIA, Compiler: Clang 11.0.1, File-System: zfs, Screen Resolution: 2880x1800

Security Notes: KPTI

Parallel Gentoo 5.12 PTI GCC 11.1 ClearLinux Preset world

Processor: Intel Core i7-3615QM (8 Cores), Motherboard: Parallels Software Virtual (16.1.2 49151 BIOS), Chipset: Red Hat Virtio + ICH8/R, Memory: 4096MB, Disk: 69GB Gentoo-ClearLinu, Graphics: Red Hat Virtio GPU, Audio: Intel 82801BA/BAM, Network: Red Hat Virtio device

OS: Gentoo/Linux, Kernel: 5.12.1-gentoo-x86_64-gcc (x86_64), Compiler: GCC 11.1.0 + Clang 12.0.0 + LLVM 12.0.0, File-System: ext4, Screen Resolution: 1024x768, System Layer: Parallels Virtualization

Kernel Notes: Transparent Huge Pages: always
Disk Notes: MQ-DEADLINE / commit=600,discard,noatime,rw,stripe=256 / Block Size: 4096
Processor Notes: CPU Microcode: 0x21
Security Notes: itlb_multihit: vulnerable + l1tf: Mitigation of PTE Inversion + mds: Vulnerable: Clear buffers attempted no microcode; SMT Host state unknown + meltdown: Mitigation of PTI + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline STIBP: disabled RSB filling + srbds: Unknown: Dependent on hypervisor status + tsx_async_abort: Not affected

Apple OSX 10.15.7 Default

Processor: Intel Core i7-3615QM @ 2.30GHz (4 Cores / 8 Threads), Motherboard: Apple MacBook Pro, Chipset: Intel 7,

Benchmark Gentoo after rebuild world

Memory: 2 x 4 GB DDR3-1600MHz, Disk: 251GB APPLE SSD SM256E, Graphics: Intel HD 4000 + NVIDIA GeForce GT 650M 2GB, Monitor: Color LCD

OS: macOS 10.15.7, Kernel: 19.6.0 (x86_64), Compiler: Clang 12.0.0 + GCC 12.0.0, File-System: APFS, Screen Resolution: 2880x1800

Environment Notes: CXXFLAGS="-march=native -g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -fstack-protector --param=ssp-buffer-size=32 -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -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 -Wa,-mbranches-within-32B-boundaries -flto=auto" RUSTFLAGS="-C target-cpu=native" XPC_FLAGS=0x0 CFLAGS="-march=native -g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -fstack-protector --param=ssp-buffer-size=32 -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -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 -Wa,-mbranches-within-32B-boundaries -flto=auto"
Processor Notes: CPU Microcode: 33

Benchmark Gentoo after rebuild world

	Gentoo no-mitigation 5.5.4 GCC 9.3 O2 ivybridge	Gentoo no-mitigation 5.5.4 GCC 9.3 O2 ivybridge v2	Gentoo no-mitigation 5.5.4 GCC 9.3 O3 ivybridge	Gentoo no-mitigation 5.5.10 GCC 9.3 G-Overlay ivybridge	Gentoo no-mitigation 4.19.128 GCC 10.1 02 ivybridge	Gentoo no-mitigation 4.19.128 GCC 10.1 02 fltoivybridge	Gentoo no-mitigation 5.7.6 GCC 10.1 G-Overlay ivybridg	Gentoo no-mitigation GCC 10.203 Clear recommendation	Gentoo 4.19 idem but clang	Gentoo no-mitigation GCC 10.2 G-Overlay ivybridge	FreeBSD 12.1 Default Clang 8.0.1	FreeBSD 12.1 Default Clang 10.0.1	FreeBSD 12.2 beta clang 10.0.1 ivybridge	VoidLinux mitigation 5.8.9 GCC 9.3	VoidLinux no-mitigi 5.8.9 GCC 9.3	Open Mandriva Linux 4.1 no-mitigi 5.5 GCC 9.2	Fedore 33 Beta no-mitigi 5.8.9 GCC 10.2	Ubuntu 20.04 no-mitigi 5.4 GCC 9.3	Macos Mojave 10.15.6 Xcode 12	Clear Linux OS 33720 no-mitigi 5.8.9 GCC 10.2	Gentoo Musl no-mitigi 5.8.11 GCC 9.3 O3 G-Overlay ivy	FreeBSD 12.2 Default Clang 10.0.1	Gentoo Glibc no-mitigi 5.10 GCC 10.2 lto-overlay	Fedora 34-RC1 -mitigi 5.11 GCC 11 clearlinux cflags	FreeBSD 13-RC1 KPTI clang 11.0.1	Parallel Gentoo 5.12 PTI GCC 11.1 ClearLinux Preset wo	Apple OSX 10.15.7 Default
SQLite - 8 (sec)	39 8.4 57	36 5.4 71	40 3.0 30	44 7.4 29	40 4.2 43	42 0.1 75	44 1.4 59	25 4.8 49	18 2.5 53	21 3.0 47				20 6.2 60	40 7.8 96	18 5.8 62	69 7.3 9	11 1.7 82	19. 47 5	22 0.1 25	36 3.7 18		21 1.8 87	28 5.2 52	22 9.1 36	40. 20 7	
Normalized	4.89%	5.33%	4.83%	4.35%	4.82%	4.63%	4.41%	7.64%	10.6%	9.14%				9.44%	4.77%	10.4%	2.79%	17.4%	100%	8.85%	5.35%		9.19%	6.83%	8.5%	48.4%	
Standard Deviation	1.9%	0.8%	1.1%	2.7%	0.8%	3.1%	1.2%	4.4%	4%	3.4%				2%	2%	3.7%	3%	0.4%	2.7%	2.9%	1.5%		4.2%	1%	1.2%	9.1%	
Dbench - 6 (MB/s)	12 4.3 21	12 4.1 73	11 8.4 91	10 7.5 03	11 5.0 97	11 3.0 51	11 0.9 25	17 7.1 81	22 2.1 60	20 6.8 76				20 8.0 04	11 2.8 92	22 3.5 60	54. 75	26 4.0 74		20 9.7 60	16 1.7 93		21 4.7 53	20 7.5 17		10 18	
Normalized	12.2%	12.2%	11.6%	10.5%	11.3%	11.1%	10.9%	17.4%	21.8%	20.3%				20.4%	11.0%	21.9%	5.38%	25.9%		20.6%	15.9%		21.1%	20.3%		100%	
Standard Deviation	1.3%	1%	0.7%	0.6%	0.8%	0.5%	1.1%	2.6%	1.6%	0.6%				0.1%	0.4%	0.4%	3.6%	12.1%		0.8%	16.6%		0.7%	0.2%		2.4%	
Threaded I/O Tester - Read - 32MB - 8	10 75 7	12 04 2	13 45 9	14 07 8	12 31 4	11 54 7	12 31 6	13 32 8	15 22 3	12 63 6						12 09 1	75 13	71 5.9 47		13 93 8			13 97 5	72 11		11 24 4	
Normalized	70.6%	79.1%	88.4%	92.4%	80.8%	75.8%	80.9%	87.5%	100%	83%						79.4%	49.3%	4.7%		91.5%			91.8%	47.3%		73.8%	
Standard Deviation	33.5%	24.5%	20.3%	2.4%	26.6%	28.5%	24.9%	15.9%	1.4%	33.3%						24.9%	25.6%	41.7%		15.4%			20.5%	29.1%		15.1%	

Benchmark Gentoo after rebuild world

| | | |

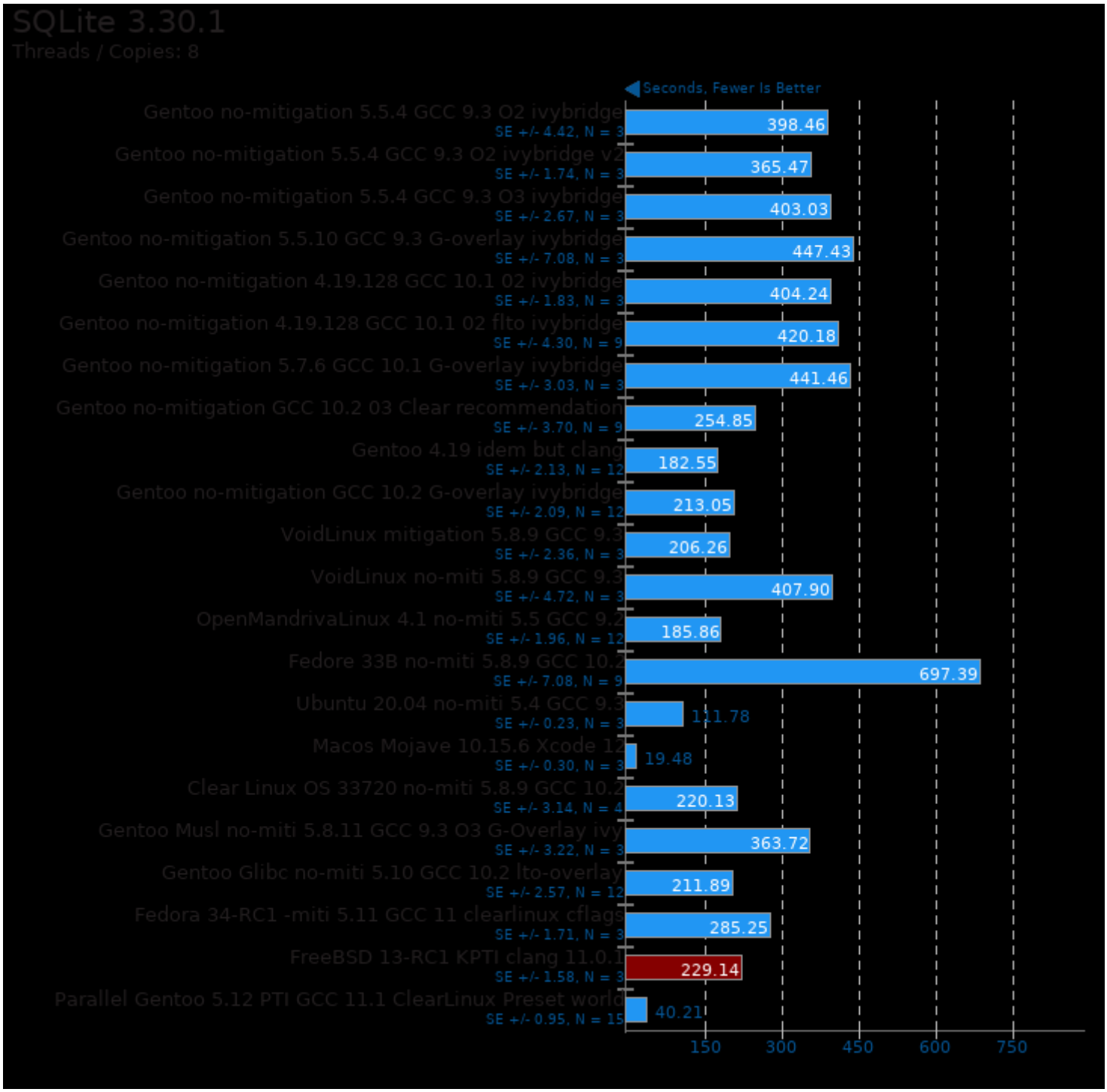
Benchmark Gentoo after rebuild world

GNU GMP GMPbench - Total Time (GMPbench Score)	31 48	31 49	31 55	30 46	31 58	31 49	31 69	31 63		31 60				31 35	11 47	22 30	28 69	11 58		31 97	29 55		29 75						
Normalized	98.4	98.5	98.6	95.2	98.7	98.4	99.1	98.9		98.8				98.0	35.8	69.7	89.7	36.2		100	92.4		93.0						
Standard Deviation	5%	%	9%	6%	5%	7%	1%	2%		4%				6%	6%	3%	1%	1%		%	2%		6%						
Crafty - Elapsed Time (Nodes/s)	56 60 69 3	56 71 08 8	56 60 97 7	54 41 59 7	56 74 26 3	56 91 26 9	56 91 05 8	57 11 20 1		56 46 42 8				54 42 13 2	20 86 86 0	44 75 81 8	50 29 74 3	46 85 34 1		57 96 39 2	53 68 24 2		54 34 62 4	57 63 06 5		49 64 75 8			
Normalized	97.6	97.8	97.6	93.8	97.8	98.1	98.1	98.5		97.4				93.8	36%	77.2	86.7	80.8		100	92.6		93.7	99.4		85.6			
Standard Deviation	6%	4%	6%	8%	9%	9%	8%	3%		1%				9%		2%	7%	3%		%	1%		6%	3%		5%			
GraphicsMagick - Swirl (Iterations/min)	11 3	11 4	11 4	11 1	11 5	11 3	11 5	78	66	66	71	59	53	66	46	21	48	45	32	87	78	98	11 7	13 0	12 4	12 6			
Normalized	86.9	87.6	87.6	85.3	88.4	86.9	88.4	60%	50.7	50.7	54.6	45.3	40.7	50.7	35.3	16.1	36.9	34.6	24.6	66.9	60%	75.3	90%	100	95.3	96.9			
Standard Deviation	2%	9%	9%	8%	6%	2%	6%		7%	7%	2%	8%	7%	7%	8%	5%	2%	2%	2%	2%		8%		%	8%	2%			
						1%		10.3 %	4.1 %	23.6 %	14.8 %	13.8 %	10.1 %	12.4 %			2.8 %	8%		2.6 %	13.4 %	7.7 %				0.8 %			
GraphicsMagick - Enhanced (Iterations/min)	43	43	43	43	44	43	43	36	26	25	32	27	25	28	17	10	21	17	11	35	33	42	44	43	43	43			
Normalized	97.7	97.7	97.7	97.7	100	97.7	97.7	81.8	59.0	56.8	72.7	61.3	56.8	63.6	38.6	22.7	47.7	38.6	25%	79.5	75%	95.4	100	97.7	97.7	97.7			
Standard Deviation	3%	3%	3%	3%	%	3%	3%	2%	9%	2%	3%	6%	2%	4%	4%	3%	3%	4%		5%		5%	%	3%	3%	3%			
								2.8 %	2.2 %		2.8 %	2.1 %		3%			2.7 %				1.7 %					0%			

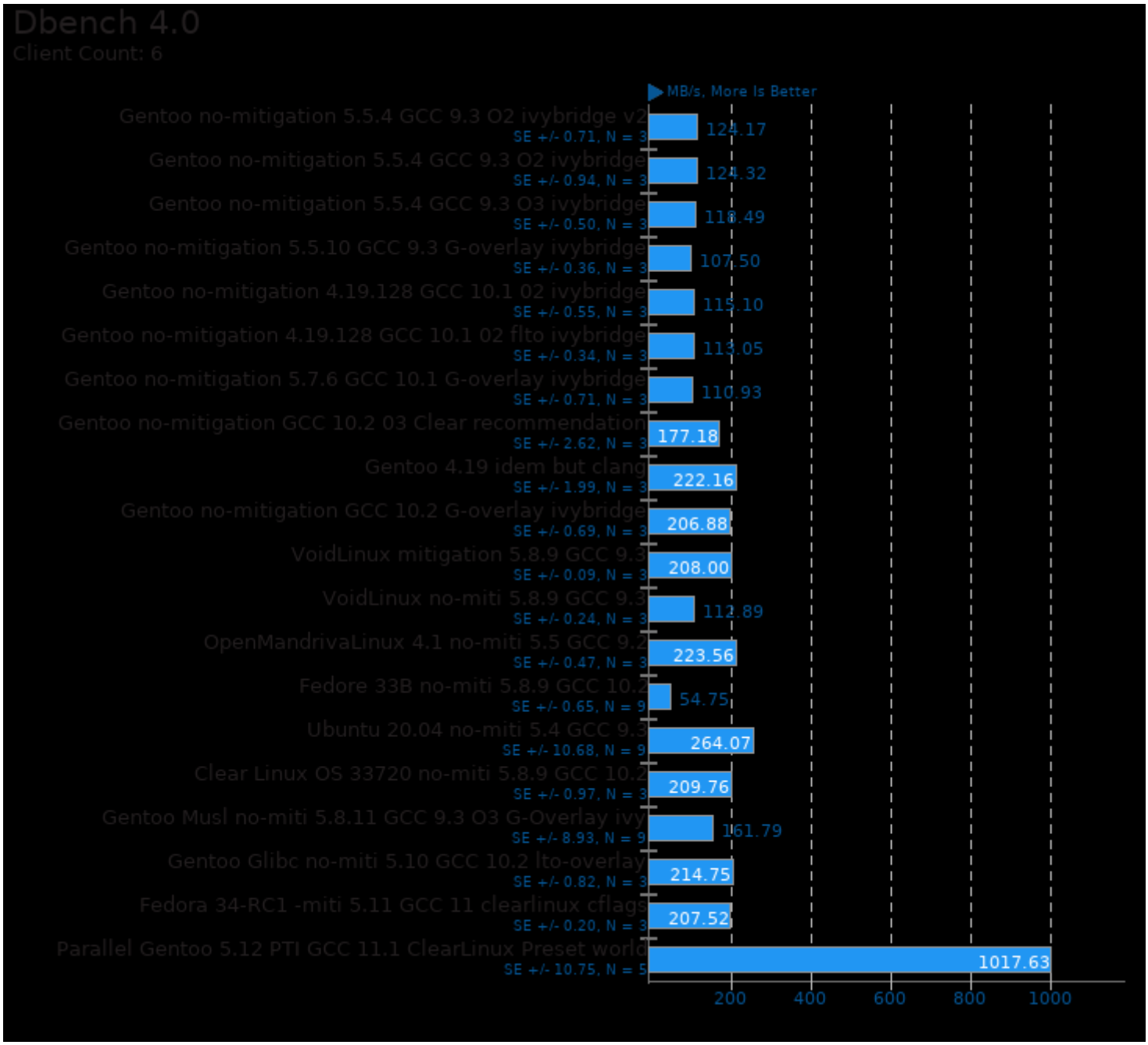
Benchmark Gentoo after rebuild world

Graphics Magick - HWB Color Space (Iteratio	37 8	38 0	38 2	37 5	38 9	38 5	38 8	36 3	25 9	22 2	32 8	27 8	25 8	26 6	15 0	10 5	19 2	15 1	11 5	40 5	30 6	44 5	44 8	36 3	39 9	38 9
Normalized	84.3	84.8	85.2	83.7	86.8	85.9	86.6	81.0	57.8	49.5	73.2	62.0	57.5	59.3	33.4	23.4	42.8	33.7	25.6	90.4	68.3	99.3	100	81.0	89.0	86.8
Standard Deviation	8%	2%	7%	1%	3%	4%	1%	3%	1%	5%	1%	5%	9%	8%	8%	4%	6%	1%	7%	%	%	3%	%	3%	6%	3%
							0.3 %	3%	3%	2.8 %	2.6 %	3%	2.4 %	2.7 %		1.6 %	2.9 %		0.5 %	2.2 %	2.7 %	3.1 %	0.2 %	0.8 %		0.7 %
C-Ray - Total Time - 4.1.R.P.P (sec)	29 1.4 65	29 2.1 45	29 1.4 78	32 2.2 41	29 4.5 07	32 3.7 65	29 1.6 55	39 8.9 76	63 1.6 85	57 2.6 55	57 2.7 94	68 2.3 66	75 3.9 91	49 0.3 06	78 2.4 40	54 7.4 89	65 4.7 5	75 4.4 28	14 07	40 6.0 32	43 1.3 09	42 3.4 52	29 2.2 59	29 7.5 78	35 0.1 82	29 9.6 48
Normalized	100	99.7	100	90.4	98.9	90.0	99.9	73.0	46.1	50.9	50.8	42.7	38.6	59.4	37.2	53.2	44.5	38.6	20.7	71.7	67.5	68.8	99.7	97.9	83.2	97.2
Standard Deviation	% 0.3 %	7% 0.3 %	% 0.6 %	5% 7.6 %	7% 1.9 %	2% 5.3 %	3% 0.2 %	5% 2.3 %	4% 0.8 %	% 0.4 %	8% 0.4 %	1% 1.3 %	6% 2.1 %	5% 0.3 %	5% 0%	4% 1.1 %	2% 0.4 %	3% 0.2 %	2% 111. 4%	8% 1.2 %	8% 0.3 %	3% 0.1 %	3% 0.9 %	5% 0.1 %	3% 0%	7% 0.4 %
Parallel BZIP2 Compression - 2.F.C (sec)	11. 53 6	11. 62 6	11. 33 1	11. 61 9	11. 11 4	11. 35 4	11. 04 8	14. 43 2		23. 54 0						22. 91 5	24. 77	30. 07 6		11. 16 8	16. 05 9		10. 92 8	11. 46 9		12. 12 9
Normalized	94.7	94%	96.4	94.0	98.3	96.2	98.9	75.7		46.4						47.6	44.1	36.3		97.8	68.0		100	95.2		90.1
Standard Deviation	3% 3%	2.8 %	4% 0.3 %	5% 2.9 %	3% 1%	5% 4%	1% 0.2 %	2% 6.5 %		2% 6.5 %						9% 2.1 %	2% 6.9 %	3% 1%		5% 0.9 %	5% 4.1 %		% 1%	8% 2.4 %		% 7.2 %

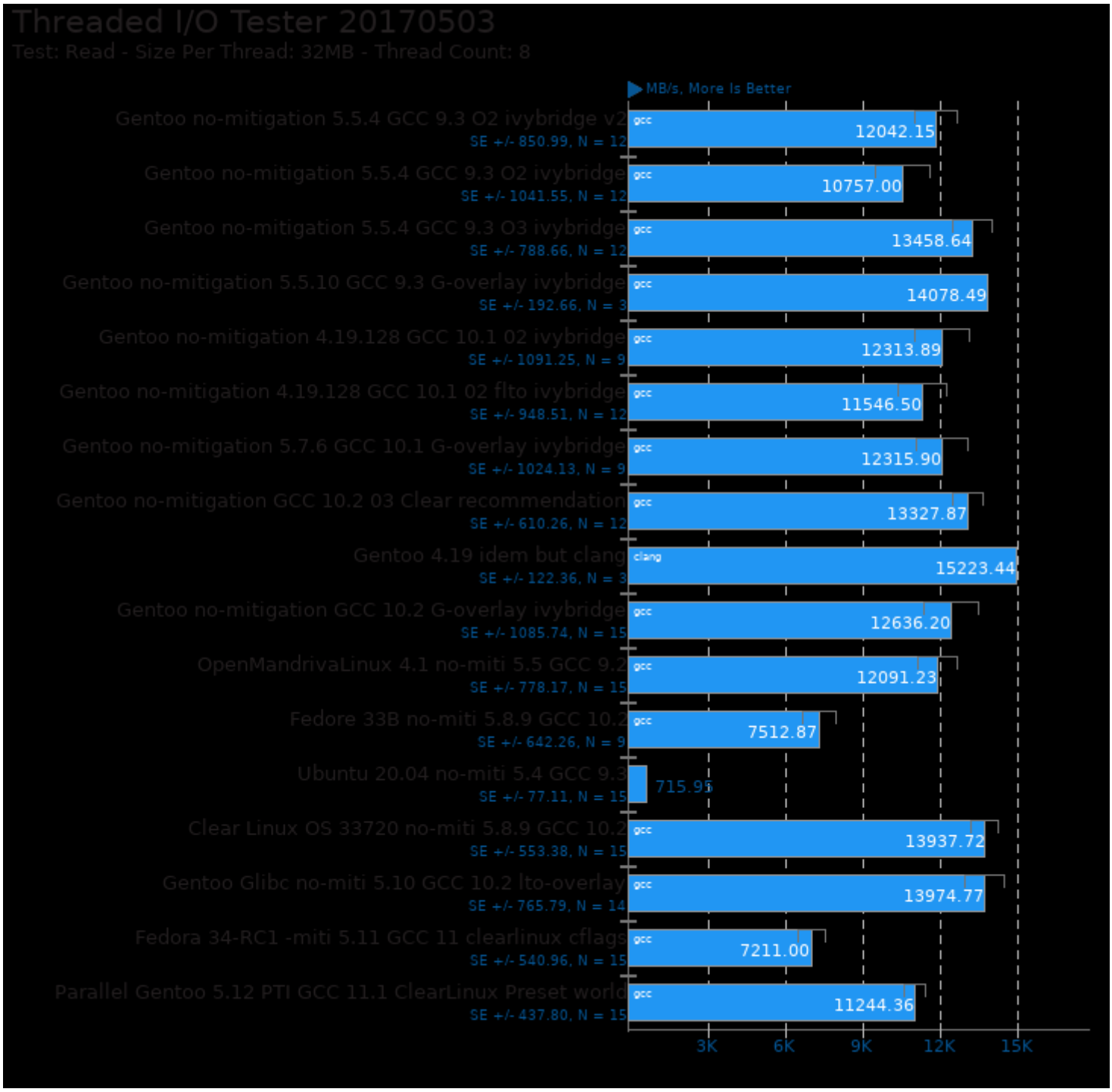
Benchmark Gentoo after rebuild world



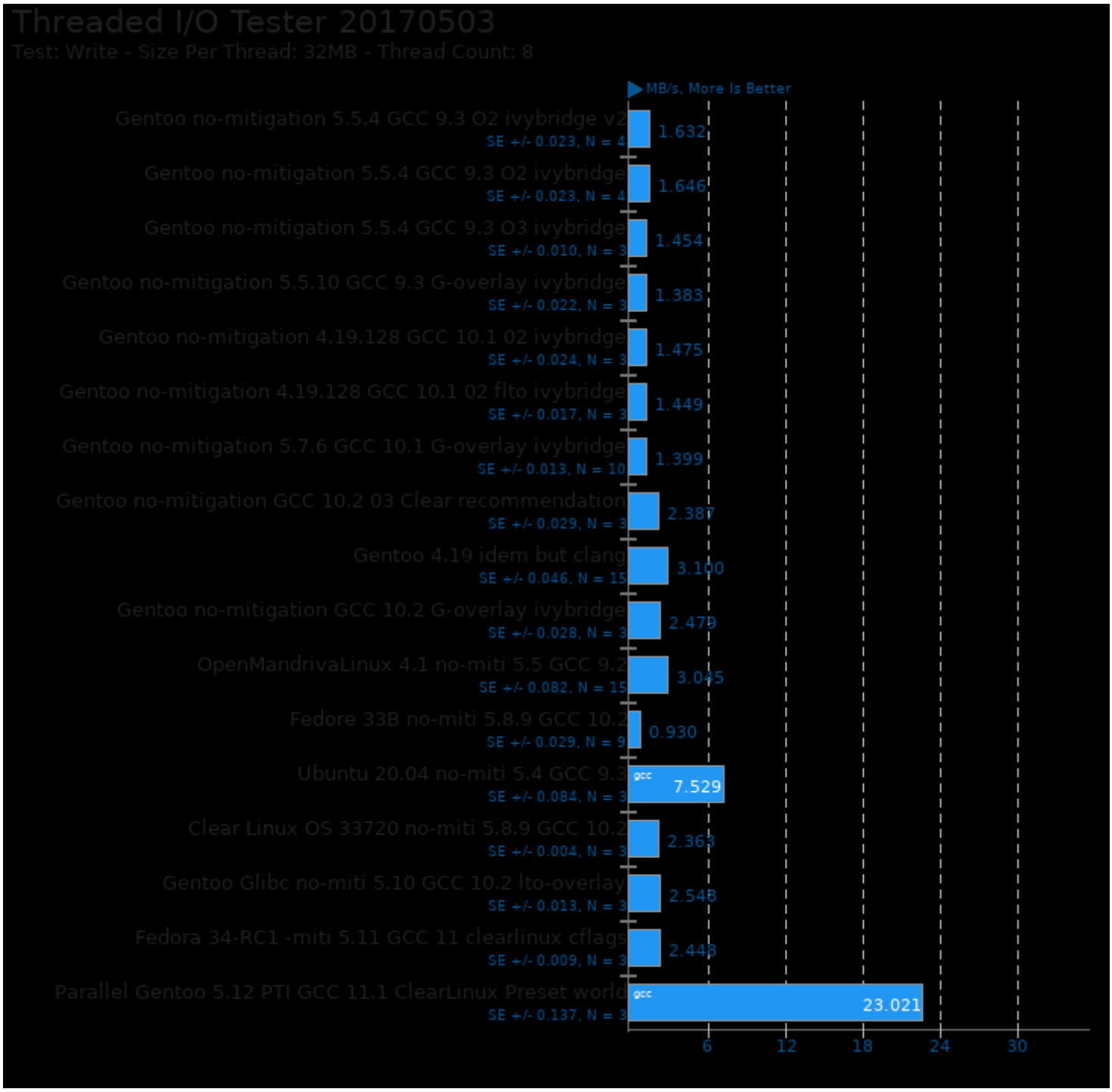
Benchmark Gentoo after rebuild world



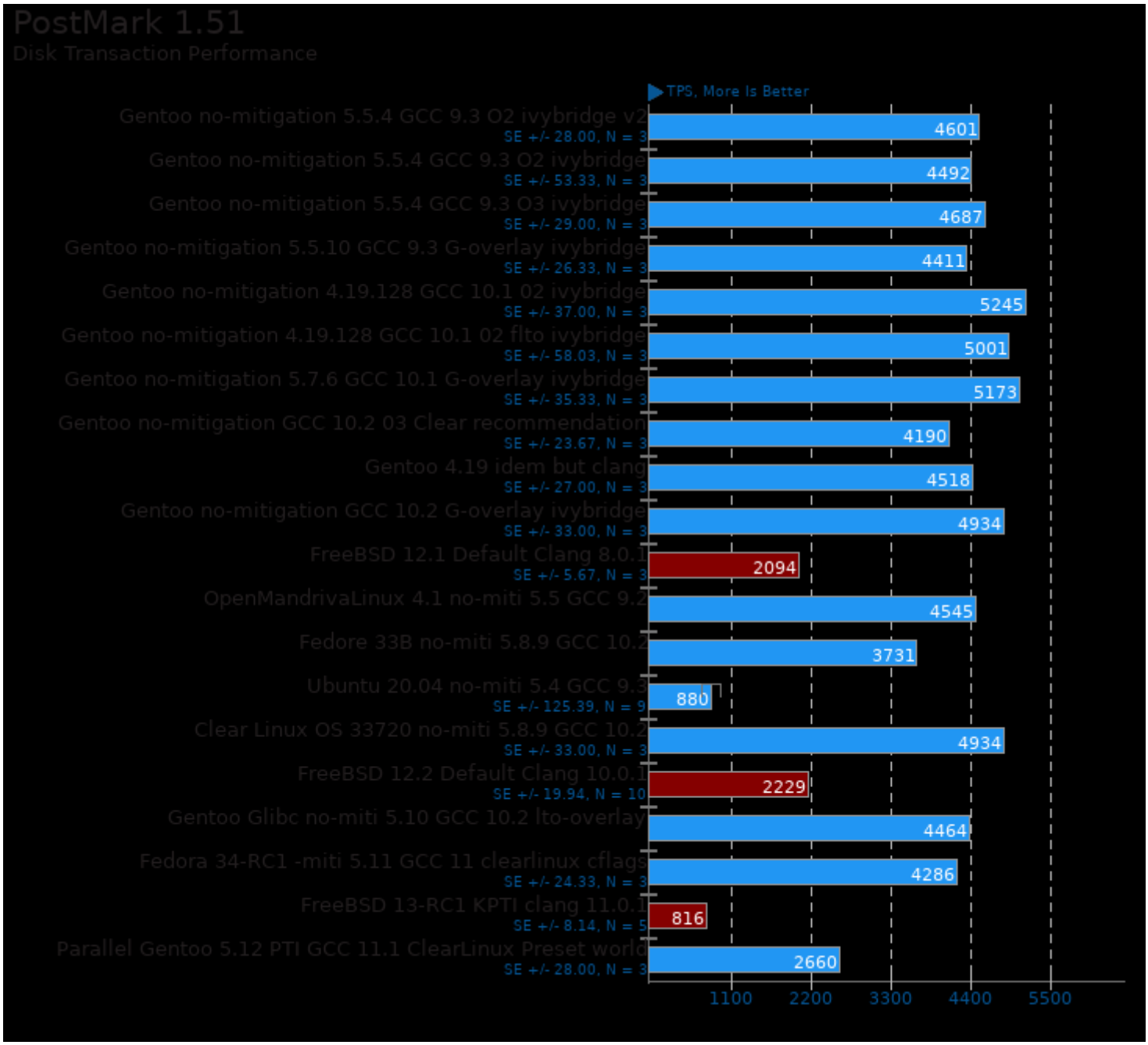
Benchmark Gentoo after rebuild world



Benchmark Gentoo after rebuild world



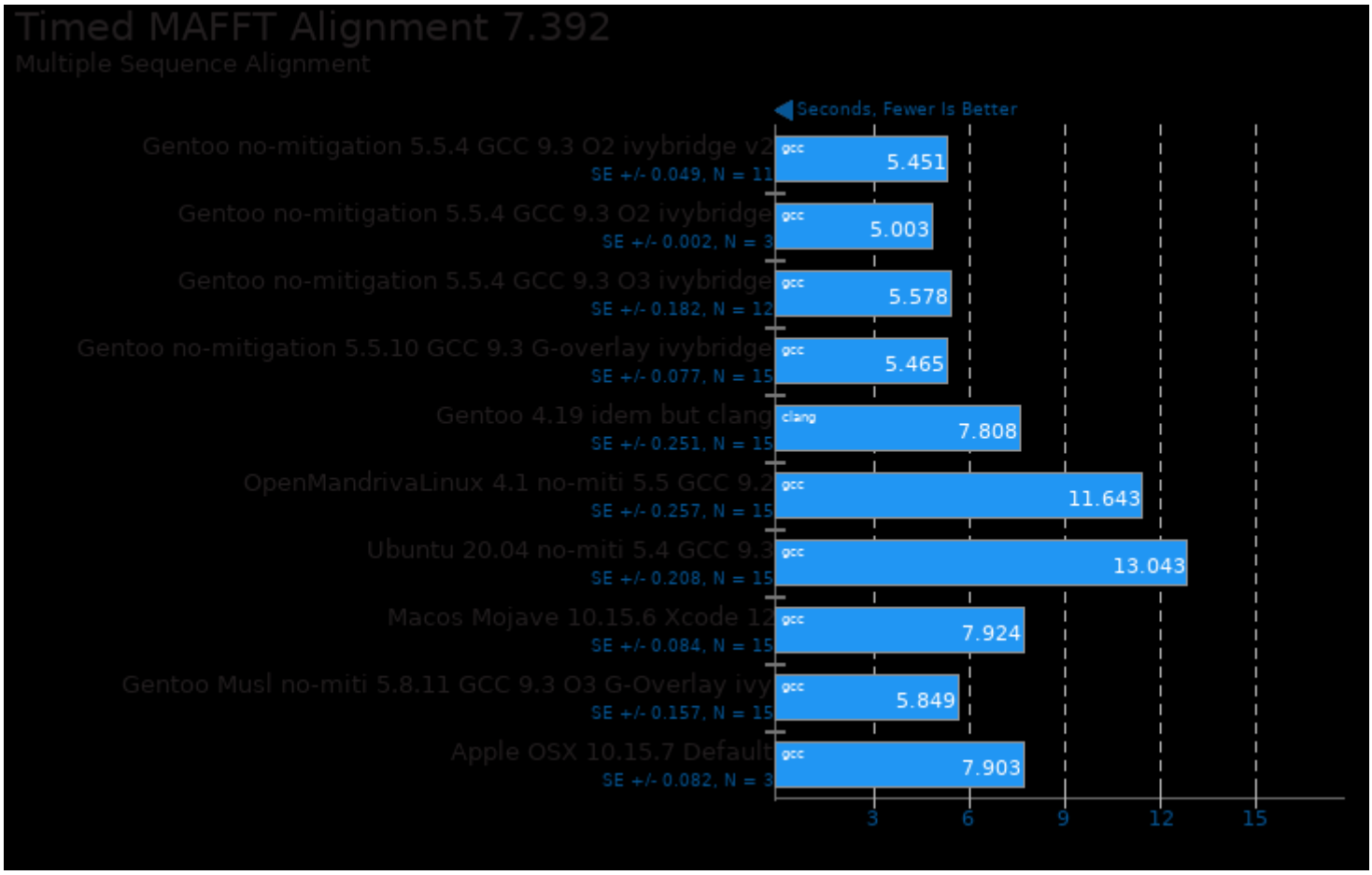
Benchmark Gentoo after rebuild world



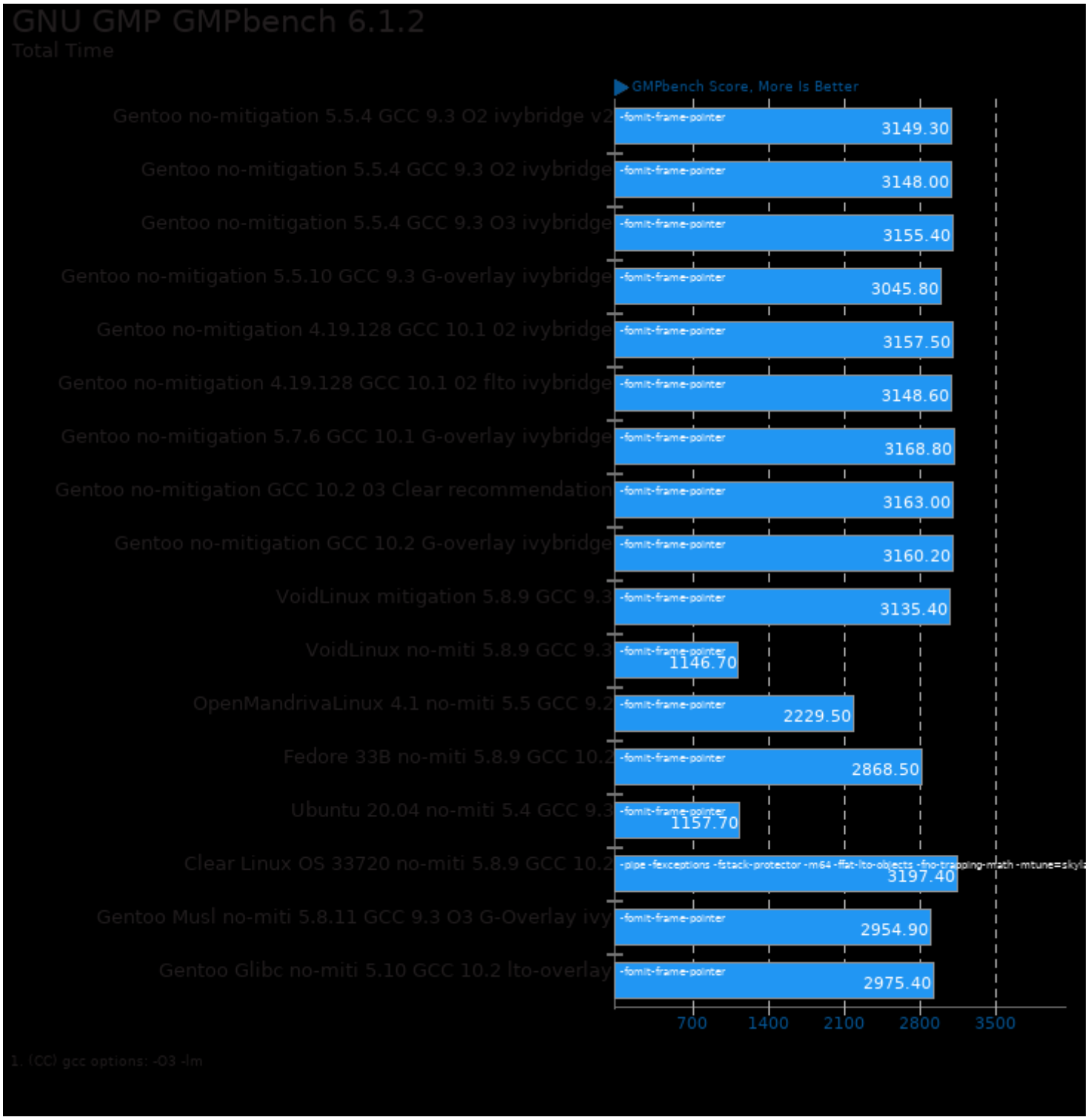
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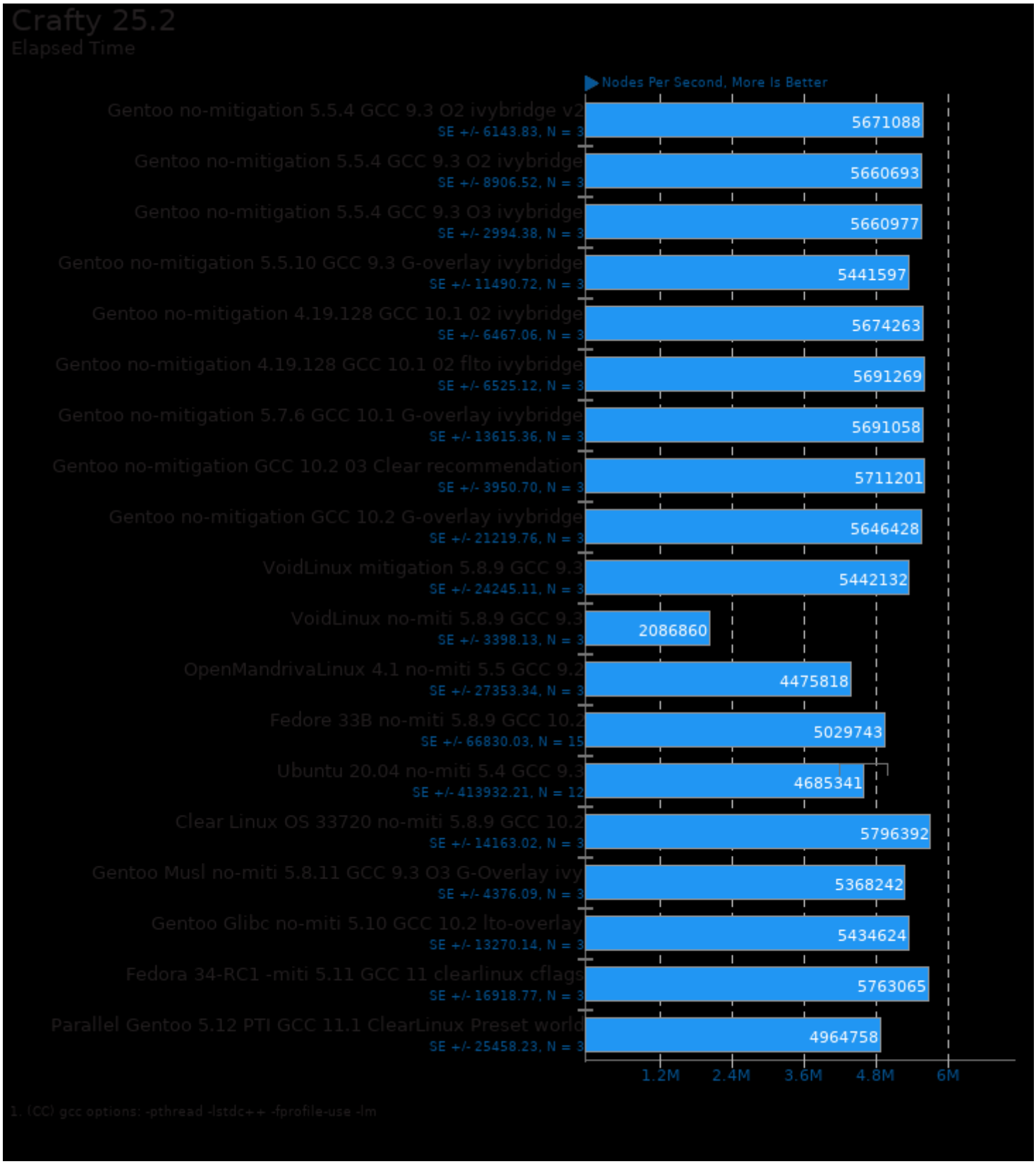
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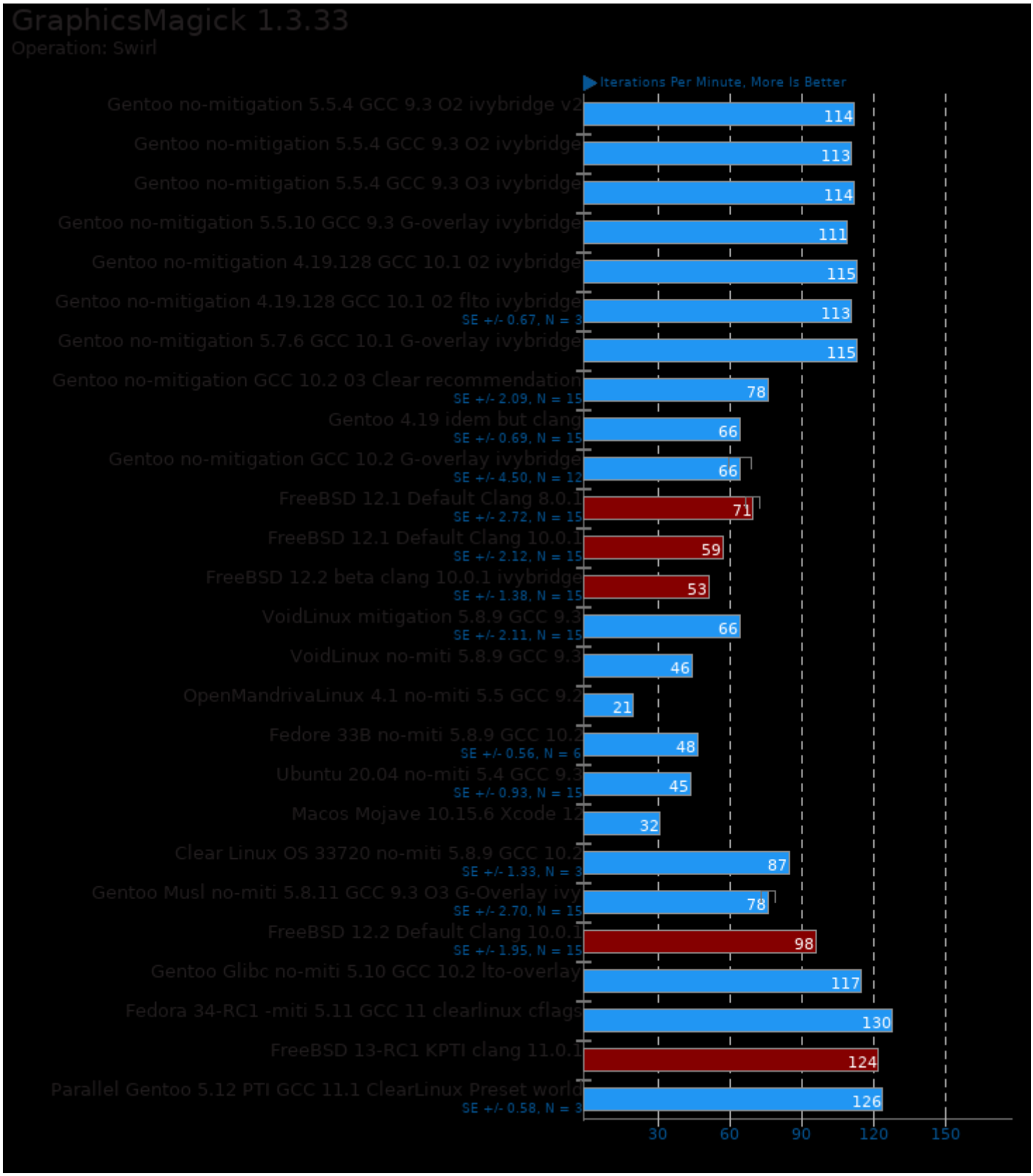
Benchmark Gentoo after rebuild world



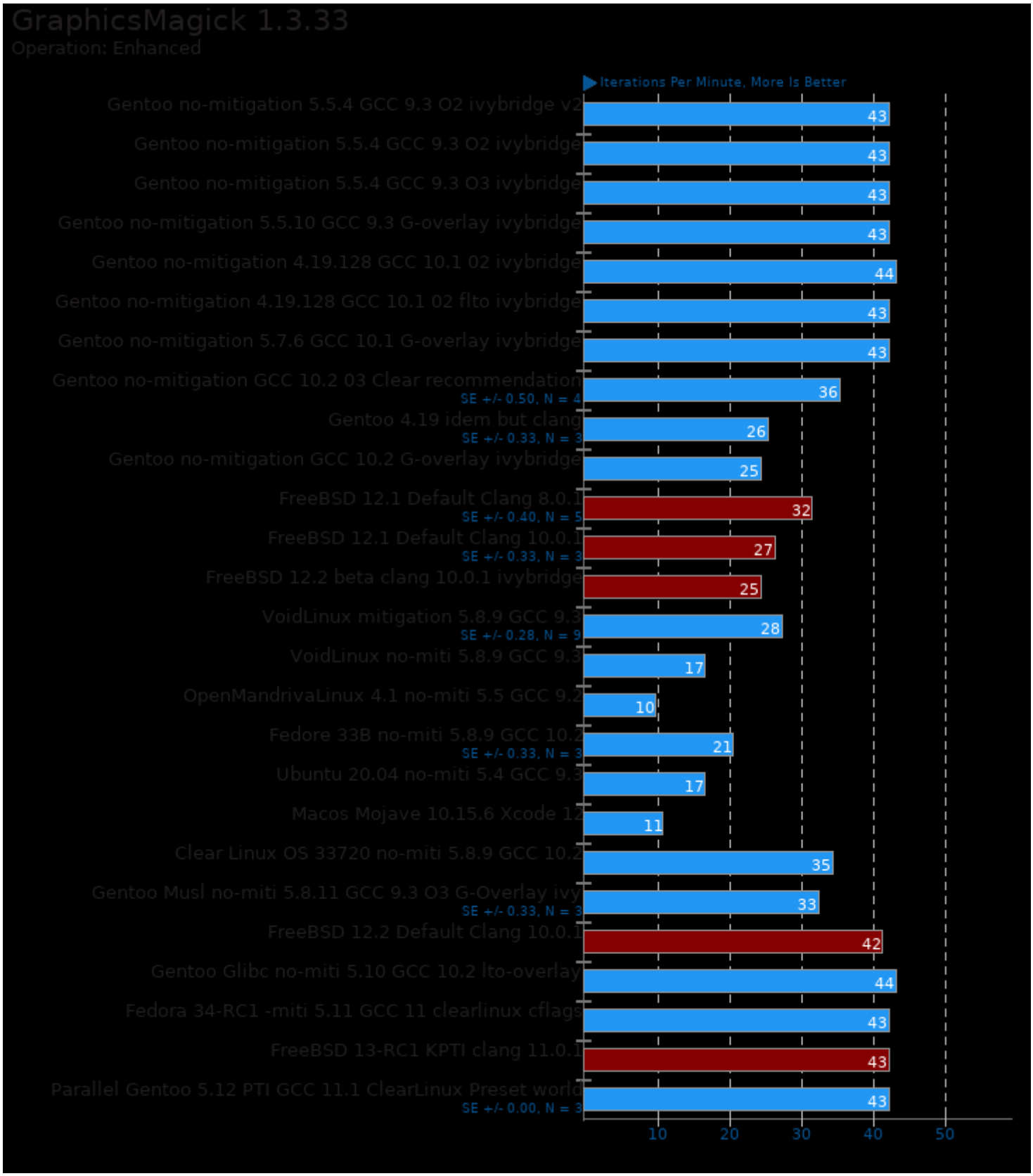
Benchmark Gentoo after rebuild world



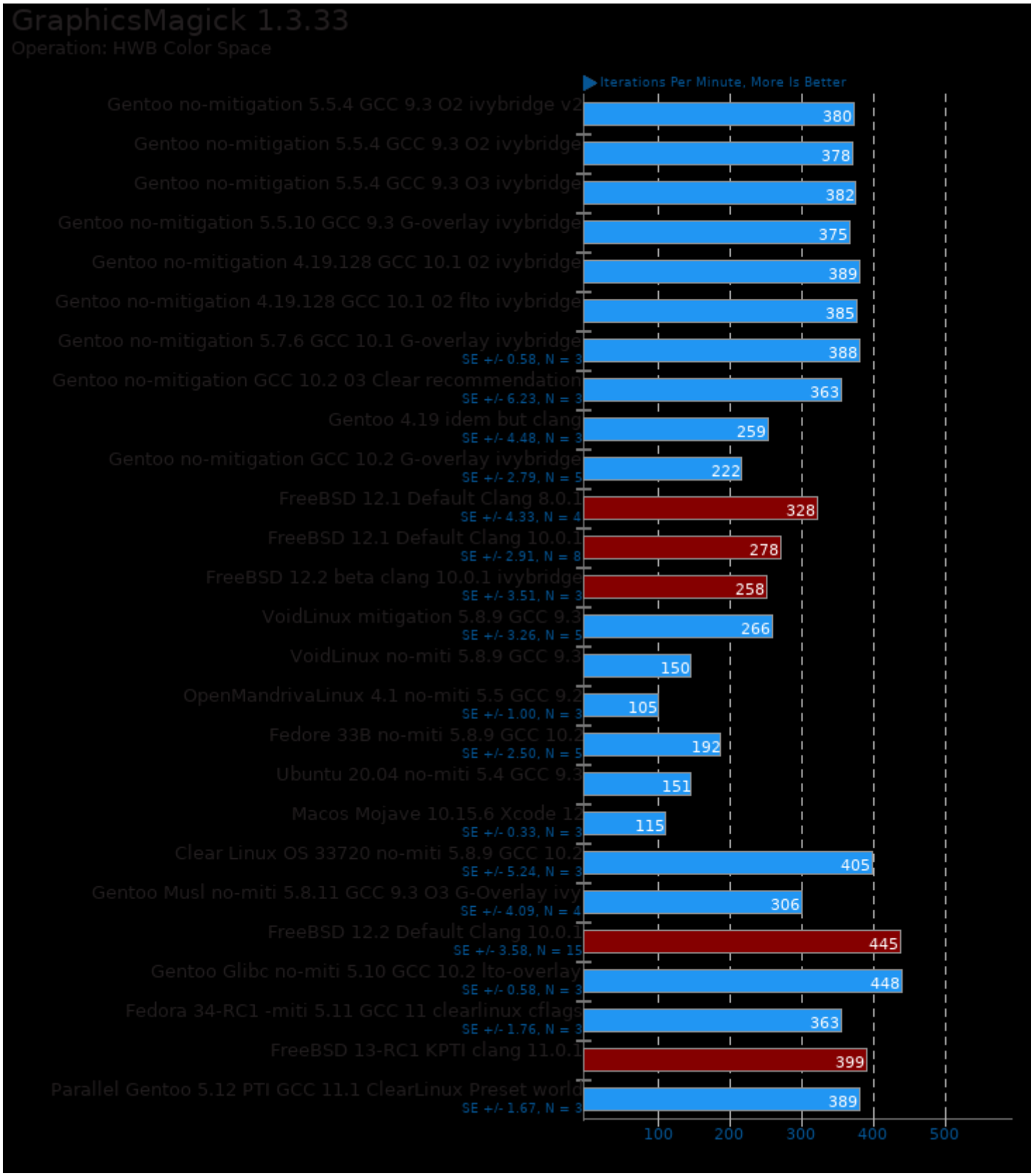
Benchmark Gentoo after rebuild world



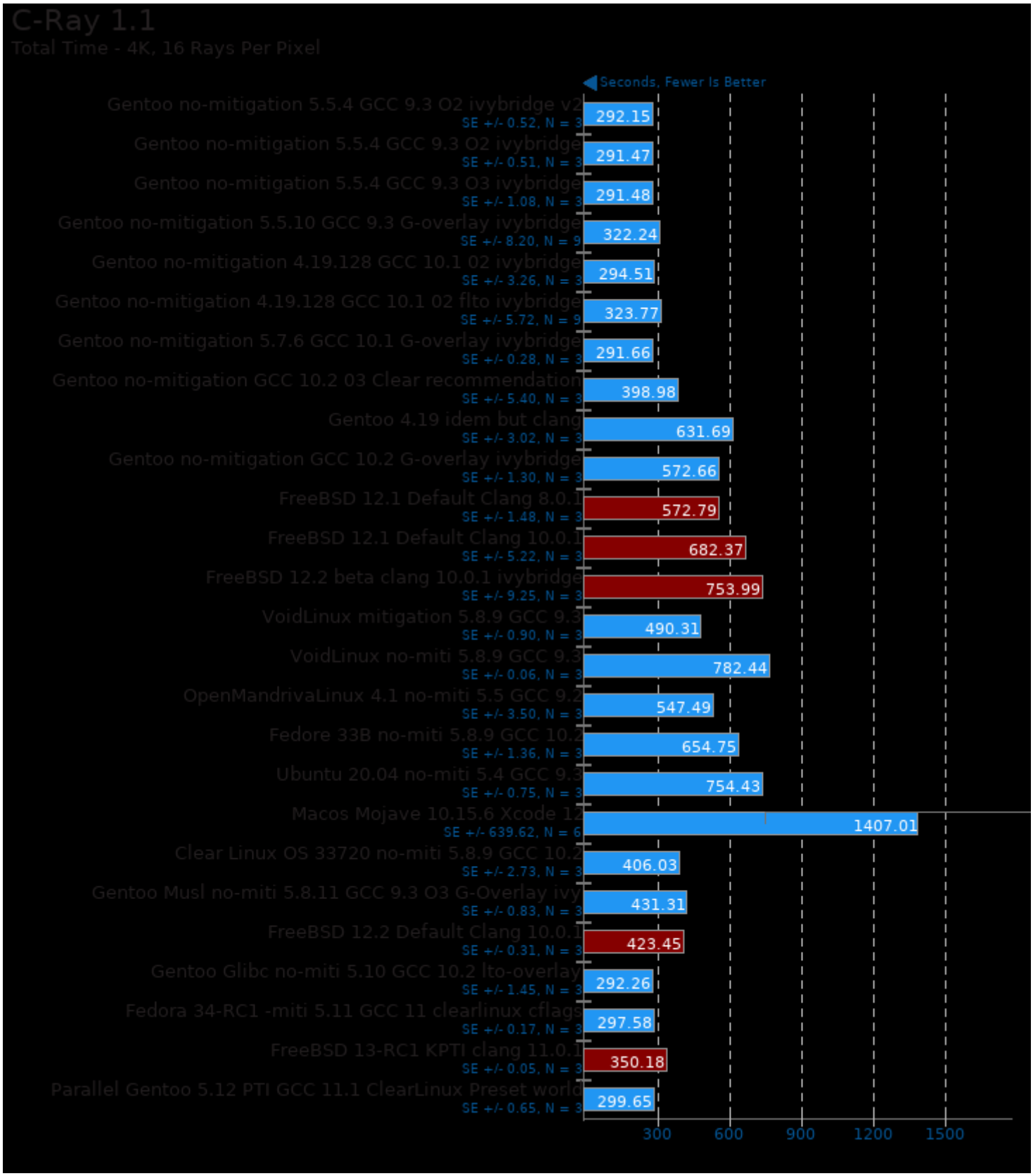
Benchmark Gentoo after rebuild world

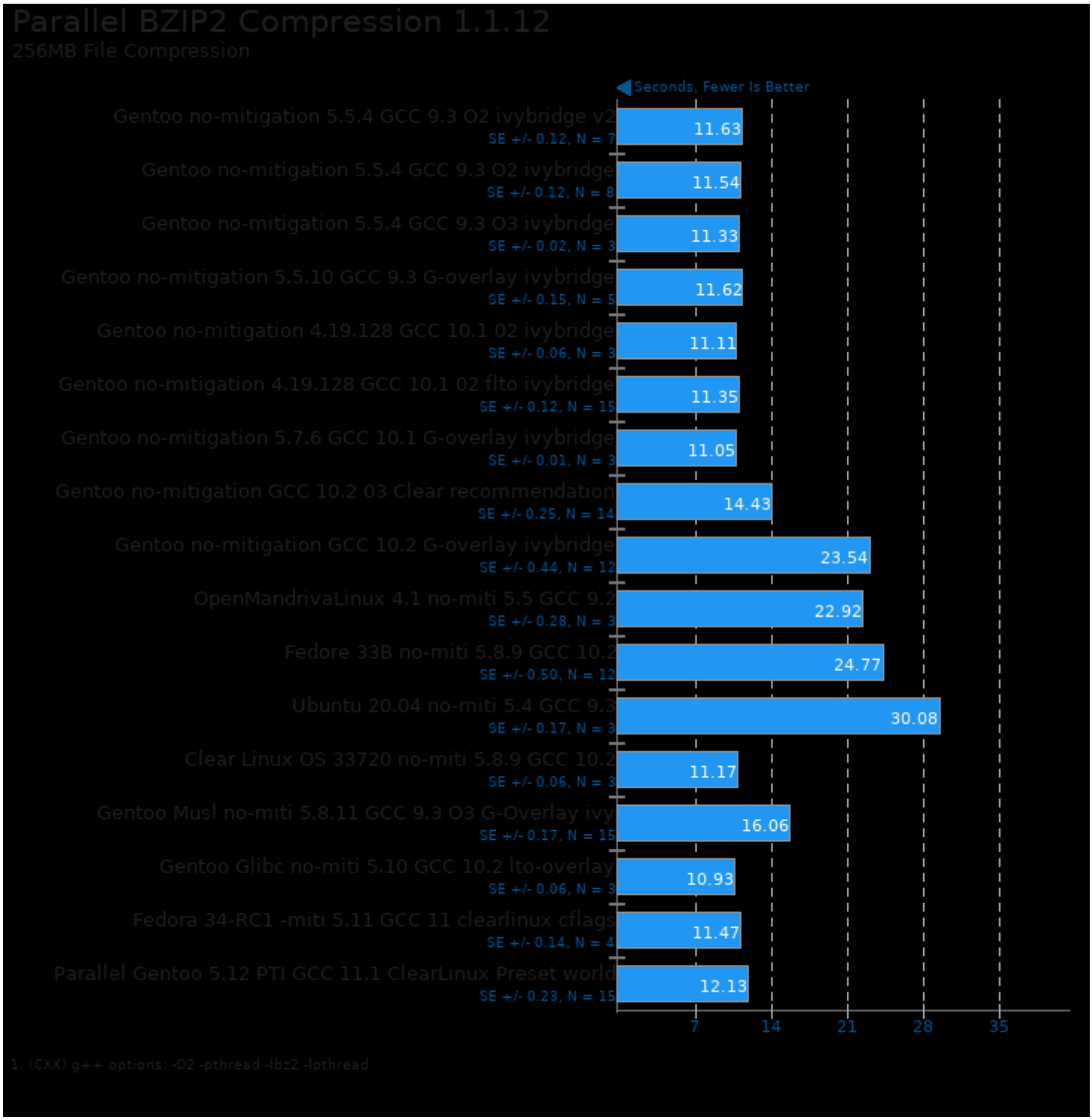


Benchmark Gentoo after rebuild world



Benchmark Gentoo after rebuild world





This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 17:15.