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Lenovo Rebuild World part 1

Intel Core i3-3110M testing with a LENOVO (78CN25WWV2.03 BIOS) and Intel 3rd Gen Core on Gentoo/Linux via the Phoronix Test Suite.

Automated Executive Summary

CentOS Stream 8 4.18 GCC 8.4 had the most wins, coming in first place for 40% of the tests.

Based on the geometric mean of all complete results, the fastest (CentOS Stream 8 4.18 GCC 8.4) was 2.035x the speed of the slowest (VoidLinux Musl 5.11 GCC 10.2). ClearLinux 34600 miti GCC 11.1 was 0.924x the speed of CentOS Stream 8 4.18 GCC 8.4, OpenMandriva Lx 4.2 miti 5.11 Clang 11.0 was 0.998x the speed of ClearLinux 34600 miti GCC 11.1, EndeavourOS -miti GCC 10.2 was 0.942x the speed of OpenMandriva Lx 4.2 miti 5.11 Clang 11.0, Gentoo -miti GCC 10.2 World-O2-native was 0.989x the speed of EndeavourOS -miti GCC 10.2, Gentoo -miti GCC 10.2 World-Os-native was 1x the speed of Gentoo -miti GCC 10.2 World-O2-native, Gentoo -miti Clang-Os 11.1 world-Os-native was 0.988x the speed of Gentoo -miti GCC 10.2 World-Os-native, Ubuntu 21.04 -miti GCC 10.3 was 0.905x the speed of Gentoo -miti Clang-Os 11.1 world-Os-native, Fedora 34 -miti GCC 11.1 was 0.853x the speed of Ubuntu 21.04 -miti GCC 10.3, VoidLinux Musl 5.11 GCC 10.2 v2 was 0.761x the speed of Fedora 34 -miti GCC 11.1, VoidLinux Musl 5.11 GCC 10.2 was 0.986x the speed of VoidLinux Musl 5.11 GCC 10.2 v2.

Test Systems:

Ubuntu 21.04 -miti GCC 10.3

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel HD 4000 2GB (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: Ubuntu 21.04, Kernel: 5.11.0-16-generic (x86_64), Desktop: MATE 1.24.1, Display Server: X Server 1.20.11, OpenGL: 4.2 Mesa 21.0.1, Compiler: GCC 10.3.0 + Clang 12.0.0-1ubuntu1 + LLVM 12.0.0, File-System: zfs, Screen Resolution: 1366x768

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/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-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: intel_cpufreq schedutil - CPU Microcode: 0x21 - Thermald 2.4.3
Disk Scheduler Notes: NONE
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: Not affected + tsx_async_abort: Not affected

ClearLinux 34600 miti GCC 11.1

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel HD 4000 2GB (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: Clear Linux OS 34600, Kernel: 5.12.2-1038.native (x86_64), Desktop: GNOME Shell 40.0, Display Server: X Server 1.20.11, OpenGL: 4.2 Mesa 21.1.0, Vulkan: 1.2.168, Compiler: GCC 11.1.1 20210507 releases/gcc-11.1.0-76-g3068b39d12 + Clang 11.1.0 + LLVM 11.1.0, File-System: ext4, Screen Resolution: 1366x768

Kernel Notes: Transparent Huge Pages: always
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" MESA_GLSL_CACHE_DISABLE=0 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=skylake-avx512
Disk Notes: BFQ / relatime,rw,stripe=256 / Block Size: 4096
Processor Notes: Scaling Governor: intel_cpufreq performance - CPU Microcode: 0x21 - Thermald 2.4.4
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: Not affected + tsx_async_abort: Not affected

Fedora 34 -miti GCC 11.1

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS),

Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel HD 4000 2GB (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: Fedora 34, Kernel: 5.11.19-300.fc34.x86_64 (x86_64), Desktop: MATE 1.24.1, Display Server: X Server 1.20.11, OpenGL: 4.2 Mesa 21.0.3, Compiler: GCC 11.1.1 20210428, File-System: btrfs, Screen Resolution: 1366x768

Kernel Notes: Transparent Huge Pages: madvise
Disk Notes: BFQ / autodefrag,compress=zstd:3,discard,noatime,rw,seclabel,space_cache,ssd,subvol=/home,subvolid=256 / Block Size: 4096
Processor Notes: Scaling Governor: intel_cpufreq schedutil - CPU Microcode: 0x21
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: Not affected + tsx_async_abort: Not affected

VoidLinux Musl 5.11 GCC 10.2

VoidLinux Musl 5.11 GCC 10.2 v2

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel HD 4000 (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: VoidLinux rolling, Kernel: 5.11.21_1 (x86_64), Display Server: X Server 1.20.11, Display Driver: intel 2.99.917, Compiler: GCC 10.2.1 20201203 + Clang 11.0.0 + LLVM 11.0.0, File-System: f2fs, Screen Resolution: 1366x768

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
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,relatime,rw,user_xattr / Block Size: 4096
Processor Notes: Scaling Governor: intel_cpufreq schedutil - 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: Not affected + tsx_async_abort: Not affected

EndeavourOS -miti GCC 10.2

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel HD 4000 2GB (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: EndeavourOS rolling, Kernel: 5.12.3-arch1-1 (x86_64), Desktop: MATE 1.24.1, Display Server: X Server 1.20.11, OpenGL: 4.2 Mesa 21.1.0, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1366x768

Kernel Notes: Transparent Huge Pages: madvise
Disk Notes: MQ-DEADLINE / commit=600,discard,noatime,rw / 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: 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: Not affected + tsx_async_abort: Not affected

CentOS Stream 8 4.18 GCC 8.4

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel HD 4000 2GB (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: CentOS Stream 8, Kernel: 4.18.0-301.1.el8.x86_64 (x86_64), Desktop: GNOME Shell 3.32.2, Display Server: X Server + Wayland, OpenGL: 4.2 Mesa 20.3.3, Compiler: GCC 8.4.1 20210423 + Clang 11.0.0 + LLVM 11.0.0, File-System: xfs, Screen Resolution: 1366x768

Kernel Notes: Transparent Huge Pages: always
Disk Notes: MQ-DEADLINE / attr2,inode64,logbsize=32k,logbufs=8,noquota,relatime,rw,seclabel / Block Size: 4096
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x21
Security Notes: SELinux + itlb_multihit: KVM: Mitigation of Split huge pages + 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: Not affected + tsx_async_abort: Not affected

OpenMandriva Lx 4.2 miti 5.11 Clang 11.0

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860 + 8GB Flash Disk, Graphics: Intel HD 4000 2GB (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: OpenMandrivaLinux 4.2, Kernel: 5.11.12-desktop-1omv4002 (x86_64), Desktop: KDE Plasma 5.20.5, Display Server: X Server 1.20.10, OpenGL: 4.2 Mesa 20.3.4, Vulkan: 1.0.2, Compiler: Clang 11.0.1 + GCC 10.2.1 20201205 + LLVM 11.0.1, File-System: ext4, Screen Resolution: 1366x768

Kernel Notes: dm_mod.use_blk_mq=1 - Transparent Huge Pages: always
Compiler Notes: Optimized build with assertions; Default target: x86_64-pc-linux-gnu; Host CPU: ivybridge
Disk Notes: MQ-DEADLINE / 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: 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: Not affected + tsx_async_abort: Not affected

Gentoo -miti GCC 10.2 World-O2-native

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel 3rd Gen Core (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: Gentoo/Linux, Kernel: 5.12.8-gentoo-dist (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.11, Compiler: GCC 10.2.0 + Clang 11.1.0 + LLVM 11.1.0, File-System: btrfs, Screen Resolution: 1366x768

Kernel Notes: Transparent Huge Pages: madvise
Disk Notes: MQ-DEADLINE / compress=zstd:3,relatime,rw,space_cache,ssd,subvol=/,subvolid=5 / 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: Not affected + tsx_async_abort: Not affected

Gentoo -miti GCC 10.2 World-Os-native

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel 3rd Gen Core (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: Gentoo/Linux, Kernel: 5.12.8-gentoo-x86_64-gcc (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.11, Compiler: GCC 10.2.0 + Clang 11.1.0 + LLVM 11.1.0, File-System: btrfs, Screen Resolution: 1366x768

Kernel Notes: Transparent Huge Pages: madvise
Disk Notes: MQ-DEADLINE / compress=zstd:3,relatime,rw,space_cache,ssd,subvol=/,subvolid=5 / 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: Not affected + tsx_async_abort: Not affected

Gentoo -miti Clang-Os 11.1 world-Os-native

Processor: Intel Core i3-3110M @ 2.40GHz (2 Cores / 4 Threads), Motherboard: LENOVO (78CN25WWV2.03 BIOS), Chipset: Intel 3rd Gen Core DRAM, Memory: 8GB, Disk: 1000GB Samsung SSD 860, Graphics: Intel 3rd Gen Core (1000MHz), Audio: Conexant CX20757, Network: Qualcomm Atheros QCA8172 + Intel Centrino-N 135

OS: Gentoo/Linux, Kernel: 5.12.8-gentoo-x86_64-gcc (x86_64), Desktop: MATE 1.24.0, Display Server: X Server 1.20.11, Compiler: Clang 11.1.0 + GCC 10.2.0 + LLVM 11.1.0, File-System: btrfs, Screen Resolution: 1366x768

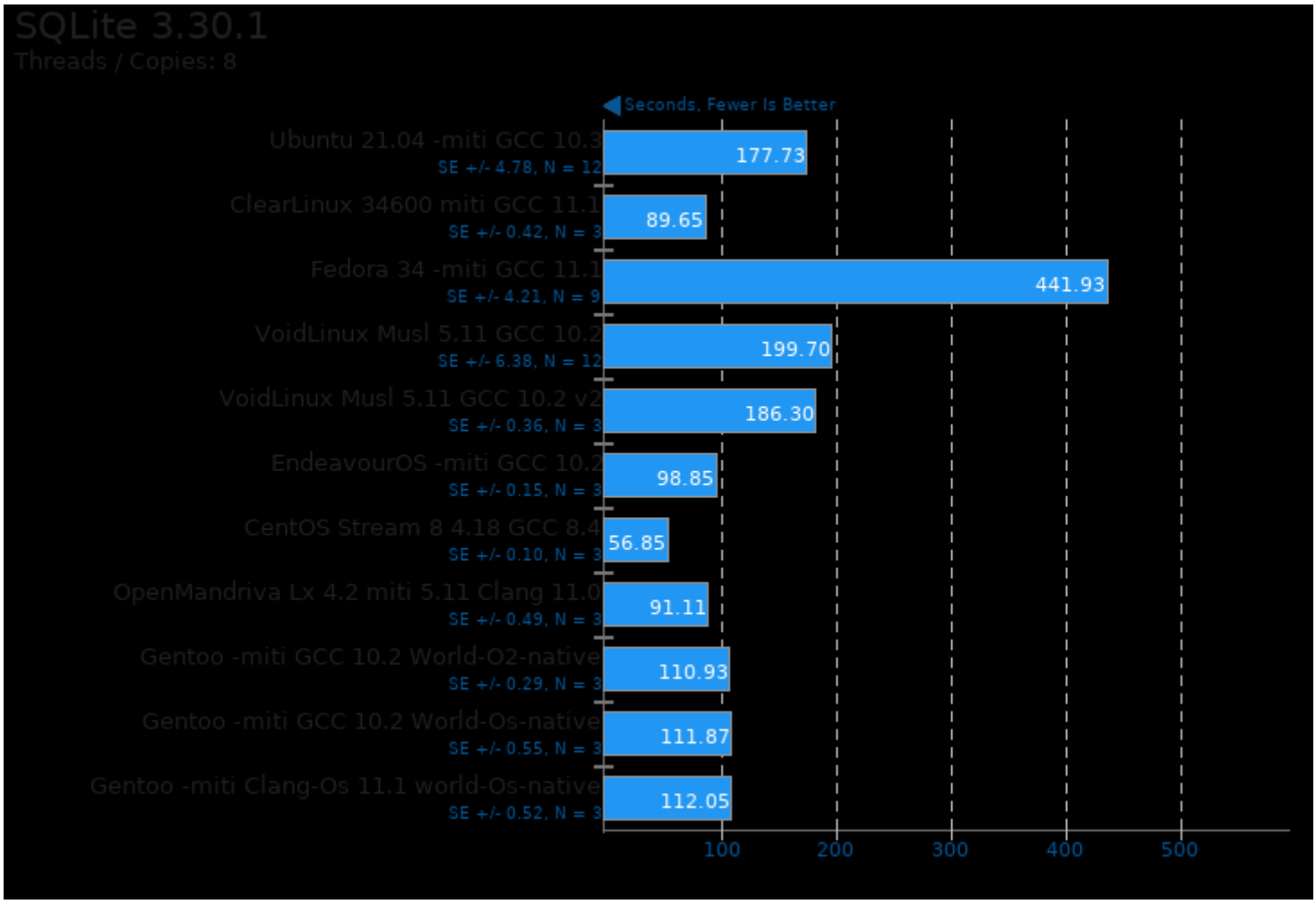
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: Optimized build; Default target: x86_64-pc-linux-gnu; Host CPU: ivybridge
Disk Notes: MQ-DEADLINE / compress=zstd:3,relatime,rw,space_cache,ssd,subvol=/,subvolid=5 / Block Size: 4096
Processor Notes: Scaling Governor: intel_cpufreq performance - 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: Not affected + tsx_async_abort: Not affected

	Ubuntu 21.04 -miti GCC 10.3	ClearLinux 34600 miti GCC 11.1	Fedora 34 -miti GCC 11.1	VoidLinux Musl 5.11 GCC 10.2	VoidLinux Musl 5.11 GCC 10.2 v2	EndeavourOS -miti GCC 10.2	CentOS Stream 8 4.18 GCC 8.4	OpenMandriva Lx 4.2 miti 5.11 Clang 11.0	Gentoo -miti GCC 10.2 World-O2-native	Gentoo -miti GCC 10.2 World-Os-native	Gentoo -miti Clang-Os 11.1 world-Os-native
SQLite - 8 (sec)	177.728	89.651	**441.927**	199.704	186.297	98.850	**56.849**	91.110	110.933	111.867	112.052
Normalized	31.99%	63.41%	12.86%	28.47%	30.52%	57.51%	100%	62.4%	51.25%	50.82%	50.73%
Standard Deviation	9.3%	0.8%	2.9%	11.1%	0.3%	0.3%	0.3%	0.9%	0.5%	0.8%	0.8%
PostMark - D.T.P (TPS)	**1286**	2757	2632			2568	**3424**	2873	3333	3304	3289
Normalized	37.56%	80.52%	76.87%			75%	100%	83.91%	97.34%	96.5%	96.06%
Standard Deviation	0.8%	0.6%	1.8%			0.6%		2%		0.8%	
Timed HMMer Search - P.D.S (sec)	223.336	**219.669**	224.466	225.445	226.288	221.763	225.961		**279.361**	274.070	261.943
Normalized	98.36%	100%	97.86%	97.44%	97.07%	99.06%	97.22%		78.63%	80.15%	83.86%
Standard Deviation	0.2%	0%	0.4%	0%	0.4%	0.3%	0%		0.2%	0.3%	1.1%
Timed MAFFT Alignment - M.S.A - LSU RNA (sec)	24.720	25.029	24.967		**28.698**	24.269	24.782	26.871	23.478	**23.453**	25.402
Normalized	94.87%	93.7%	93.94%		81.72%	96.64%	94.64%	87.28%	99.89%	100%	92.33%
Standard Deviation	1.2%	0.3%	1.7%		0.9%	0.5%	1.5%	0.7%	0.6%	0.8%	0.8%
GNU GMP GMPbench - Total Time (GMPbench Score)	2303	2298	2500		2285	2530	**2541**		2290	**2265**	
Normalized	90.63%	90.45%	98.41%		89.93%	99.56%	100%		90.13%	89.14%	

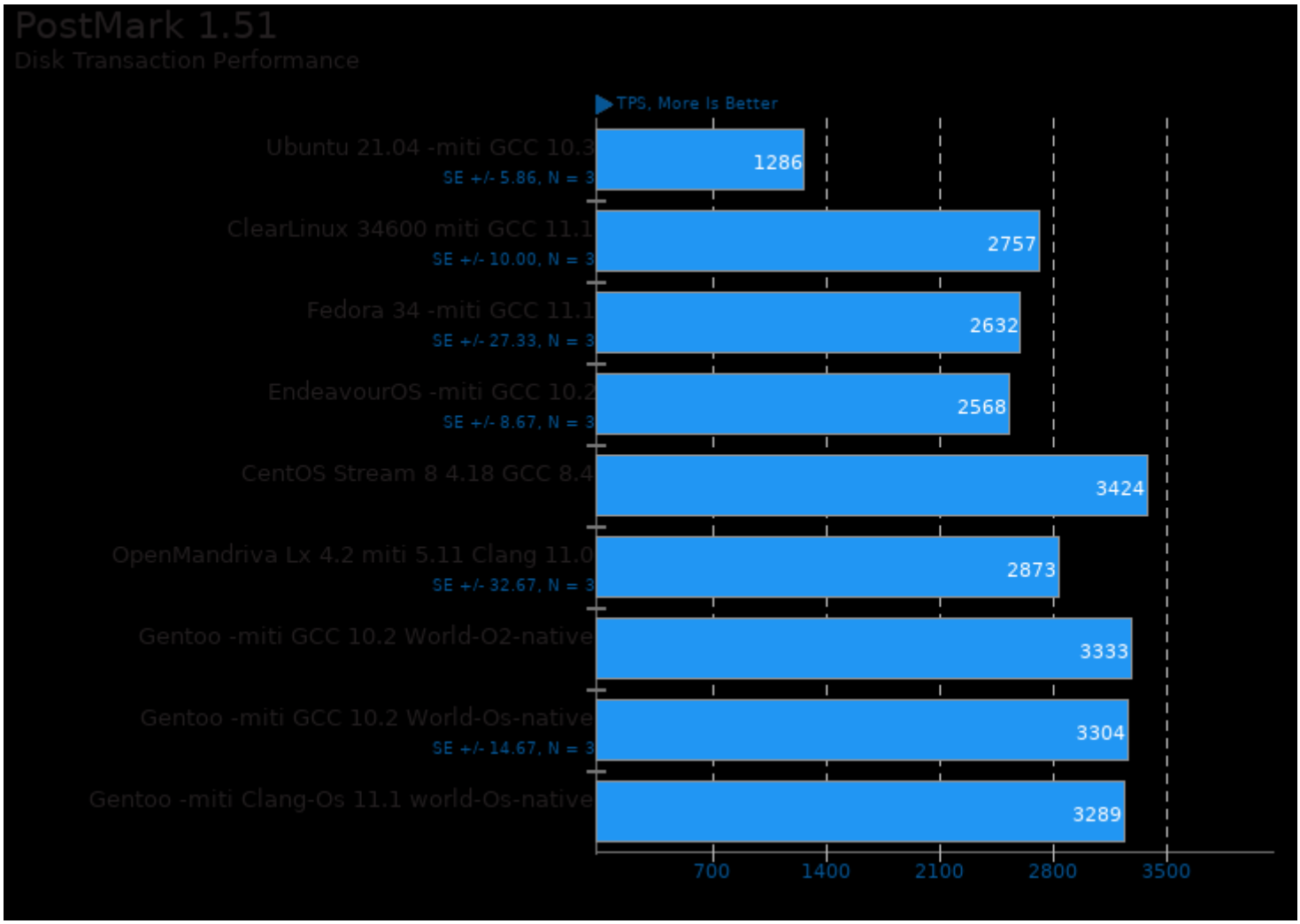
Lenovo Rebuild World part 1

Crafty - Elapsed Time (Nodes/s)	4062926	4179785	4228104	4121533	4111088	4153894	4377593		4135593	4153368	
Normalized	92.81%	95.48%	96.59%	94.15%	93.91%	94.89%	100%		94.47%	94.88%	
Standard Deviation	0.3%	0.1%	1.7%	0.3%	0.3%	0.1%	0.3%		0.4%	0.6%	
GraphicsMagick - Swirl (Iterations/min)	44	54	51	19	19	45	46	51	45	45	50
Normalized	81.48%	100%	94.44%	35.19%	35.19%	83.33%	85.19%	94.44%	83.33%	83.33%	92.59%
Standard Deviation		0%				0%		0%			
GraphicsMagick - Enhanced (Iterations/min)	17	16	17	9	9	17	17	17	17	17	17
Normalized	100%	94.12%	100%	52.94%	52.94%	100%	100%	100%	100%	100%	100%
Standard Deviation		0%				0%		0%			
GraphicsMagick - HWB Color Space (Iterations/min)	161	182	159	89	89	162	185	188	172	173	169
Normalized	85.64%	96.81%	84.57%	47.34%	47.34%	86.17%	98.4%	100%	91.49%	92.02%	89.89%
Standard Deviation		0%	0.7%			0%		0%			
C-Ray - Total Time - 4.1.R.P.P (sec)	755.169	775.707	771.391	790.170	791.153	753.052	756.953	797.782	754.086	753.603	865.467
Normalized	99.72%	97.08%	97.62%	95.3%	95.18%	100%	99.48%	94.39%	99.86%	99.93%	87.01%
Standard Deviation	0.1%	0.1%	0.1%	0%	0%	0%	0.3%	0.8%	0.2%	0.2%	0.2%

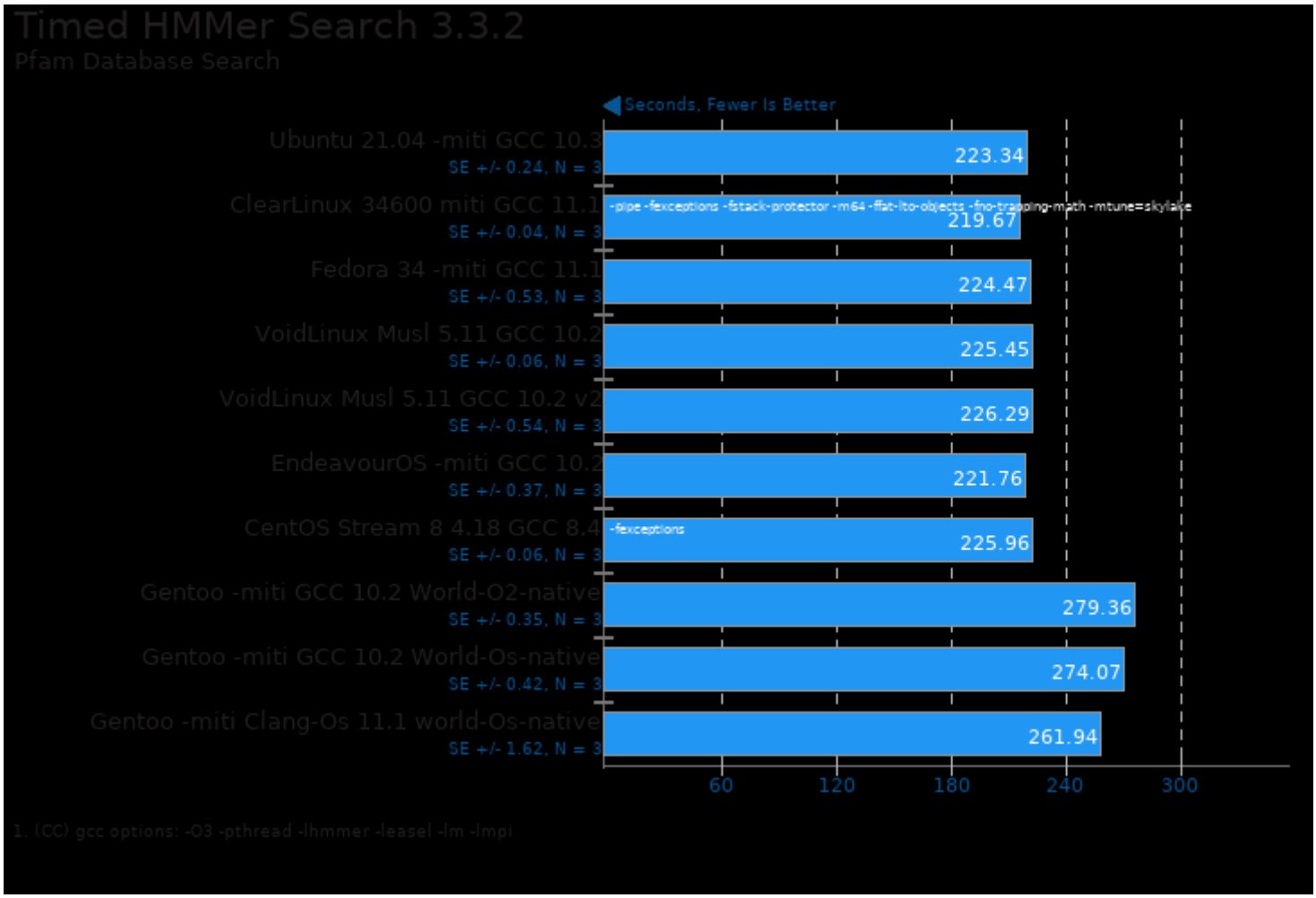
Lenovo Rebuild World part 1



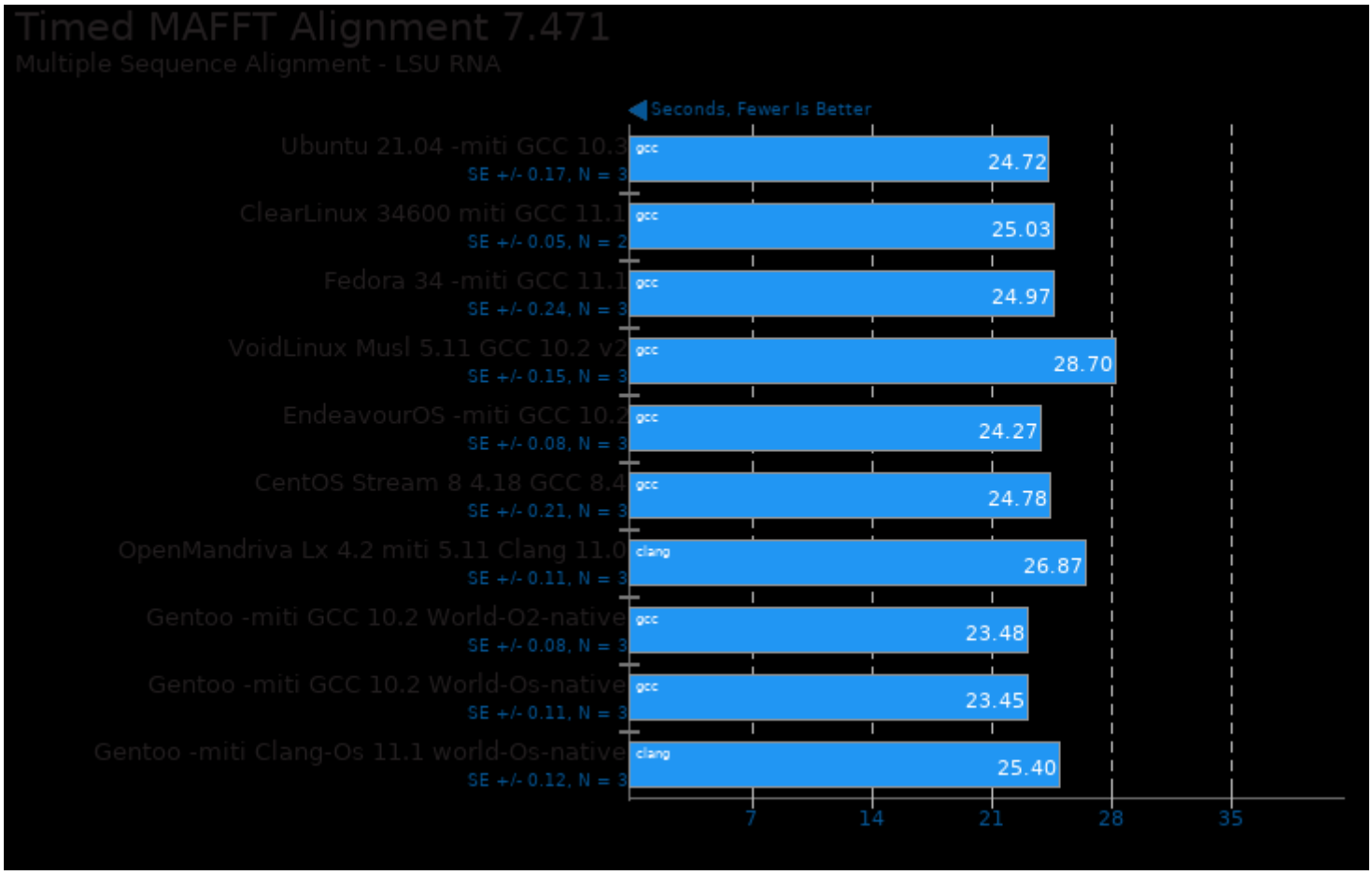
Lenovo Rebuild World part 1



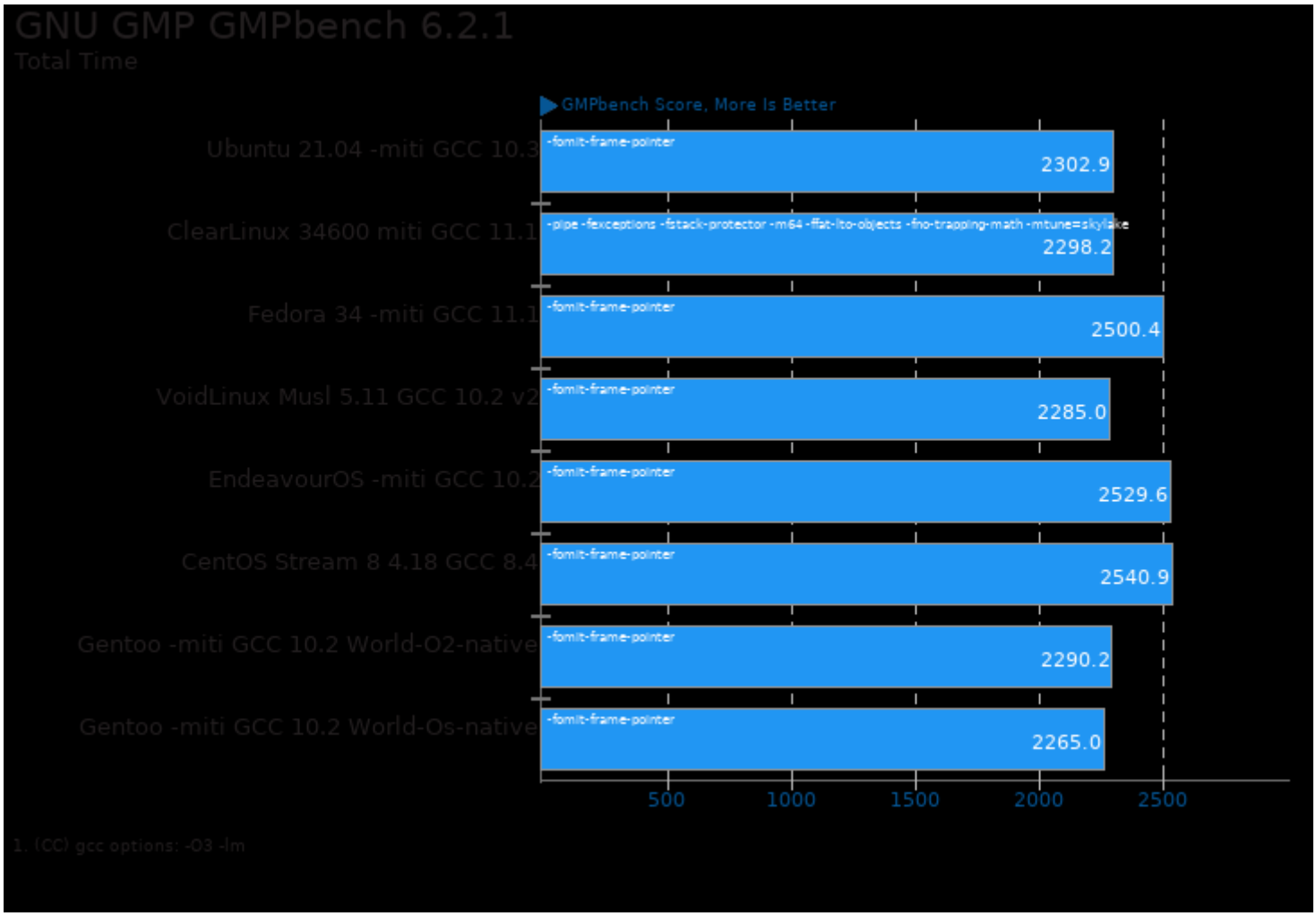
Lenovo Rebuild World part 1



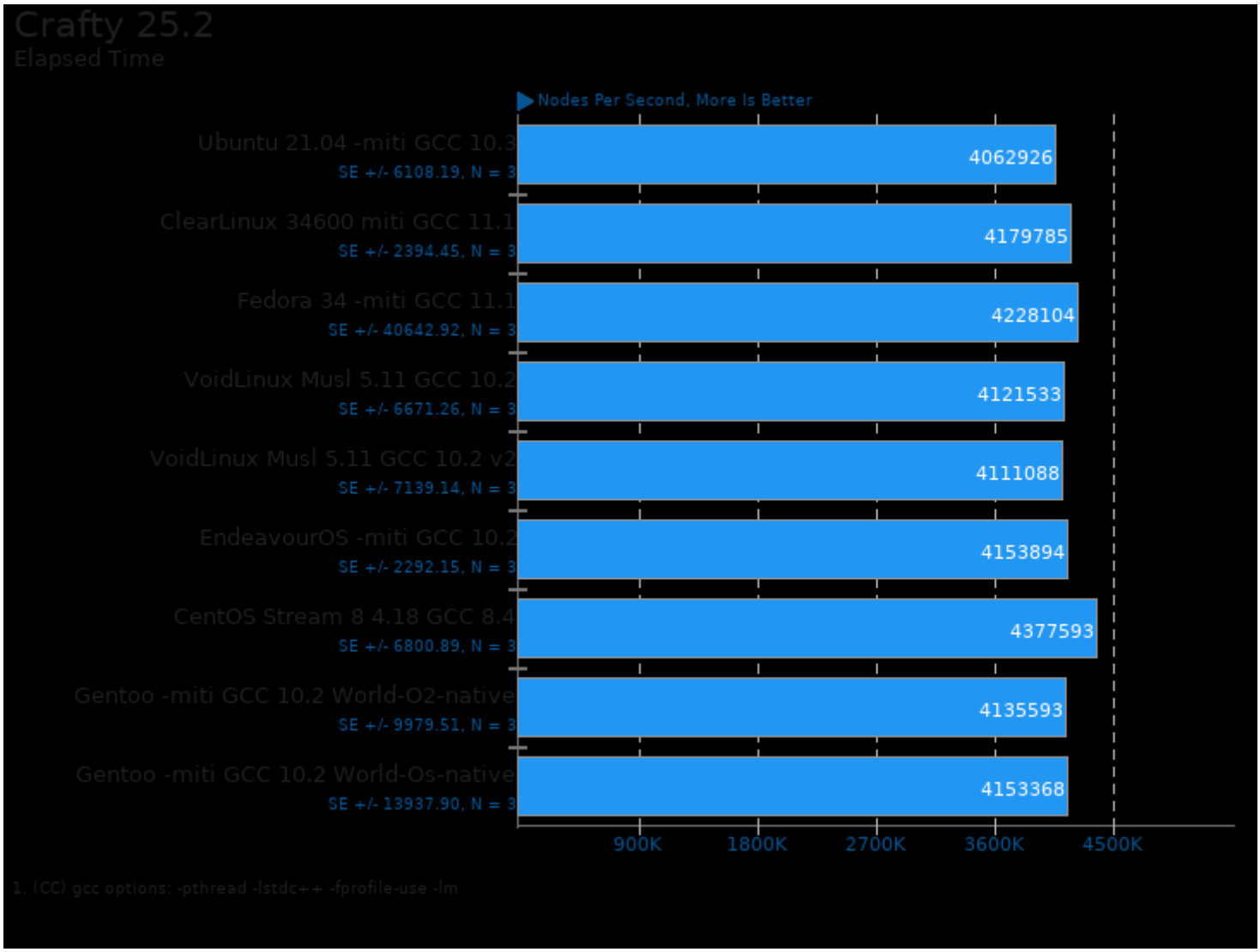
Lenovo Rebuild World part 1

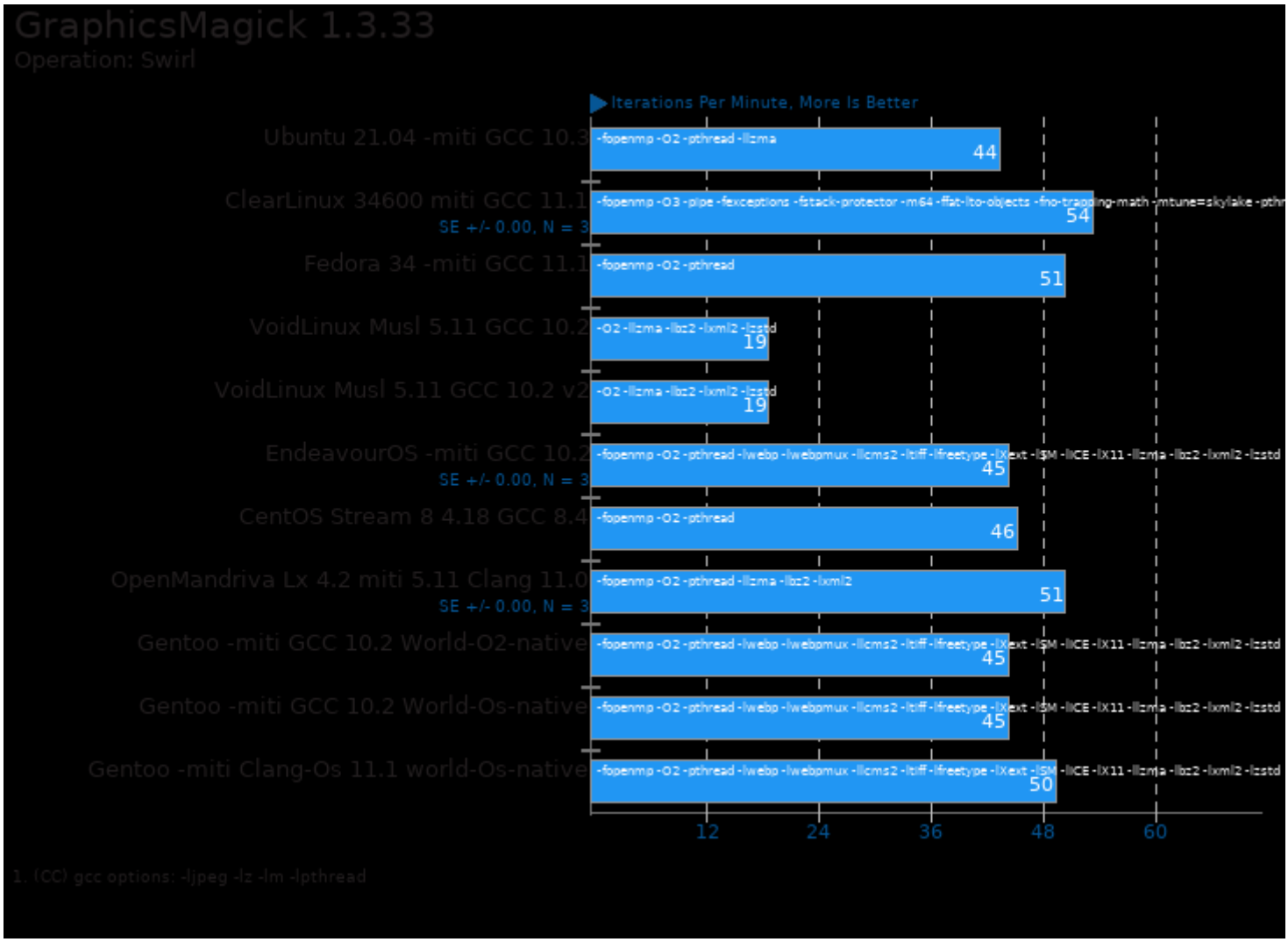


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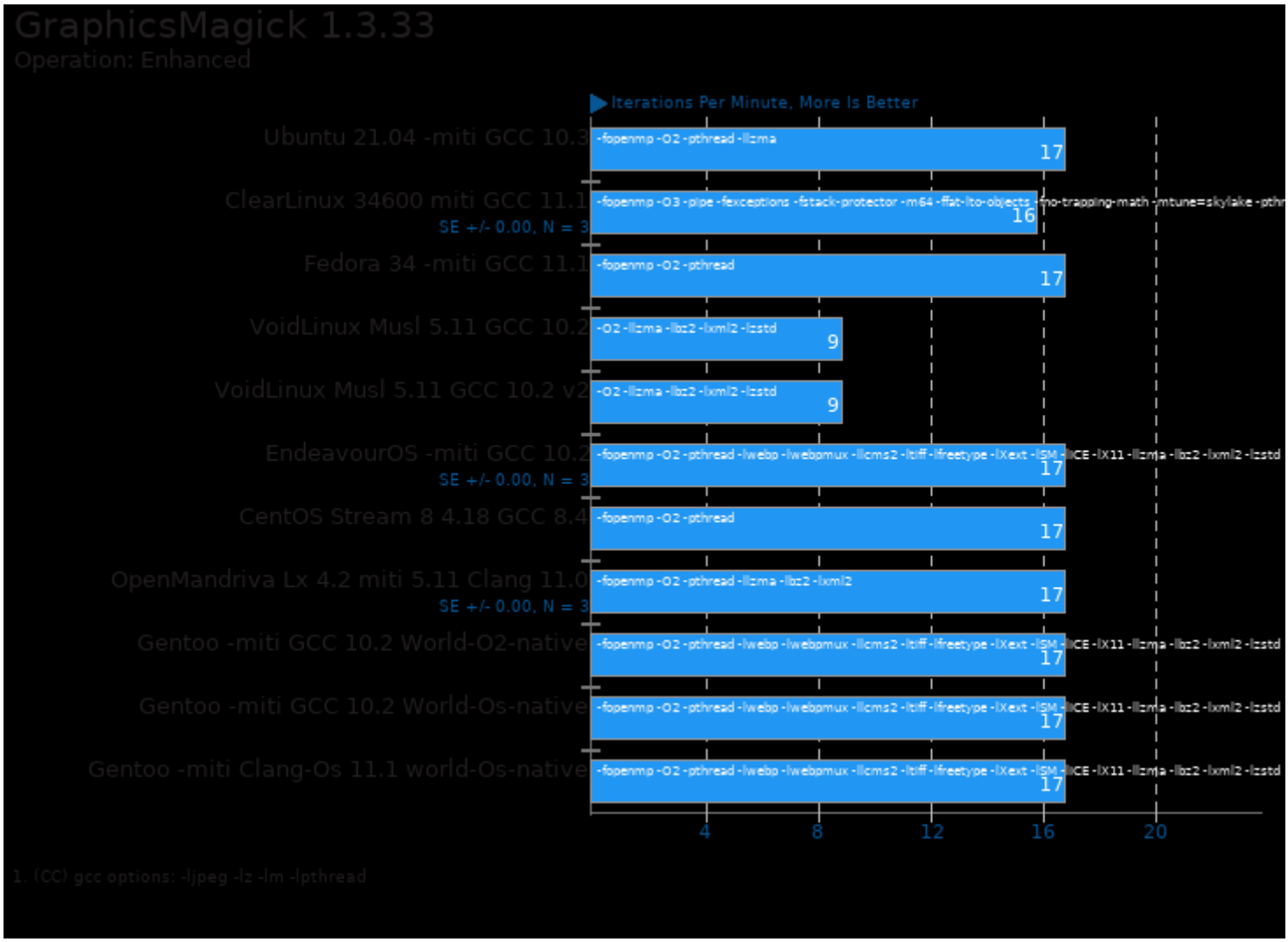


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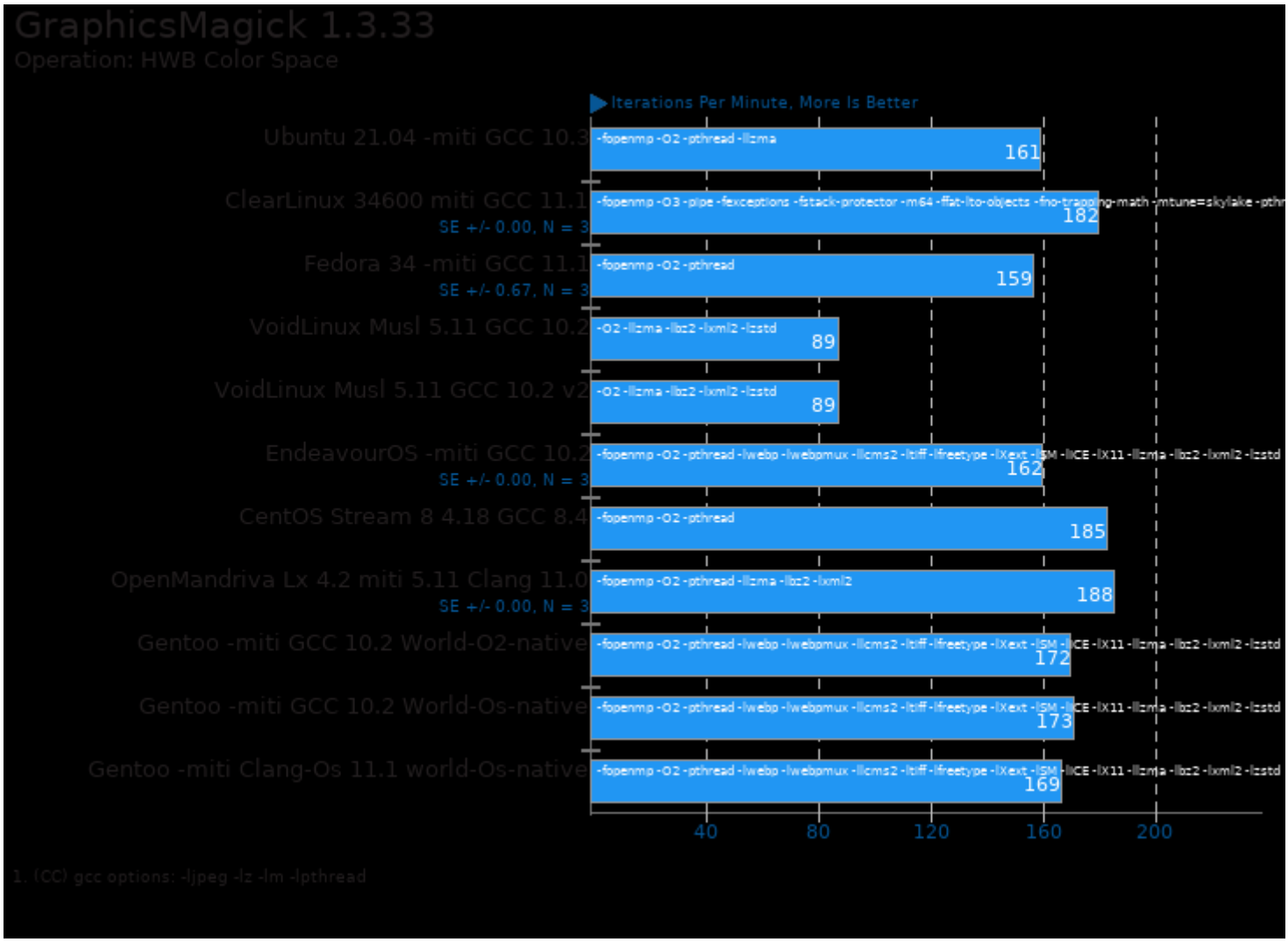



GraphicsMagick 1.3.33
Operation: Swirl
Iterations Per Minute, More Is Better
Ubuntu 21.04 -miti GCC 10.3
-fopenmp -O2 -pthread -llzma
44
ClearLinux 34600 miti GCC 11.1
SE +/- 0.00, N = 3
-fopenmp -O3 -pipe -fexceptions -fstack-protector -m64 -flat-lto-objects -fno-trapping-math -mtune=skylake -pthr
54
Fedora 34 -miti GCC 11.1
-fopenmp -O2 -pthread
51
VoidLinux Musl 5.11 GCC 10.2
-O2 -llzma -lbz2 -lxml2 -lzstd
19
VoidLinux Musl 5.11 GCC 10.2 v2
-O2 -llzma -lbz2 -lxml2 -lzstd
19
EndeavourOS -miti GCC 10.2
SE +/- 0.00, N = 3
-fopenmp -O2 -pthread -lwebp -lwebpmux -llcms2 -ltiff -lfreetype -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lzstd
45
CentOS Stream 8 4.18 GCC 8.4
-fopenmp -O2 -pthread
46
OpenMandriva Lx 4.2 miti 5.11 Clang 11.0
SE +/- 0.00, N = 3
-fopenmp -O2 -pthread -llzma -lbz2 -lxml2
51
Gentoo -miti GCC 10.2 World-O2-native
-fopenmp -O2 -pthread -lwebp -lwebpmux -llcms2 -ltiff -lfreetype -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lzstd
45
Gentoo -miti GCC 10.2 World-Os-native
-fopenmp -O2 -pthread -lwebp -lwebpmux -llcms2 -ltiff -lfreetype -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lzstd
45
Gentoo -miti Clang-Os 11.1 world-Os-native
-fopenmp -O2 -pthread -lwebp -lwebpmux -llcms2 -ltiff -lfreetype -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lzstd
50
12
24
36
48
60
1. (CC) gcc options: -ljpeg -lz -lm -lpthread

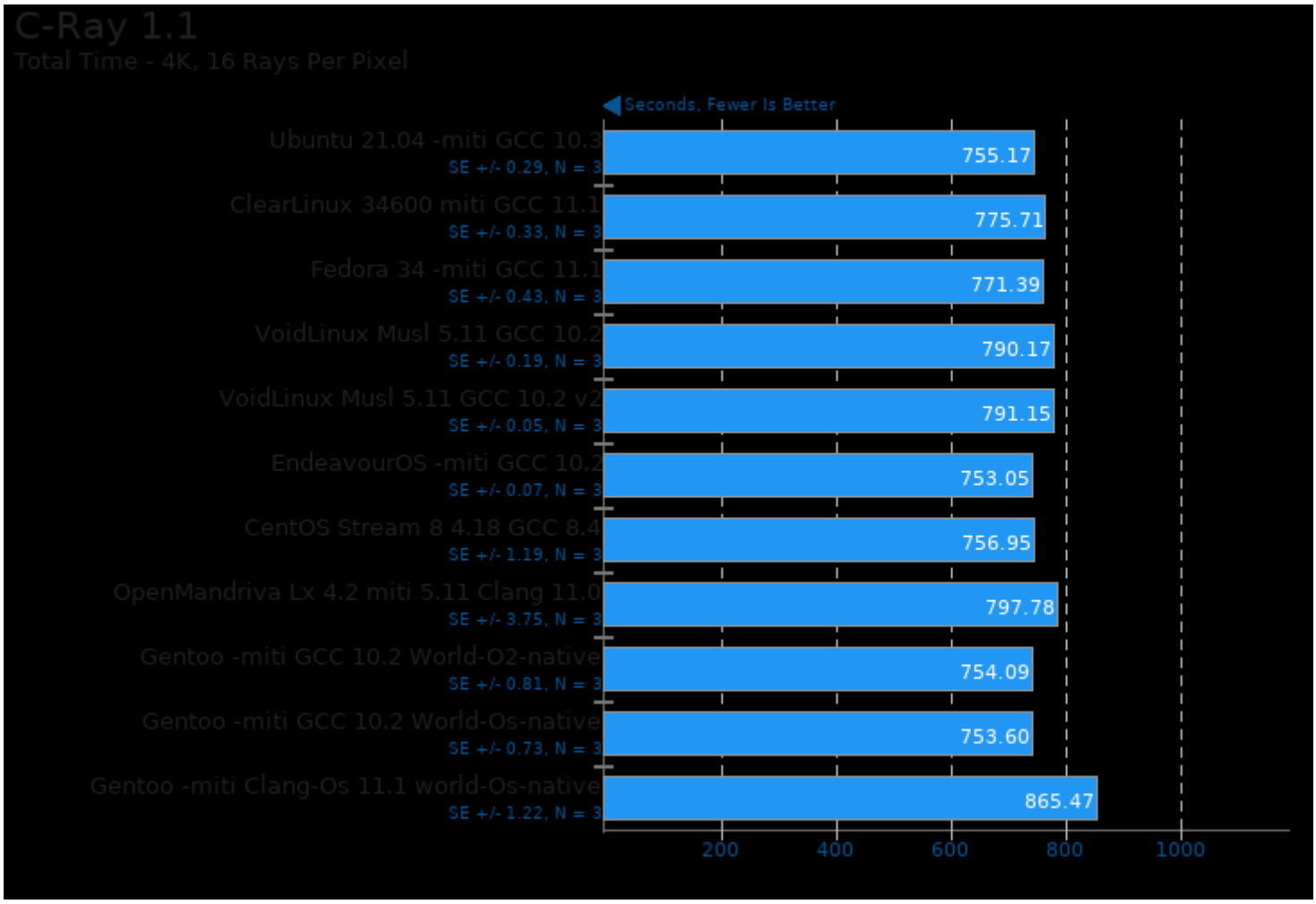
Lenovo Rebuild World part 1



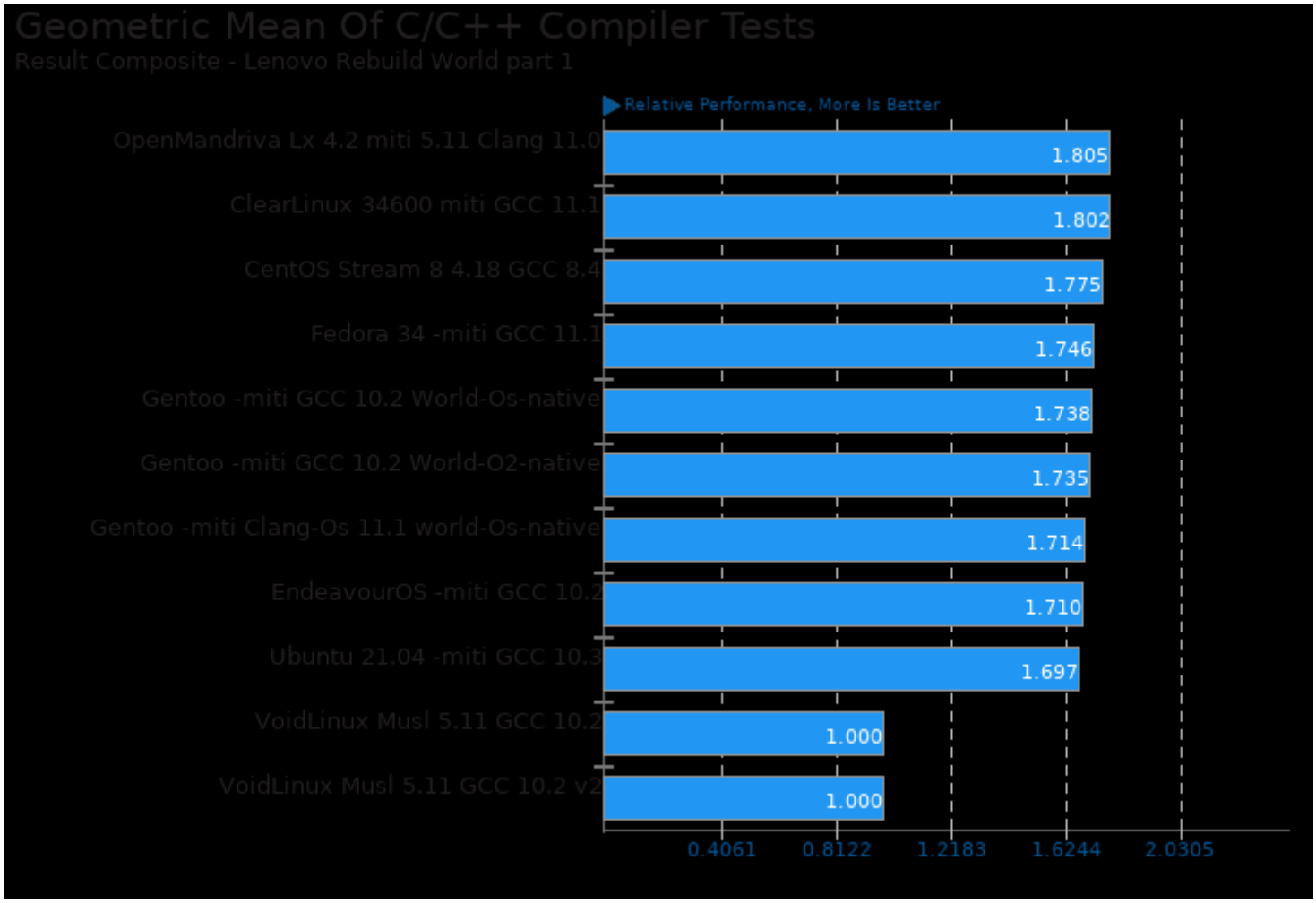
Lenovo Rebuild World part 1



Lenovo Rebuild World part 1

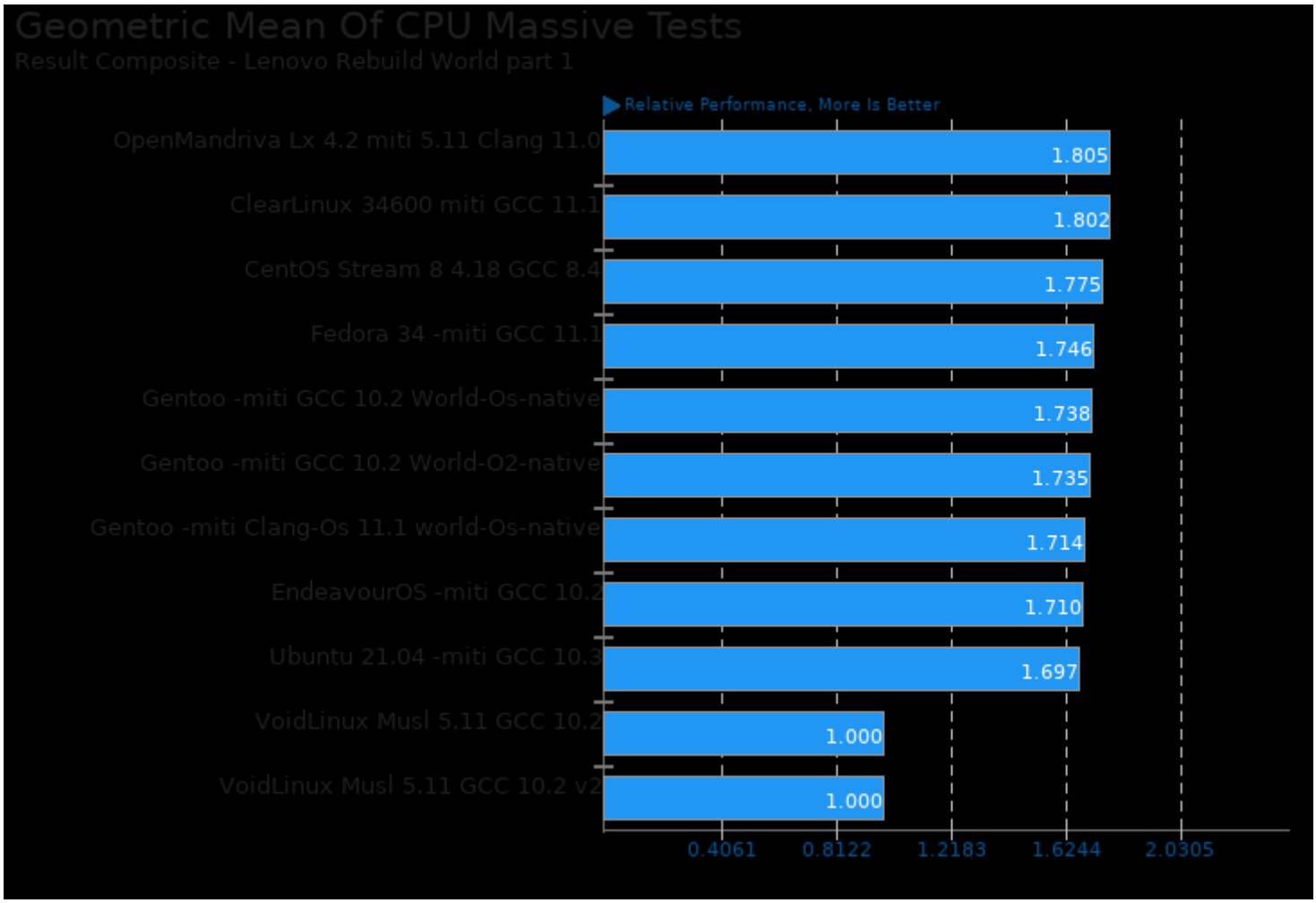


These geometric means are based upon test groupings / test suites for this result file.



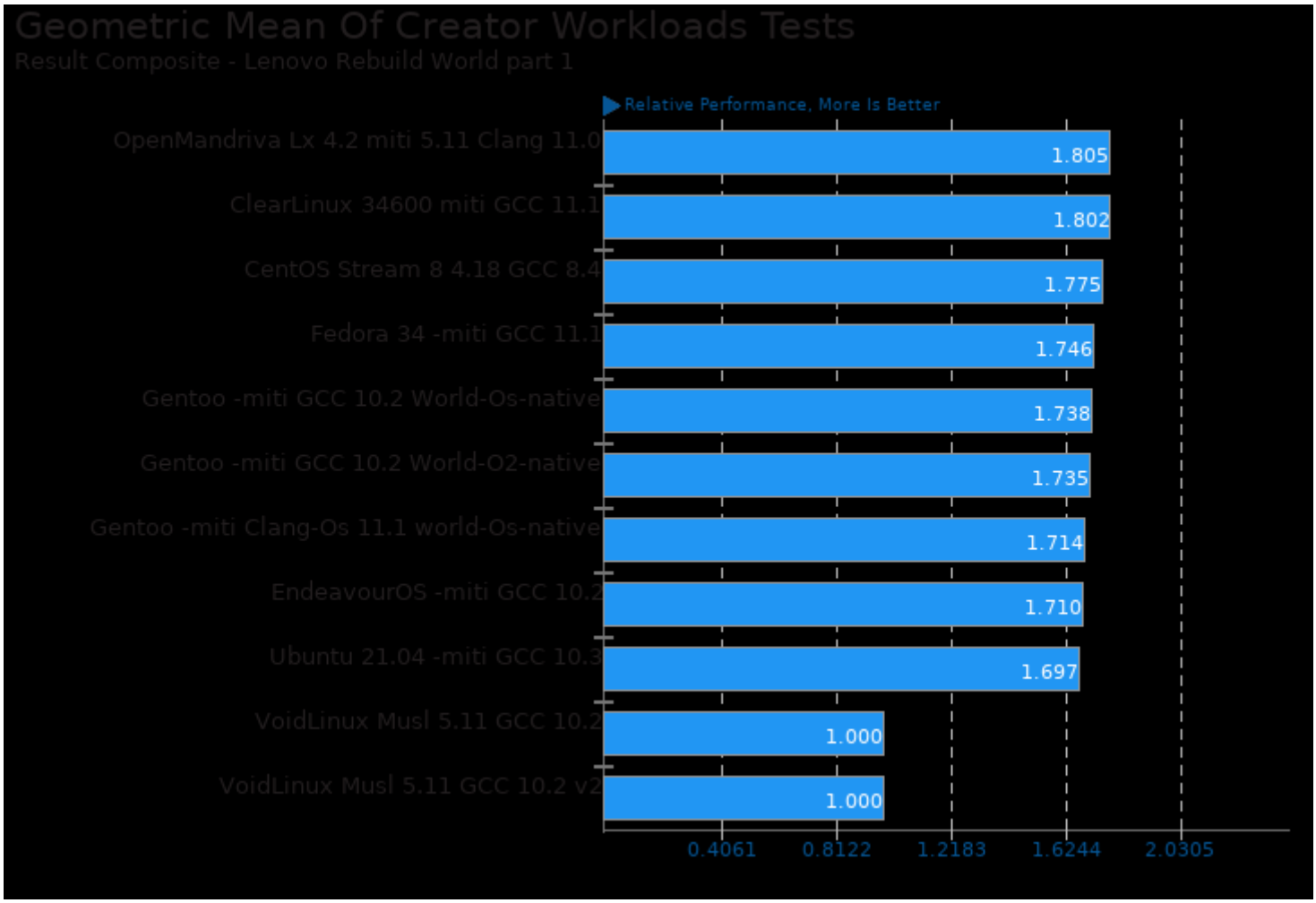
Geometric mean based upon tests: pts/mafft, pts/graphics-magick, pts/hmmer and pts/c-ray

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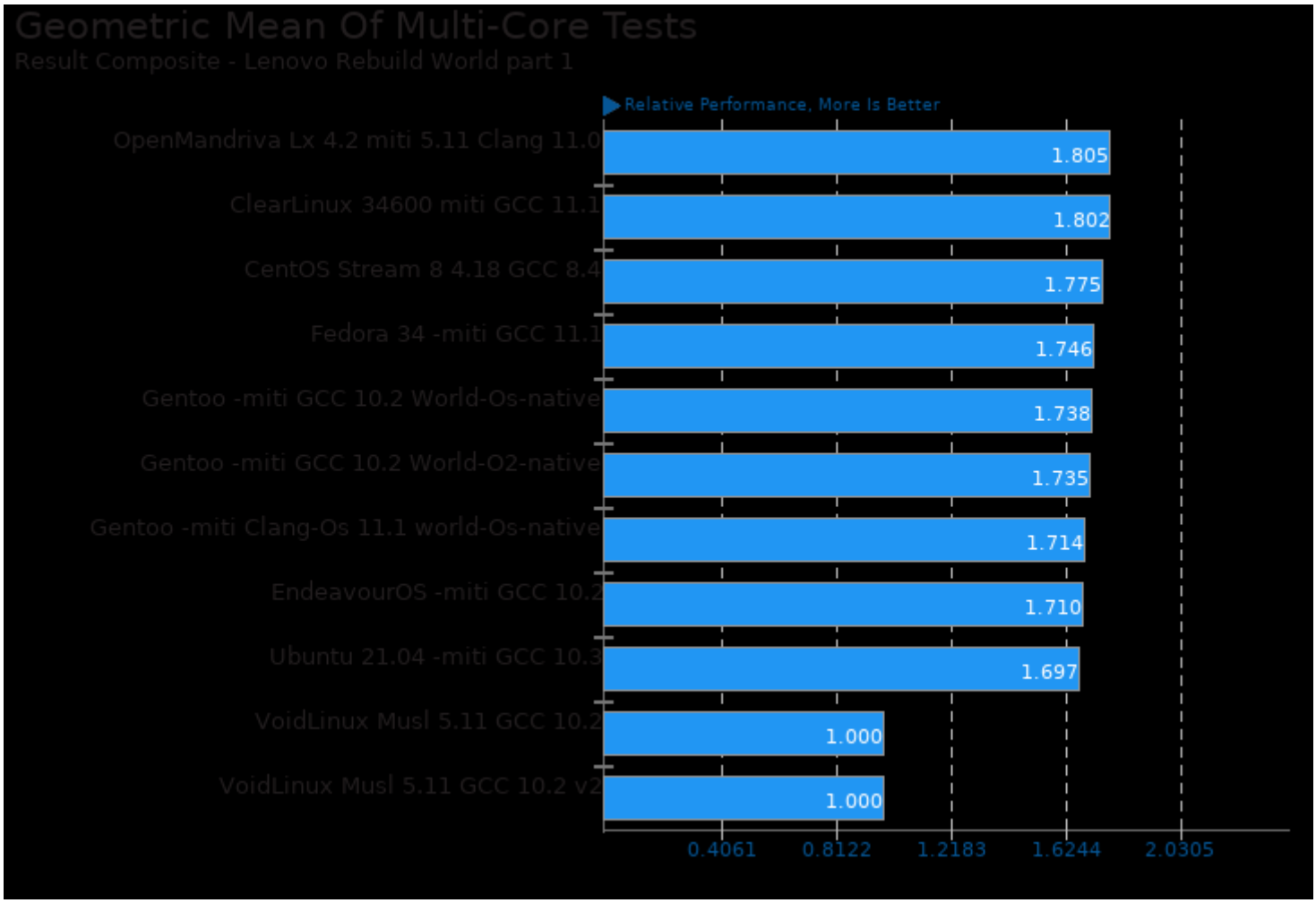
Geometric mean based upon tests: pts/c-ray, pts/crafty, pts/graphics-magick, pts/hmmer and pts/mafft

Lenovo Rebuild World part 1



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

Lenovo Rebuild World part 1



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

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 05:25.