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5800X SIMDJSON

Intel Core i9-9900K testing with a Gigabyte Z390 M GAMING-CF (F9m BIOS) and Gigabyte NVIDIA GeForce RTX 3080 10GB on Gentoo 2.7 via the Phoronix Test Suite.

Test Systems:

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Processor: AMD Ryzen 7 5800X 8-Core @ 3.80GHz (8 Cores / 16 Threads), Motherboard: ASRock X570 Pro4 (P3.40 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus, Graphics: Sapphire AMD Radeon RX 470/480/570/570X/580/580X/590 8GB (1560/2100MHz), Audio: AMD Ellesmere HDMI Audio, Monitor: G237HL, Network: Intel I211

OS: Ubuntu 20.10, Kernel: 5.10.0-051000rc7daily20201213-generic (x86_64) 20201212, Desktop: GNOME Shell

3.38.1, Display Server: X Server 1.20.9, Display Driver: modesetting 1.20.9, OpenGL: 4.6 Mesa 20.2.1 (LLVM 11.0.0), Vulkan: 1.2.131, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-JvwpWM/gcc-10-10.2.0/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-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 schedutil (Boost: Enabled) - CPU Microcode: 0xa201009
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

9900K/52x52x49/3733C15

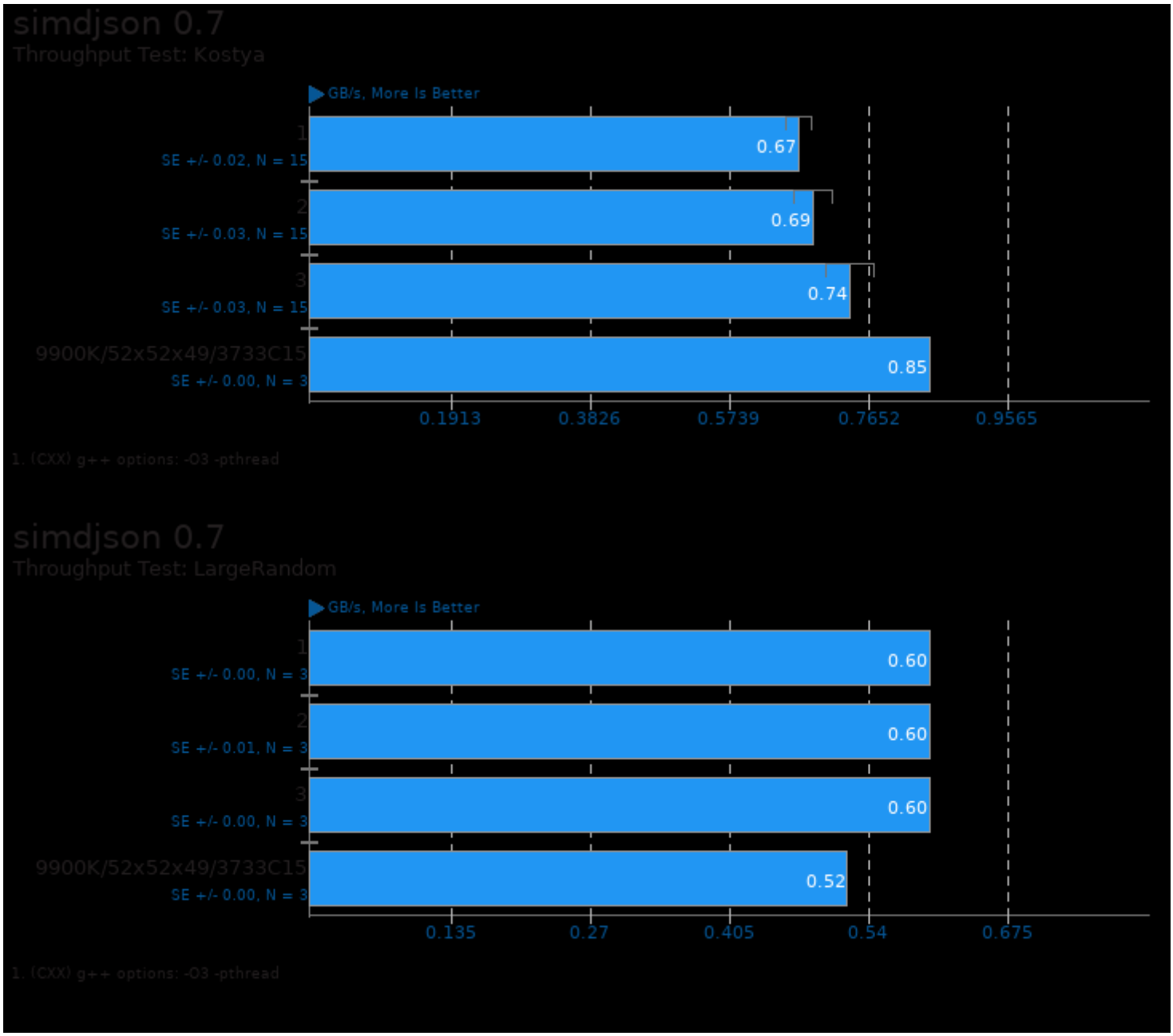
Processor: Intel Core i9-9900K @ 5.20GHz (8 Cores / 16 Threads), Motherboard: Gigabyte Z390 M GAMING-CF (F9m BIOS), Chipset: Intel Cannon Lake PCH, Memory: 32GB, Disk: Samsung SSD 970 EVO 500GB + 1024GB INTEL SSDPEKNW010T9 + 240GB KINGSTON SH103S3 + 2000GB Samsung SSD 860 + 2000GB Western Digital WD2003FZEX-0 + 256GB PLEXTOR PX-256M6, Graphics: Gigabyte NVIDIA GeForce RTX 3080 10GB, Audio: NVIDIA Device 1aef, Network: Intel I219-V

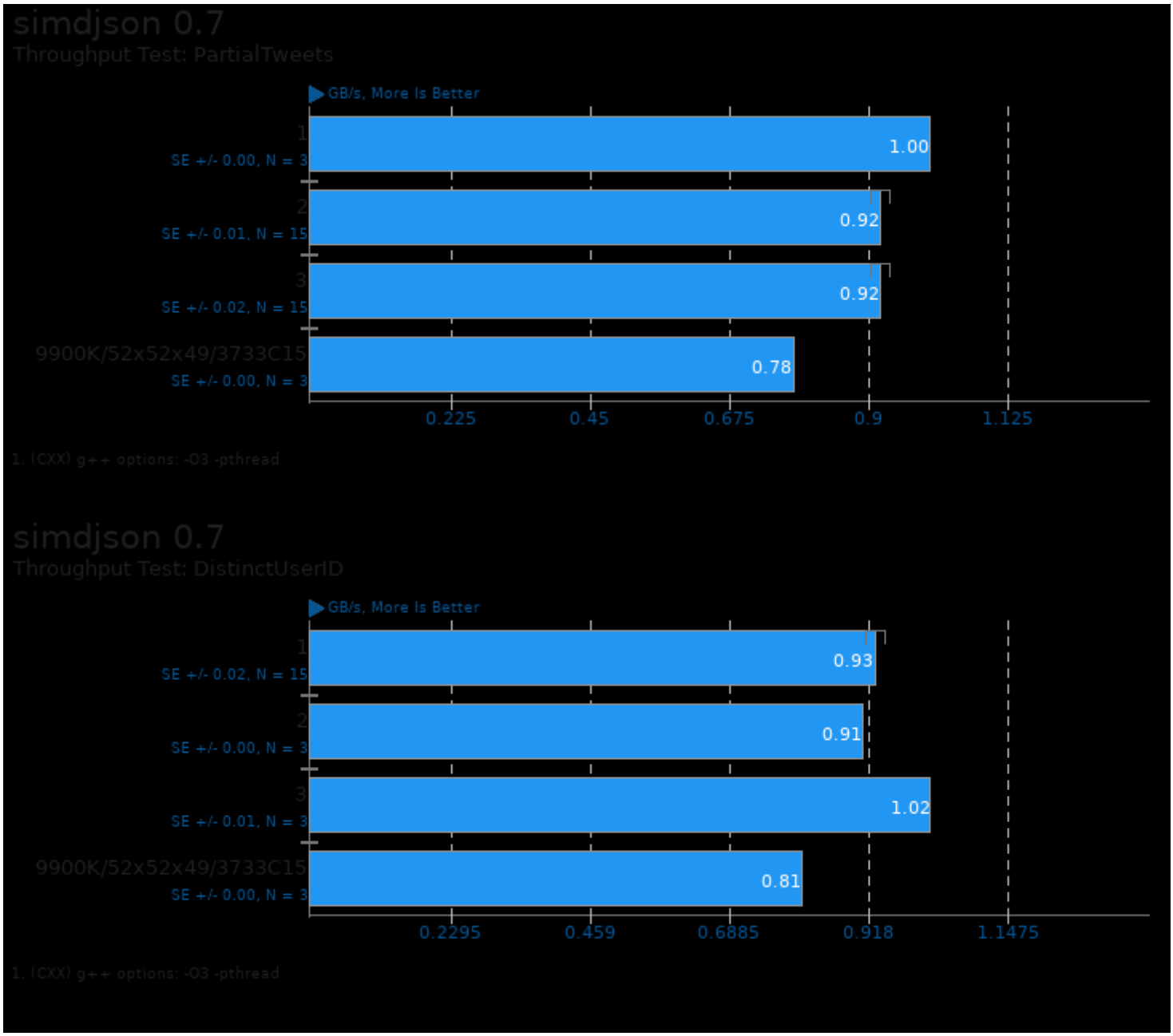
OS: Gentoo 2.7, Kernel: 5.10.10-zen1 (x86_64), Desktop: KDE Plasma, Display Server: X Server 1.20.10, Display Driver: NVIDIA, Vulkan: 1.2.155, Compiler: GCC 10.2.0 + Clang 11.1.0 + LLVM 11.1.0 + CUDA 11.1, File-System: reiserfs

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --bindir=/usr/x86_64-pc-linux-gnu/gcc-bin/10.2.0 --build=x86_64-pc-linux-gnu --datadir=/usr/share/gcc-data/x86_64-pc-linux-gnu/10.2.0 --disable-esp --disable-fixed-point --disable-isl-version-check --disable-libada --disable-libssp --disable-libvtv --disable-systemtap --disable-vtable-verify --disable-werror --enable-__cxa_atexit --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-default-ssp --enable-languages=c,c++,fortran --enable-libgomp --enable-libstdcxx-time --enable-lto --enable-multilib --enable-nls --enable-obsolete --enable-secureplt --enable-shared --enable-targets=all --enable-threads=posix --host=x86_64-pc-linux-gnu --includedir=/usr/lib/gcc/x86_64-pc-linux-gnu/10.2.0/include --mandir=/usr/share/gcc-data/x86_64-pc-linux-gnu/10.2.0/man --with-isl --with-multilib-list=m32,m64 --with-python-dir=/share/gcc-data/x86_64-pc-linux-gnu/10.2.0/python --without-zstd
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0xde
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Not affected + mds: Mitigation of Clear buffers; SMT vulnerable + 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 generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbds: Mitigation of Microcode + tsx_async_abort: Mitigation of Clear buffers; SMT vulnerable

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simdjson - Kostya (GB/s)	**0.67**	0.69	0.74	**0.85**
Normalized	78.82%	81.18%	87.06%	100%
Standard Deviation	10.2%	15.1%	17%	0%
simdjson - LargeRand (GB/s)	**0.60**	**0.60**	**0.60**	**0.52**
Normalized	100%	100%	100%	86.67%
Standard Deviation	1%	1.7%	1%	0%
simdjson - PartialTweets (GB/s)	**1.00**	0.92	0.92	**0.78**
Normalized	100%	92%	92%	78%
Standard Deviation	0.6%	6.1%	6.5%	0%
simdjson - DistinctUserID (GB/s)	0.93	0.91	**1.02**	**0.81**
Normalized	91.18%	89.22%	100%	79.41%
Standard Deviation	6.6%	0.6%	1.7%	0%

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This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 07:24.