

www.phoronix-test-suite.com

Intel MLC Ryzen 9 5950X

AMD Ryzen 9 5950X 16-Core testing with a ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3302 BIOS) and AMD Radeon RX 5600 OEM/5600 XT / 5700/5700 8GB on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 63% of the tests.

Based on the geometric mean of all complete results, the fastest (1) was 1.006x the speed of the slowest (2). 3 was 0.994x the speed of 1 and 2 was 1x the speed of 3.

Test Systems:

1

2

Intel MLC Ryzen 9 5950X

3

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3302 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600, Graphics: AMD Radeon RX 5600 OEM/5600 XT / 5700/5700 8GB (2100/875MHz), Audio: AMD Navi 10 HDMI Audio, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.11.6-051106-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, OpenGL: 4.6 Mesa 21.2.0-devel (git-55fb941 2021-04-16 groovy-oibaf-ppa) (LLVM 12.0.0), Vulkan: 1.2.168, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 3840x2160

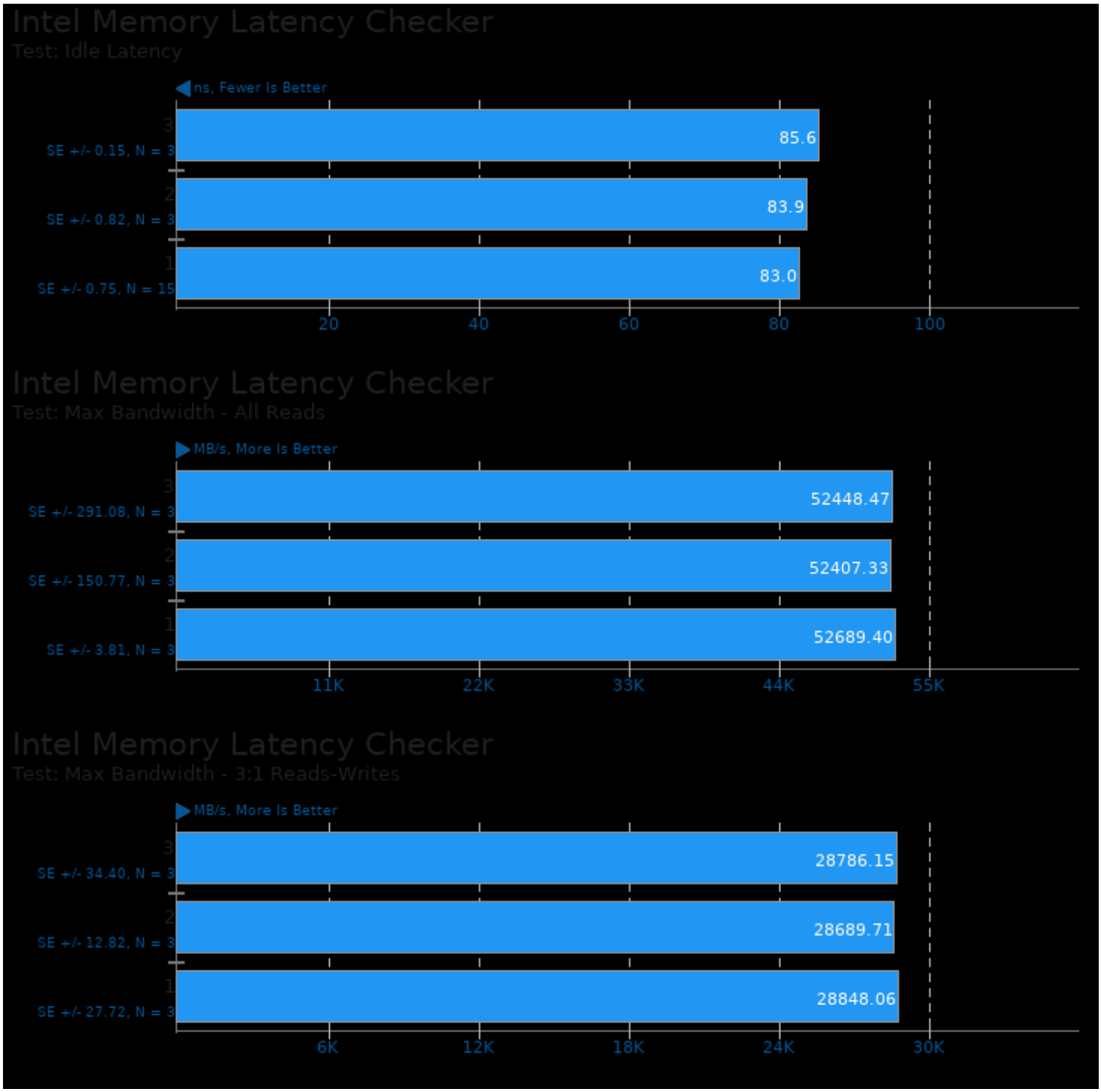
Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq schedutil (Boost: Enabled) - CPU Microcode: 0xa201009
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled 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

	1	2	3
Intel Memory Latency Checker - Idle Latency (ns)	**83.0**	83.9	**85.6**
Normalized	100%	98.93%	96.96%
Standard Deviation	3.5%	1.7%	0.3%
Intel Memory Latency Checker - Max Bandwidth - All Reads (MB/s)	**52689**	**52407**	52448
Normalized	100%	99.46%	99.54%
Standard Deviation	0%	0.5%	1%
Intel Memory Latency Checker - Max Bandwidth - 3:1 Reads-Writes (MB/s)	**28848**	**28690**	28786
Normalized	100%	99.45%	99.79%
Standard Deviation	0.2%	0.1%	0.2%
Intel Memory Latency Checker - Max Bandwidth - 2:1 Reads-Writes (MB/s)	**26182**	**26033**	26112
Normalized	100%	99.43%	99.73%
Standard Deviation	0.1%	0.4%	0.8%
Intel Memory Latency Checker - Max Bandwidth - 1:1 Reads-Writes (MB/s)	**26686**	**25911**	26231
Normalized	100%	97.1%	98.3%
Standard Deviation	0.1%	3.4%	3%
Intel Memory Latency Checker - Max Bandwidth - Stream-Triad Like (MB/s)	**33563**	**33419**	33537
Normalized	100%	99.57%	99.92%
Standard Deviation	0%	0.7%	0.2%
Intel Memory Latency Checker - P.I.B - All Reads (MB/s)	**51710**	51780	**51799**
Normalized	99.83%	99.96%	100%
Standard Deviation	0%	0%	0%
Intel Memory Latency Checker - P.I.B - 3:1 Reads-Writes (MB/s)	**28693**	28753	**28753**
Normalized	99.79%	100%	100%
Standard Deviation	0.1%	0.1%	0.1%

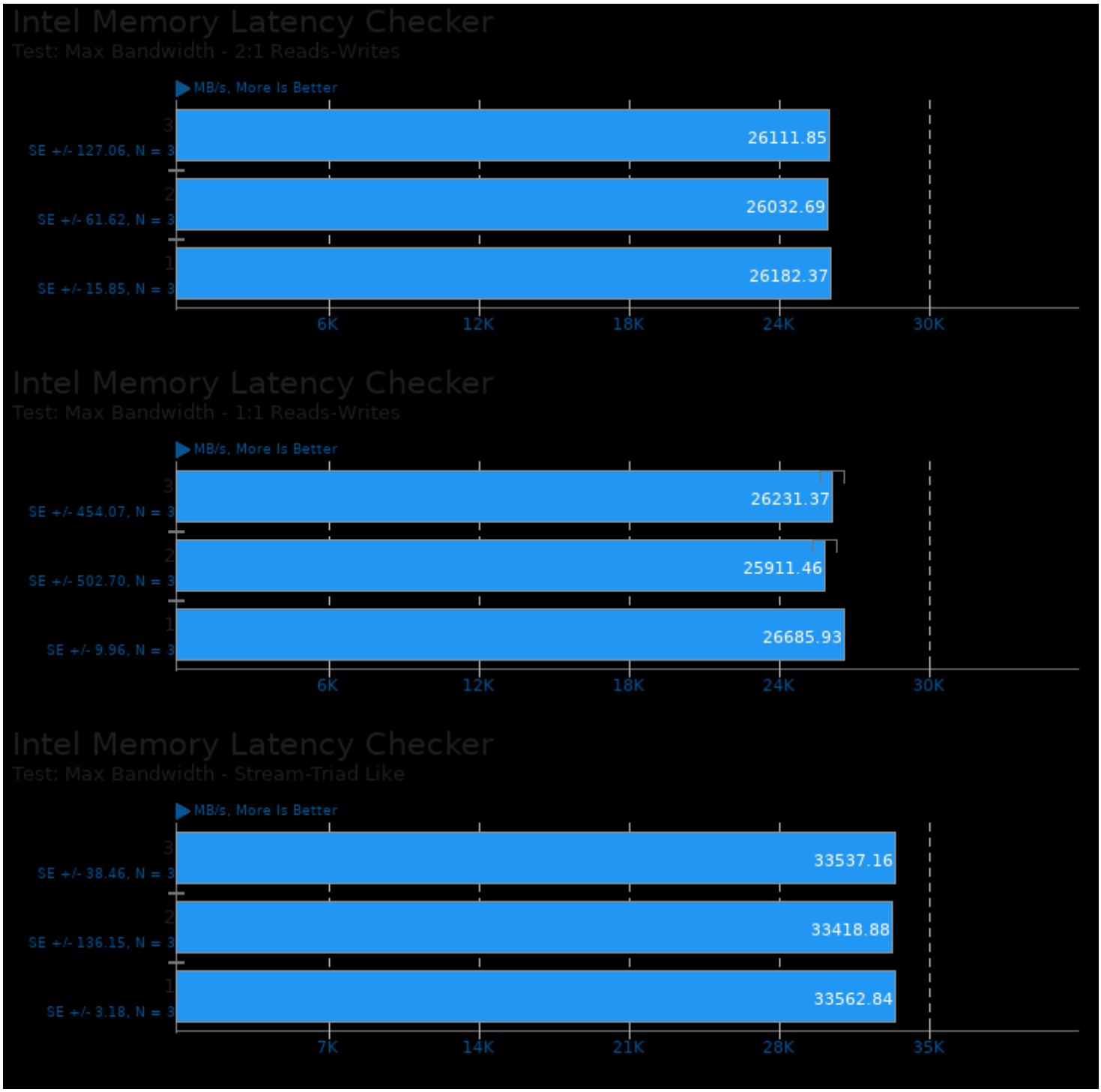
Intel MLC Ryzen 9 5950X

Intel Memory Latency Checker - P.I.B - 2:1 Reads-Writes (MB/s)	**26198**	**26225**	26222
Normalized	99.89%	100%	99.99%
Standard Deviation	0.1%	0.1%	0.1%
Intel Memory Latency Checker - P.I.B - 1:1 Reads-Writes (MB/s)	**25555**	**25269**	25276
Normalized	100%	98.88%	98.91%
Standard Deviation	0.9%	1.2%	1.1%
Intel Memory Latency Checker - P.I.B - Stream-Triad Like (MB/s)	**33566**	33574	**33601**
Normalized	99.9%	99.92%	100%
Standard Deviation	0%	0%	0%

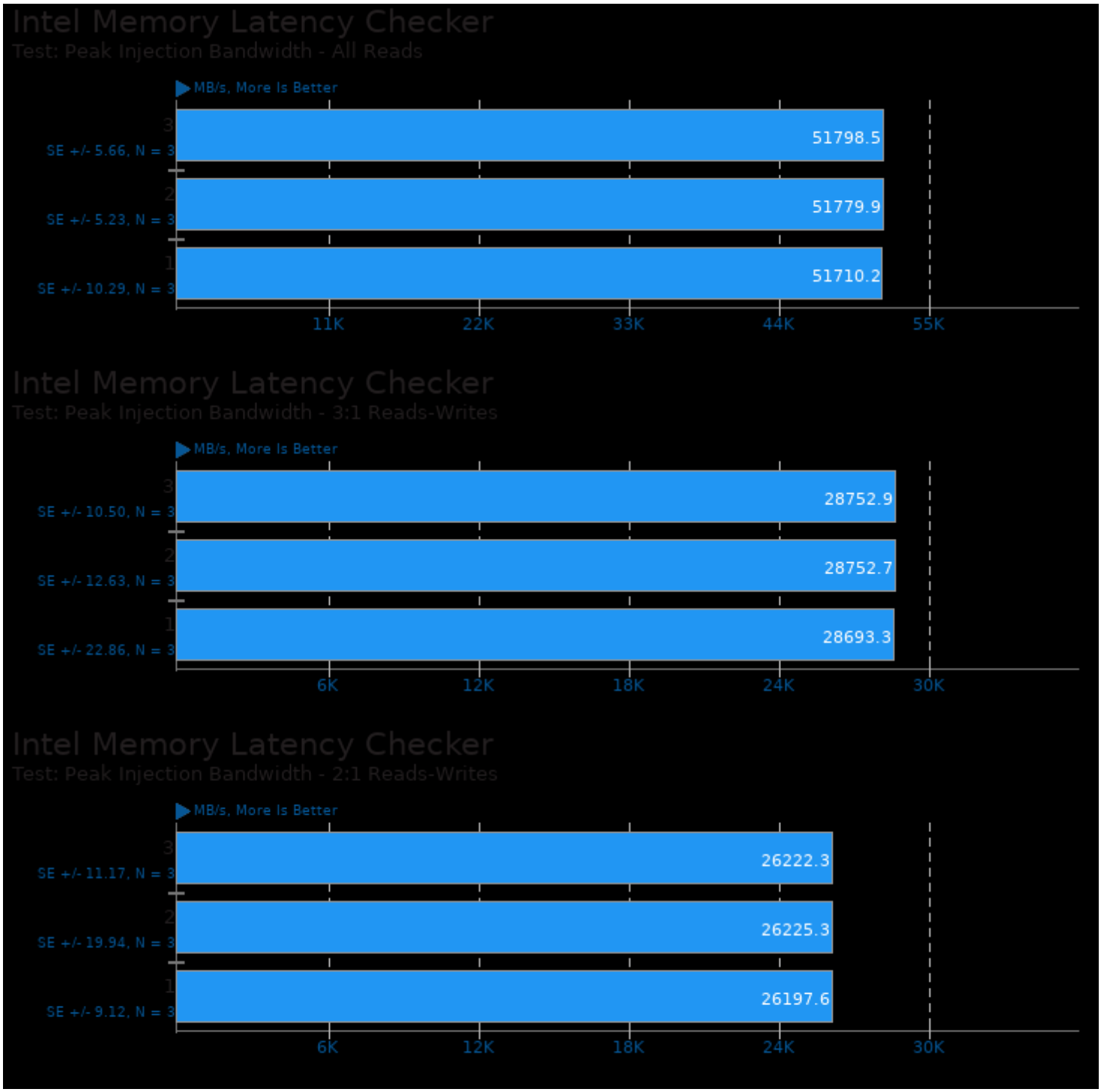
Intel MLC Ryzen 9 5950X



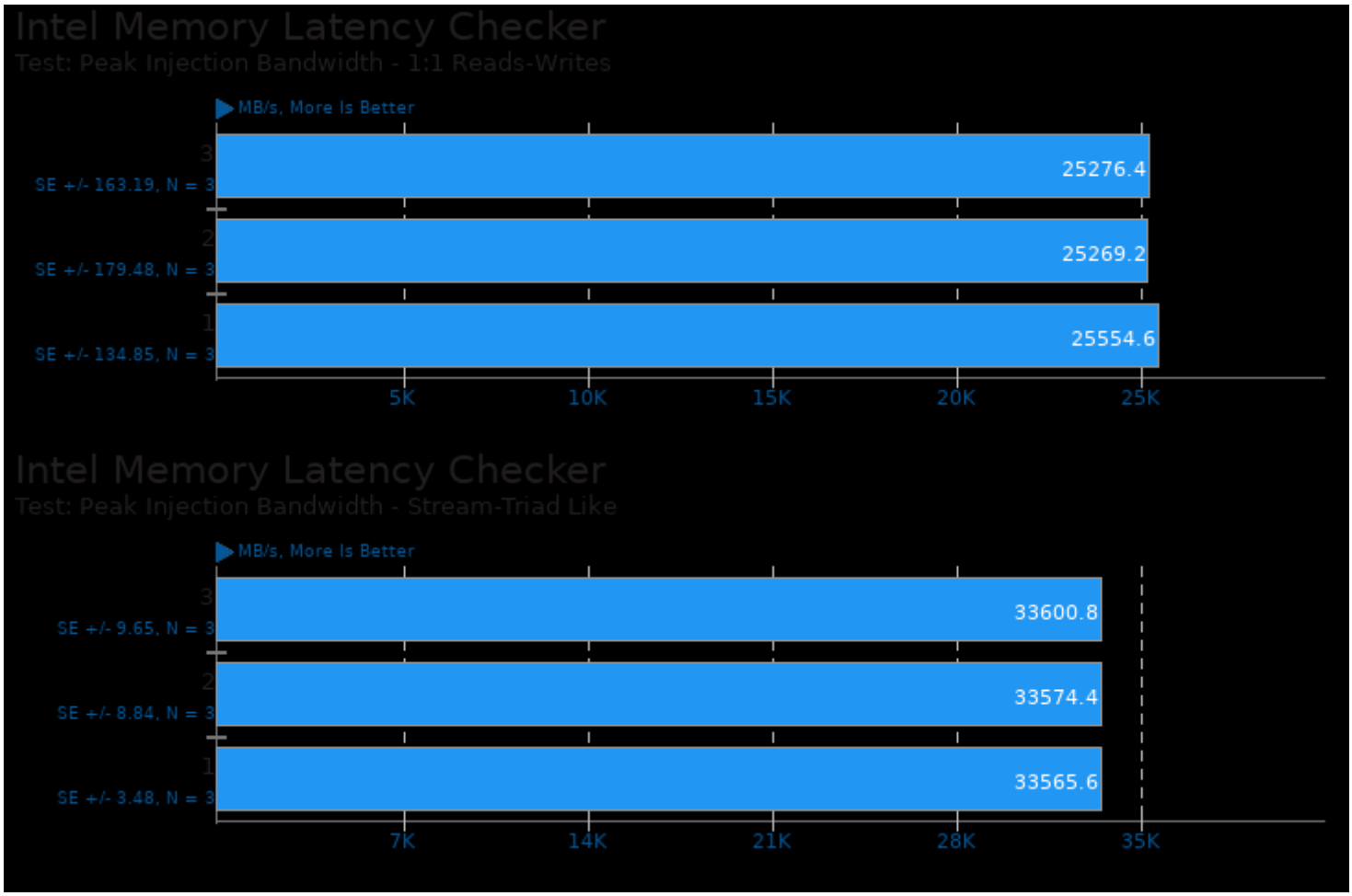
Intel MLC Ryzen 9 5950X



Intel MLC Ryzen 9 5950X



Intel MLC Ryzen 9 5950X



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 14:41.