

www.phoronix-test-suite.com

sys epyc

2 x AMD EPYC 7742 64-Core testing with a Supermicro H11DSi-NT v2.00 (2.1 BIOS) and llvmpipe on Ubuntu 21.10 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 54% of the tests.

Based on the geometric mean of all complete results, the fastest (1) was 1.082x the speed of the slowest (3). 2 was 0.924x the speed of 1 and 3 was 1x the speed of 2.

Test Systems:

1

2

3

Processor: 2 x AMD EPYC 7742 64-Core @ 2.25GHz (128 Cores / 256 Threads), Motherboard: Supermicro H11DSi-NT v2.00 (2.1 BIOS), Chipset: AMD Starship/Matisse, Memory: 126GB, Disk: 280GB INTEL SSDPE21D280GA, Graphics: llvmpipe, Network: 2 x Intel 10G X550T

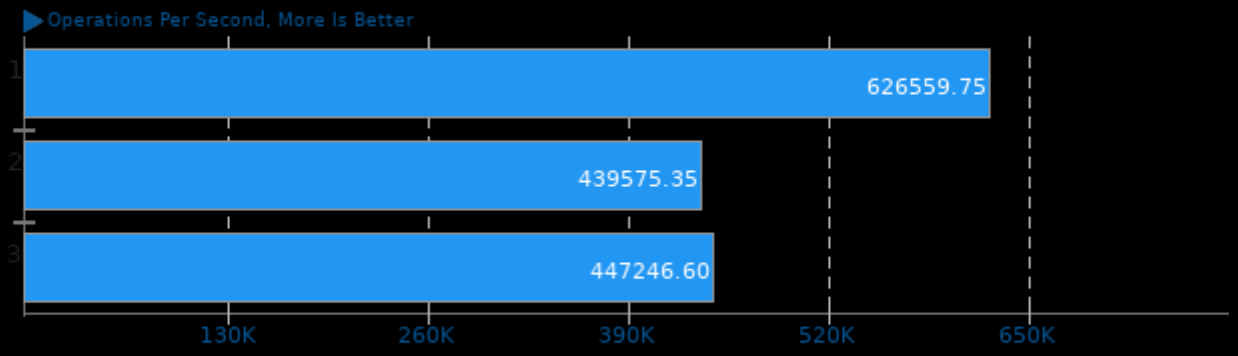
OS: Ubuntu 21.10, Kernel: 5.13.0-19-generic (x86_64), Desktop: GNOME Shell 40.5, Display Server: X Server + Wayland, OpenGL: 4.5 Mesa 21.2.2 (LLVM 12.0.1 256 bits), Vulkan: 1.1.182, Compiler: GCC 11.2.0, File-System: ext4, Screen Resolution: 1024x768

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 schedutil (Boost: Enabled) - CPU Microcode: 0x8301034
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

	1	2	3
Redis Memtier / Redis Benchmark - MIX (Operations/sec)	**626560**	**439575**	447247
Normalized	100%	70.16%	71.38%
Redis Memtier / Redis Benchmark - GET (Operations/sec)	**692369**	440178	**421668**
Normalized	100%	63.58%	60.9%
Redis Memtier / Redis Benchmark - SET (Operations/sec)	**521696**	**500206**	502216
Normalized	100%	95.88%	96.27%
Redis Memtier / Redis Benchmark - L.a.L.l (Reqs/sec)	**908275**	**939585**	915927
Normalized	96.67%	100%	97.48%
Redis Memtier / Redis Benchmark - L.a.L.l (Reqs/sec)	**958040**	**939414**	956946
Normalized	100%	98.06%	99.89%
Nginx - Long Connection - 1000 (Reqs/sec)	**138807**	**139687**	139131
Normalized	99.37%	100%	99.6%
Nginx - Short Connection - 1000 (Reqs/sec)	17030	**16733**	**17042**
Normalized	99.93%	98.18%	100%
Nginx - Long Connection - 500 (Reqs/sec)	**144841**	142466	**141942**
Normalized	100%	98.36%	98%
Nginx - Short Connection - 500 (Reqs/sec)	**35849**	35856	**36312**
Normalized	98.73%	98.74%	100%
OpenSSL (verify/s)	1637238	**1636580**	**1637486**
Normalized	99.98%	99.94%	100%
OpenSSL (sign/s)	**25208**	**25188**	25205
Normalized	100%	99.92%	99.99%

Redis Memtier / Redis Benchmark

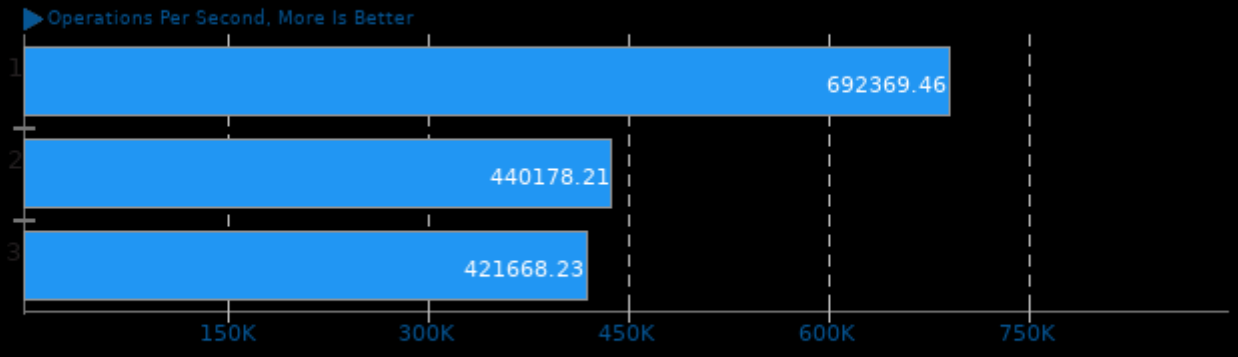
Test: MIX



1. (CXX) g++ options: -O2 -levent_openssl -levent -lcrypto -lssl -lpthread -lz -lpcre
2. Redis server v=6.0.15 sha=00000000:0 malloc=jemalloc-5.2.1 bits=64 build=4610f4c3acf7fb25

Redis Memtier / Redis Benchmark

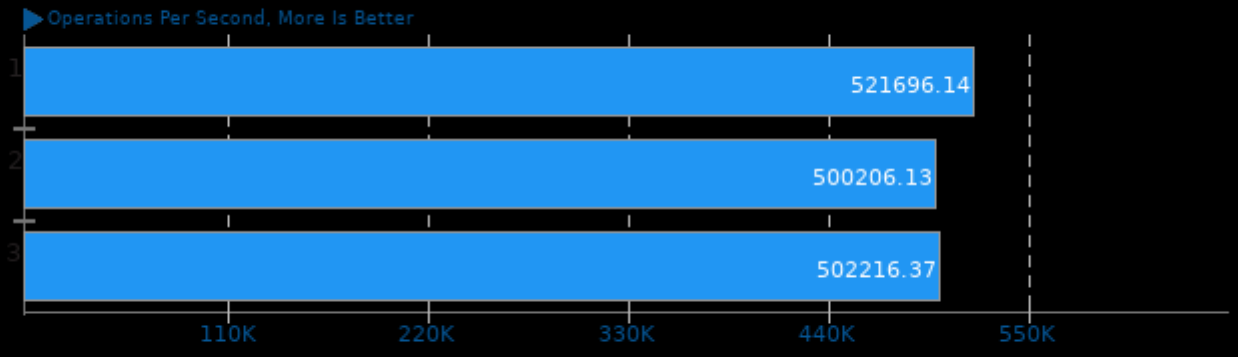
Test: GET



1. (CXX) g++ options: -O2 -levent_openssl -levent -lcrypto -lssl -lpthread -lz -lpcre
2. Redis server v=6.0.15 sha=00000000:0 malloc=jemalloc-5.2.1 bits=64 build=4610f4c3acf7fb25

Redis Memtier / Redis Benchmark

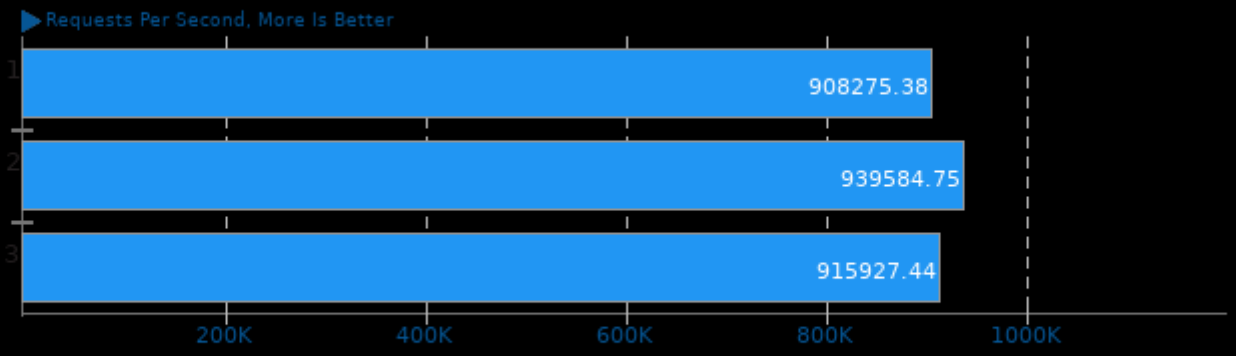
Test: SET



1. (CXX) g++ options: -O2 -levent_openssl -levent -lcrypto -lssl -lpthread -lz -lpcre
2. Redis server v=6.0.15 sha=00000000:0 malloc=jemalloc-5.2.1 bits=64 build=4610f4c3acf7fb25

Redis Memtier / Redis Benchmark

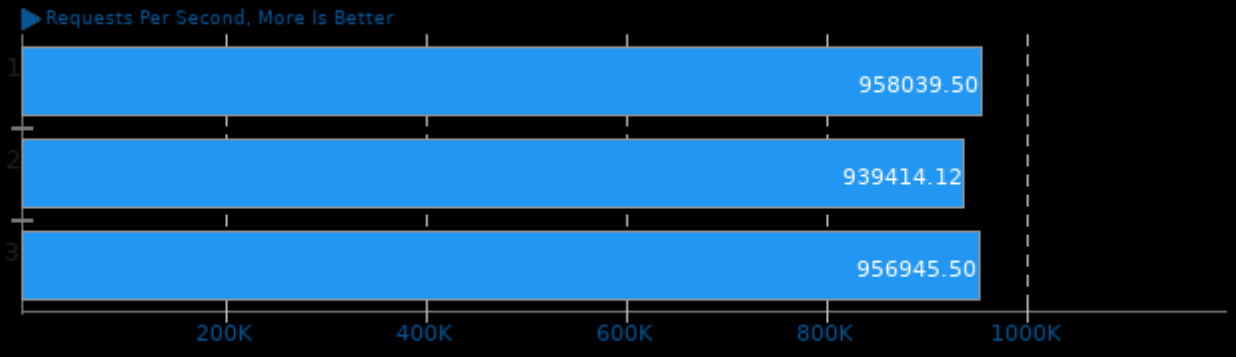
Test: LPUSH and LPOP: lpush



1. (CXX) g++ options: -O2 -levent_openssl -levent -lcrypto -lssl -lpthread -lz -lpcre
2. Redis server v=6.0.15 sha=00000000:0 malloc=jemalloc-5.2.1 bits=64 build=4610f4c3acf7fb25

Redis Memtier / Redis Benchmark

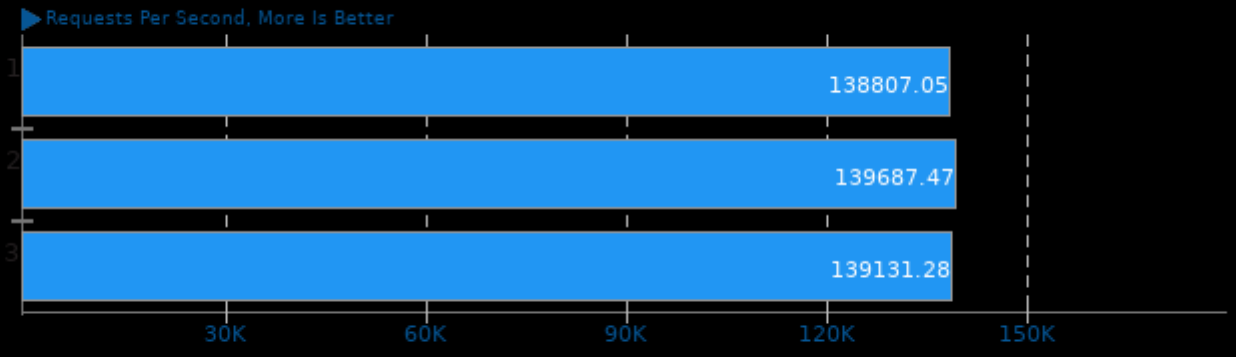
Test: LPUSH and LPOP: lpop



1. (CXX) g++ options: -O2 -levent_openssl -levent -lcrypto -lssl -lpthread -lz -lpcre
2. Redis server v=6.0.15 sha=00000000:0 malloc=jemalloc-5.2.1 bits=64 build=4610f4c3acf7fb25

Nginx

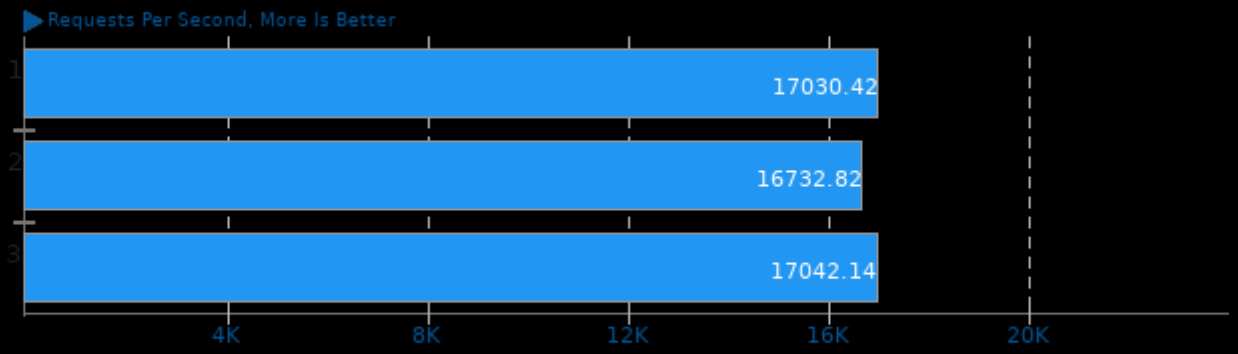
Test: Long Connection - Connections: 1000



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)

Nginx

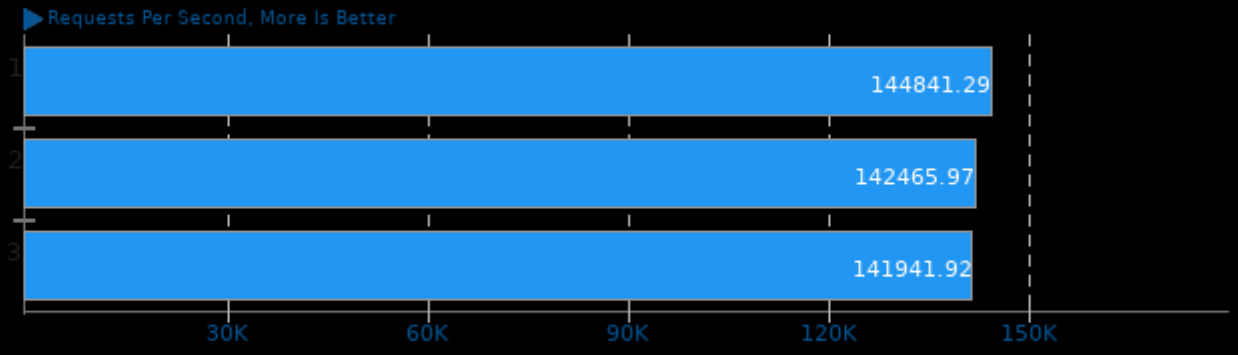
Test: Short Connection - Connections: 1000



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)

Nginx

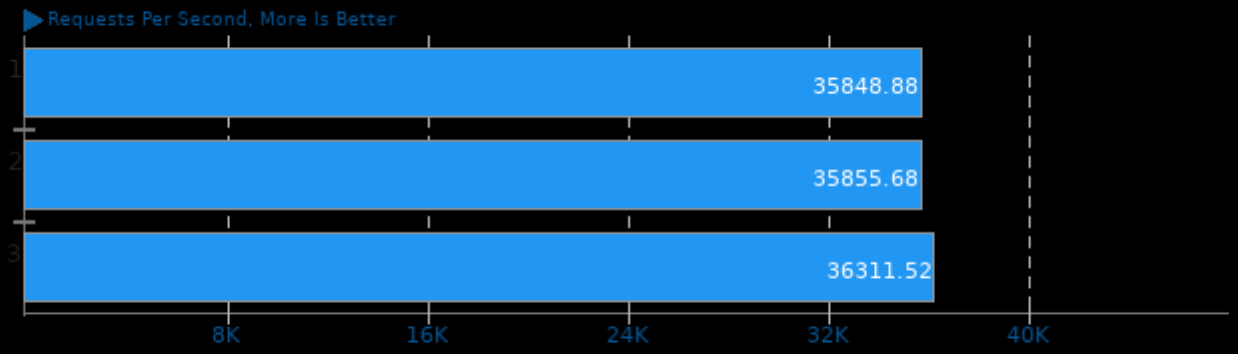
Test: Long Connection - Connections: 500



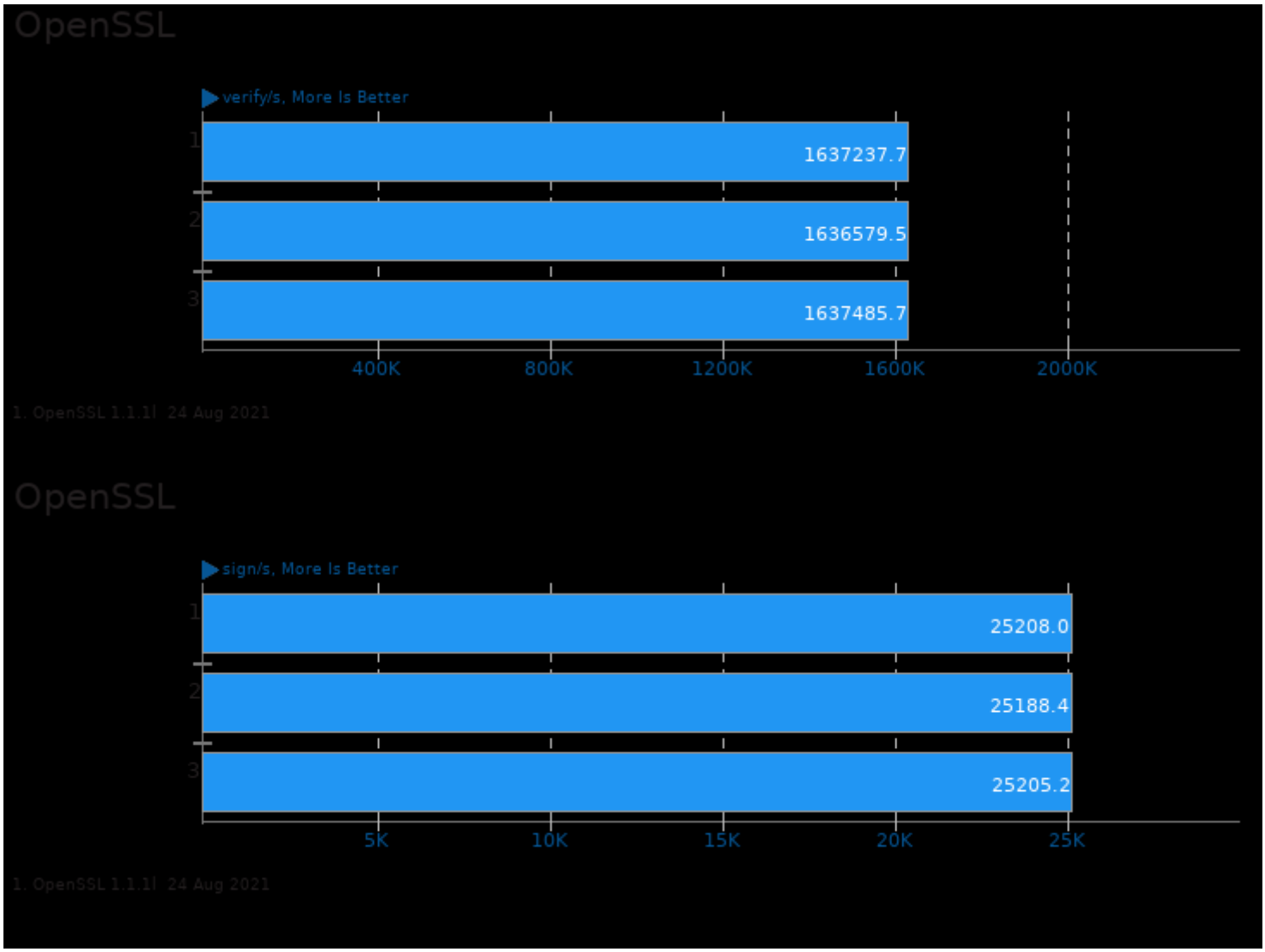
1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)

Nginx

Test: Short Connection - Connections: 500



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 07:11.