



[www.phoronix-test-suite.com](http://www.phoronix-test-suite.com)

## DDNet Xonotic Thelio

AMD Ryzen Threadripper 3990X 64-Core testing with a System76 Thelio Major (F4c Z5 BIOS) and AMD Radeon RX 5600 OEM/5600 XT / 5700/5700 8GB on Pop 20.10 via the Phoronix Test Suite.

### Automated Executive Summary

*1 had the most wins, coming in first place for 50% of the tests.*

*Based on the geometric mean of all complete results, the fastest (1) was 1.002x the speed of the slowest (3). 4 was 1x the speed of 1, 2 was 0.999x the speed of 4, 5 was 0.999x the speed of 2, 3 was 1x the speed of 5.*

### Test Systems:

1

2

**3**

**4**

**5**

Processor: AMD Ryzen Threadripper 3990X 64-Core @ 2.90GHz (64 Cores / 128 Threads), Motherboard: System76 Thelio Major (F4c Z5 BIOS), Chipset: AMD Starship/Matisse, Memory: 126GB, Disk: Samsung SSD 970 EVO Plus 500GB, Graphics: AMD Radeon RX 5600 OEM/5600 XT / 5700/5700 8GB (1750/875MHz), Audio: AMD Navi 10 HDMI Audio, Monitor: DELL P2415Q, Network: Intel I211 + Intel Wi-Fi 6 AX200

OS: Pop 20.10, Kernel: 5.8.0-7630-generic (x86\_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.8, OpenGL: 4.6 Mesa 21.1.0-devel (git-96d7555 2021-01-22 groovy-oibaf-ppa) (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: snd\_usb\_audio.ignore\_ctl\_error=1 - Transparent Huge Pages: madvise  
 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,objc++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --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 ondemand (Boost: Enabled) - CPU Microcode: 0x8301025  
 Graphics Notes: GLAMOR  
 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 retrpeline IBPB: conditional STIBP: conditional RSB filling + srbs: Not affected + tsx\_async\_abort: Not affected

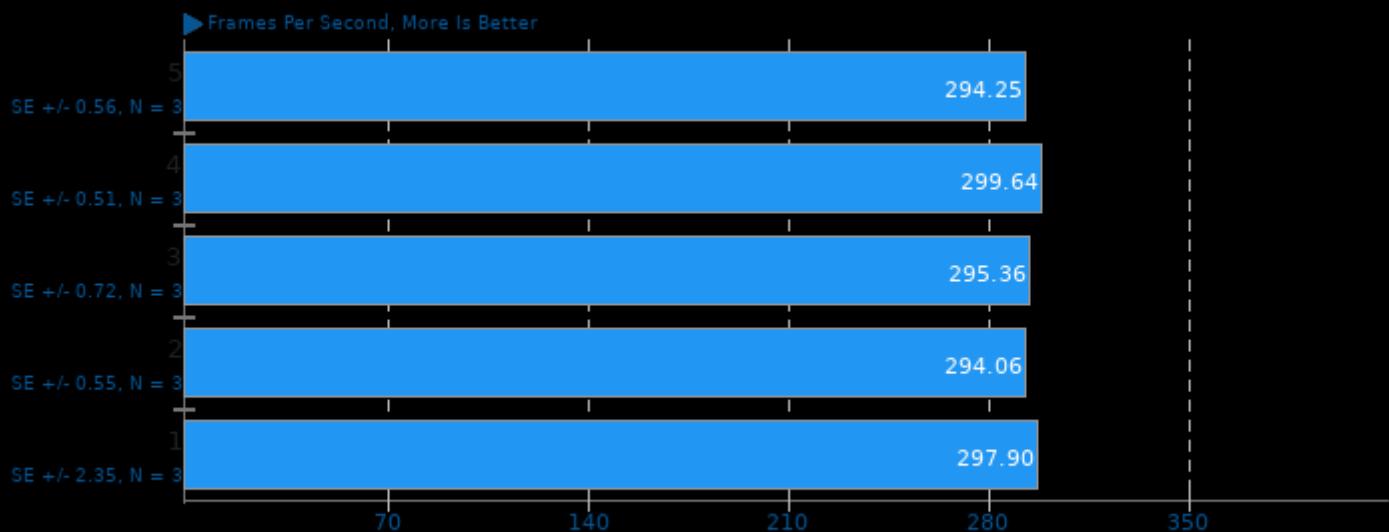
	1	2	3	4	5
<b>DDraceNetwork - 1920 x 1080 -</b>	297.90	<b>294.06</b>	295.36	<b>299.64</b>	294.25
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - Multeasymap (FPS)</b>					
Normalized	99.42%	98.14%	98.57%	100%	98.2%
Standard Deviation	1.4%	0.3%	0.4%	0.3%	0.3%
<b>Xonotic - 3840 x 2160 - Ultra</b>	345.9108736	<b>346.7563631</b>	344.1518027	<b>342.4798279</b>	342.9932407
Normalized	99.76%	100%	99.25%	98.77%	98.91%
Standard Deviation	0.2%	0.2%	0.3%	0.5%	0.7%
<b>Xonotic - 3840 x 2160 - Ultimate</b>	<b>274.9678360</b>	274.4208516	273.5910159	273.3933281	<b>271.6694398</b>
(FPS)					
Normalized	100%	99.8%	99.5%	99.43%	98.8%
Standard Deviation	0.2%	0.4%	0.3%	0.9%	0.1%
<b>DDraceNetwork - 3840 x 2160 -</b>	<b>286.85</b>	<b>290.29</b>	288.55	289.97	290.16
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Zoomed out - Multeasymap</b>					
Normalized	98.81%	100%	99.4%	99.89%	99.96%
Standard Deviation	1.2%	0.4%	0.6%	1.2%	1.1%
<b>DDraceNetwork - 3840 x 2160 -</b>	<b>294.28</b>	295.28	295.90	295.63	<b>297.26</b>
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - Multeasymap (FPS)</b>					
Normalized	99%	99.33%	99.54%	99.45%	100%
Standard Deviation	0.9%	0.1%	0.5%	0.3%	0.9%

## DDNet Xonotic Thelio

<b>DDraceNetwork - 2560 x 1440 -</b>	<b>288.72</b>	288.68	<b>287.16</b>	<b>290.03</b>	288.67
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Zoomed out - Multeasymap</b>					
Normalized	99.55%	99.53%	99.01%	100%	99.53%
Standard Deviation	0.5%	0.3%	0.2%	0.8%	0.6%
<b>DDraceNetwork - 2560 x 1440 -</b>	<b>295.56</b>	<b>297.60</b>	<b>295.42</b>	296.00	295.91
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - Multeasymap (FPS)</b>					
Normalized	99.31%	100%	99.27%	99.46%	99.43%
Standard Deviation	1%	0.8%	0.3%	0.4%	0.5%
<b>DDraceNetwork - 1920 x 1080 -</b>	<b>2124</b>	2113	<b>2109</b>	2111	2113
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - RaiNyMore2 (FPS)</b>					
Normalized	100%	99.47%	99.29%	99.39%	99.48%
Standard Deviation	0.3%	0.3%	0.3%	0.3%	0.3%
<b>DDraceNetwork - 1920 x 1080 -</b>	<b>289.76</b>	287.89	288.43	288.34	<b>287.77</b>
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Zoomed out - Multeasymap</b>					
Normalized	100%	99.35%	99.54%	99.51%	99.31%
Standard Deviation	0.5%	0.9%	0.4%	0.3%	0.2%
<b>Xonotic - 3840 x 2160 - High</b>	<b>388.3566121</b>	386.7697000	386.8695013	387.7644734	<b>386.0754589</b>
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - RaiNyMore2 (FPS)</b>					
Normalized	100%	99.59%	99.62%	99.85%	99.41%
Standard Deviation	0.4%	0.5%	0.6%	0.6%	0.5%
<b>Xonotic - 3840 x 2160 - Low</b>	<b>534.6200874</b>	534.7567787	536.8551906	<b>537.7491047</b>	536.9248745
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - RaiNyMore2 (FPS)</b>					
Normalized	99.42%	99.44%	99.83%	100%	99.85%
Standard Deviation	0.4%	0.2%	0.2%	0.9%	0.2%
<b>DDraceNetwork - 2560 x 1440 -</b>	<b>1253</b>	1249	<b>1247</b>	1249	1251
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - RaiNyMore2 (FPS)</b>					
Normalized	100%	99.67%	99.53%	99.66%	99.8%
Standard Deviation	0.1%	0.1%	0.1%	0.1%	0%
<b>DDraceNetwork - 3840 x 2160 -</b>	<b>602.83</b>	601.41	<b>601.07</b>	602.18	602.30
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Default - RaiNyMore2 (FPS)</b>					
Normalized	100%	99.76%	99.71%	99.89%	99.91%
Standard Deviation	0%	0.1%	0.1%	0%	0.1%
<b>DDraceNetwork - 2560 x 1440 -</b>	<b>1451</b>	1451	1450	1449	<b>1448</b>
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Zoomed out - RaiNyMore2 (FPS)</b>					
Normalized	100%	99.96%	99.94%	99.84%	99.79%
Standard Deviation	0.1%	0.1%	0.1%	0.1%	0.1%
<b>DDraceNetwork - 1920 x 1080 -</b>	<b>2599</b>	2598	2599	2596	<b>2596</b>
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Zoomed out - RaiNyMore2 (FPS)</b>					
Normalized	100%	99.98%	99.99%	99.91%	99.89%
Standard Deviation	0.3%	0.2%	0.2%	0.3%	0.3%
<b>DDraceNetwork - 3840 x 2160 -</b>	697.96	698.06	698.29	<b>698.56</b>	<b>697.86</b>
<b>Fullscreen - OpenGL 3.3 -</b>					
<b>Zoomed out - RaiNyMore2 (FPS)</b>					
Normalized	99.91%	99.93%	99.96%	100%	99.9%
Standard Deviation	0.2%	0.1%	0.2%	0.1%	0.2%

## DDrakeNetwork 15.3.1

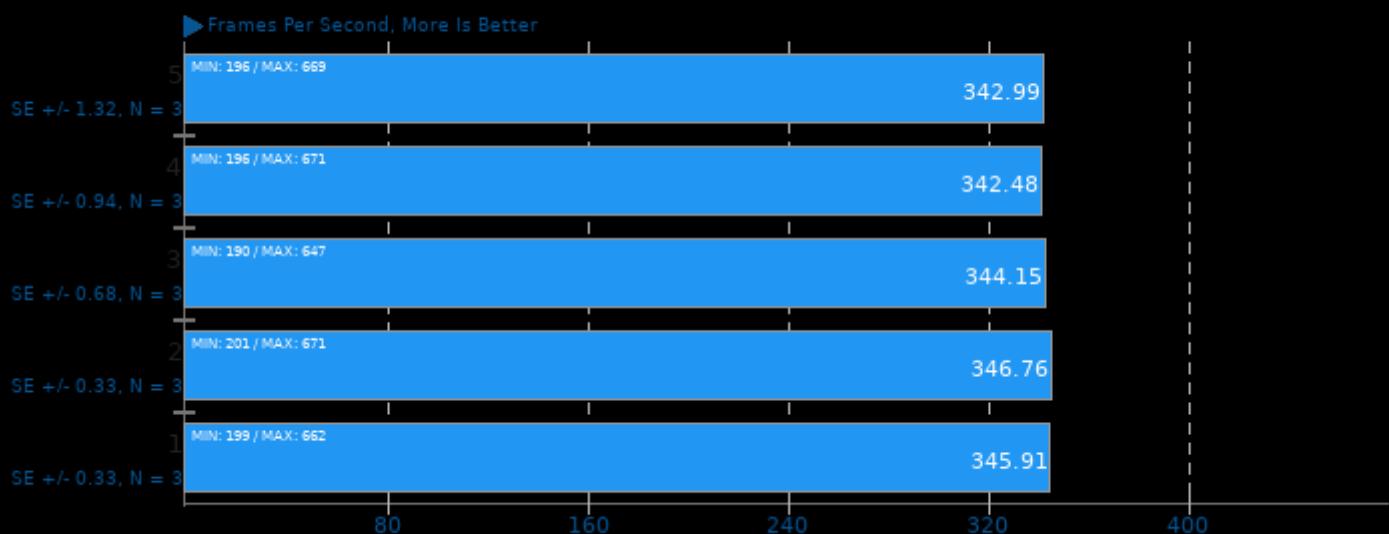
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

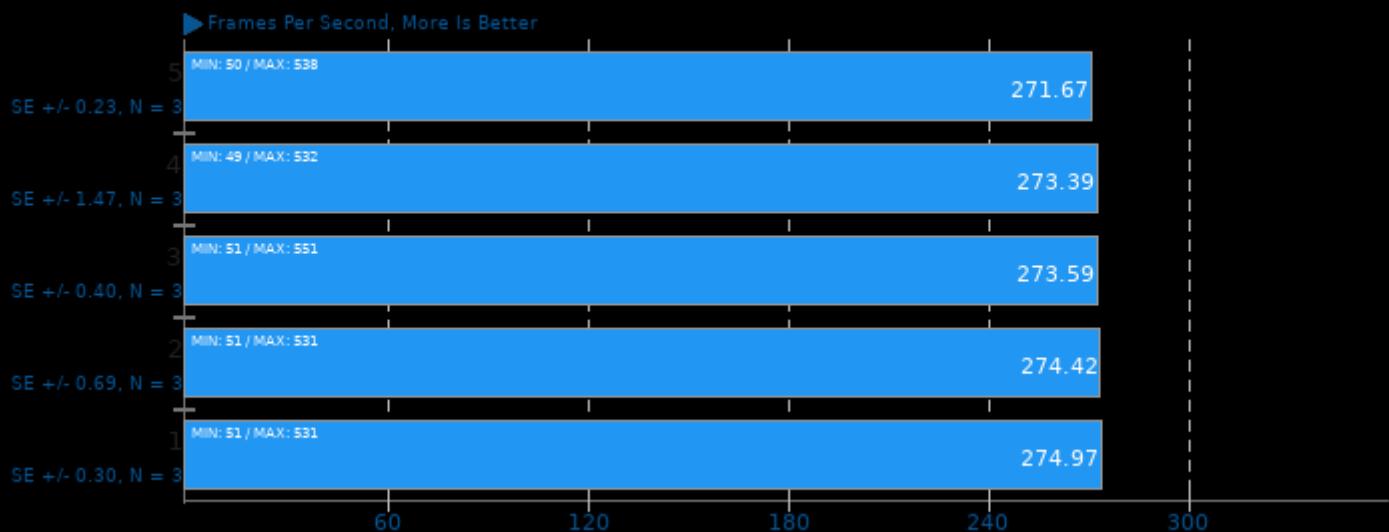
## Xonotic 0.8.2

Resolution: 3840 x 2160 - Effects Quality: Ultra



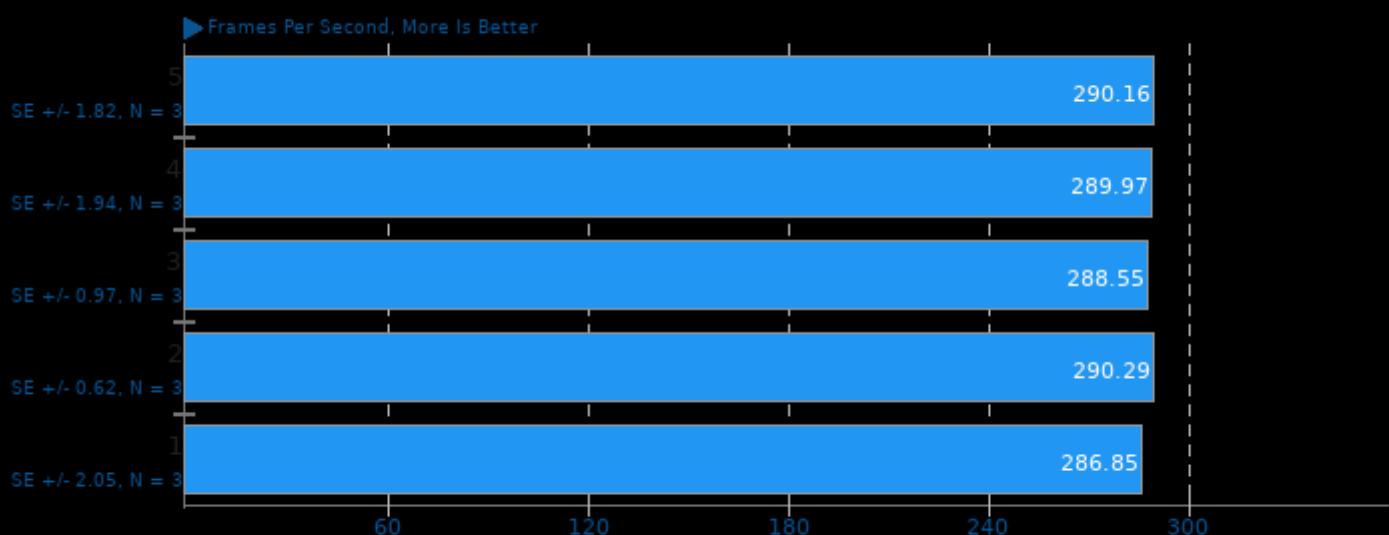
## Xonotic 0.8.2

Resolution: 3840 x 2160 - Effects Quality: Ultimate



## DDraceNetwork 15.3.1

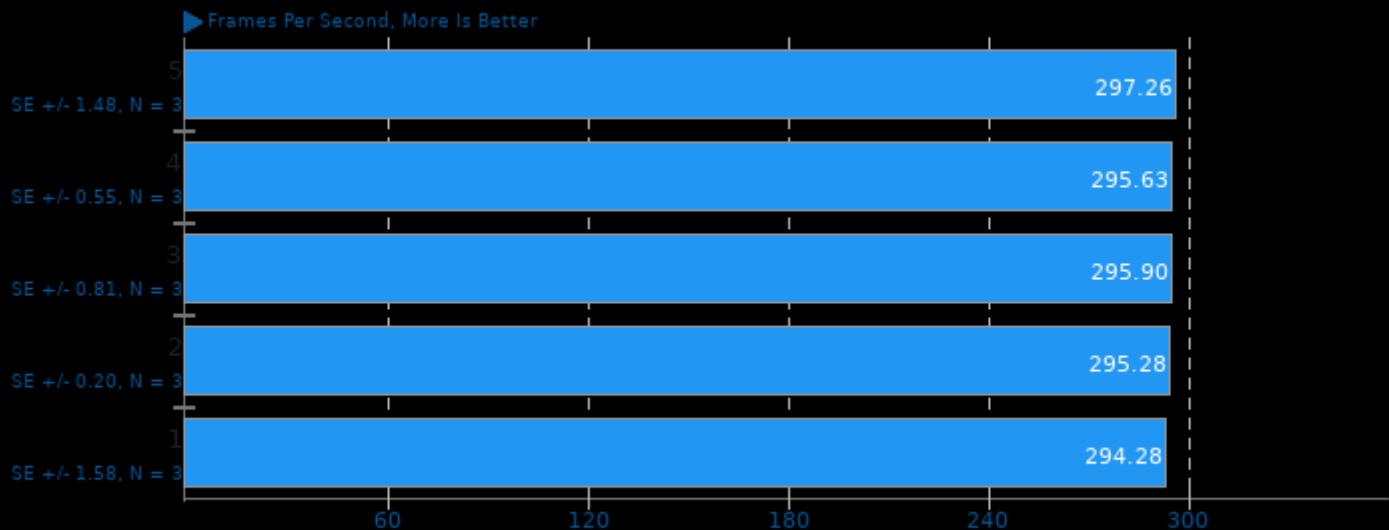
Resolution: 3840 x 2160 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: Multeasymap



1. (CXX) g++ options: -O3 -fPIE -fthreadsafe-statics -lgdk\_pixbuf-2.0 -lgio-2.0 -lobject-2.0 -lglib-2.0

## DDrakeNetwork 15.3.1

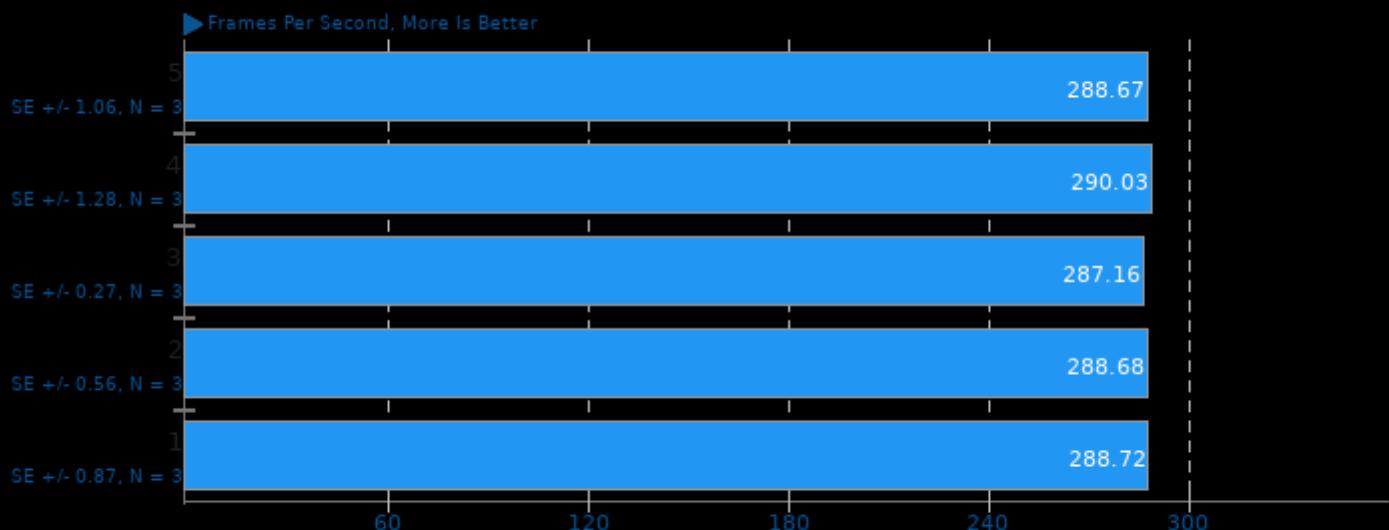
Resolution: 3840 x 2160 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

## DDrakeNetwork 15.3.1

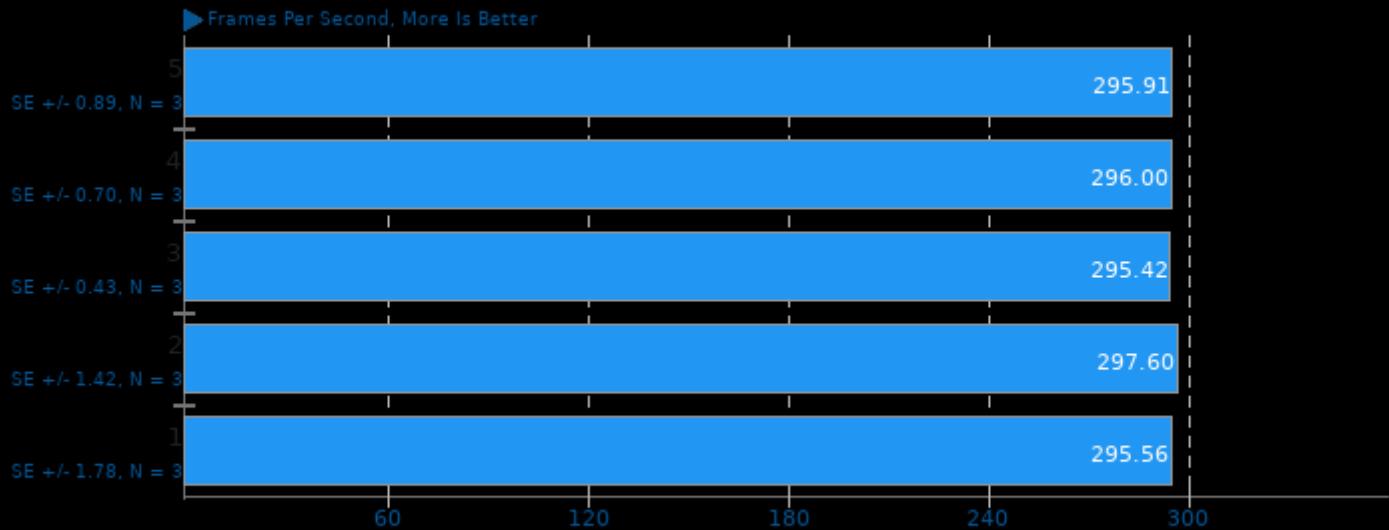
Resolution: 2560 x 1440 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: Multeasymap



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

## DDrakeNetwork 15.3.1

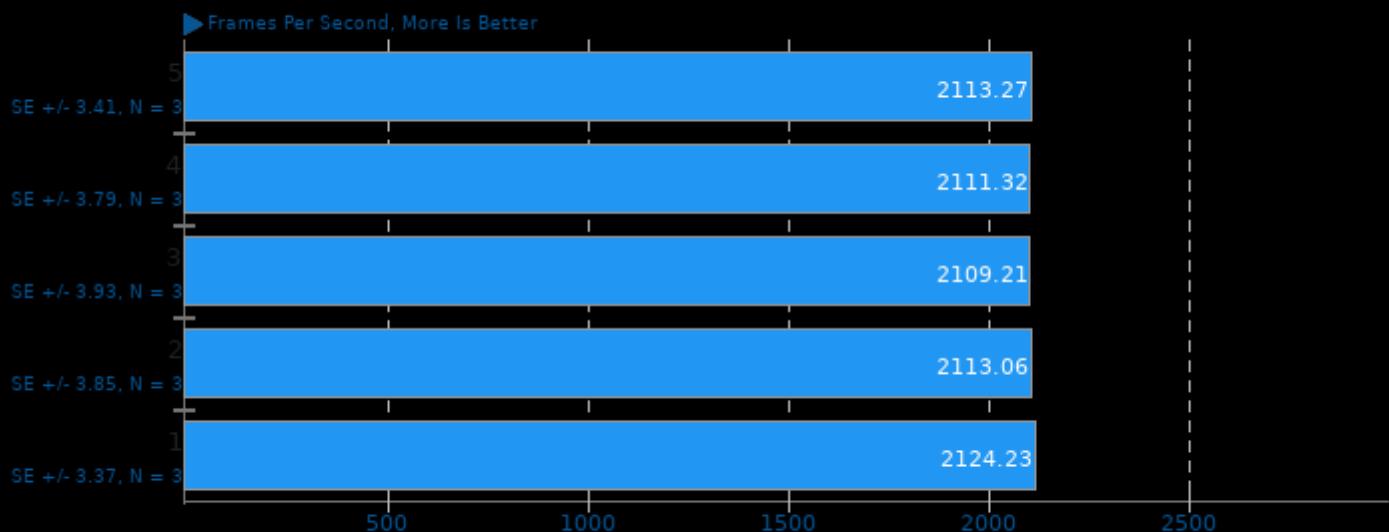
Resolution: 2560 x 1440 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

## DDrakeNetwork 15.3.1

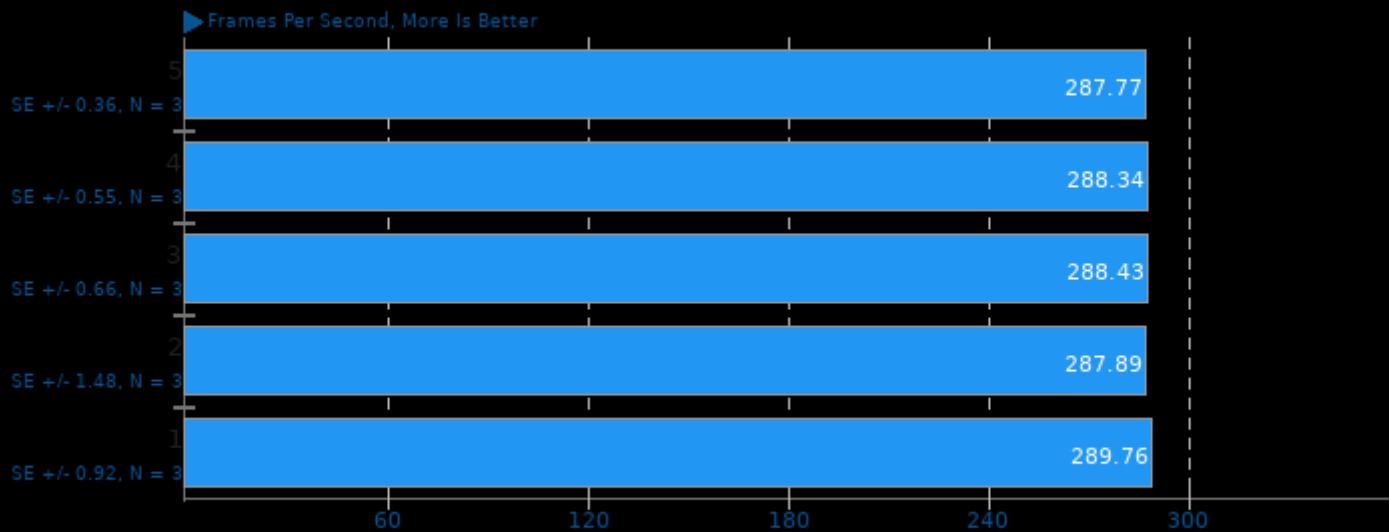
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

## DDrakeNetwork 15.3.1

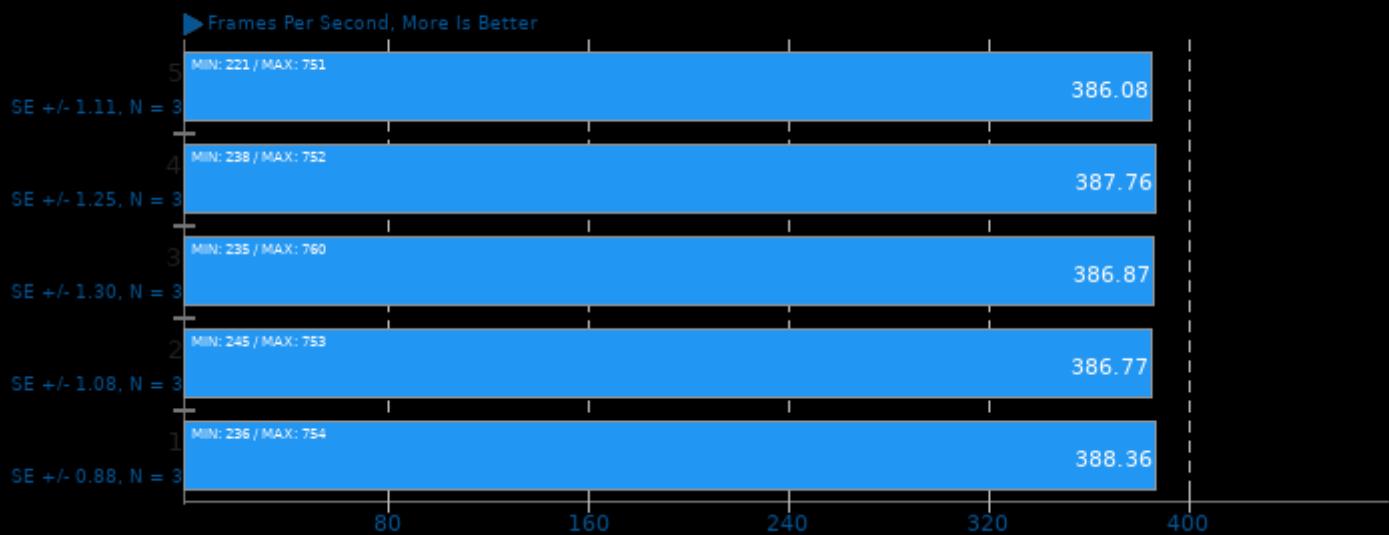
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: Multeasymap



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

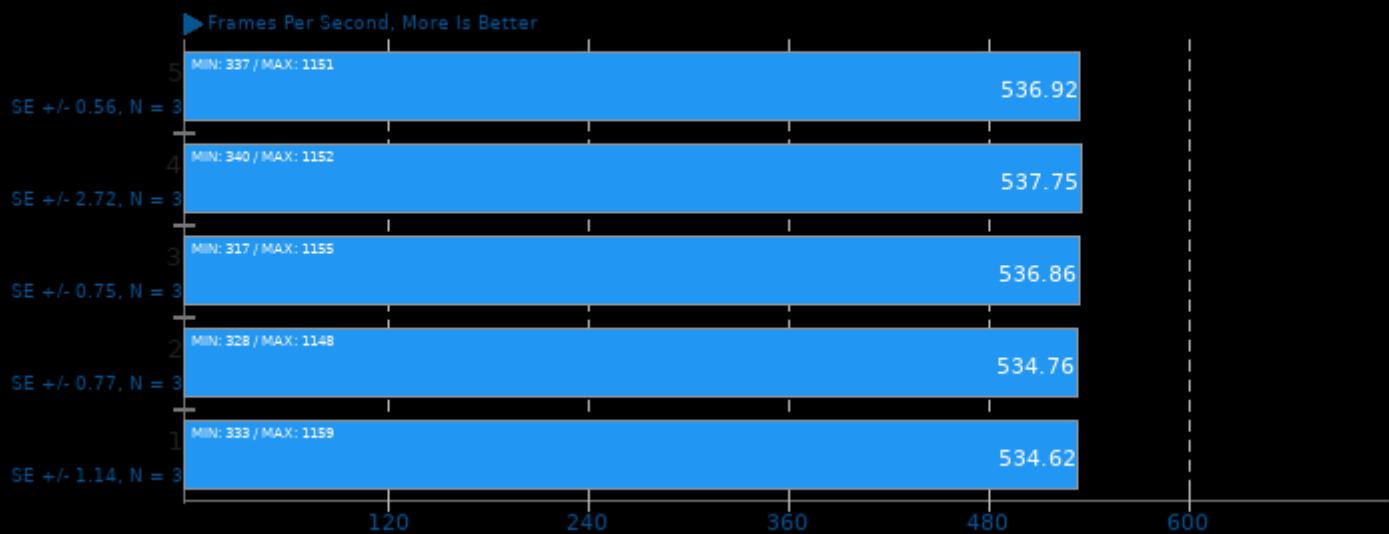
## Xonotic 0.8.2

Resolution: 3840 x 2160 - Effects Quality: High



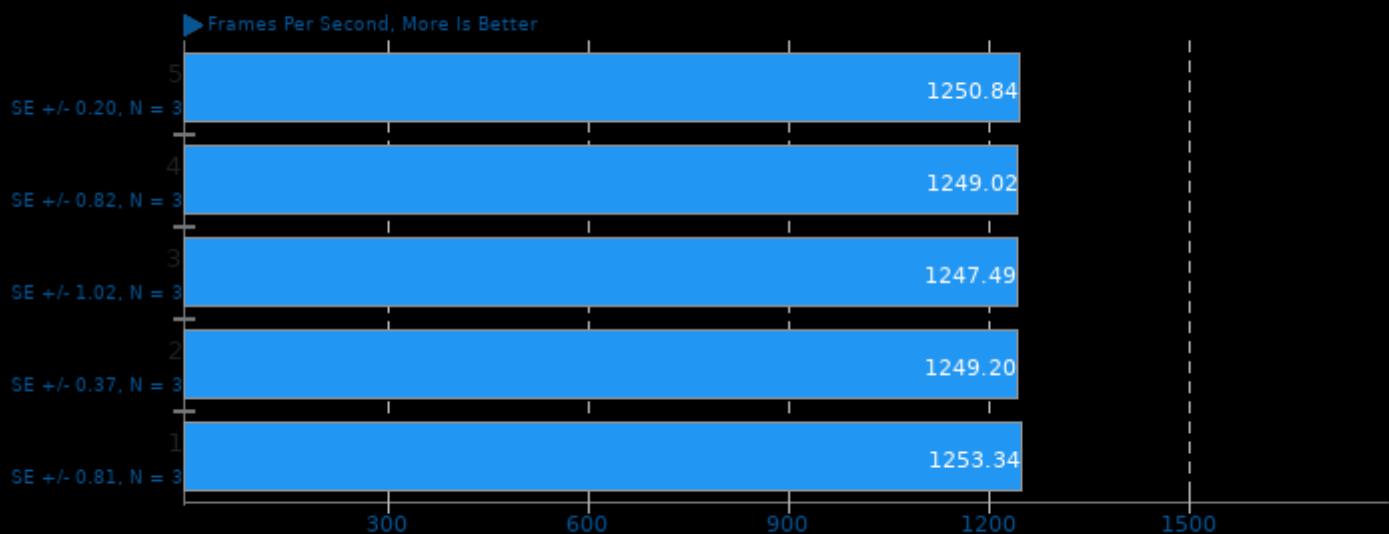
## Xonotic 0.8.2

Resolution: 3840 x 2160 - Effects Quality: Low



## DDrakeNetwork 15.3.1

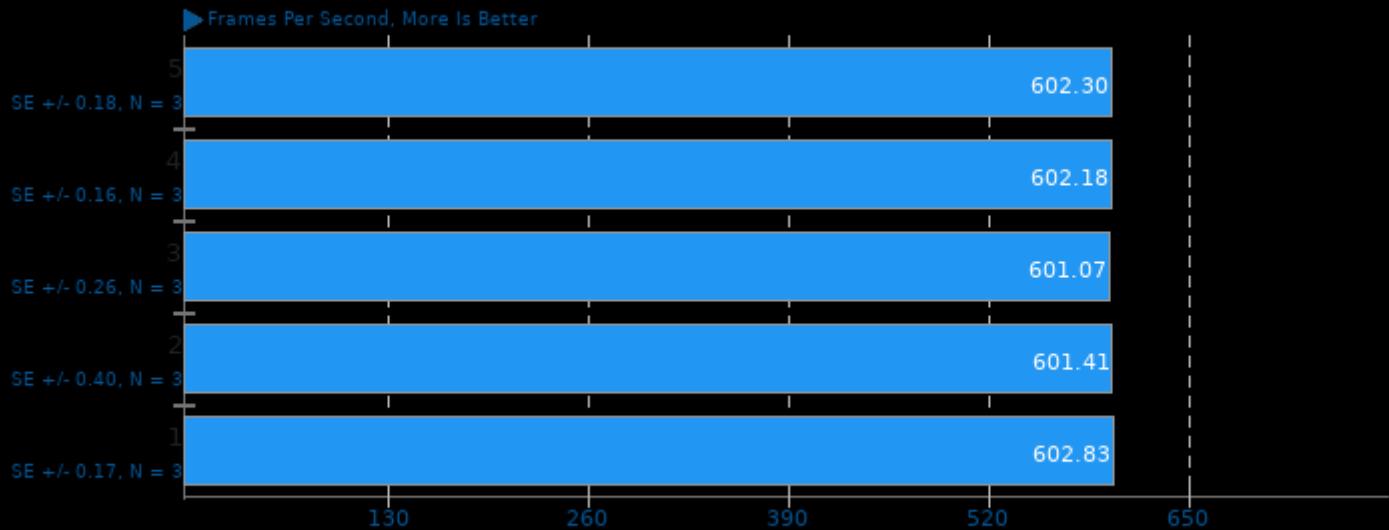
Resolution: 2560 x 1440 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -fPIE -fthreadsafe-runtime -fno-PIE -fno-threadsafe-runtime -lgdk\_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0

## DDrakeNetwork 15.3.1

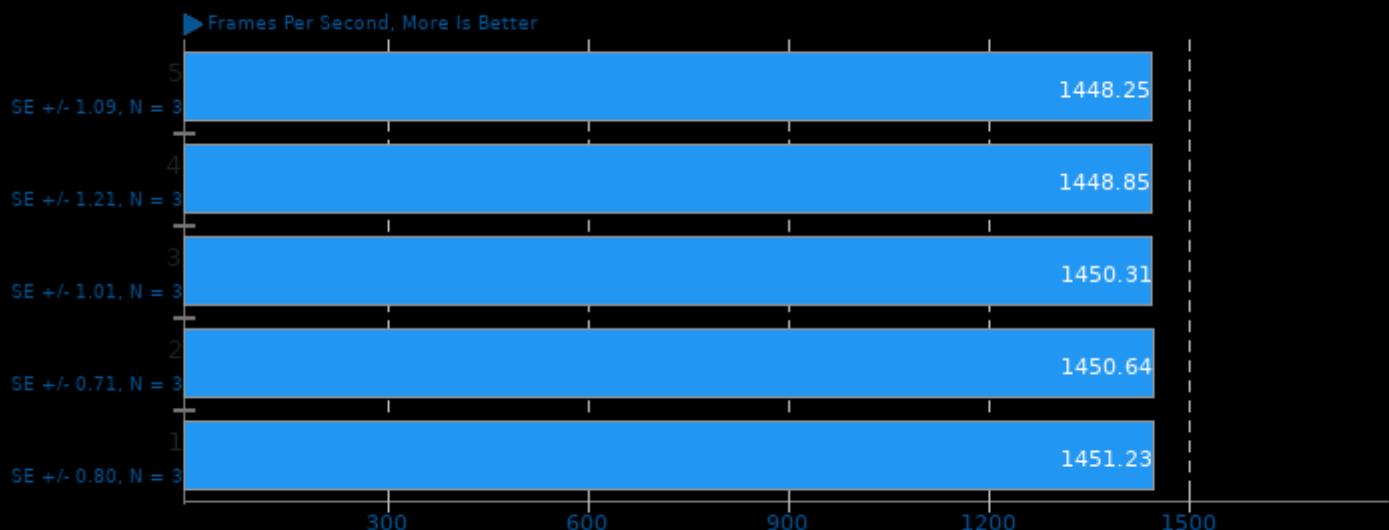
Resolution: 3840 x 2160 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

## DDrakeNetwork 15.3.1

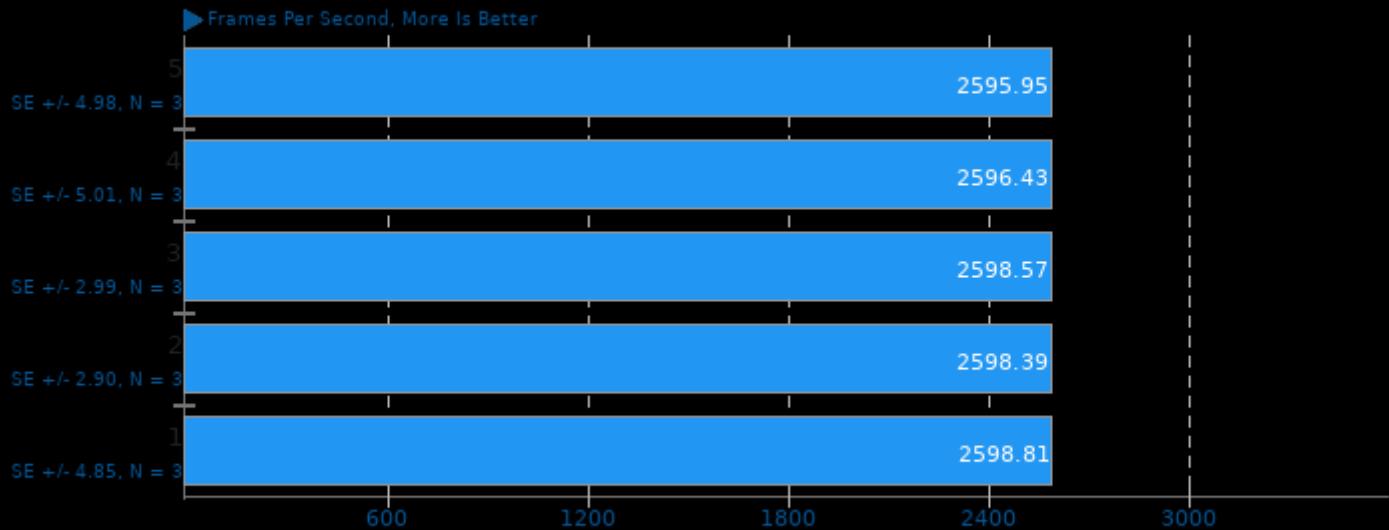
Resolution: 2560 x 1440 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

## DDrakeNetwork 15.3.1

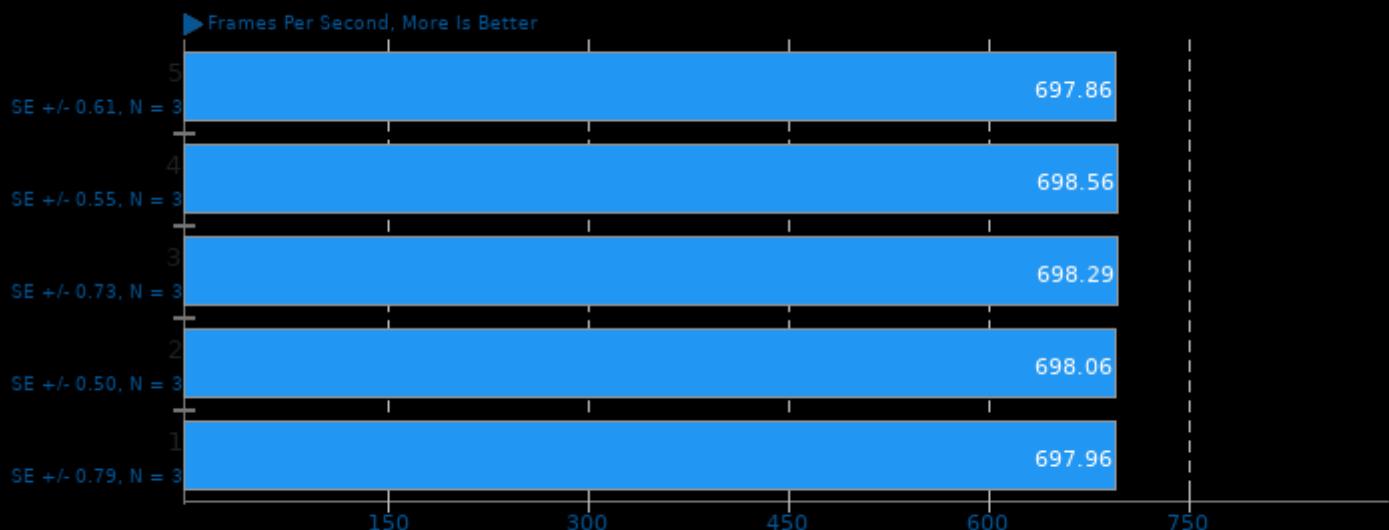
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

## DDrakeNetwork 15.3.1

Resolution: 3840 x 2160 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -lrt -pthread -lnotify -lgdk\_pixbuf-2.0 -gio-2.0 -gobject-2.0 -glib-2.0

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 07:18.*