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## Ryzen 7 3700X Clear Linux Assembler JCC Comp

AMD Ryzen 9 3900X 12-Core testing with a ASUS Pro WS X570-ACE (1104 BIOS) and Gigabyte AMD Radeon RX 5700 / XT 8GB on Debian unstable via the Phoronix Test Suite.

### Automated Executive Summary

*Debian unstable had the most wins, coming in first place for 55% of the tests.*

*Based on the geometric mean of all complete results, the fastest (Debian unstable) was 1.277x the speed of the slowest (Clear Linux 31480). Clear Linux 31470 was 0.786x the speed of Debian unstable and Clear Linux 31480 was 0.996x the speed of Clear Linux 31470.*

*The results with the greatest spread from best to worst included:*

*SQLite (Threads / Copies: 32) at 3.018x*

*Parboil (Test: OpenMP Stencil) at 2.952x*

*Rodinia (CPU Temperature Monitor) at 2.673x*

*GraphicsMagick (CPU Temperature Monitor) at 2.502x*

*Timed MrBayes Analysis (CPU Temperature Monitor) at 2.409x*

*GraphicsMagick (CPU Temperature Monitor) at 2.408x*

*Smallpt (CPU Temperature Monitor) at 2.383x*

*N-Queens (CPU Temperature Monitor) at 2.133x*

*NGINX Benchmark (CPU Temperature Monitor) at 2.05x*

*Apache Benchmark (CPU Temperature Monitor) at 2.036x.*

## Test Systems:

### Clear Linux 31470

Processor: AMD Ryzen 7 3700X 8-Core @ 3.60GHz (8 Cores / 16 Threads), Motherboard: MSI MEG X570 GODLIKE (MS-7C34) v1.0 (1.40 BIOS), Chipset: AMD Device 1480, Memory: 16384MB, Disk: Samsung SSD 970 EVO Plus 250GB + 32GB Flash Disk, Graphics: MSI AMD Radeon RX 470/480/570/570X/580/580X 8GB (1366/2000MHz), Audio: AMD Ellesmere, Monitor: ASUS VP28U, Network: Realtek Device 2600 + Realtek Device 3000 + Intel Device 2723

OS: Clear Linux OS 31470, Kernel: 5.3.8-854.native (x86\_64), Desktop: GNOME Shell 3.34.1, Display Server: X Server 1.20.5, Display Driver: modesetting 1.20.5, OpenGL: 4.5 Mesa 19.3.0-devel (LLVM 9.0.0), Vulkan: 1.1.107, Compiler: GCC 9.2.1 20191101 gcc-9-branch@277702 + Clang 9.0.0 + LLVM 9.0.0, File-System: ext4, Screen Resolution: 3840x2160

Environment Notes: CFLAGS="-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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -WI,-sort-common -WI,--enable-new-dtags" 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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -WI,--enable-new-dtags" CXFLAGS="-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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -WI,-sort-common -WI,--enable-new-dtags -mtune=skylake -fvisibility-inlines-hidden -WI,--enable-new-dtags" MESA\_GLSL\_CACHE\_DISABLE=0 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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -WI,-sort-common -WI,--enable-new-dtags -mtune=skylake" THEANO\_FLAGS="floatX=float32,openmp=true,gcc.cxxflags="-freetrue-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=haswell

Disk Notes: MQ-DEADLINE / relatime,rw

Processor Notes: Scaling Governor: acpi-cpufreq performance - CPU Microcode: 0x8701013

Python Notes: Python 3.7.5

Security Notes: 11f: Not affected + mds: Not affected + meltdown: Not affected + spec\_store\_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre\_v1: Mitigation of usercopy/swaps barriers and \_\_user pointer sanitization + spectre\_v2: Mitigation of Full AMD retpoline IBPB: conditional STIBP: always-on RSB filling

### Clear Linux 31480

Processor: AMD Ryzen 7 3700X 8-Core @ 3.60GHz (8 Cores / 16 Threads), Motherboard: MSI MEG X570 GODLIKE (MS-7C34) v1.0 (1.40 BIOS), Chipset: AMD Device 1480, Memory: 16384MB, Disk: Samsung SSD 970 EVO Plus 250GB + 32GB Flash Disk, Graphics: MSI AMD Radeon RX 470/480/570/570X/580/580X 8GB (1366/2000MHz), Audio: AMD Ellesmere, Monitor: ASUS VP28U, Network: Realtek Device 2600 + Realtek Device 3000 + Intel Device 2723

OS: Clear Linux OS 31480, Kernel: 5.3.8-854.native (x86\_64), Desktop: GNOME Shell 3.34.1, Display Server: X Server 1.20.5, Display Driver: modesetting 1.20.5, OpenGL: 4.5 Mesa 19.3.0-devel (LLVM 9.0.0), Vulkan: 1.1.107, Compiler: GCC 9.2.1 20191103 gcc-9-branch@277748 + Clang 9.0.0 + LLVM 9.0.0, File-System: ext4, Screen Resolution: 3840x2160

Environment Notes: CFLAGS="-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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -WI,-sort-common -WI,--enable-new-dtags" 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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -WI,--enable-new-dtags" CXFLAGS="-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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -WI,-sort-common -WI,--enable-new-dtags -mtune=skylake -fvisibility-inlines-hidden -WI,--enable-new-dtags" MESA\_GLSL\_CACHE\_DISABLE=0 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 -ffree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -WI,-sort-common -WI,--enable-new-dtags -mtune=skylake" THEANO\_FLAGS="floatX=float32,openmp=true,gcc.cxxflags="-freetrue-vectorize -mavx"

```
-ftree-loop-distribute-patterns -WI,-z -WI,now -WI,-z -WI,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -WI,--enable-new-dtags"
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 -WI,-z -WI,now -WI,-z -WI,relro -fno-semantic-interposition
-fflat-lto-objects -fno-trapping-math -WI,-sort-common -WI,--enable-new-dtags -mtune=skylake -fvisibility-inlines-hidden -WI,--enable-new-dtags"
MESA_GLSL_CACHE_DISABLE=0 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 -WI,-z -WI,now -WI,-z
-WI,relro -fno-semantic-interposition -fflat-lto-objects -fno-trapping-math -WI,-sort-common -WI,--enable-new-dtags -mtune=skylake"
THEANO_FLAGS="floatX=float32,openmp=true,gcc.cxxflags=-fno-semantic-interposition -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=haswell
Disk Notes: MQ-DEADLINE / relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq performance - CPU Microcode: 0x8701013
Python Notes: Python 3.7.5
Security Notes: 11tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1:
Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional STIBP: always-on RSB filling
```

## Debian unstable

Processor: AMD Ryzen 9 3900X 12-Core @ 3.80GHz (12 Cores / 24 Threads), Motherboard: ASUS Pro WS X570-ACE (1104 BIOS), Chipset: AMD Starship/Matisse, Memory: 64GB, Disk: Samsung SSD 960 EVO 250GB + 1000GB PCIe SSD + 128GB SAMSUNG SSD 830 + 120GB OCZ ARC100 + 525GB Crucial\_CT525MX3, Graphics: Gigabyte AMD Radeon RX 5700 / XT 8GB (2100/875MHz), Audio: AMD Navi 10 HDMI Audio, Monitor: VS248, Network: Intel I211

OS: Debian unstable, Kernel: 5.4.0-rc7-csm (x86\_64) 20191114, Desktop: Xfce 4.14, Display Server: X Server 1.20.4, OpenGL: 4.5 Mesa 19.2.3 (LLVM 9.0.0), Vulkan: 1.1.107, Compiler: GCC 9.2.1 20191109 + LLVM 10.0.0, File-System: ext4, Screen Resolution: 1920x1080

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Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrapping --enable-checking=release --enable-clocale-gnu --enable-default-pie
--enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,objc+++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch
--enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none,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
Disk Notes: NONE / errors=remount-ro,noatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
Python Notes: Python 2.7.17 + Python 3.7.5
Security Notes: 11tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1:
Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled
```

	Clear Linux 31470	Clear Linux 31480	Debian unstable
<b>SQLite - 1 (sec)</b>	<b>33.992</b>	33.906	<b>31.65</b>
Normalized	93.11%	93.35%	100%
Standard Deviation	0.3%	0.2%	0.5%
<b>SQLite - 8 (sec)</b>	<b>125</b>	129	<b>139</b>
Normalized	100%	96.9%	89.93%
Standard Deviation	1.5%	1.3%	8.5%
<b>SQLite - 32 (sec)</b>	<b>227</b>	229	<b>685</b>
Normalized	100%	99.13%	33.14%
Standard Deviation	0.5%	0.2%	1.1%
<b>IOR - Write Test (MB/s)</b>	<b>313.01</b>	<b>319.00</b>	
Normalized	98.12%	100%	
Standard Deviation	0.8%	1.6%	
<b>IOR - Read Test (MB/s)</b>	<b>1484</b>	<b>1491</b>	
Normalized	99.5%	100%	
Standard Deviation	1.6%	1.8%	

<b>NAS Parallel Benchmarks - BT.C (Mop/s)</b>	<b>18742</b>	<b>18706</b>	
Normalized	100%	99.81%	
Standard Deviation	0.1%	0.2%	
<b>NAS Parallel Benchmarks - CG.C (Mop/s)</b>	<b>5490</b>	<b>5460</b>	
Normalized	100%	99.46%	
Standard Deviation	0%	0.9%	
<b>NAS Parallel Benchmarks - EP.C (Mop/s)</b>	<b>540.13</b>	<b>538.34</b>	
Normalized	100%	99.67%	
Standard Deviation	0.3%	0%	
<b>NAS Parallel Benchmarks - EP.D (Mop/s)</b>	<b>538.27</b>	<b>539.07</b>	
Normalized	99.85%	100%	
Standard Deviation	0.4%	0.2%	
<b>NAS Parallel Benchmarks - FT.C (Mop/s)</b>	<b>12089</b>	<b>12048</b>	
Normalized	100%	99.66%	
Standard Deviation	1.3%	1.4%	
<b>NAS Parallel Benchmarks - LU.C (Mop/s)</b>	<b>23978</b>	<b>23950</b>	
Normalized	100%	99.89%	
Standard Deviation	0%	0%	
<b>NAS Parallel Benchmarks - MG.C (Mop/s)</b>	<b>12179</b>	<b>12167</b>	
Normalized	100%	99.91%	
Standard Deviation	0.3%	0.3%	
<b>NAS Parallel Benchmarks - SP.B (Mop/s)</b>	<b>5814</b>	<b>5670</b>	
Normalized	100%	97.54%	
Standard Deviation	2.1%	1.5%	
<b>Parboil - OpenMP CUTCP (sec)</b>	2.420594	<b>2.436665</b>	<b>2.03</b>
Normalized	83.86%	83.31%	100%
Standard Deviation	2%	2%	0.8%
<b>Parboil - OpenMP Stencil (sec)</b>	26.143194	<b>26.422717</b>	<b>8.95</b>
Normalized	34.23%	33.87%	100%
Standard Deviation	2.8%	0%	1.1%
<b>Parboil - O.M.G (sec)</b>	28.209876	<b>26.576752</b>	<b>32.73</b>
Normalized	94.21%	100%	81.2%
Standard Deviation	0.1%	0.8%	0.3%
<b>miniFE - Small (CG Mflops)</b>	<b>3952</b>	<b>3952</b>	
Normalized	99.98%	100%	
Standard Deviation	0%	0%	
<b>Rodinia - OpenMP LavaMD (sec)</b>	29.419	<b>29.437</b>	<b>19.19</b>
Normalized	65.23%	65.19%	100%
Standard Deviation	0.2%	0.1%	0.7%
<b>Rodinia - OpenMP CFD Solver (sec)</b>	<b>21.803</b>	21.779	<b>12.82</b>
Normalized	58.8%	58.86%	100%
Standard Deviation	0.8%	1%	0.4%
<b>Rodinia - O.S (sec)</b>	28.137	<b>28.140</b>	<b>19.24</b>
Normalized	68.38%	68.37%	100%
Standard Deviation	0.1%	0%	0.2%
<b>Timed MrBayes Analysis - P.P.A (sec)</b>	69.750	<b>70.303</b>	<b>66.76</b>
Normalized	95.71%	94.96%	100%
Standard Deviation	0.1%	0.4%	0.2%
<b>QMCPACK (Execution Time - sec)</b>	<b>500.84</b>	<b>500.75</b>	
Normalized	99.98%	100%	
<b>GraphicsMagick - Swirl (Iterations/min)</b>	583	<b>582</b>	<b>842</b>
Normalized	69.24%	69.12%	100%
Standard Deviation	0.8%	0.9%	0.4%
<b>GraphicsMagick - Rotate (Iterations/min)</b>	<b>838</b>	830	<b>791</b>
Normalized	100%	99.05%	94.39%

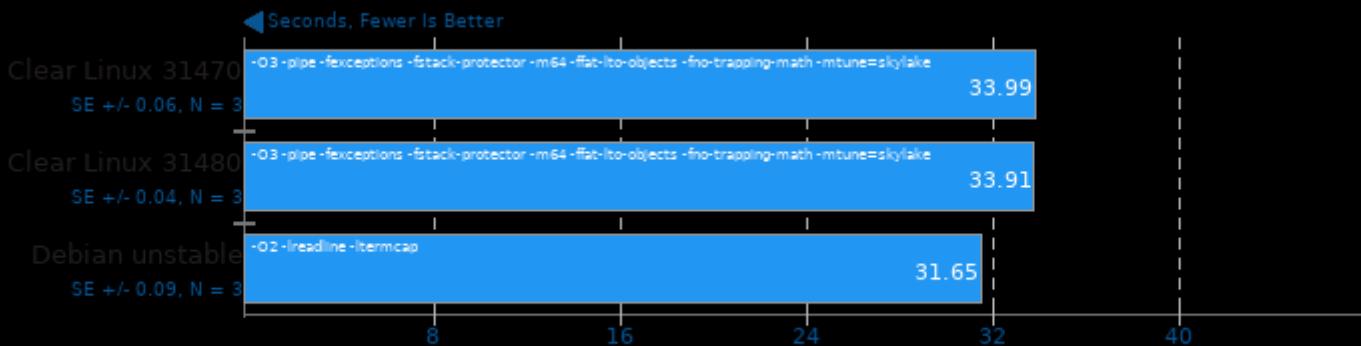
	Standard Deviation	0.5%	0.2%	0.7%
<b>GraphicsMagick - Sharpen (Iterations/min)</b>	133	133	203	
	Normalized	65.52%	65.52%	100%
	Standard Deviation			0.3%
<b>GraphicsMagick - Enhanced (Iterations/min)</b>	209	209	312	
	Normalized	66.99%	66.99%	100%
<b>GraphicsMagick - Resizing (Iterations/min)</b>	1129	1120	1555	
	Normalized	72.6%	72.03%	100%
	Standard Deviation	0.1%		0.2%
<b>GraphicsMagick - Noise-Gaussian (Iterations/min)</b>	270	268	389	
	Normalized	69.41%	68.89%	100%
	Standard Deviation		0.2%	0.1%
<b>GraphicsMagick - HWB Color Space (Iterations/min)</b>	1553	1497	1532	
	Normalized	100%	96.39%	98.65%
	Standard Deviation	0.4%	0.8%	0.4%
<b>SVT-VP9 - VMAF Optimized - Bosphorus 1080p (FPS)</b>	158	159	240	
	Normalized	65.83%	66.25%	100%
	Standard Deviation	1.5%	1.8%	0.3%
<b>SVT-VP9 - P.S.O - Bosphorus 1080p (FPS)</b>	167	167	248	
	Normalized	67.34%	67.34%	100%
	Standard Deviation	0.2%	0.1%	0.4%
<b>SVT-VP9 - V.Q.O - Bosphorus 1080p (FPS)</b>	135	135	207	
	Normalized	65.22%	65.22%	100%
	Standard Deviation	0.2%	0.3%	0.2%
<b>ACES DGEMM - S.F.P.R (GFLOP/s)</b>	1.176922	1.141712	4.57	
	Normalized	25.75%	24.98%	100%
	Standard Deviation	10%	6.9%	1.1%
<b>Smallpt - G.I.R.1.S (sec)</b>	9.854	9.903	6.77	
	Normalized	68.7%	68.36%	100%
	Standard Deviation	0.1%	0.3%	0.2%
<b>FLAC Audio Encoding - WAV To FLAC (sec)</b>	7.335	7.349	7.55	
	Normalized	100%	99.81%	97.15%
	Standard Deviation	0.2%	0.2%	0.6%
<b>LAME MP3 Encoding - WAV To MP3 (sec)</b>	7.209	7.141	6.98	
	Normalized	96.82%	97.75%	100%
	Standard Deviation	0.4%	0.1%	1.1%
<b>N-Queens - Elapsed Time (sec)</b>	13.324	13.554	8.86	
	Normalized	66.5%	65.37%	100%
	Standard Deviation	0.3%	0.3%	0%
<b>OpenSSL - R.4.b.P (Signs/sec)</b>	2371	2368	3655	
	Normalized	64.87%	64.79%	100%
	Standard Deviation	0.2%	0.2%	0.1%
<b>ASKAP - tConvolve MT - Gridding (Million Grid Points/sec)</b>	894	902	1329	
	Normalized	67.27%	67.87%	100%
	Standard Deviation	0%	0.1%	0.5%
<b>ASKAP - tConvolve MT - Degridding (Million Grid Points/sec)</b>	1656	1649	1971	
	Normalized	84.02%	83.66%	100%
	Standard Deviation	0.2%	0.1%	0.5%

<b>ASKAP - tConvolve MPI - Gridding (Million Grid Points/sec)</b>	<b>916.413</b>	<b>916.150</b>
Normalized	100%	99.97%
Standard Deviation	0%	0%
<b>ASKAP - tConvolve MPI - Degridding (Million Grid Points/sec)</b>	<b>1655</b>	<b>1655</b>
Normalized	100%	99.97%
Standard Deviation	0.1%	0.1%
<b>ASKAP - tConvolve OpenMP - Gridding (Million Grid Points/sec)</b>	<b>1216</b>	<b>1199</b>
Normalized	53.24%	52.5%
Standard Deviation	0%	2.8%
<b>ASKAP - tConvolve OpenMP - Degridding (Million Grid Points/sec)</b>	<b>1982</b>	<b>2225</b>
Normalized	89.08%	88.99%
Standard Deviation	0.4%	0.4%
<b>libjpeg-turbo tbench - D.T (Megapixels/sec)</b>	<b>217</b>	<b>214</b>
Normalized	97.31%	95.96%
Standard Deviation	0%	0.1%
<b>GROMACS - Water Benchmark (Ns/Day)</b>	<b>0.796</b>	<b>0.796</b>
Standard Deviation	0.1%	0.1%
<b>SQLite Speedtest - Timed Time - Size 1,000 (sec)</b>	<b>55.319</b>	<b>52.06</b>
Normalized	94.11%	93.75%
Standard Deviation	0.2%	0.7%
<b>Redis - LPOP (Req/s)</b>	<b>2752533</b>	<b>2717969</b>
Normalized	86.77%	85.68%
Standard Deviation	1.1%	1.8%
<b>Redis - SADD (Req/s)</b>	<b>2150743</b>	<b>2141465</b>
Normalized	89.55%	89.16%
Standard Deviation	1.2%	1%
<b>Redis - LPUSH (Req/s)</b>	<b>1740597</b>	<b>1724244</b>
Normalized	95.22%	94.33%
Standard Deviation	2%	1%
<b>Redis - GET (Req/s)</b>	<b>2634016</b>	<b>2678907</b>
Normalized	88.9%	90.42%
Standard Deviation	0.9%	1.4%
<b>Redis - SET (Req/s)</b>	<b>1939345</b>	<b>1938769</b>
Normalized	85.72%	85.7%
Standard Deviation	0.9%	2.5%
<b>Facebook RocksDB - Rand Fill (Op/s)</b>	<b>1017552</b>	<b>1015791</b>
Normalized	100%	99.83%
Standard Deviation	0.5%	0.6%
<b>Facebook RocksDB - Rand Read (Op/s)</b>	<b>44612645</b>	<b>44227724</b>
Normalized	100%	99.14%
Standard Deviation	2.4%	0.5%
<b>Facebook RocksDB - Seq Fill (Op/s)</b>	<b>1278382</b>	<b>1265400</b>
Normalized	100%	98.98%
Standard Deviation	1.6%	1.4%
<b>Facebook RocksDB - Rand Fill Sync (Op/s)</b>	<b>1162141</b>	<b>1139109</b>
Normalized	100%	98.02%
Standard Deviation	0.5%	0.9%
<b>Facebook RocksDB - Read While Writing</b>	<b>1997484</b>	<b>1986462</b>
Normalized	100%	99.45%

	Standard Deviation	1.4%	0.8%	
<b>NGINX Benchmark - S.W.P.S (Reqs/sec)</b>	<b>49303</b>		<b>49512</b>	<b>63525</b>
	Normalized	77.61%	77.94%	100%
	Standard Deviation	0.2%	0.1%	0.8%
<b>Apache Benchmark - S.W.P.S (Reqs/sec)</b>	<b>40206</b>		<b>40127</b>	<b>49683</b>
	Normalized	80.93%	80.77%	100%
	Standard Deviation	0.3%	0.7%	0.3%

## SQLite 3.30.1

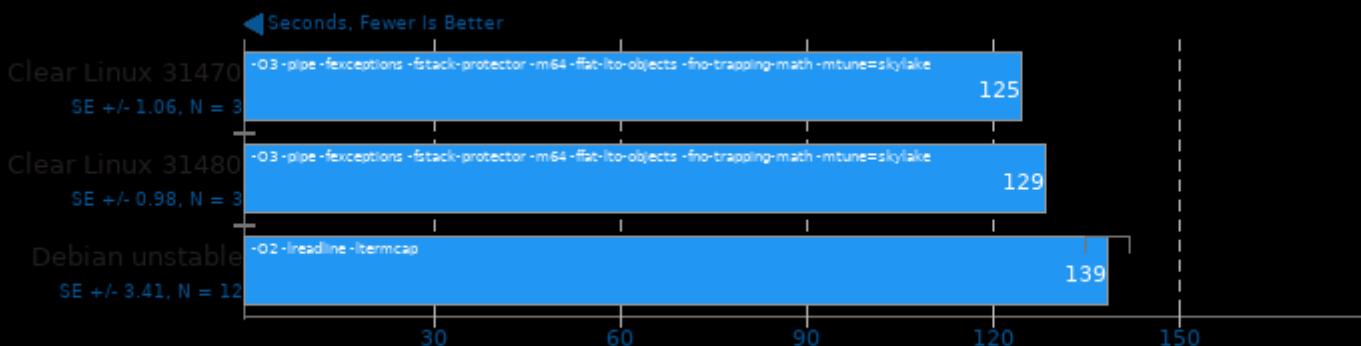
Threads / Copies: 1



1. (CC) gcc options: -Iz -Im -ldl -lpthread

## SQLite 3.30.1

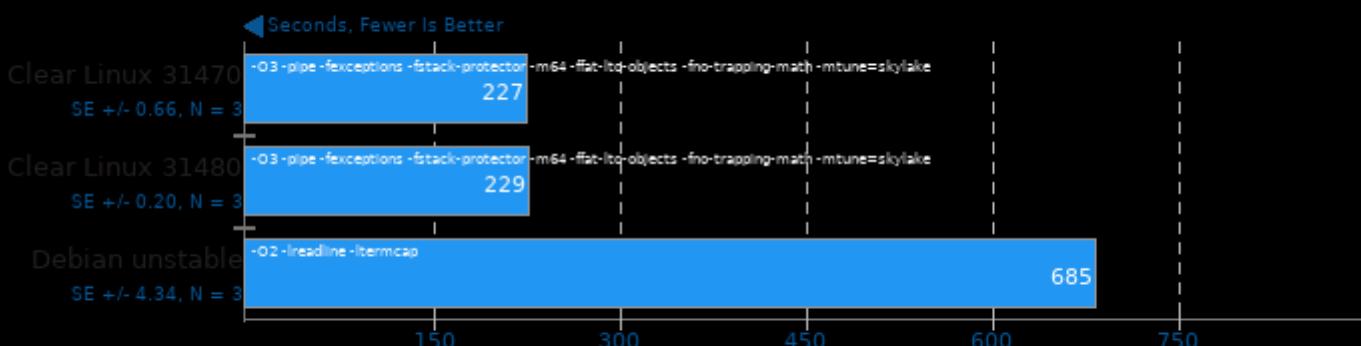
Threads / Copies: 8



1. (CC) gcc options: -Iz -Im -ldl -lpthread

## SQLite 3.30.1

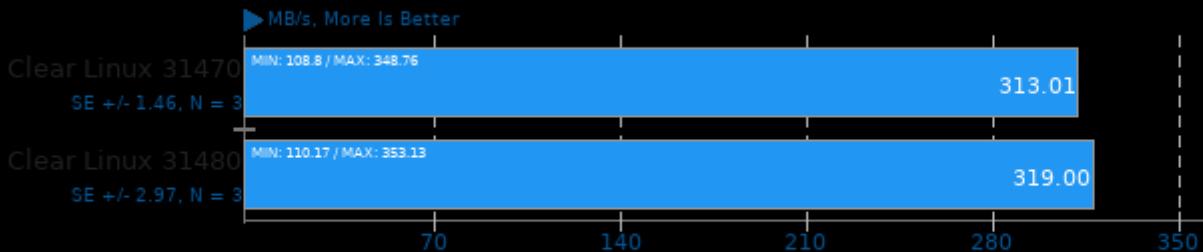
Threads / Copies: 32



1. (CC) gcc options: -Iz -Im -ldl -lpthread

## IOR 3.2.1

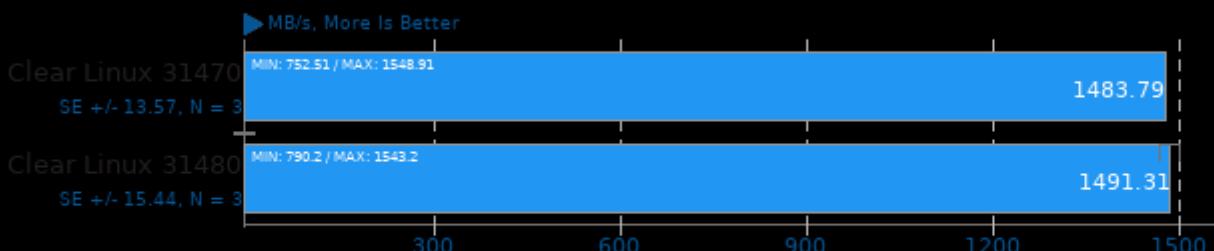
Write Test



1. (CC) gcc options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -lm -lmpi

## IOR 3.2.1

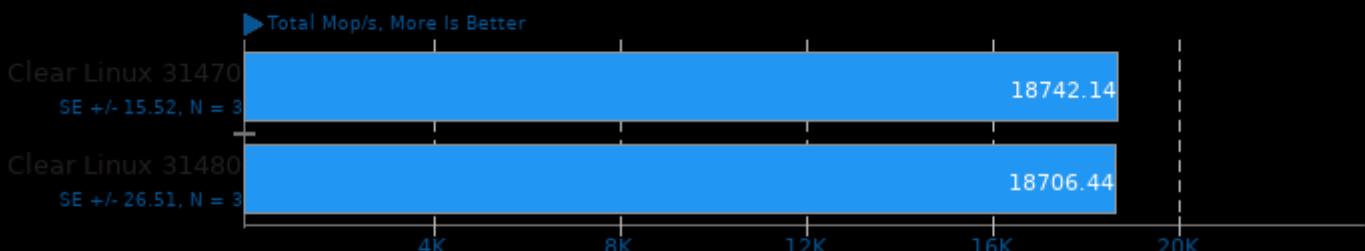
Read Test



1. (CC) gcc options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -lm -lmpi

## NAS Parallel Benchmarks 3.4

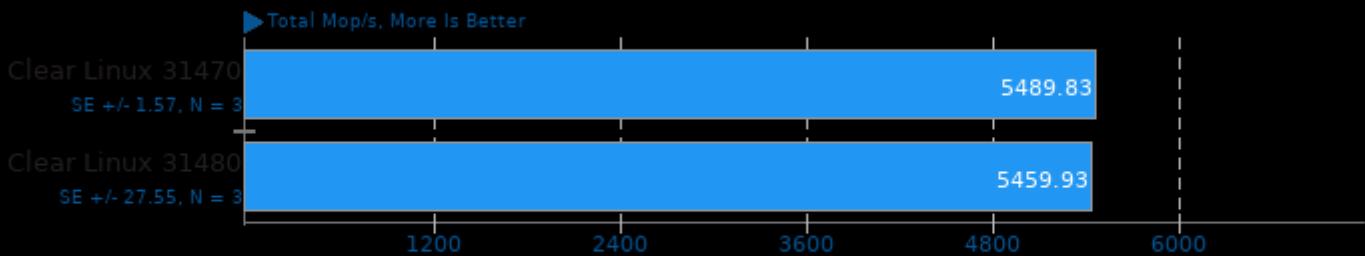
Test / Class: BT.C



1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm  
2. 3.2

## NAS Parallel Benchmarks 3.4

Test / Class: CG.C

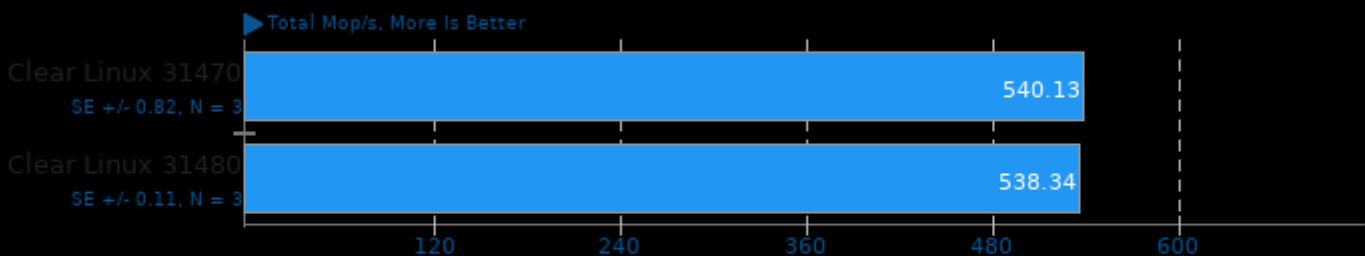


1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm

2. 3.2

## NAS Parallel Benchmarks 3.4

Test / Class: EP.C

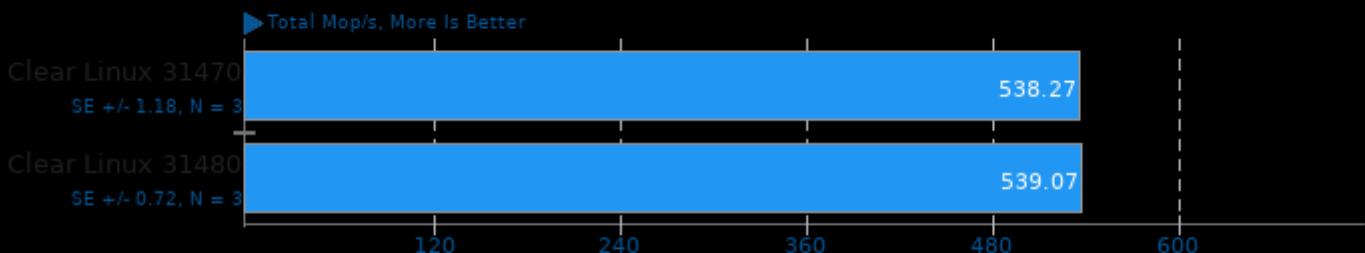


1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm

2. 3.2

## NAS Parallel Benchmarks 3.4

Test / Class: EP.D

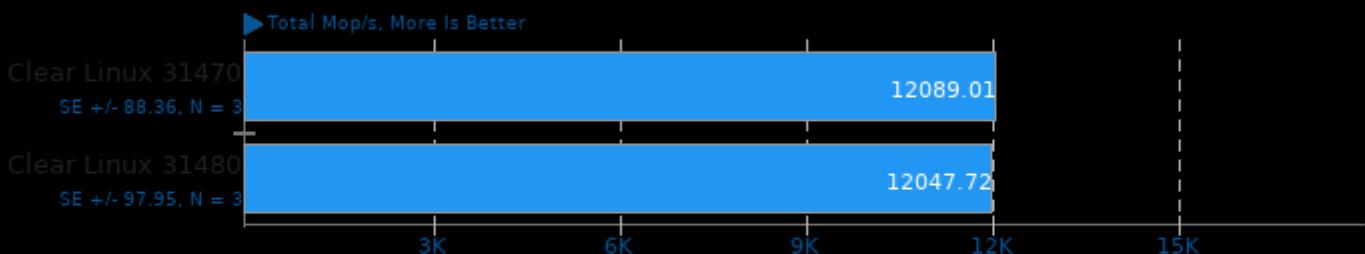


1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm

2. 3.2

## NAS Parallel Benchmarks 3.4

Test / Class: FT.C

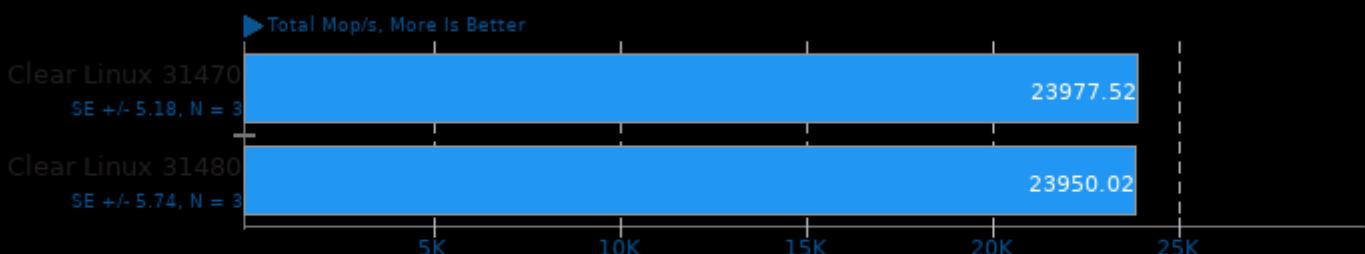


1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm

2. 3.2

## NAS Parallel Benchmarks 3.4

Test / Class: LU.C

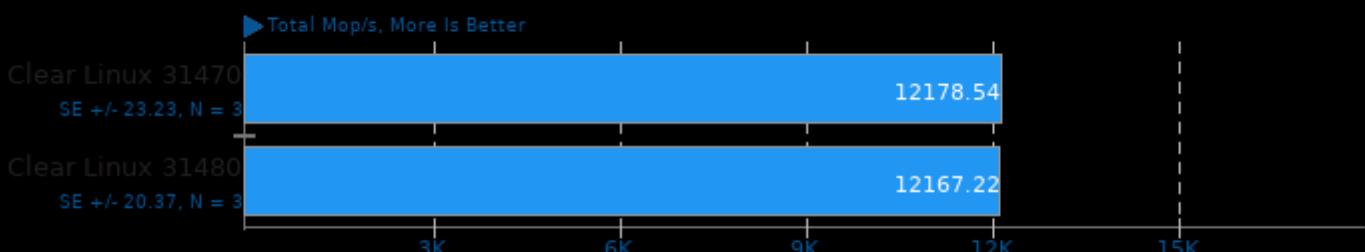


1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm

2. 3.2

## NAS Parallel Benchmarks 3.4

Test / Class: MG.C

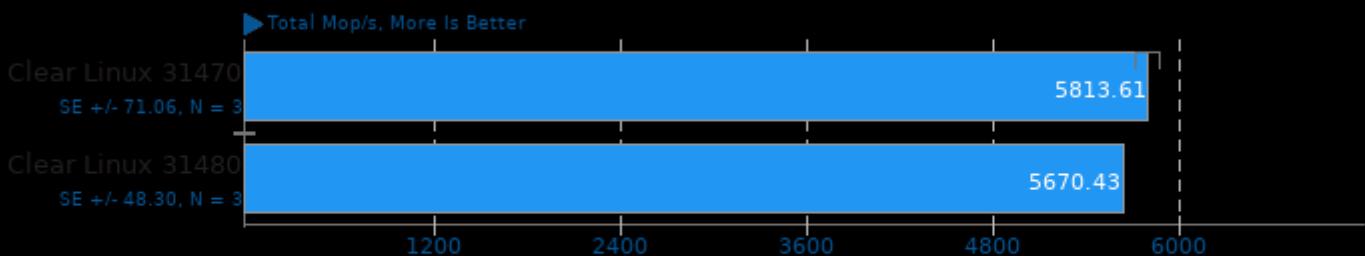


1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm

2. 3.2

## NAS Parallel Benchmarks 3.4

Test / Class: SP.B

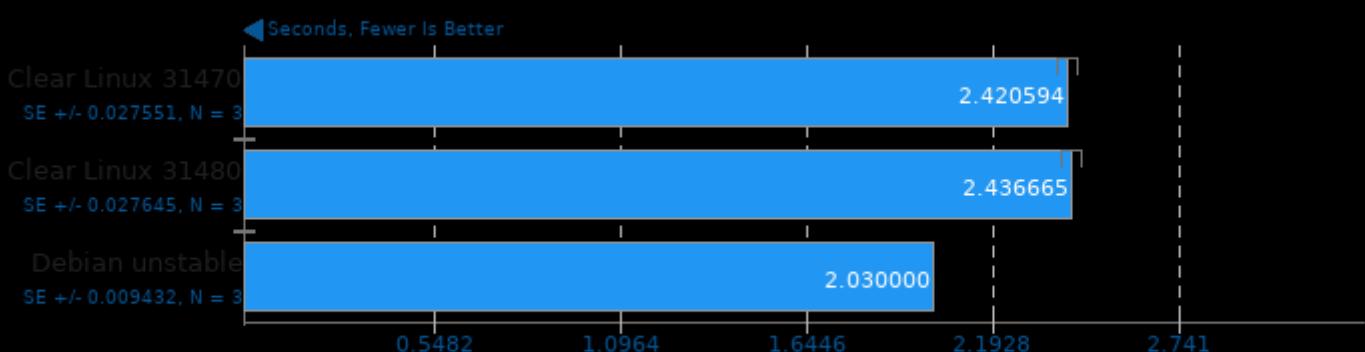


1. (F9X) gfortran options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -march=native -pthread -lm

2. 3.2

## Parboil 2.5

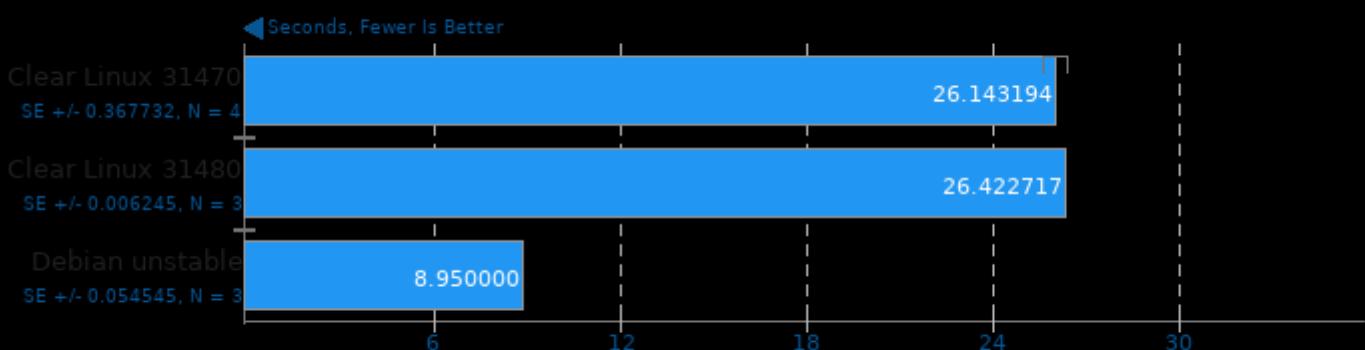
Test: OpenMP CUTCP



1. (CXX) g++ options: -lm -lpthread -lgomp -O3 -ffast-math -fopenmp

## Parboil 2.5

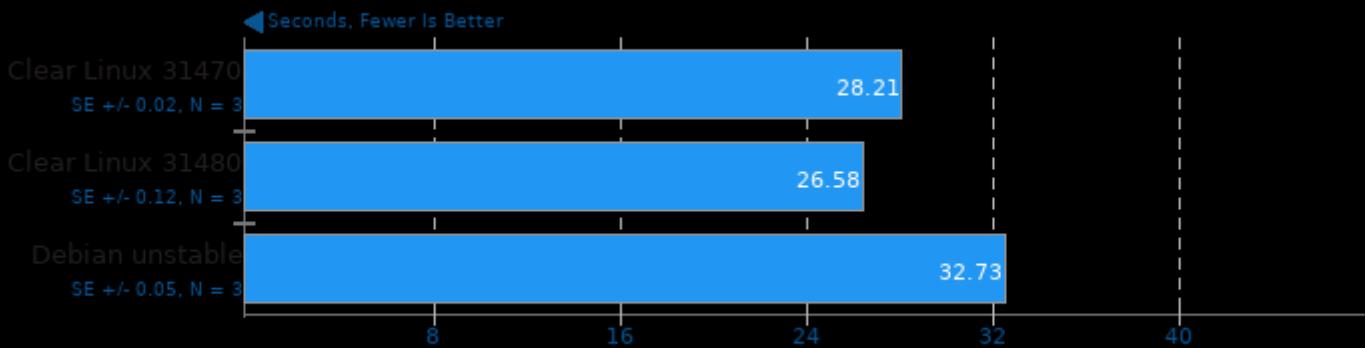
Test: OpenMP Stencil



1. (CXX) g++ options: -lm -lpthread -lgomp -O3 -ffast-math -fopenmp

## Parboil 2.5

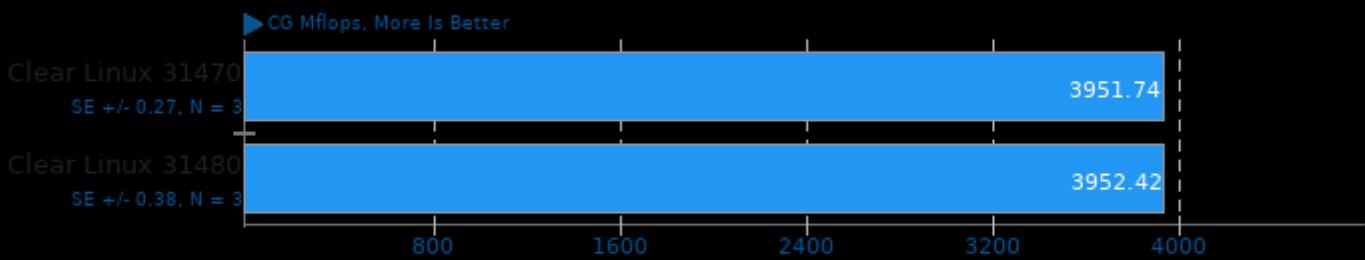
Test: OpenMP MRI Gridding



1. (CXX) g++ options: -lm -lpthread -lgomp -O3 -fast-math -fopenmp

## miniFE 2.2

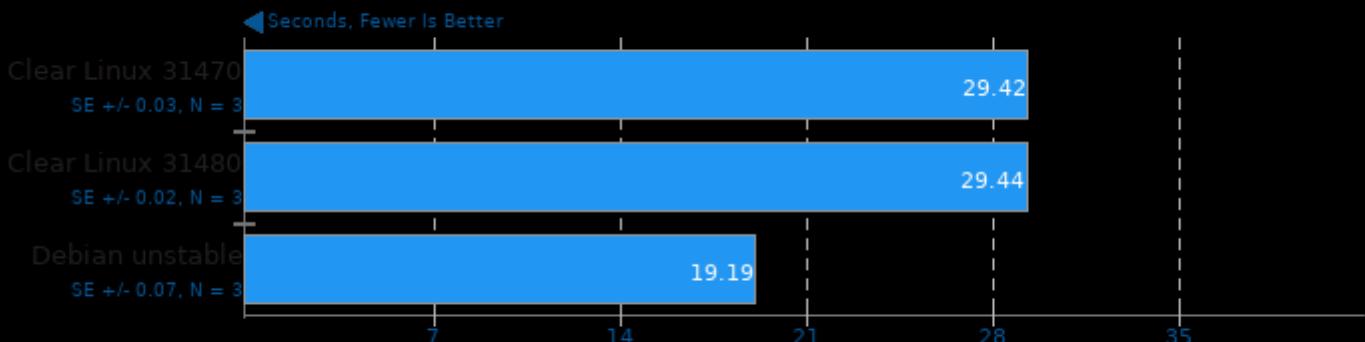
Problem Size: Small



1. (CXX) g++ options: -march=native -O3 -fopenmp -pthread -lmpi

## Rodinia 2.4

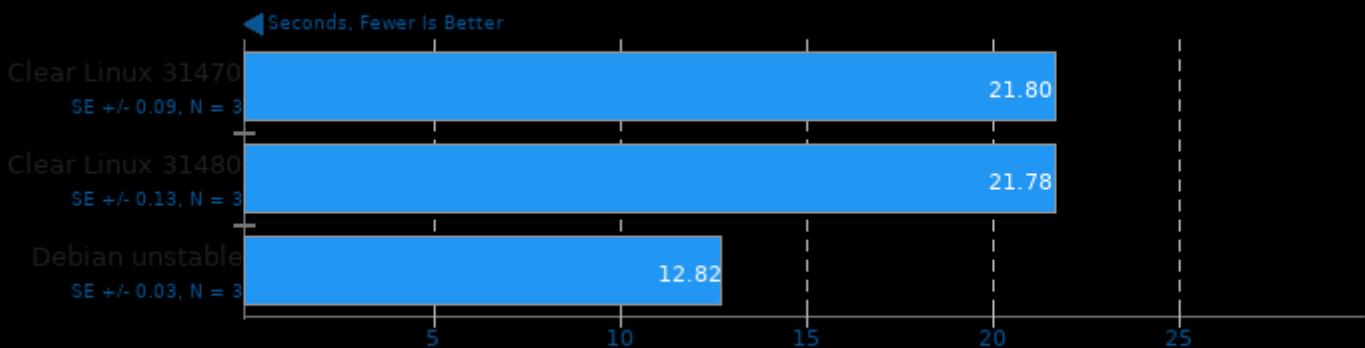
Test: OpenMP LavaMD



1. (CXX) g++ options: -O2 -fOpenCL

## Rodinia 2.4

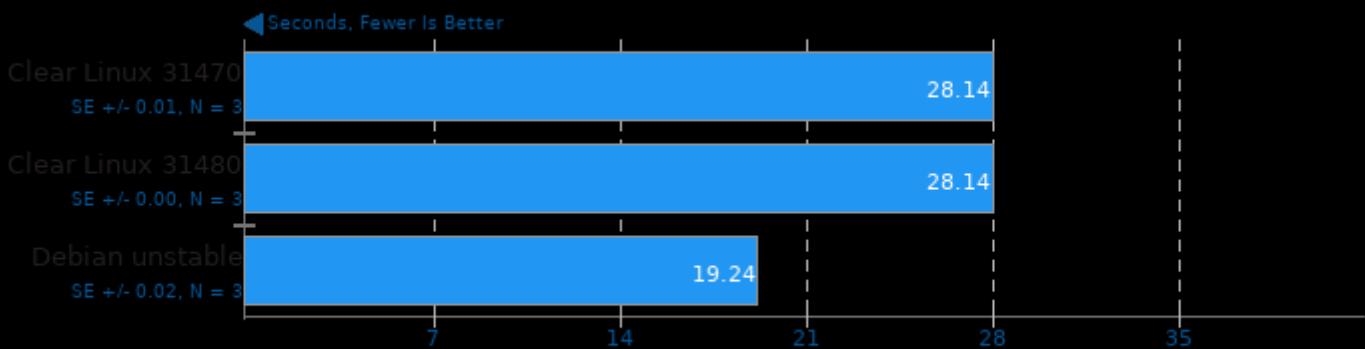
Test: OpenMP CFD Solver



1. (CXX) g++ options: -O2 -fOpenCL

## Rodinia 2.4

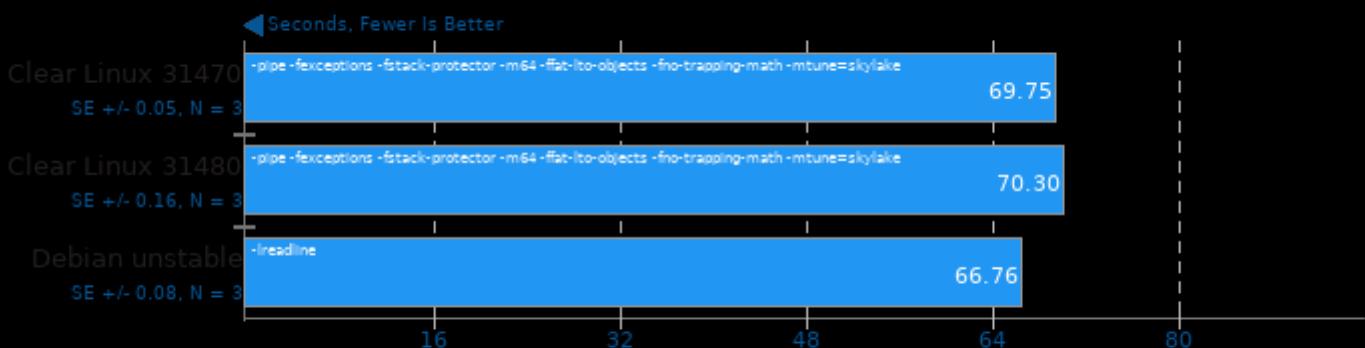
Test: OpenMP Streamcluster



1. (CXX) g++ options: -O2 -fOpenCL

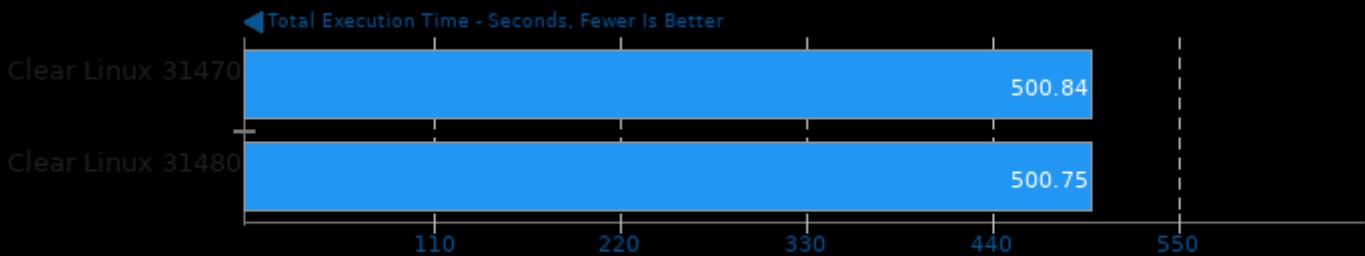
## Timed MrBayes Analysis 3.2.7

Primate Phylogeny Analysis

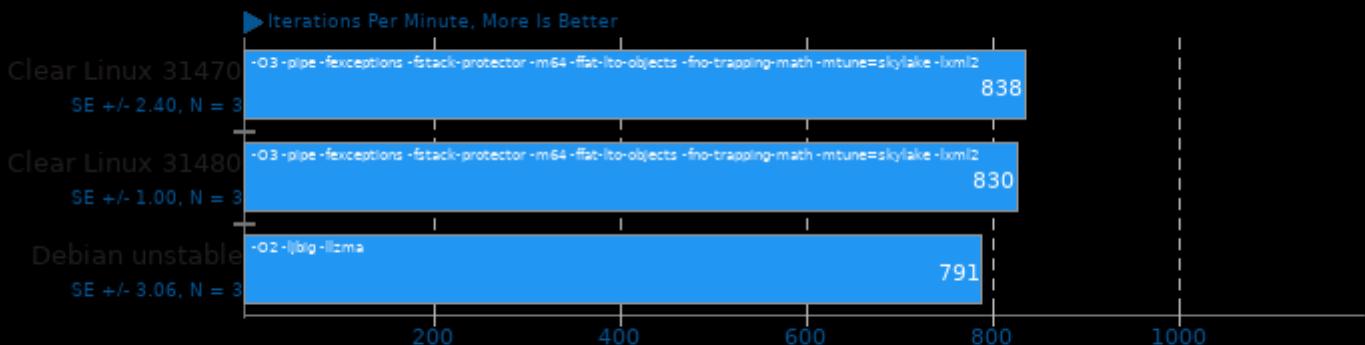
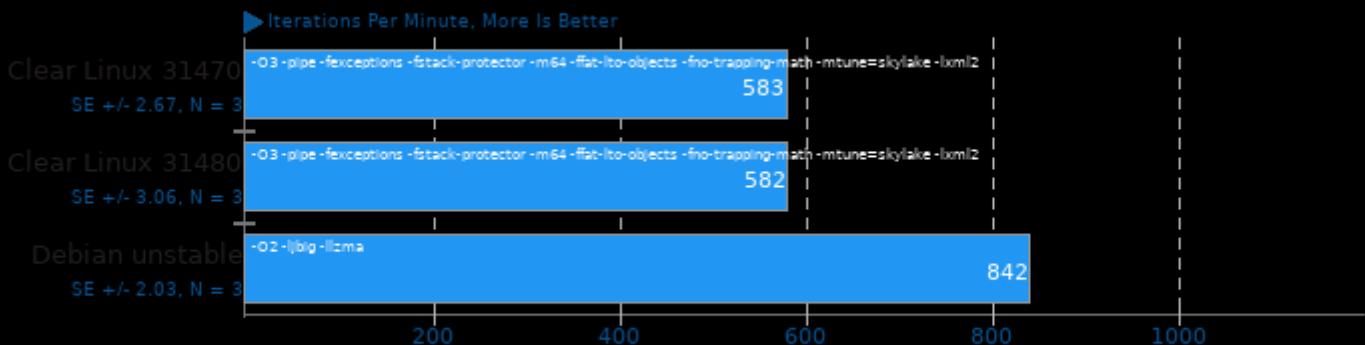


1. (CC) gcc options: -mmpmx -msse -msse2 -msse3 -msse3 -msse4.1 -msse4.2 -msse4a -msha -maes -mavx -mfma -mavx2 -mrdrnd -mbmi -mbmi2 -madx

QMCPACK 3.8

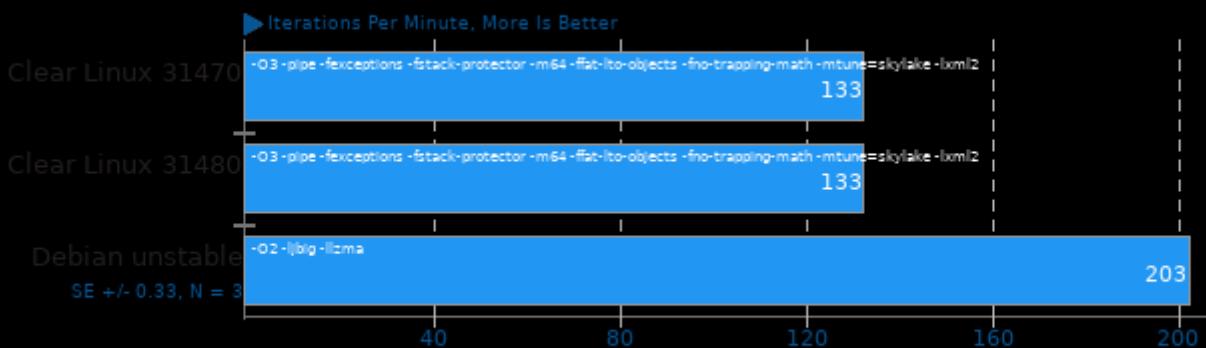


1. (CXX) g++ options: -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -fopenmp -fomit-frame-pointer -



## GraphicsMagick 1.3.33

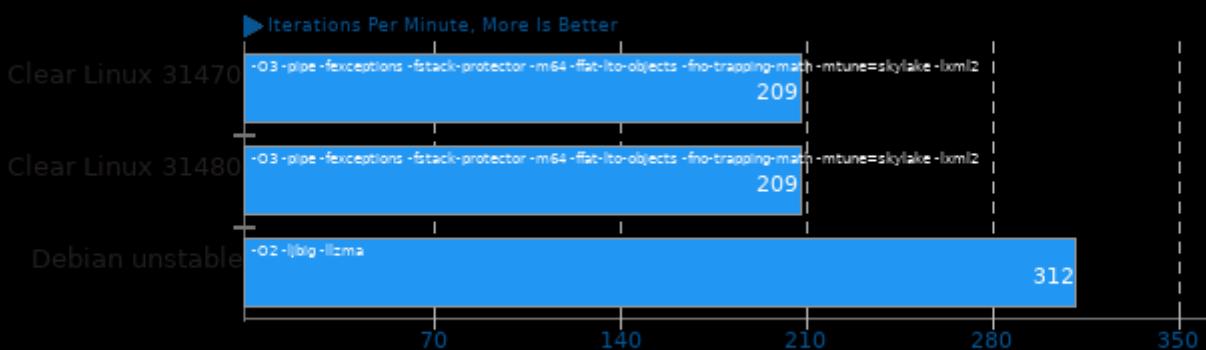
Operation: Sharpen



1. (CC) gcc options: -fopenmp -pthread -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lbz2 -lz -lm -lpthread

## GraphicsMagick 1.3.33

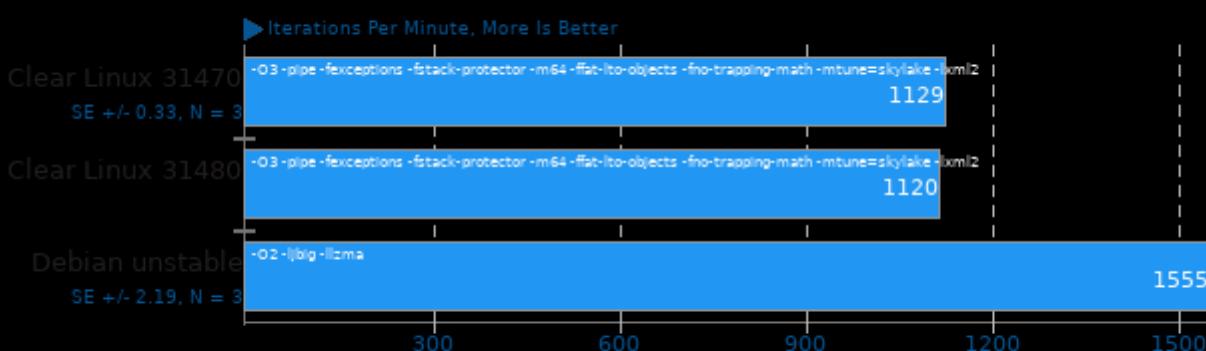
Operation: Enhanced



1. (CC) gcc options: -fopenmp -pthread -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lbz2 -lz -lm -lpthread

## GraphicsMagick 1.3.33

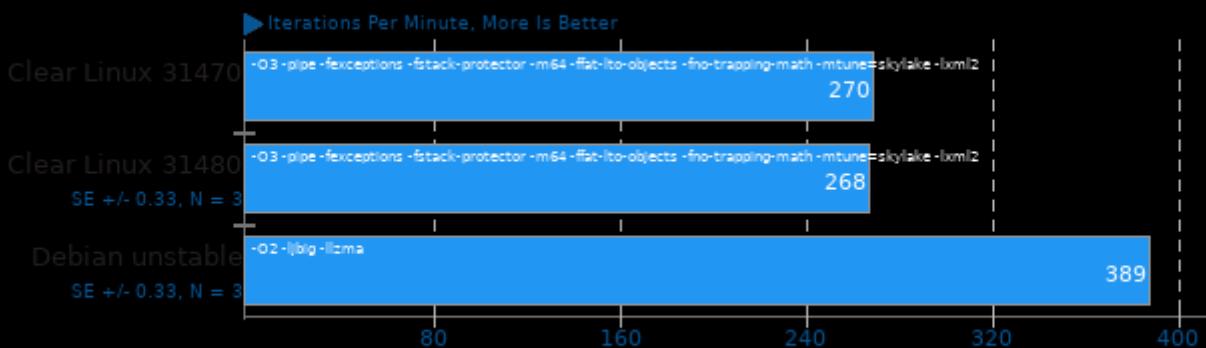
Operation: Resizing



1. (CC) gcc options: -fopenmp -pthread -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lbz2 -lz -lm -lpthread

## GraphicsMagick 1.3.33

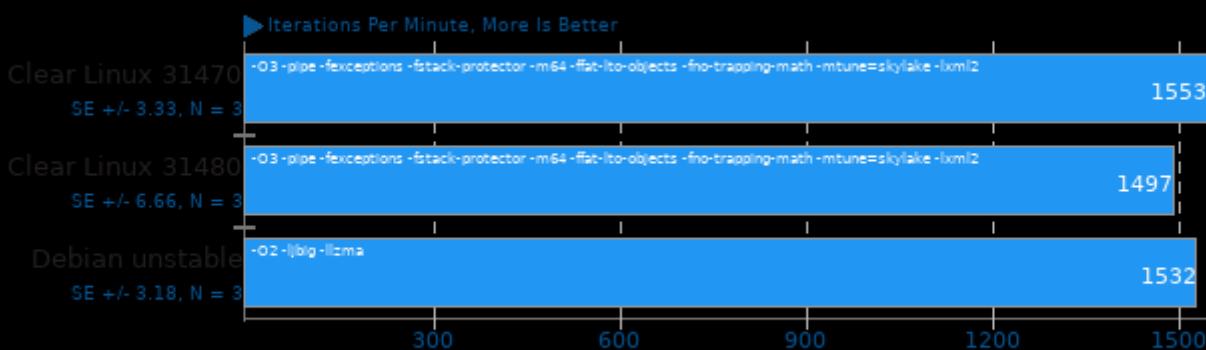
Operation: Noise-Gaussian



1. (CC) gcc options: -fopenmp -pthread -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lbz2 -lz -lm -lpthread

## GraphicsMagick 1.3.33

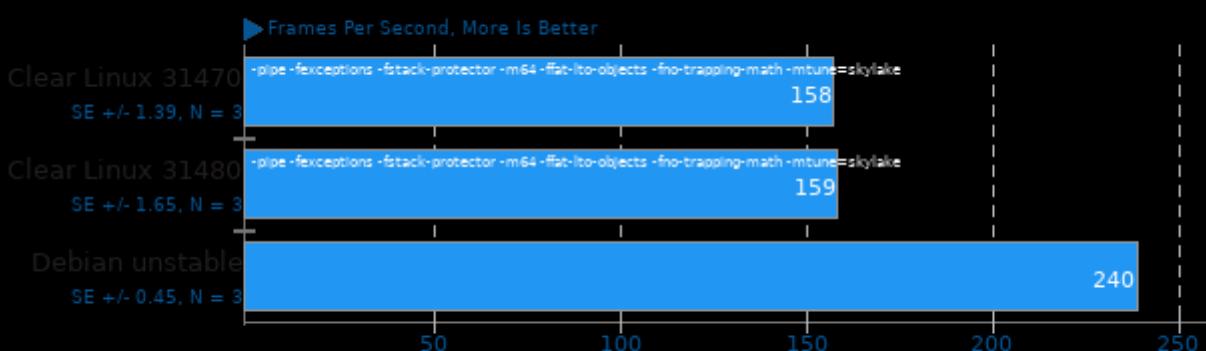
Operation: HWB Color Space



1. (CC) gcc options: -fopenmp -pthread -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lbz2 -lz -lm -lpthread

## SVT-VP9 0.1

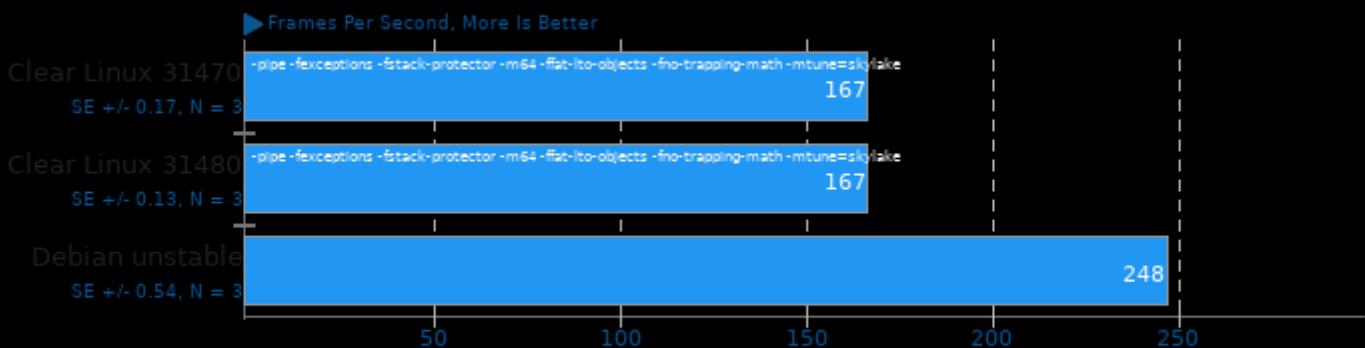
Tuning: VMAF Optimized - Input: Bosphorus 1080p



1. (CC) gcc options: -O3 -fPIE -fPIC -fvisibility=hidden -pie -rdynamic -lpthread -lrt -lm

## SVT-VP9 0.1

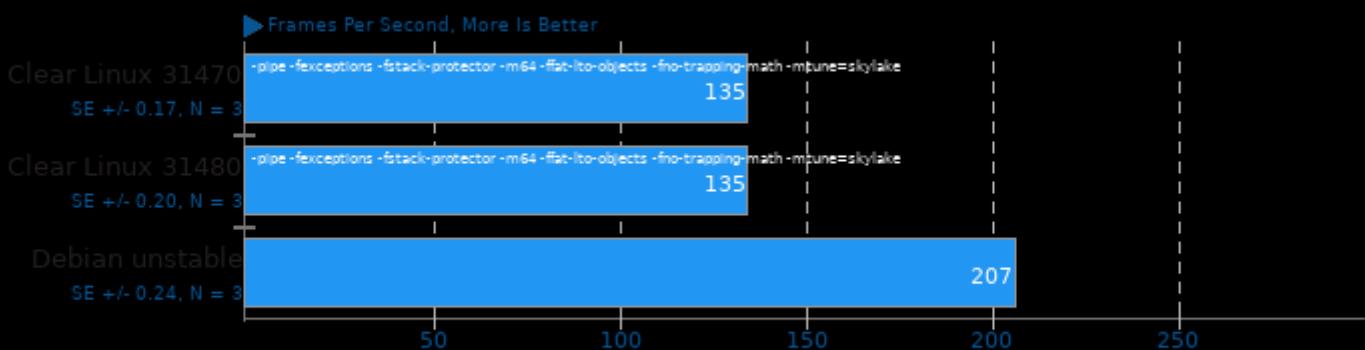
Tuning: PSNR/SSIM Optimized - Input: Bosphorus 1080p



1. (CC) gcc options: -O3 -fPIE -fPIC -fvisibility=hidden -pie -rdynamic -lpthread -lrt -lm

## SVT-VP9 0.1

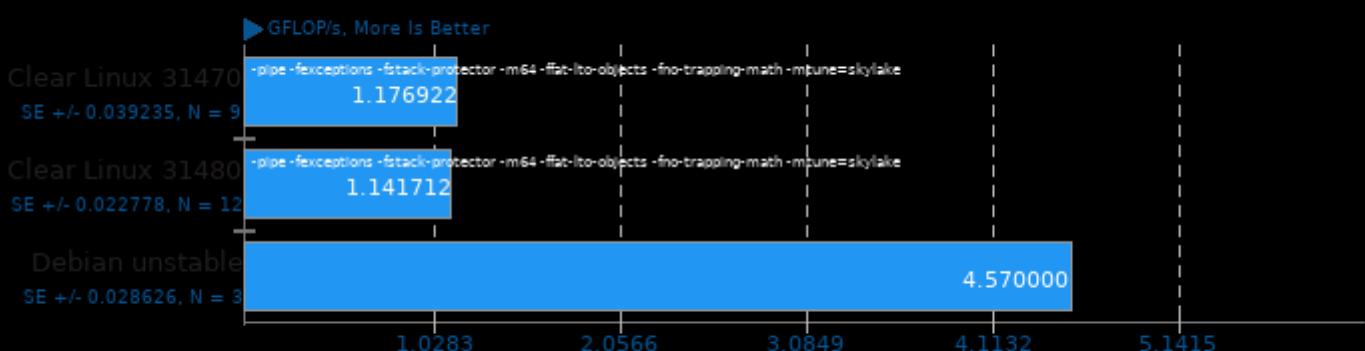
Tuning: Visual Quality Optimized - Input: Bosphorus 1080p



1. (CC) gcc options: -O3 -fPIE -fPIC -fvisibility=hidden -pie -rdynamic -lpthread -lrt -lm

## ACES DGEMM 1.0

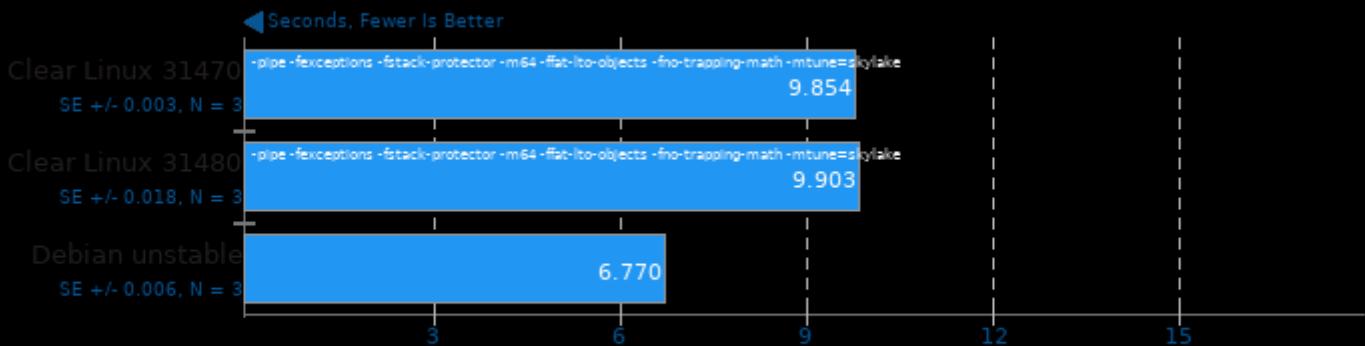
Sustained Floating-Point Rate



1. (CC) gcc options: -O3 -march=native -fopenmp

## Smallpt 1.0

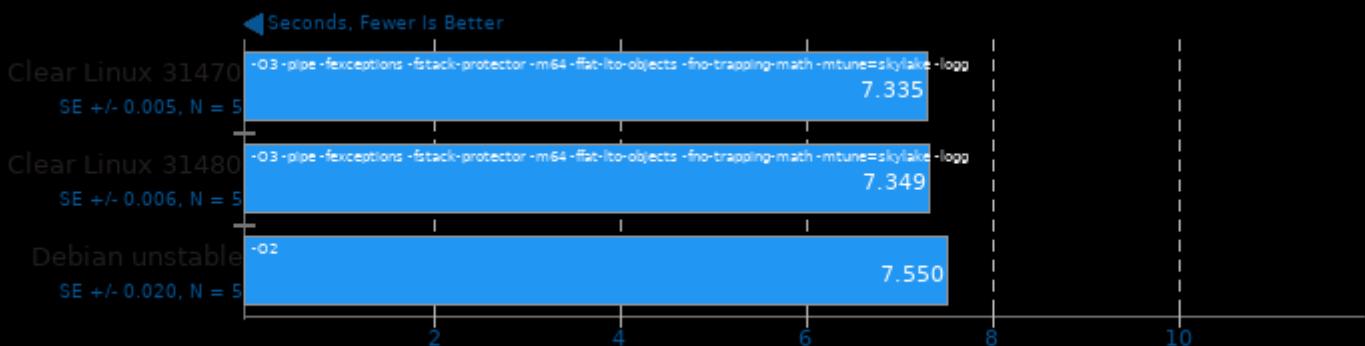
Global Illumination Renderer; 128 Samples



1. (CXX) g++ options: -fopenmp -O3

## FLAC Audio Encoding 1.3.2

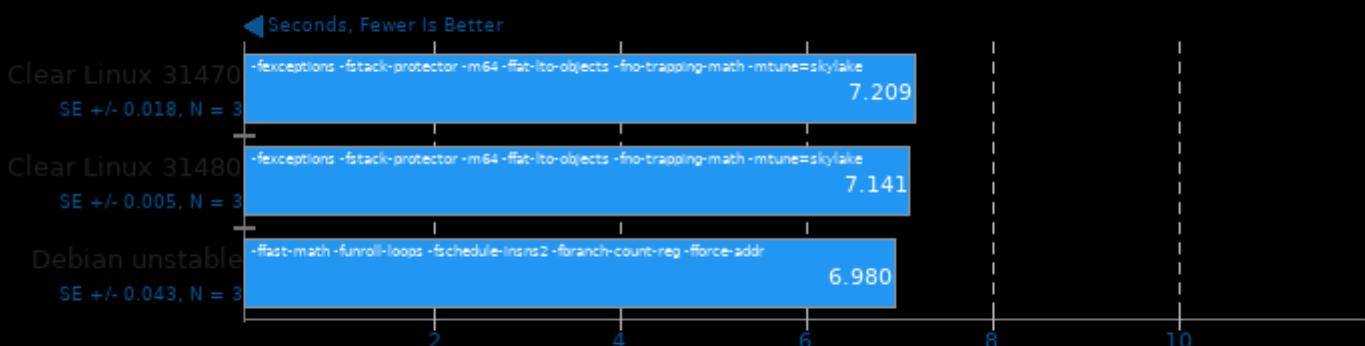
WAV To FLAC



1. (CXX) g++ options: -fvisibility=hidden -lm

## LAME MP3 Encoding 3.100

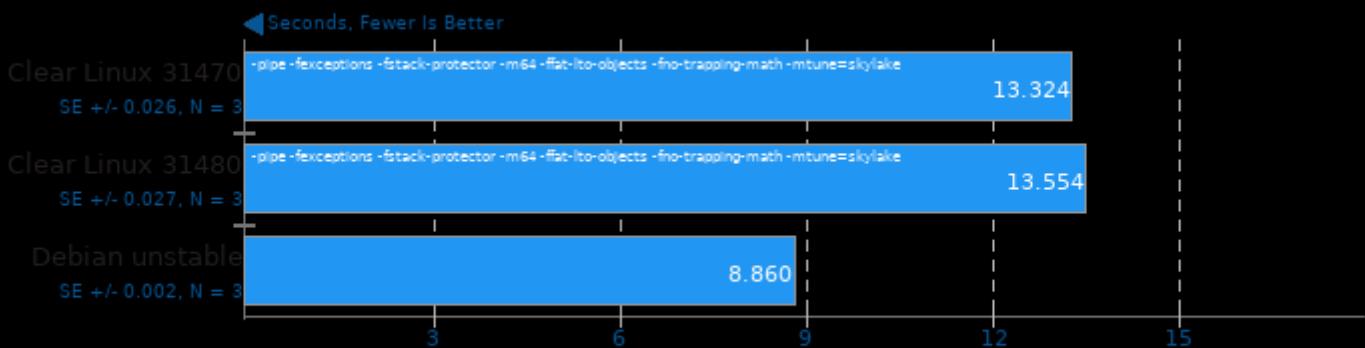
WAV To MP3



1. (CC) gcc options: -O3 -pipe -fincrusts -lm

## N-Queens 1.0

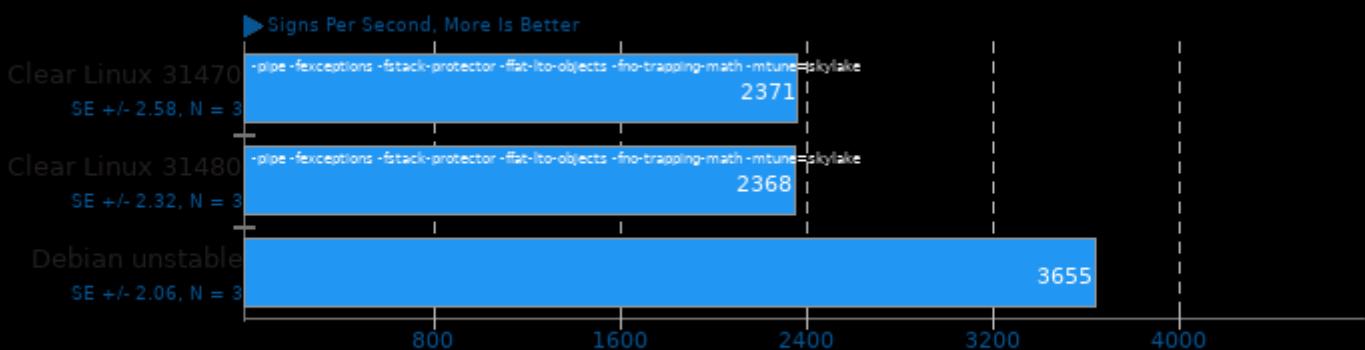
Elapsed Time



1. (CC) gcc options: -static -fopenmp -O3 -march=native

## OpenSSL 1.1.1

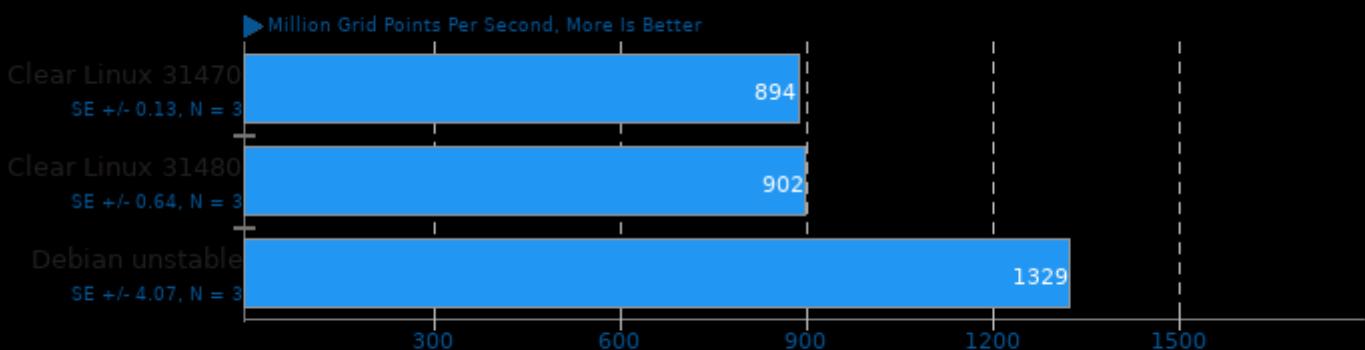
RSA 4096-bit Performance



1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl

## ASKAP 2018-11-10

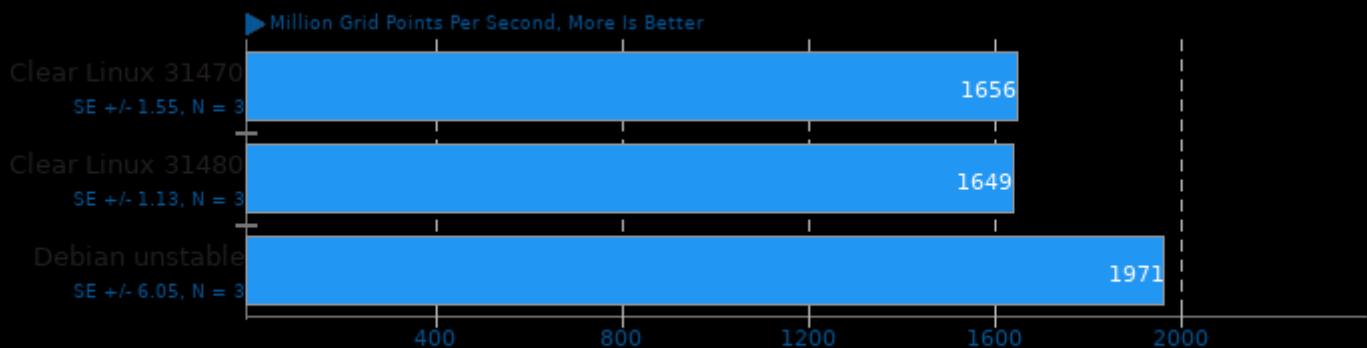
Test: tConvolve MT - Gridding



1. (CXX) g++ options: -lpthread

**ASKAP 2018-11-10**

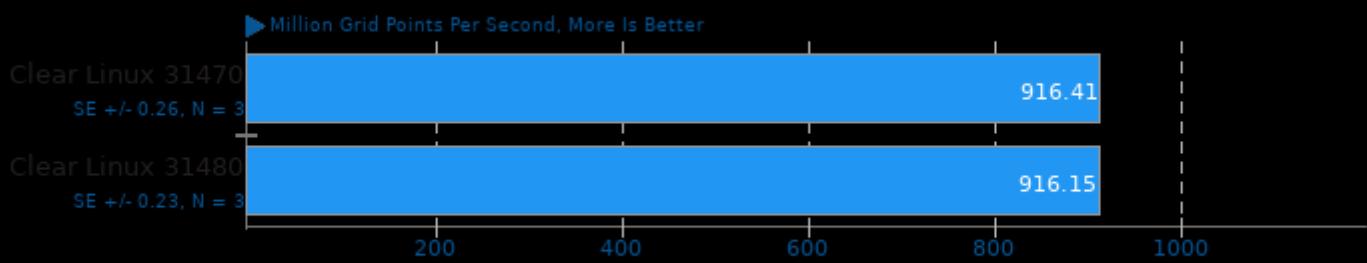
Test: tConvolve MT - Degridding



1. (CXX) g++ options: -lpthread

**ASKAP 2018-11-10**

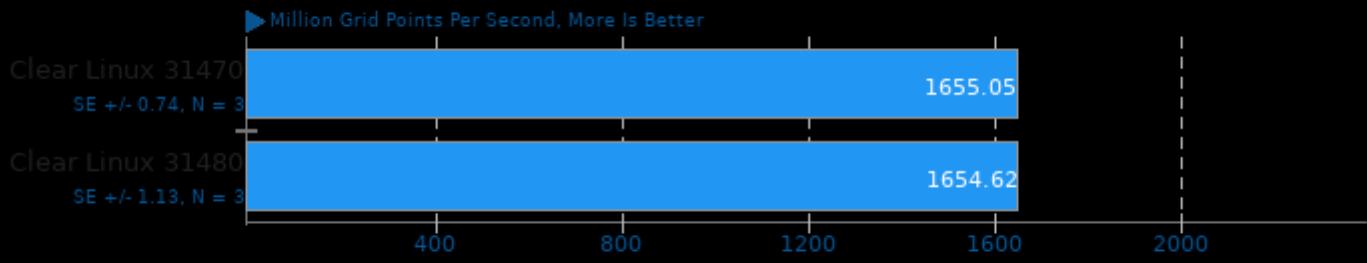
Test: tConvolve MPI - Gridding



1. (CXX) g++ options: -lpthread

**ASKAP 2018-11-10**

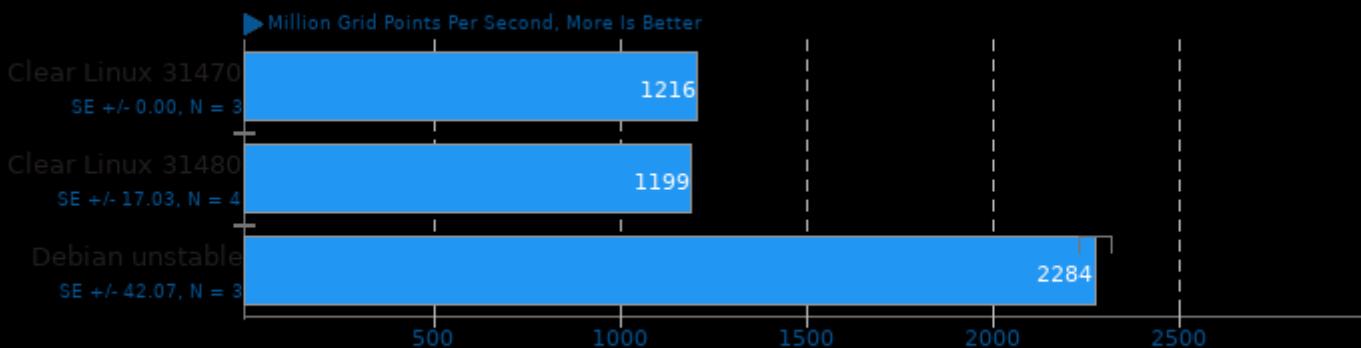
Test: tConvolve MPI - Degridding



1. (CXX) g++ options: -lpthread

## ASKAP 2018-11-10

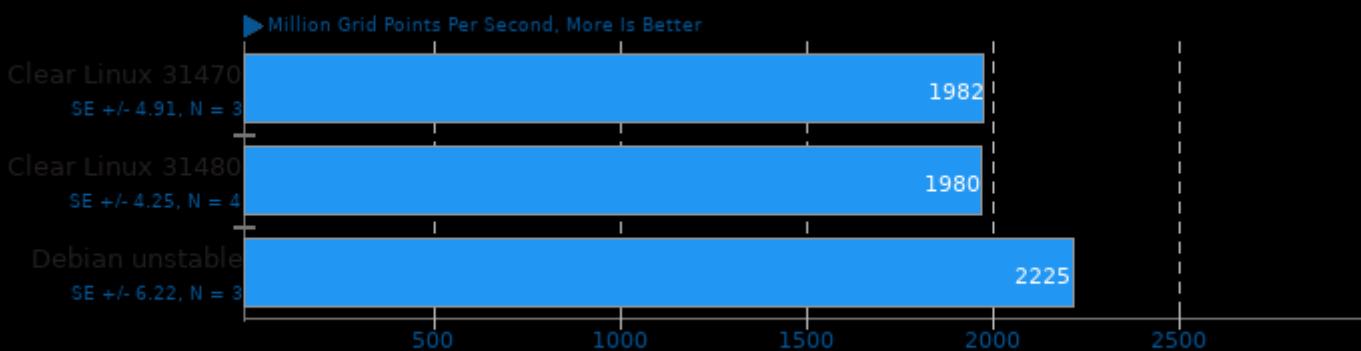
Test: tConvolve OpenMP - Gridding



1. (CXX) g++ options: -lpthread

## ASKAP 2018-11-10

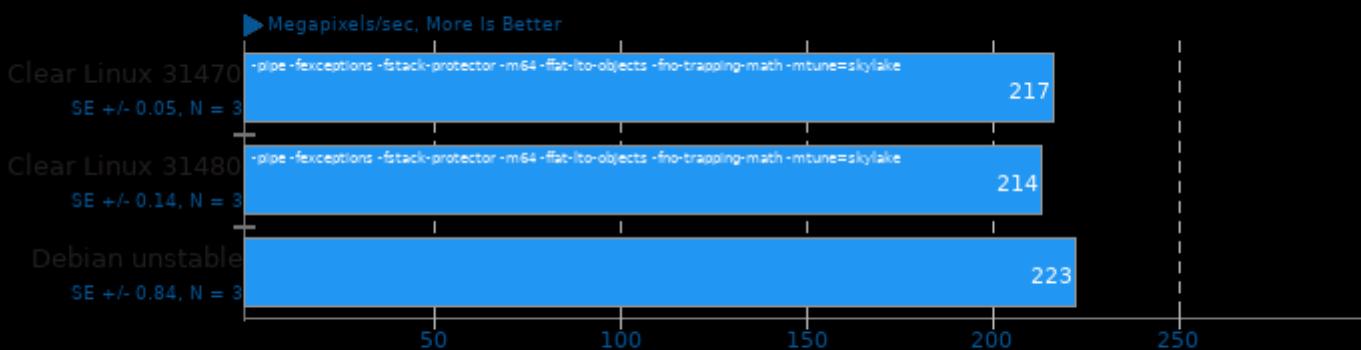
Test: tConvolve OpenMP - Degridding



1. (CXX) g++ options: -lpthread

## libjpeg-turbo tjbench 2.0.2

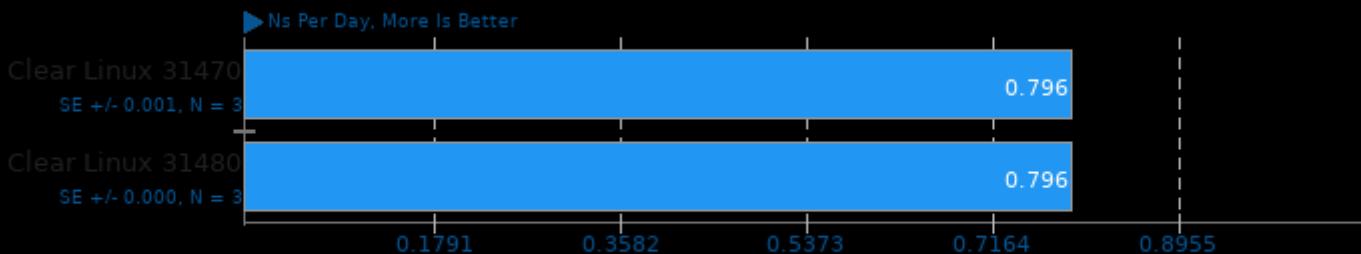
Test: Decompression Throughput



1. (CC) gcc options: -O3 -rdynamic

## GROMACS 2019.4

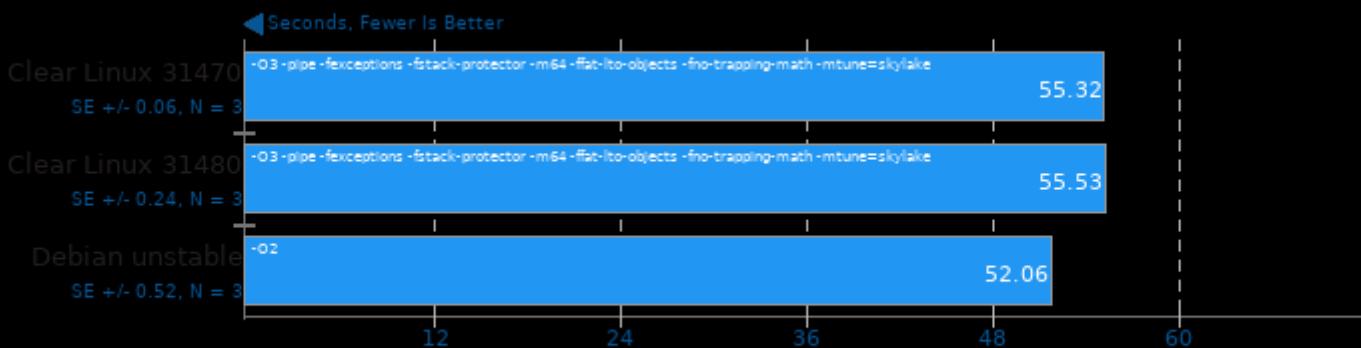
Water Benchmark



1. (CXX) g++ options: -mavx2 -mfma -pthread -O3 -pipe -fexceptions -fstack-protector -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -std=c+

## SQLite Speedtest 3.30

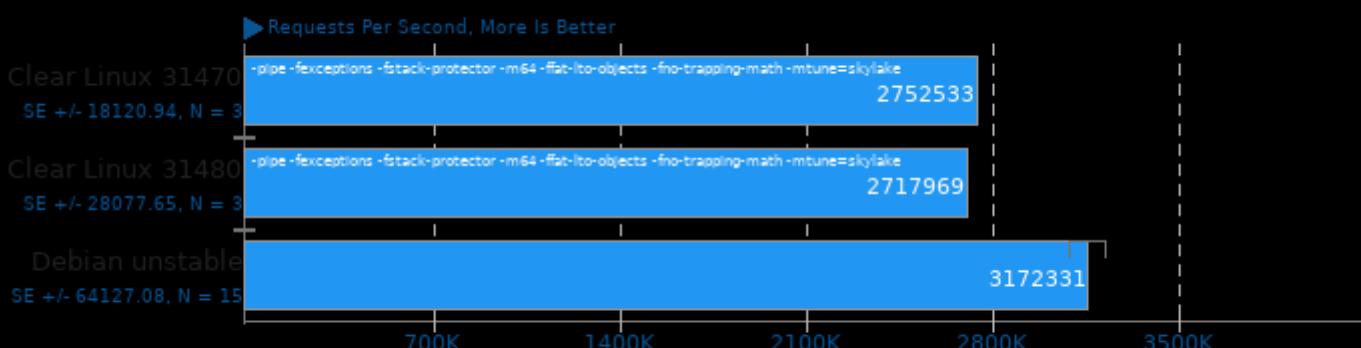
Timed Time - Size 1,000



1. (CC) gcc options: -ldl -lz -lpthread

## Redis 5.0.5

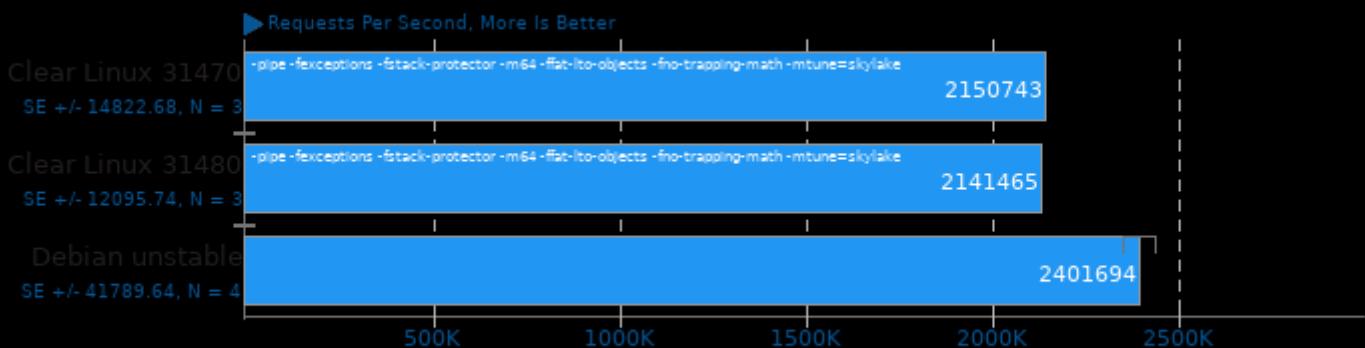
Test: LPOP



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

## Redis 5.0.5

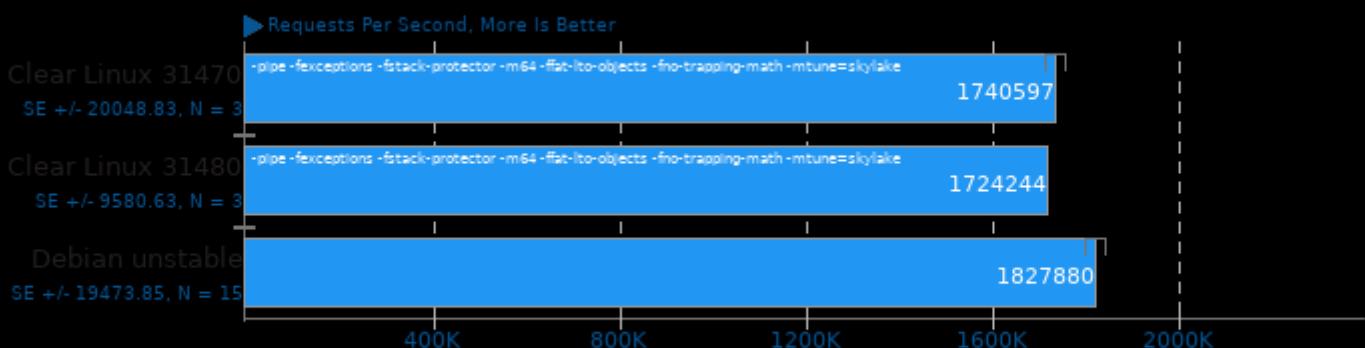
Test: SADD



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

## Redis 5.0.5

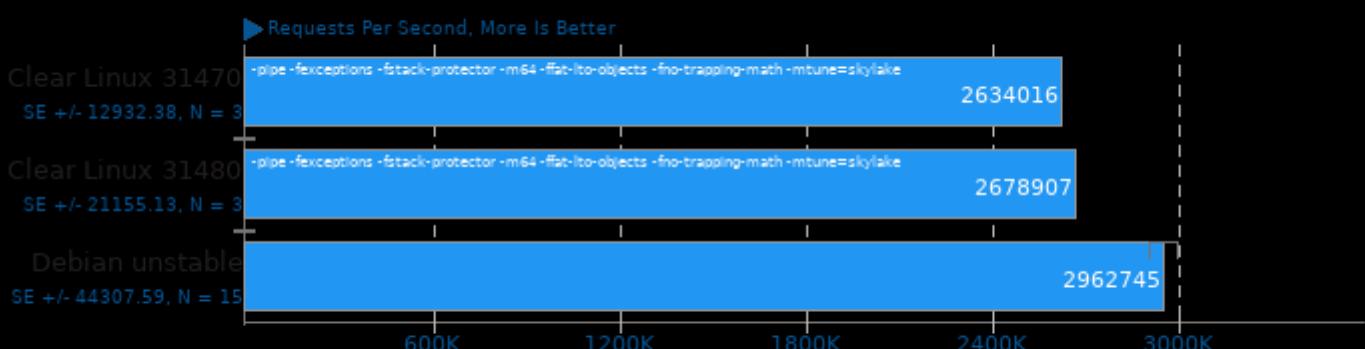
Test: LPUSH



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

## Redis 5.0.5

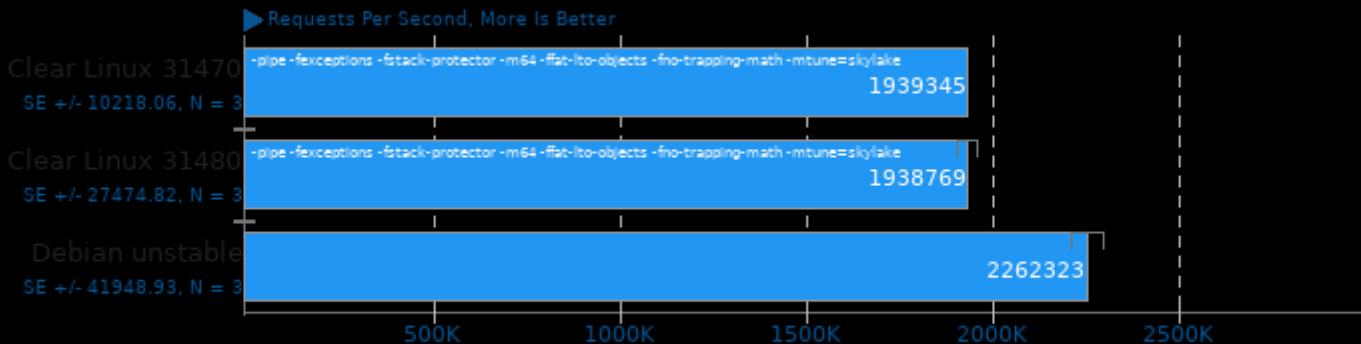
Test: GET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

## Redis 5.0.5

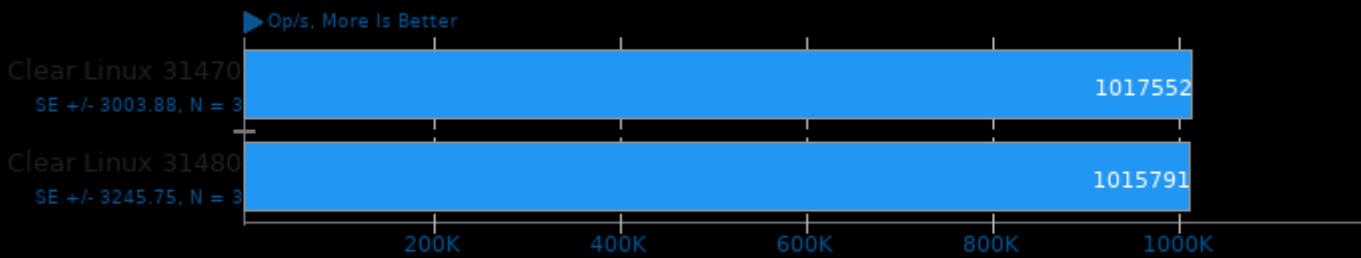
Test: SET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

## Facebook RocksDB 6.3.6

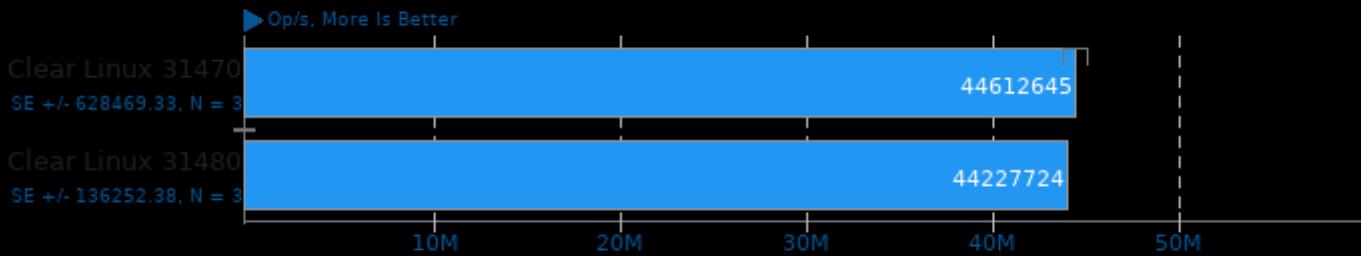
Test: Random Fill



1. (CXX) g++ options: -O3 -march=native -std=c++11 -fno-built-in-memcmp -fno-rtti -rdynamic -lpthread

## Facebook RocksDB 6.3.6

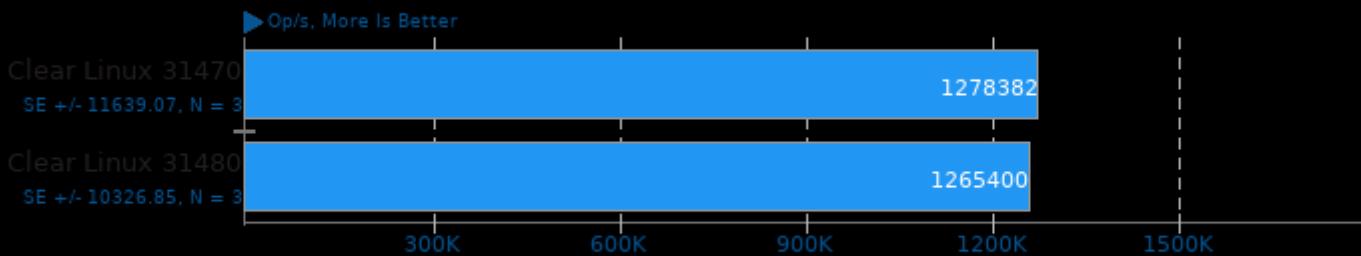
Test: Random Read



1. (CXX) g++ options: -O3 -march=native -std=c++11 -fno-built-in-memcmp -fno-rtti -rdynamic -lpthread

## Facebook RocksDB 6.3.6

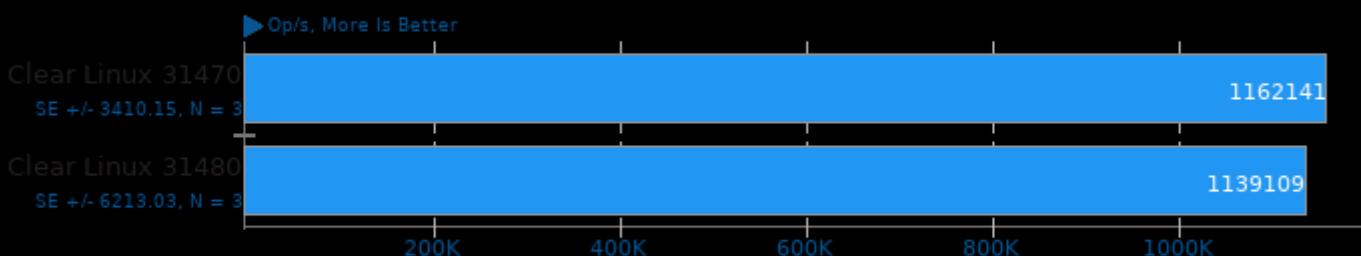
Test: Sequential Fill



1. (CXX) g++ options: -O3 -march=native -std=c++11 -fno-built-in-memcmp -fno-rtti -rdynamic -lpthread

## Facebook RocksDB 6.3.6

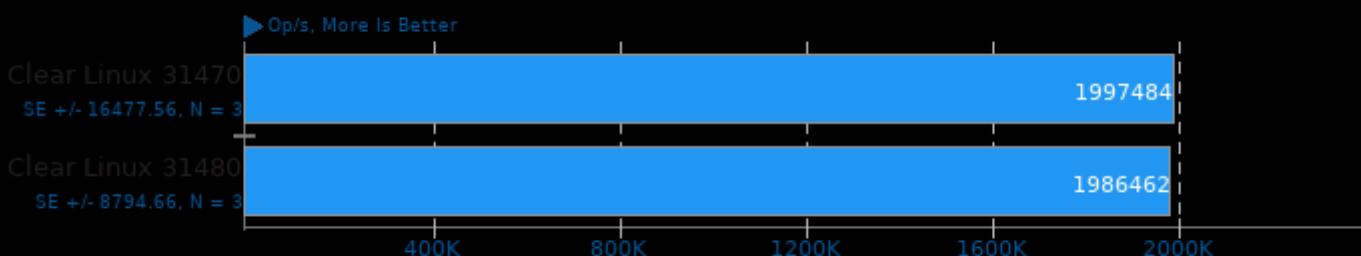
Test: Random Fill Sync



1. (CXX) g++ options: -O3 -march=native -std=c++11 -fno-built-in-memcmp -fno-rtti -rdynamic -lpthread

## Facebook RocksDB 6.3.6

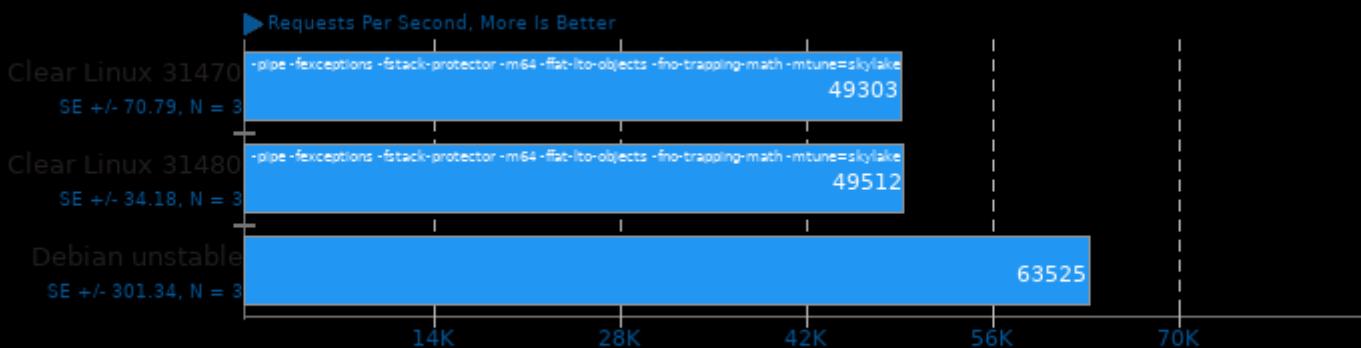
Test: Read While Writing



1. (CXX) g++ options: -O3 -march=native -std=c++11 -fno-built-in-memcmp -fno-rtti -rdynamic -lpthread

## NGINX Benchmark 1.9.9

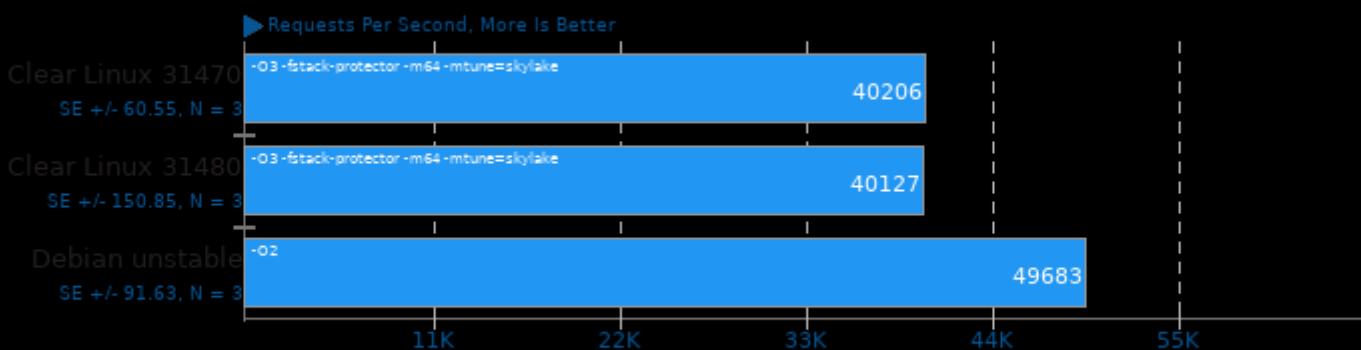
Static Web Page Serving



1. (CC) gcc options: -lpthread -lcrypt -lcrypto -lz -O3 -march=native

## Apache Benchmark 2.4.29

Static Web Page Serving



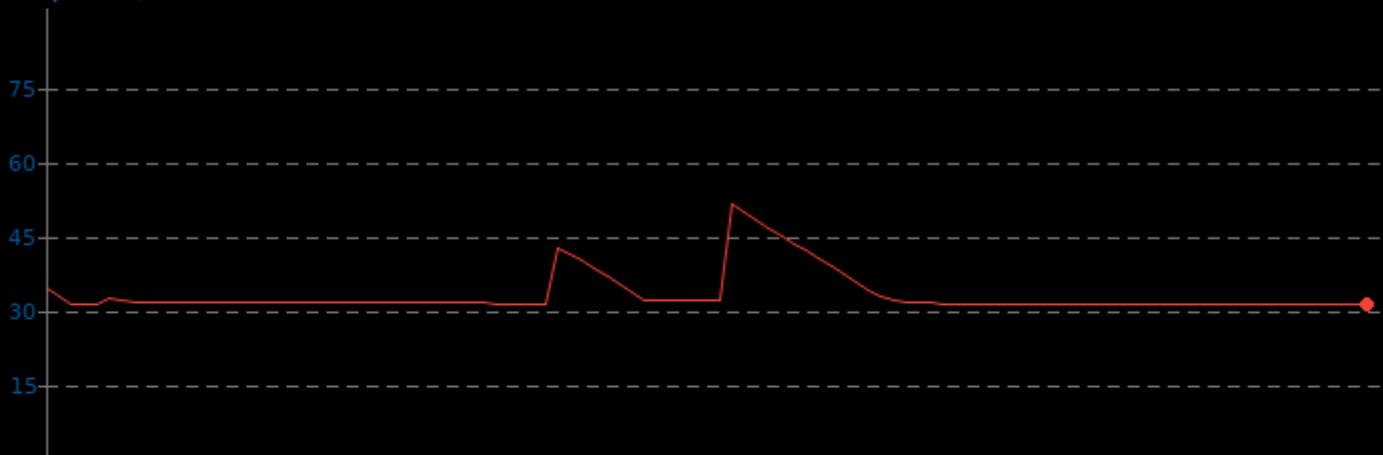
1. (CC) gcc options: -shared -fPIC -pthread

## SQLite 3.30.1

CPU Temperature Monitor

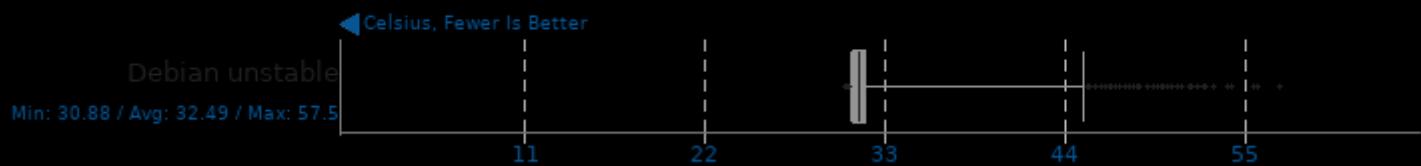
	Min	Avg	Max
Debian unstable	31.3	33.4	51.3

▼ Celsius, Fewer Is Better



## SQLite 3.30.1

CPU Temperature Monitor



## SQLite 3.30.1

CPU Temperature Monitor

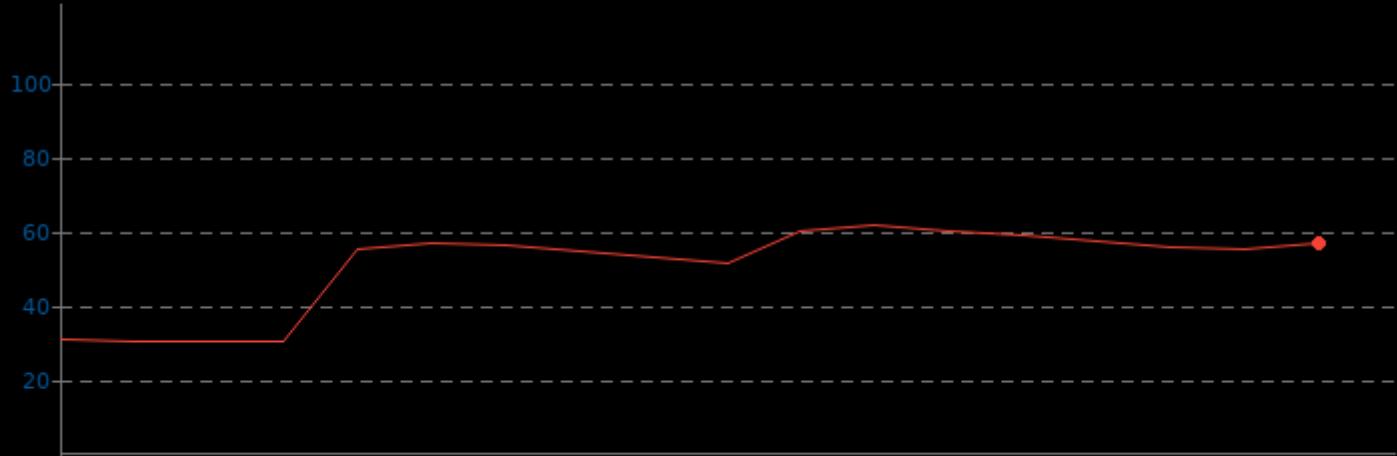


## Parboil 2.5

CPU Temperature Monitor

■ Debian unstable    Min: 30.6    Avg: 50.9    Max: 61.5

▼ Celsius, Fewer Is Better

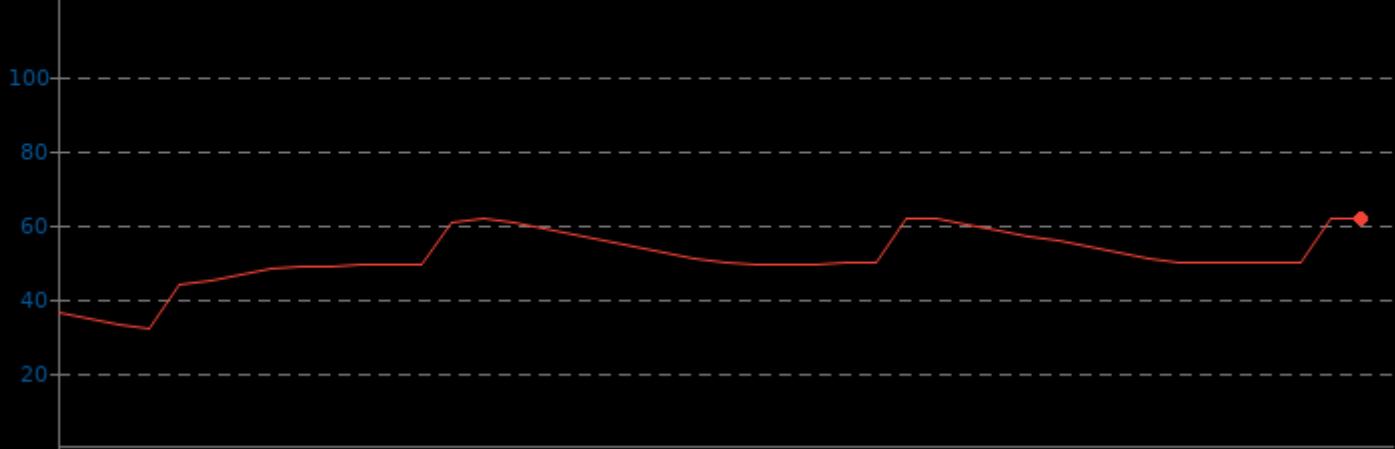


## Parboil 2.5

CPU Temperature Monitor

■ Debian unstable	Min	31.9
	Avg	51.4
	Max	61.8

▼ Celsius, Fewer Is Better

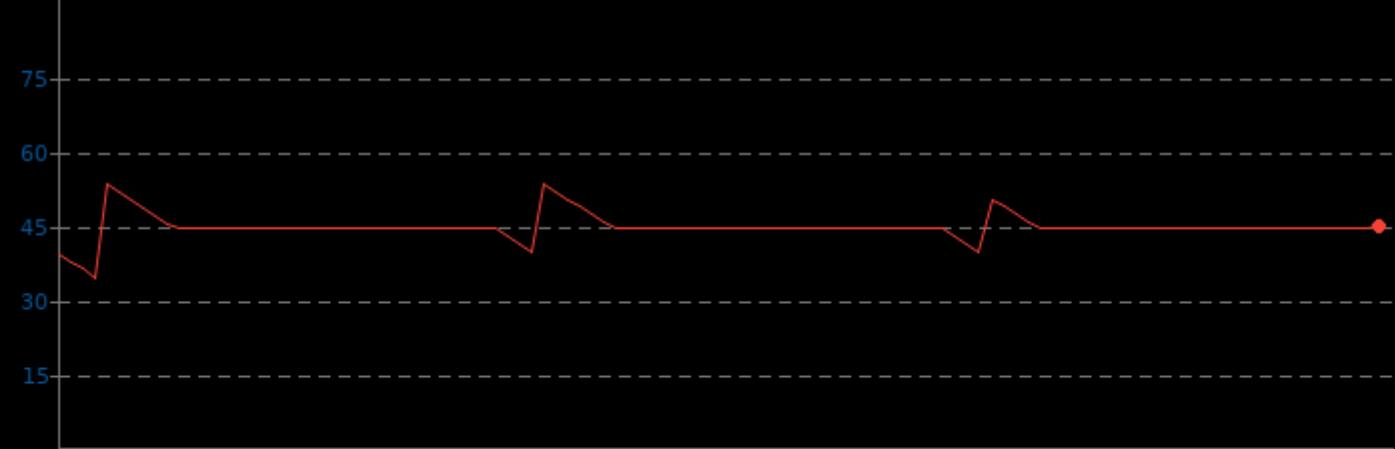


## Parboil 2.5

CPU Temperature Monitor

■ Debian unstable	Min	34.8
	Avg	44.8
	Max	53.5

▼ Celsius, Fewer Is Better

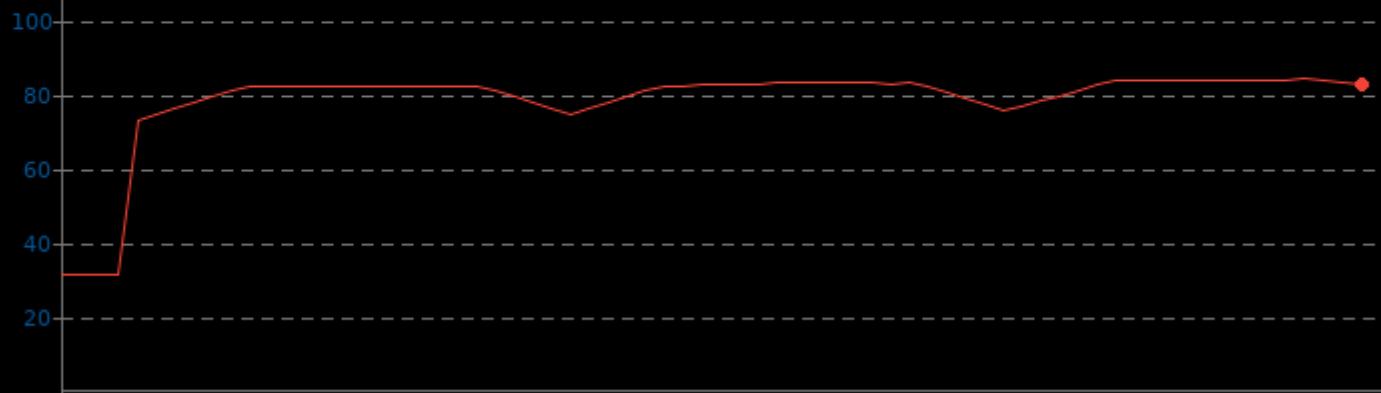


## Rodinia 2.4

CPU Temperature Monitor

■ Debian unstable	Min	31.4
	Avg	78.2
	Max	83.9

▼ Celsius, Fewer Is Better

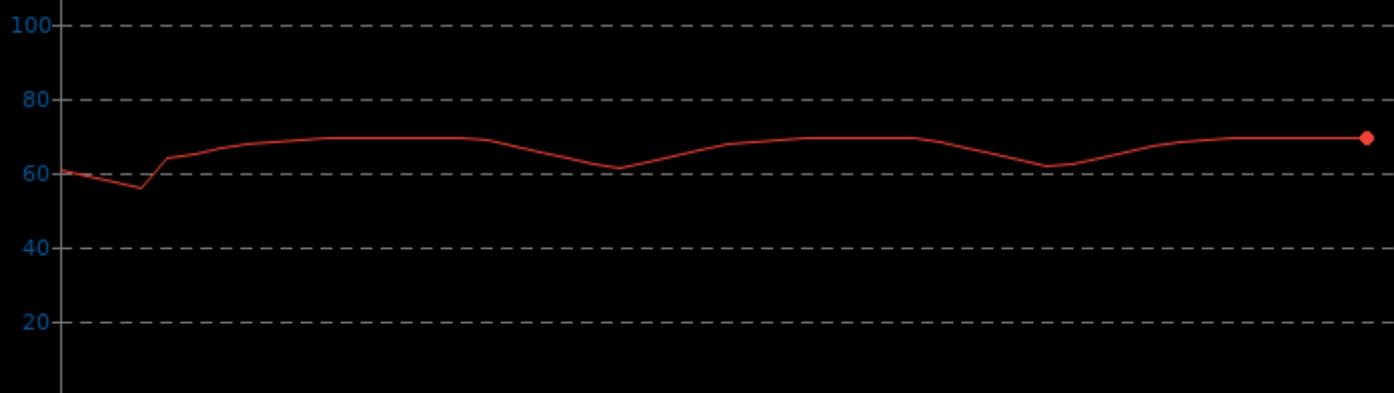


## Rodinia 2.4

CPU Temperature Monitor

■ Debian unstable	Min	55.8
	Avg	66.2
	Max	69.3

▼ Celsius, Fewer Is Better



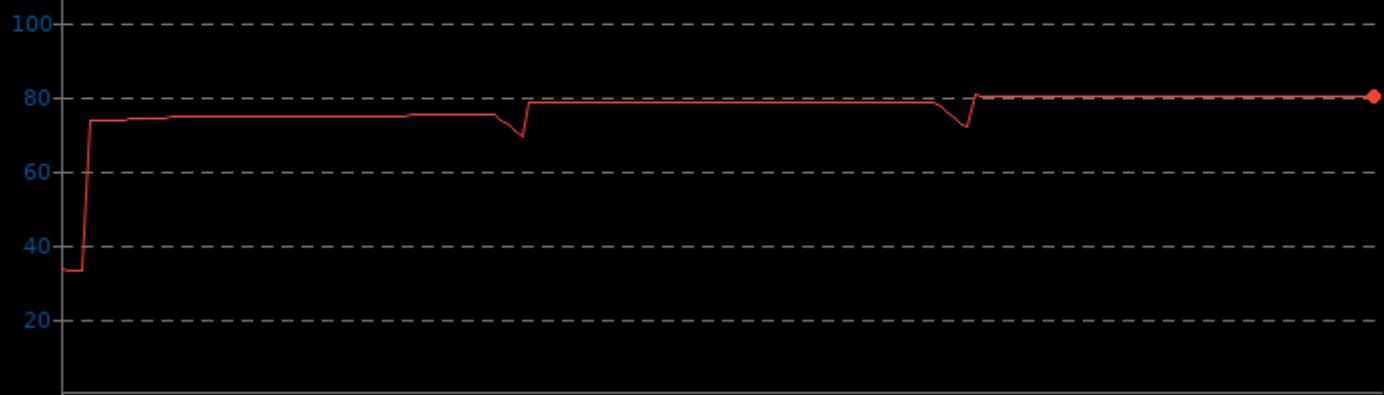
Rodinia 2.4

## GraphicsMagick 1.3.33

CPU Temperature Monitor

■ Debian unstable	Min	33.4
	Avg	76.3
	Max	80.4

▼ Celsius, Fewer Is Better

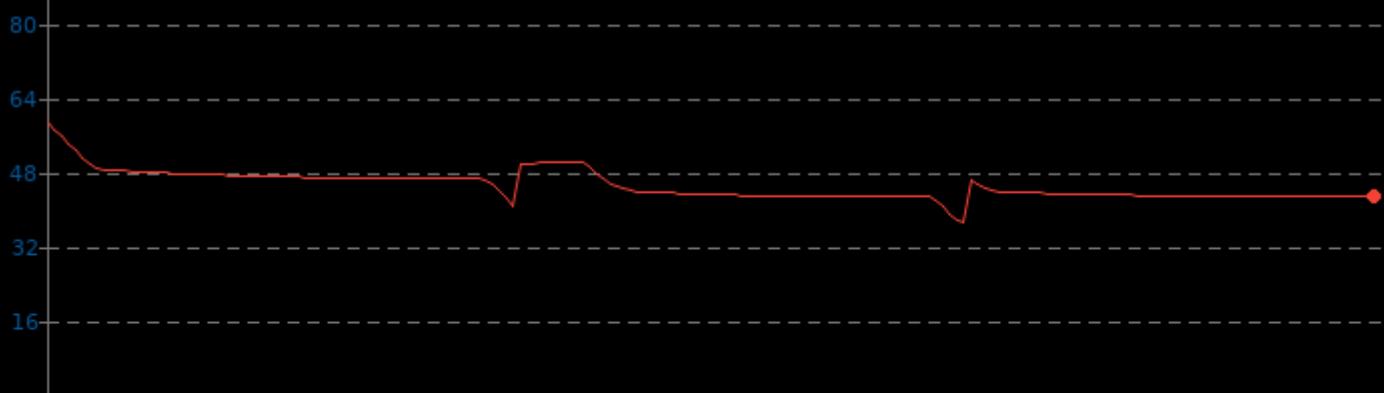


## GraphicsMagick 1.3.33

CPU Temperature Monitor

■ Debian unstable	Min	37.1
	Avg	45.1
	Max	58.8

▼ Celsius, Fewer Is Better



## GraphicsMagick 1.3.33

CPU Temperature Monitor

Debian unstable	Min	32.1
	Avg	78.3
	Max	80.4

▼ Celsius, Fewer Is Better

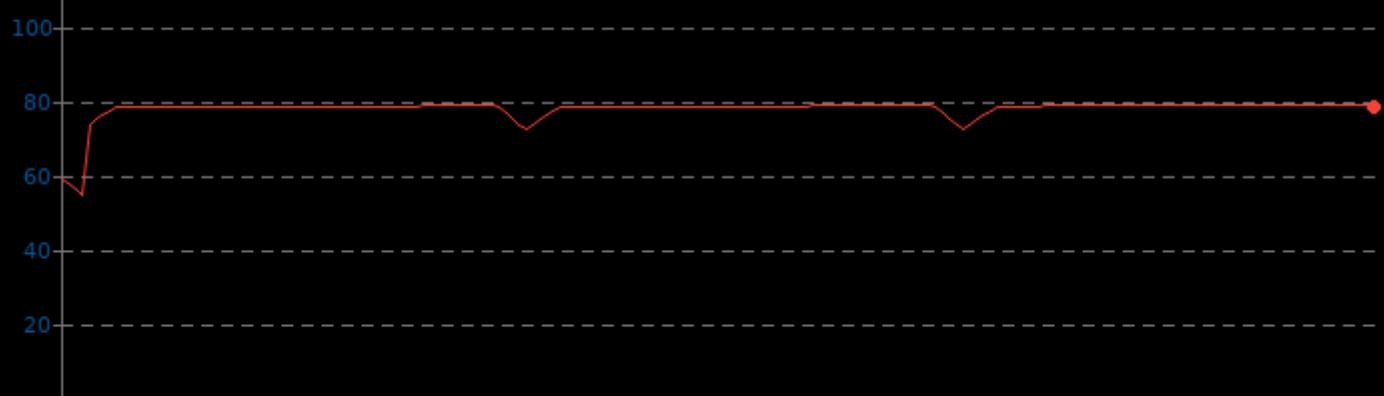


## GraphicsMagick 1.3.33

CPU Temperature Monitor

Debian unstable	Min	54.5
	Avg	77.6
	Max	78.5

▼ Celsius, Fewer Is Better

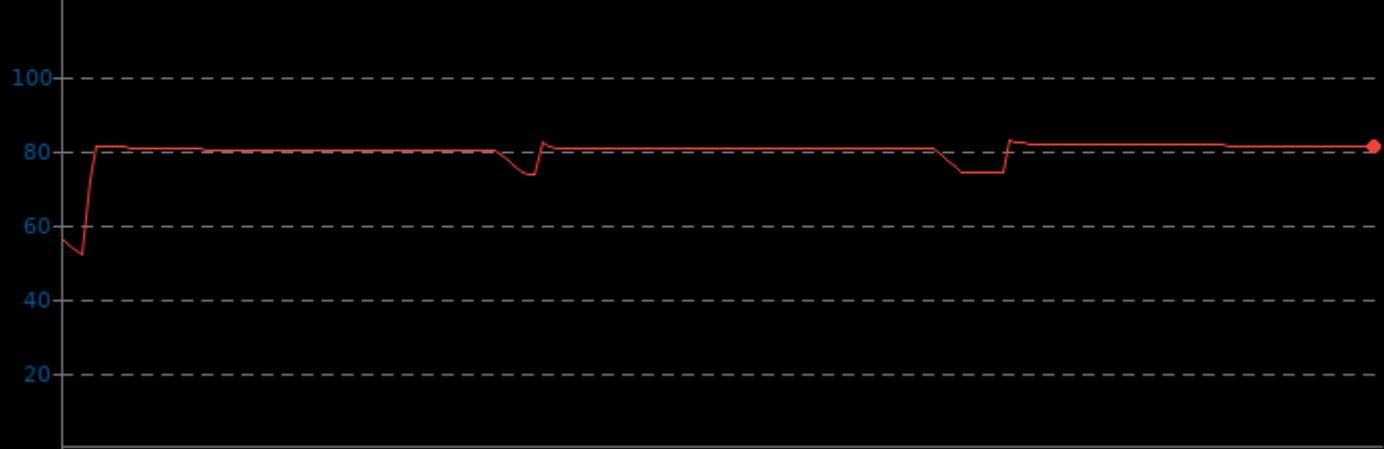


## GraphicsMagick 1.3.33

CPU Temperature Monitor

Debian unstable	Min	51.8
	Avg	79.5
	Max	82.6

▼ Celsius, Fewer Is Better

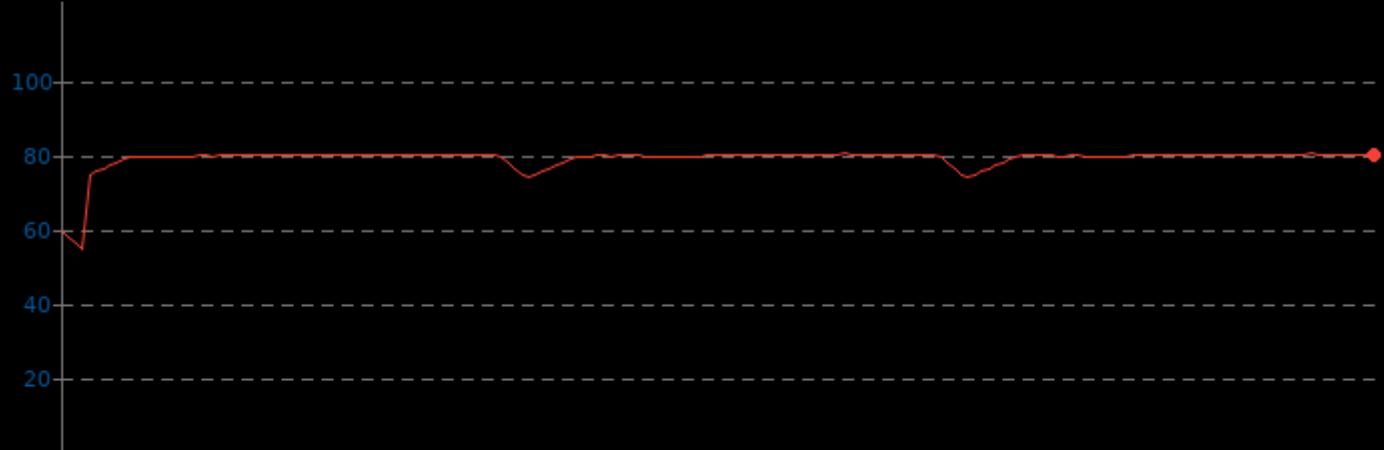


## GraphicsMagick 1.3.33

CPU Temperature Monitor

Debian unstable	Min	54.6
	Avg	78.8
	Max	80.1

▼ Celsius, Fewer Is Better

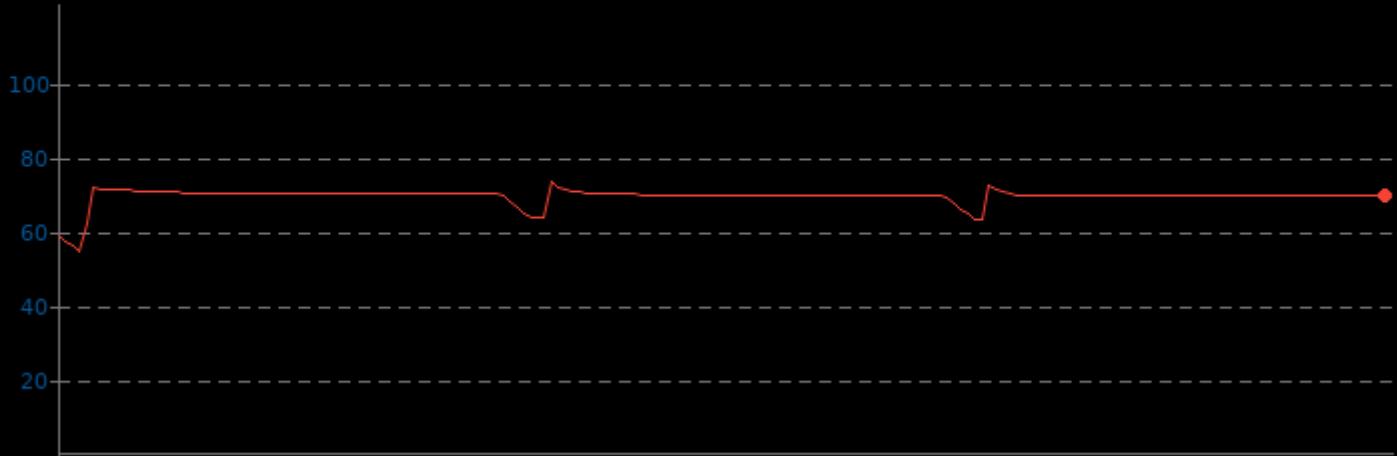


## GraphicsMagick 1.3.33

CPU Temperature Monitor

Min	54.4
Avg	69.3
Max	73.1

▼ Celsius, Fewer Is Better

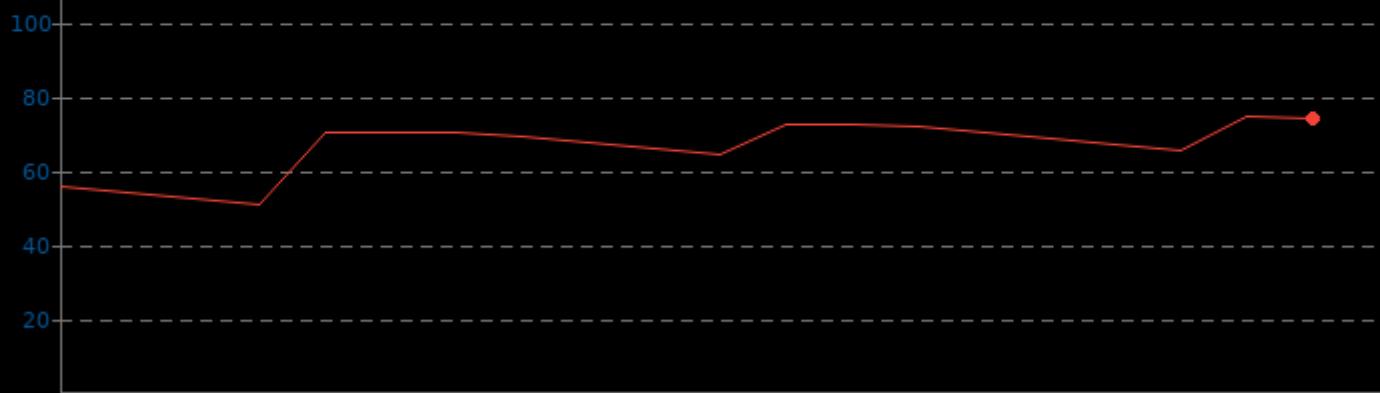


## SVT-VP9 0.1

CPU Temperature Monitor

Debian unstable	Min	51.1
	Avg	66.4
	Max	74.5

▼ Celsius, Fewer Is Better

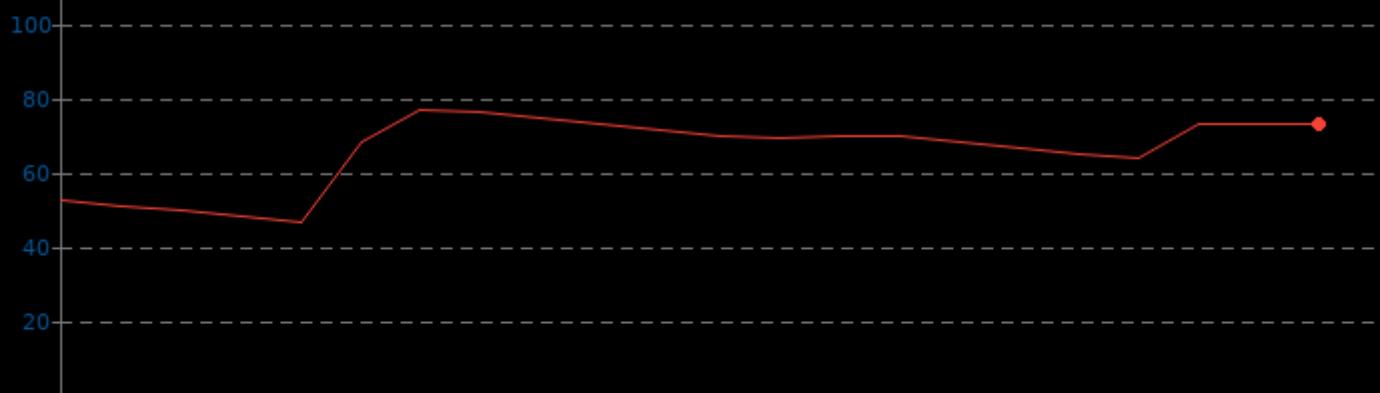


## SVT-VP9 0.1

CPU Temperature Monitor

Debian unstable	Min	46.6
	Avg	65.8
	Max	76.4

▼ Celsius, Fewer Is Better

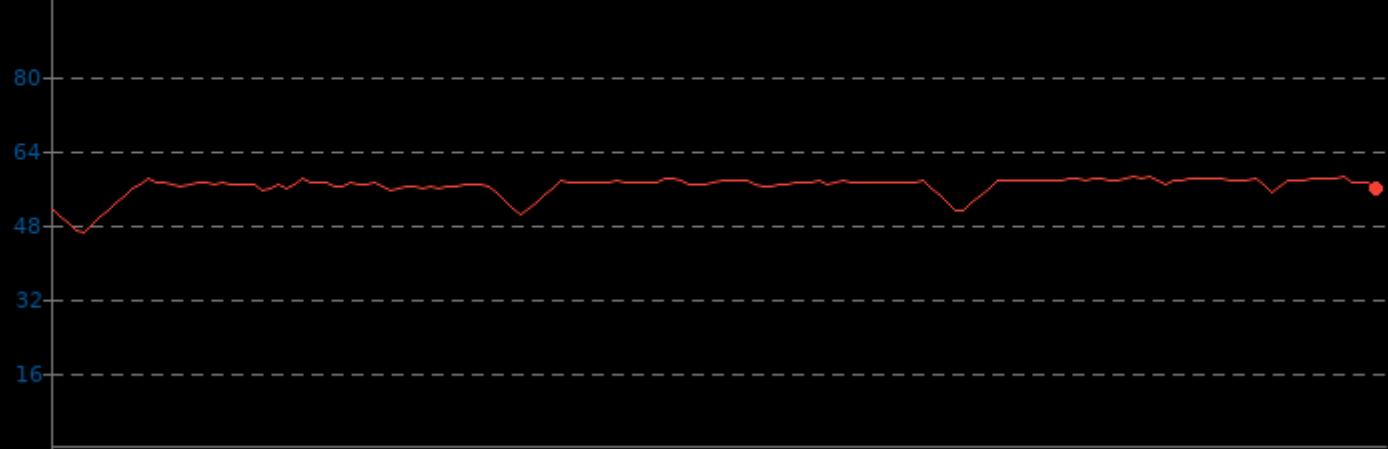


**ACES DGEMM 1.0**

CPU Temperature Monitor

Min	46.4
Avg	56.2
Max	58.1

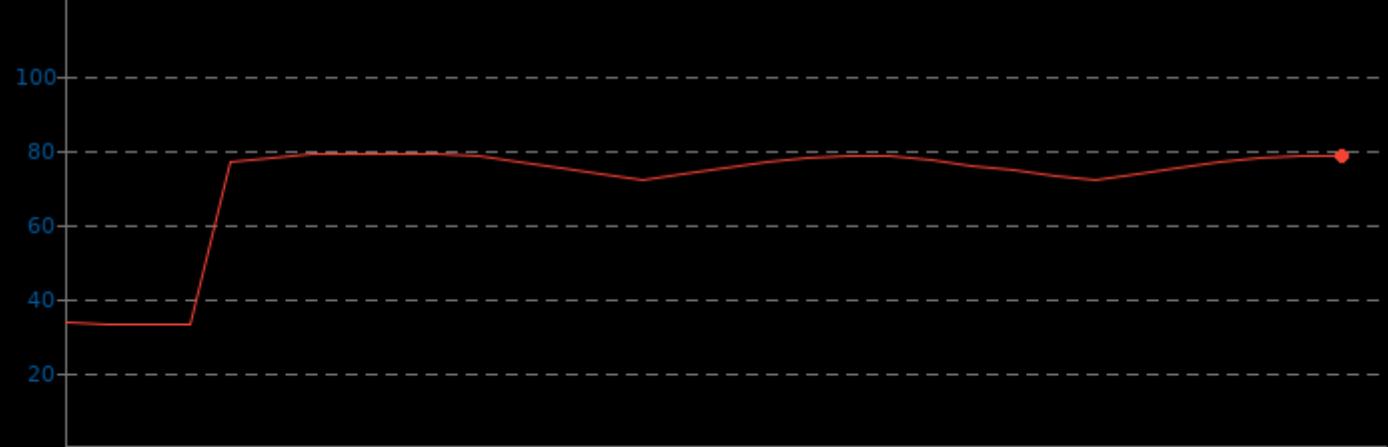
▼ Celsius, Fewer Is Better

**Smallpt 1.0**

CPU Temperature Monitor

Min	33.0
Avg	70.8
Max	78.6

▼ Celsius, Fewer Is Better

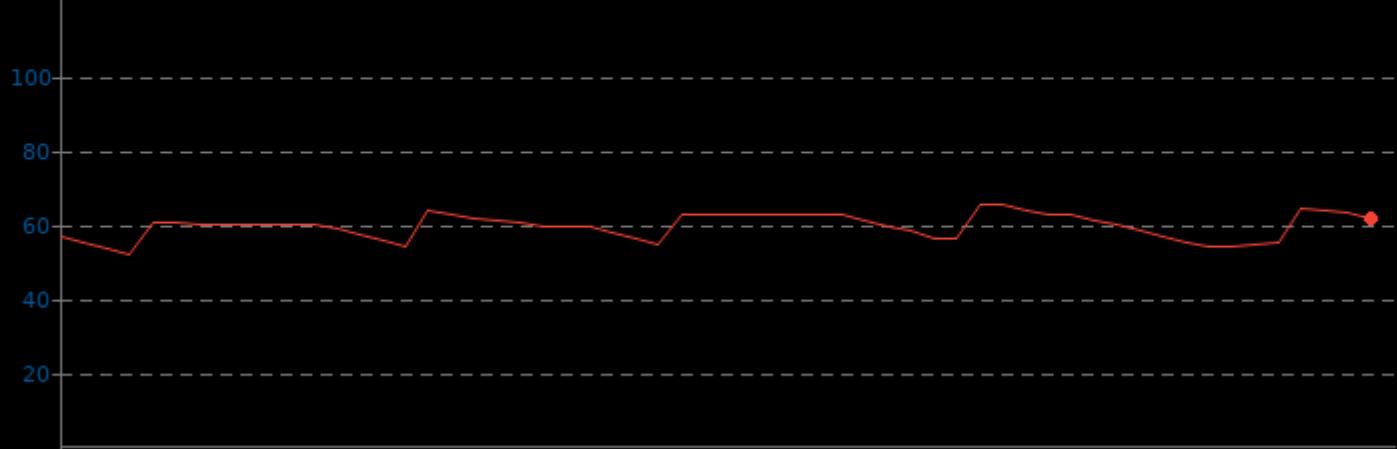


## FLAC Audio Encoding 1.3.2

CPU Temperature Monitor

■ Debian unstable	Min	52.0
	Avg	59.6
	Max	65.4

▼ Celsius, Fewer Is Better

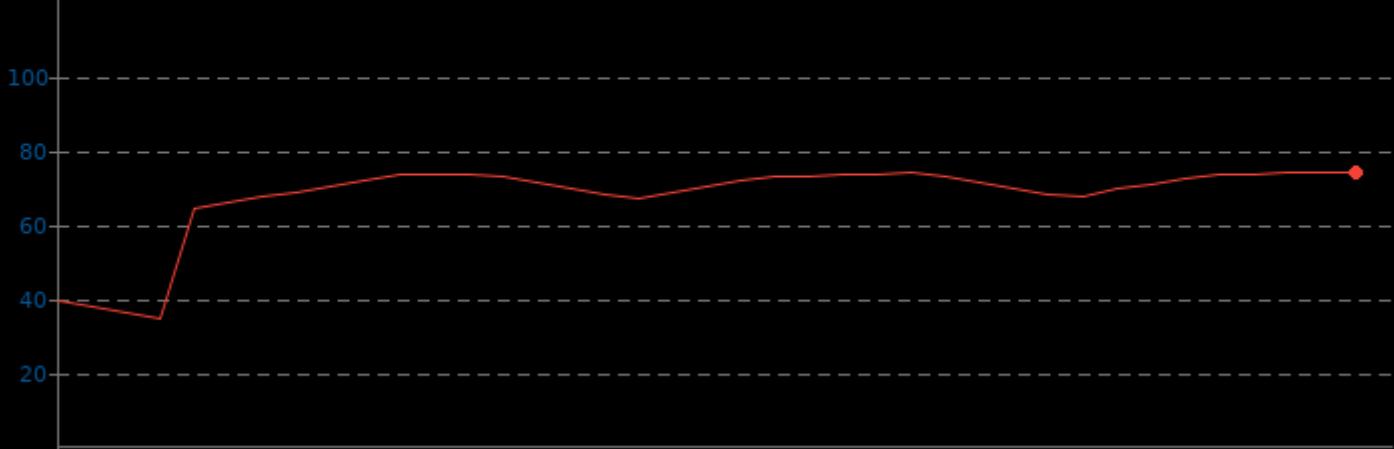


## N-Queens 1.0

CPU Temperature Monitor

■ Debian unstable    Min 34.8    Avg 67.5    Max 74.1

▼ Celsius, Fewer Is Better

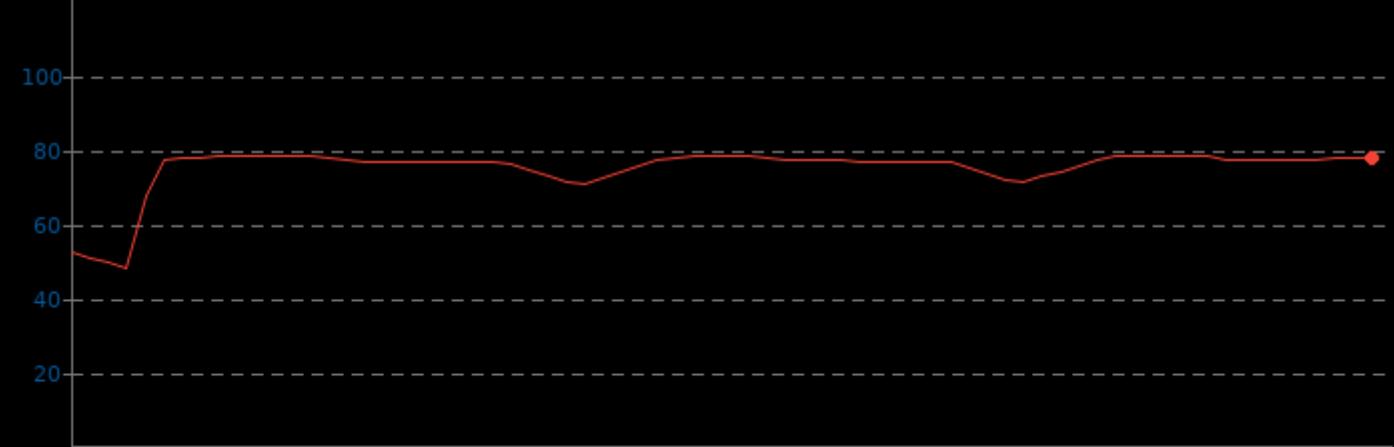


## OpenSSL 1.1.1

CPU Temperature Monitor

■ Debian unstable    Min 48.1    Avg 74.9    Max 78.3

▼ Celsius, Fewer Is Better

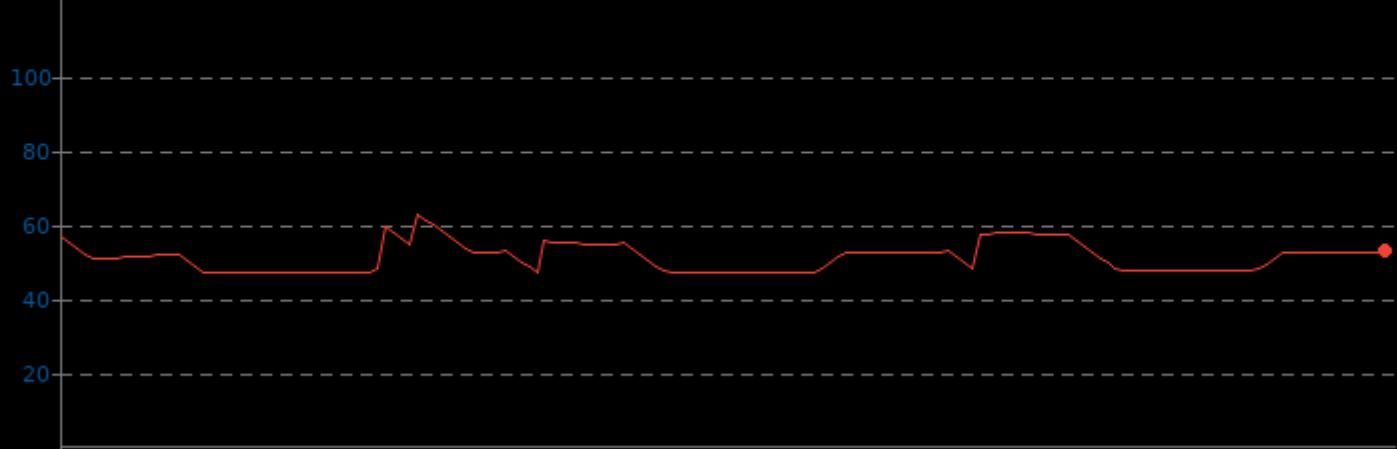


## ASKAP 2018-11-10

CPU Temperature Monitor

Min	47.0
Avg	51.2
Max	62.8

▼ Celsius, Fewer Is Better

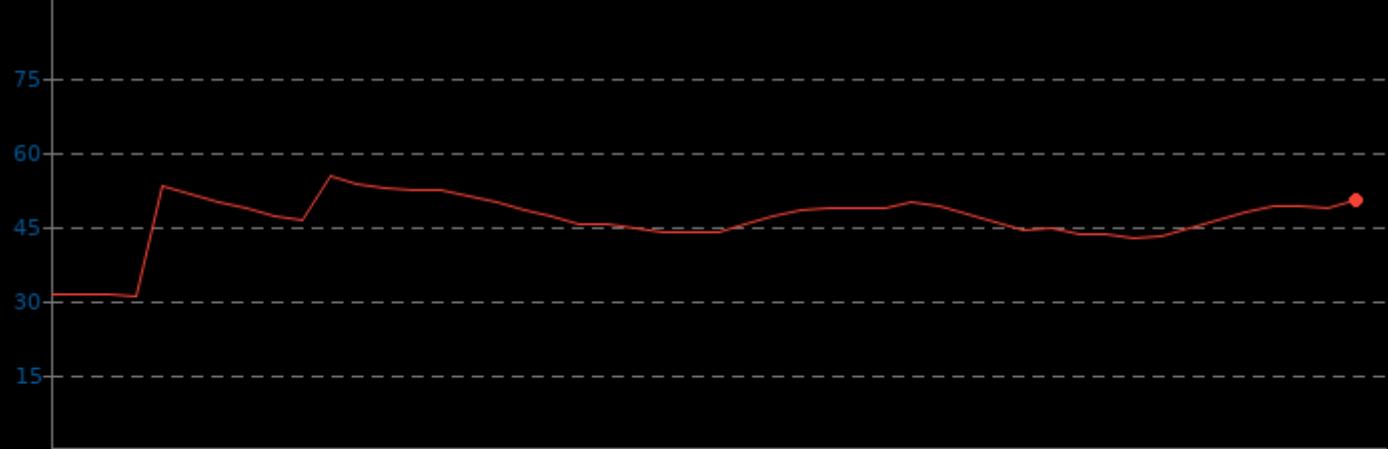


## ASKAP 2018-11-10

CPU Temperature Monitor

Min	31.1
Avg	46.3
Max	55.0

▼ Celsius, Fewer Is Better

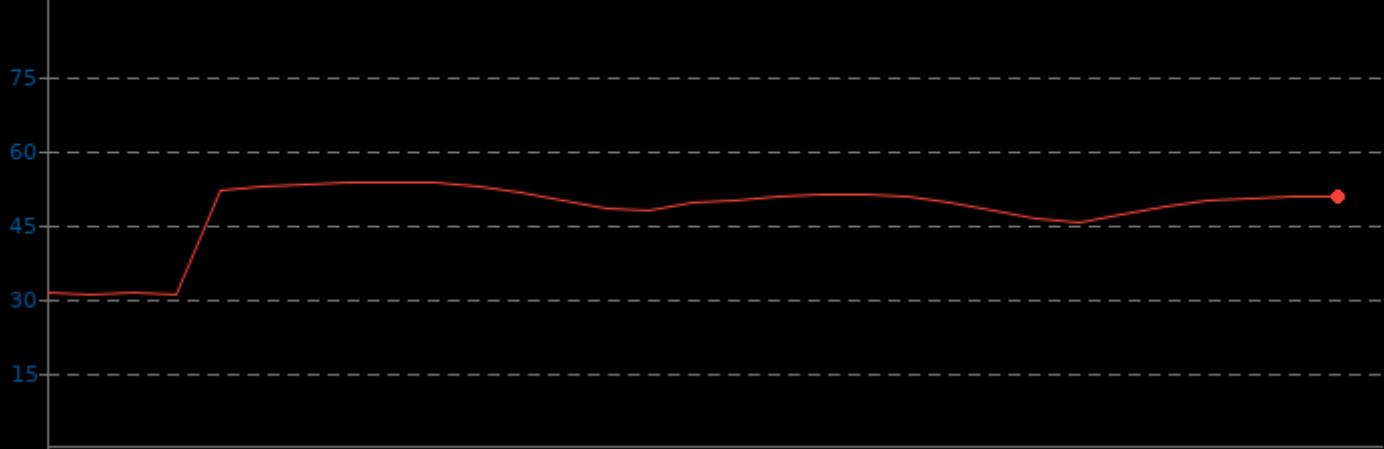


**libjpeg-turbo tjbench 2.0.2**

CPU Temperature Monitor

■ Debian unstable	Min	31.0
	Avg	47.7
	Max	53.5

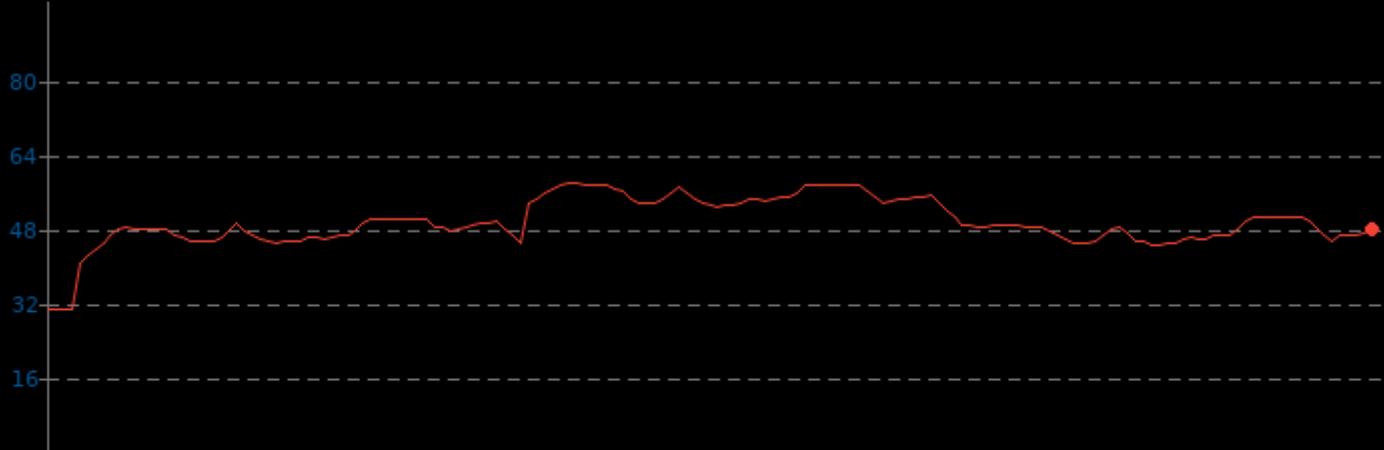
▼ Celsius, Fewer Is Better

**SQLite Speedtest 3.30**

CPU Temperature Monitor

■ Debian unstable	Min	30.8
	Avg	49.5
	Max	58.0

▼ Celsius, Fewer Is Better

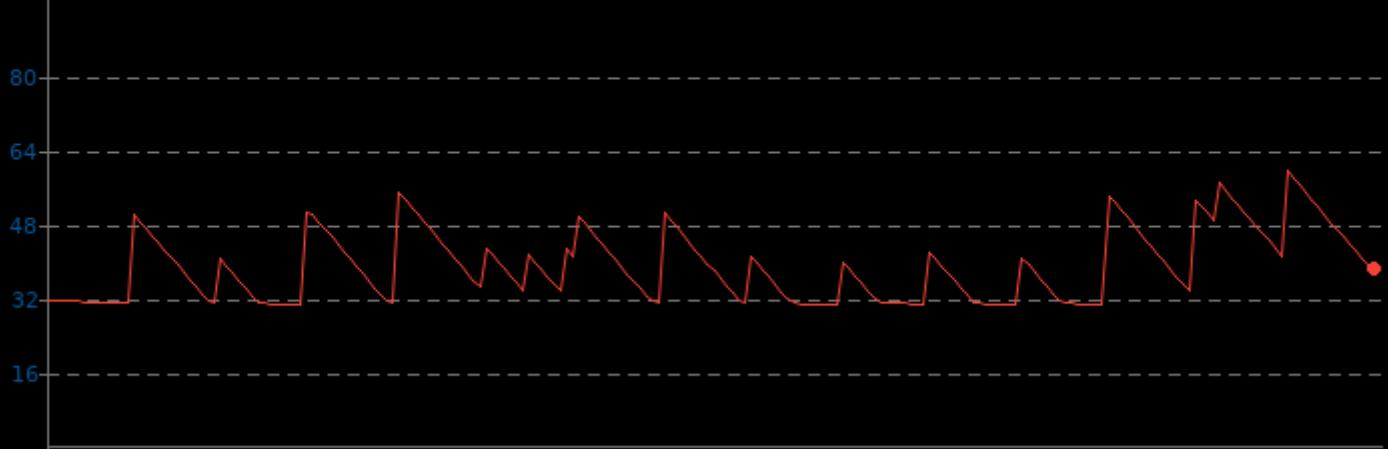


## Redis 5.0.5

CPU Temperature Monitor

Min	30.8	Avg	39.1	Max	59.5
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▼ Celsius, Fewer Is Better

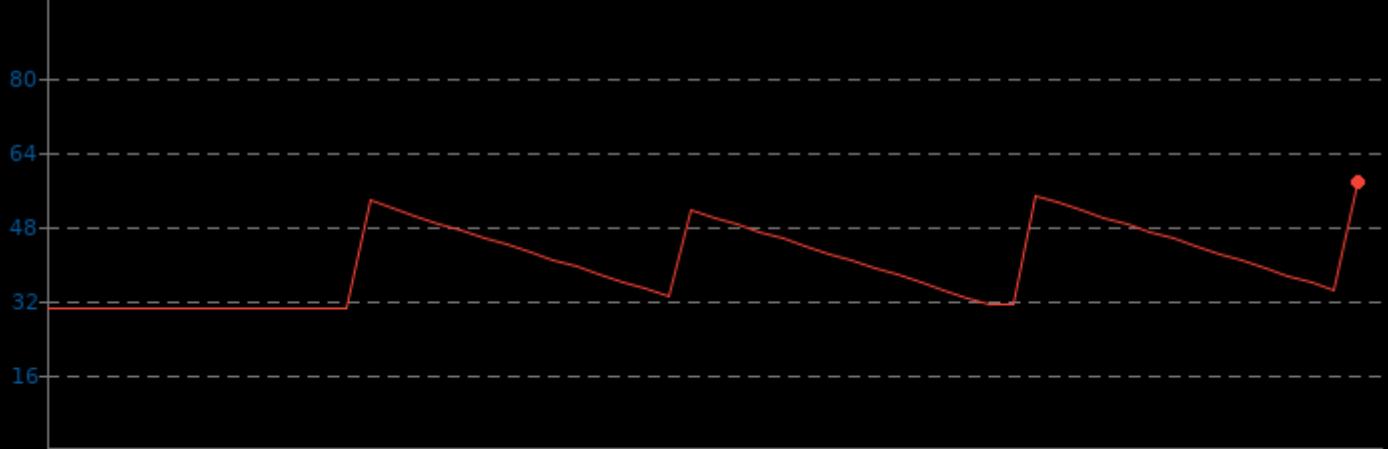


## Redis 5.0.5

CPU Temperature Monitor

Min	30.4	Avg	40.0	Max	57.5
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▼ Celsius, Fewer Is Better

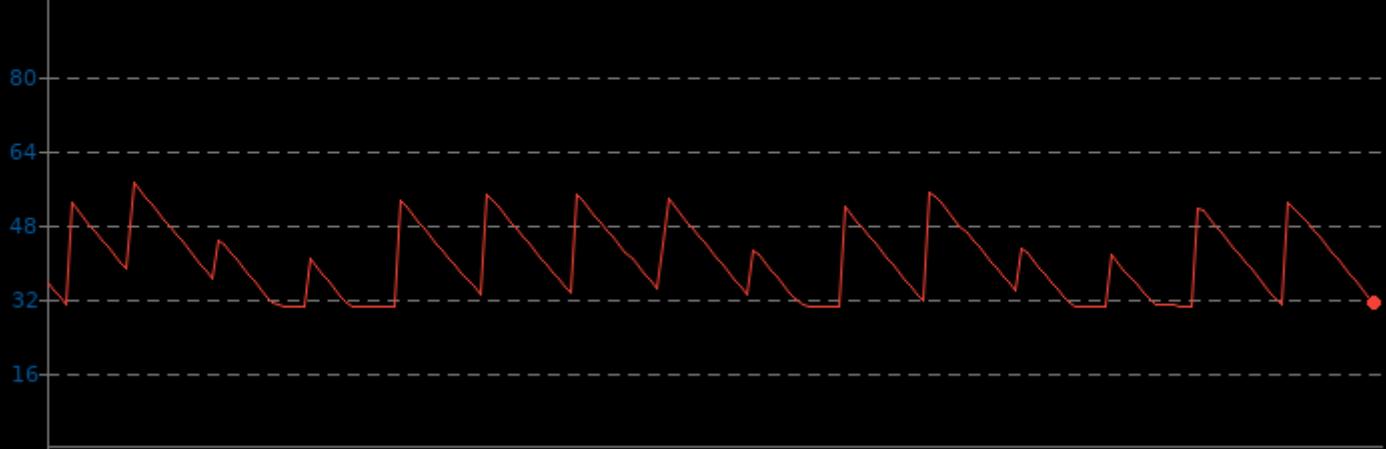


## Redis 5.0.5

CPU Temperature Monitor

■ Debian unstable	Min 30.3	Avg 40.2	Max 56.9
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▼ Celsius, Fewer Is Better

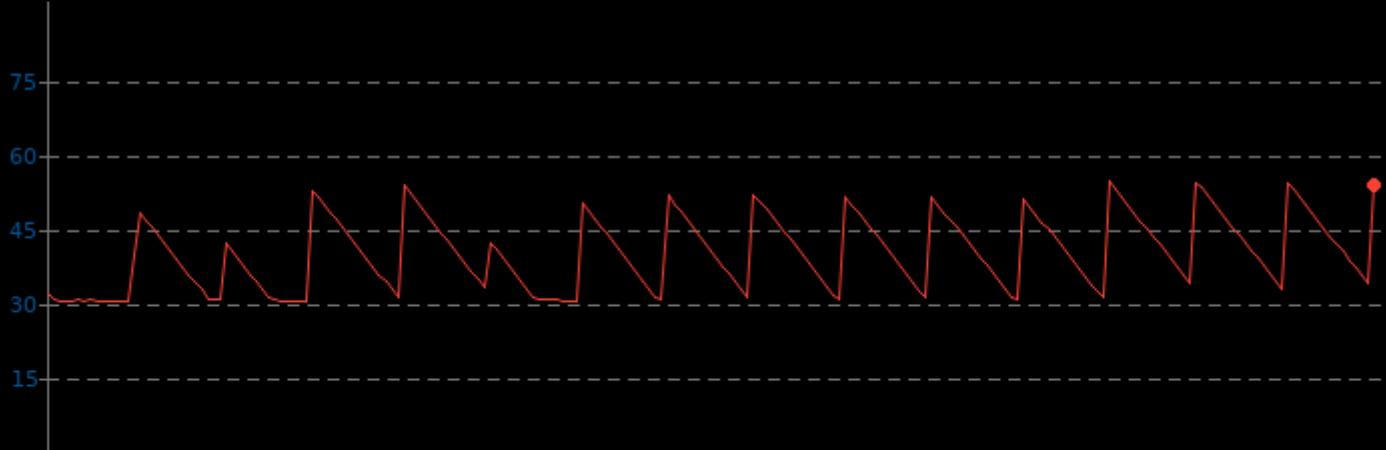


## Redis 5.0.5

CPU Temperature Monitor

■ Debian unstable	Min 30.5	Avg 40.2	Max 54.5
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▼ Celsius, Fewer Is Better

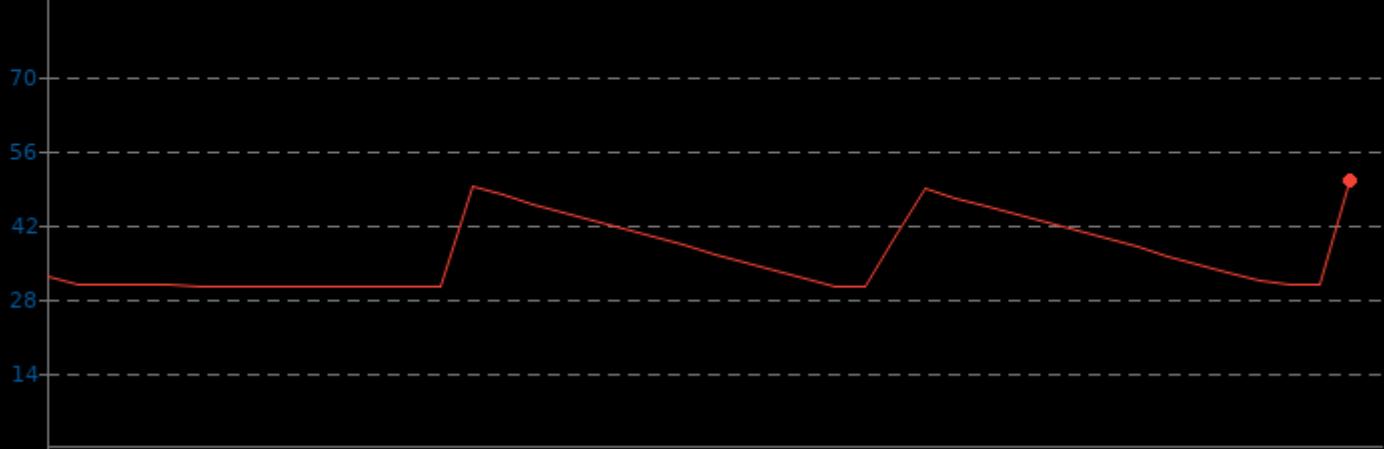


## Redis 5.0.5

CPU Temperature Monitor

Min	30.3	Avg	36.5	Max	50.1
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▼ Celsius, Fewer Is Better



## Apache Benchmark 2.4.29

CPU Temperature Monitor

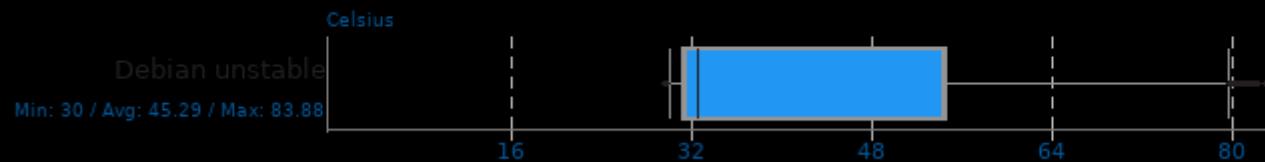
Min	30.9
Avg	50.1
Max	62.9

▼ Celsius, Fewer Is Better



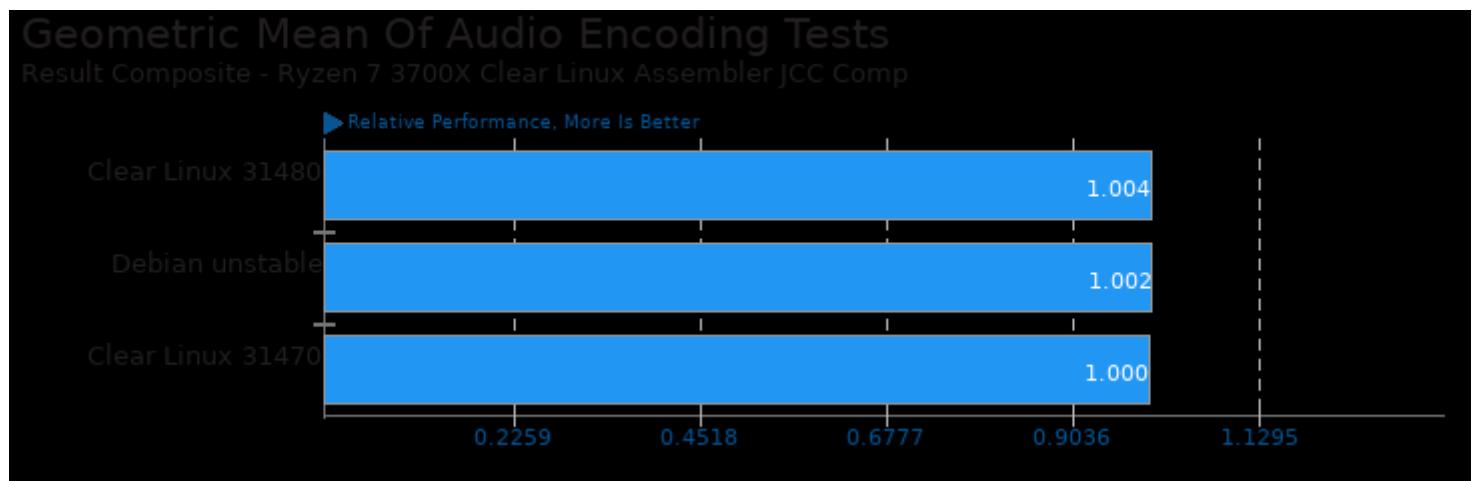
## CPU Temperature Monitor

Phoronix Test Suite System Monitoring

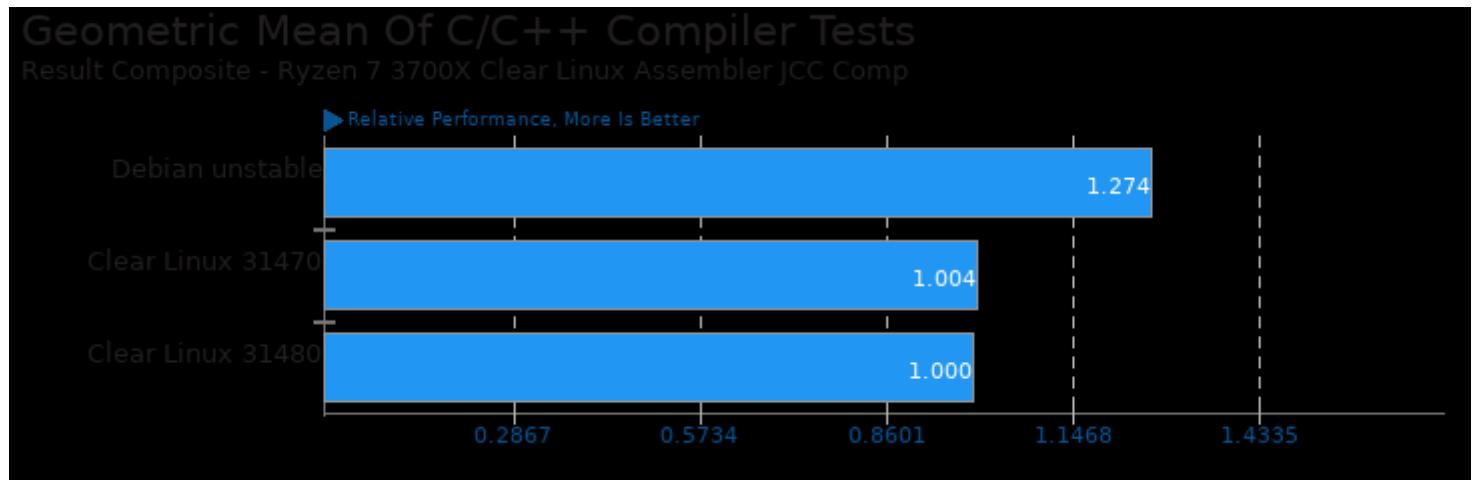


## Ryzen 7 3700X Clear Linux Assembler JCC Comp

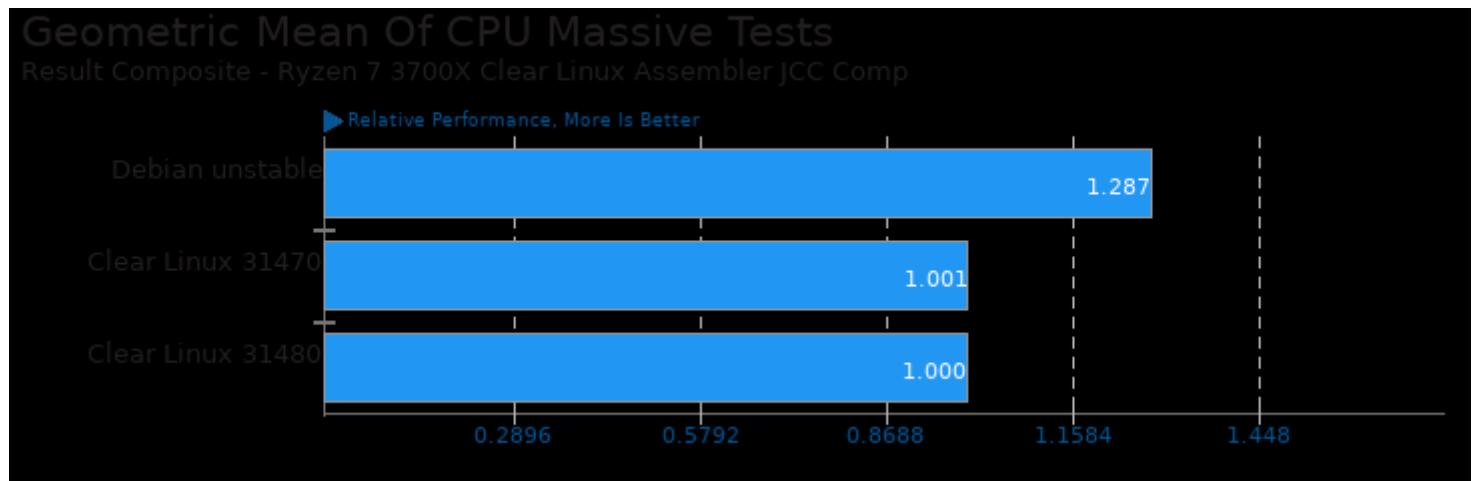
These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/encode-mp3 and pts/encode-flac



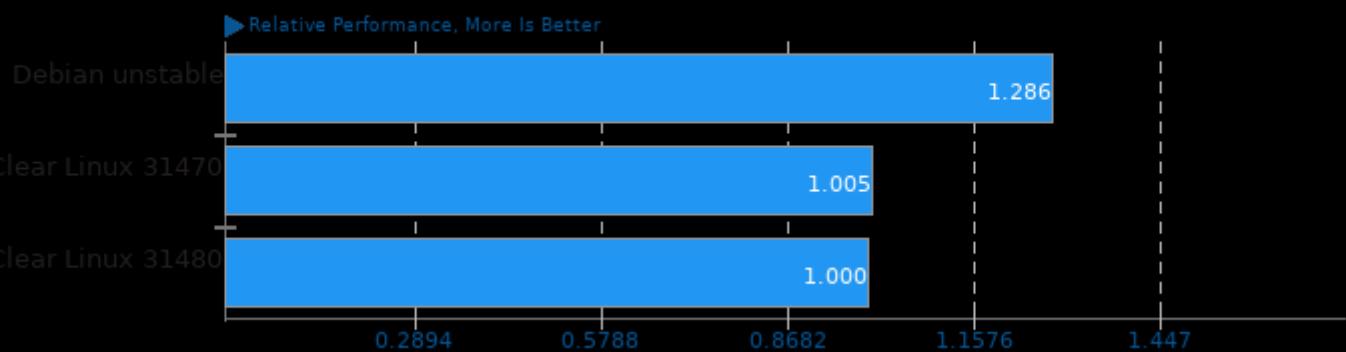
Geometric mean based upon tests: pts/graphics-magick, pts/encode-mp3, pts/encode-flac, pts/apache, pts/sqlite-speedtest, pts/mrbayes, pts/openssl, pts/nginx, pts/svt-vp9 and pts/gromacs



Geometric mean based upon tests: pts/apache, pts/svt-vp9, pts/encode-flac, pts/encode-mp3, pts/graphics-magick, pts/openssl, pts/mrbayes, pts/nginx, pts/npb, pts/parboil, pts/redis, pts/rodrinia and pts/tjbench

## Geometric Mean Of Creator Workloads Tests

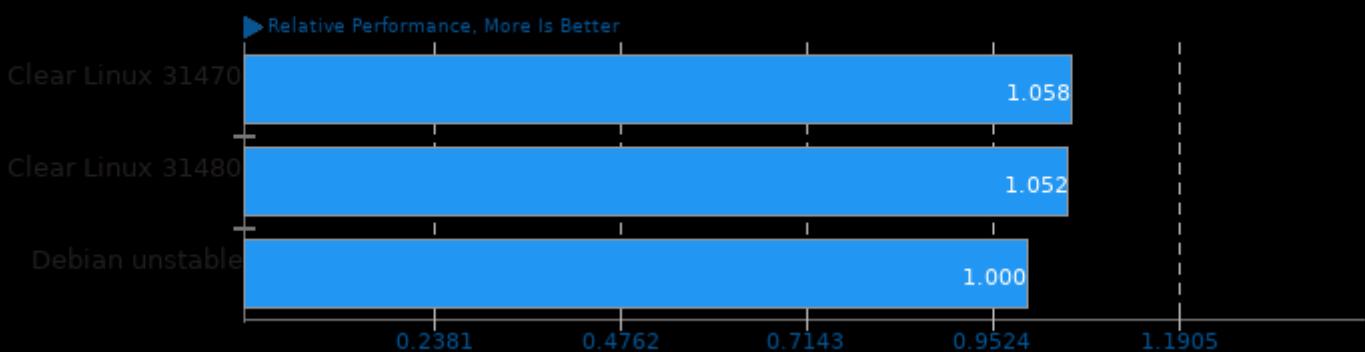
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/smallpt, pts/svt-vp9, pts/encode-mp3, pts/encode-flac, pts/graphics-magick and pts/tjbench

## Geometric Mean Of Database Test Suite

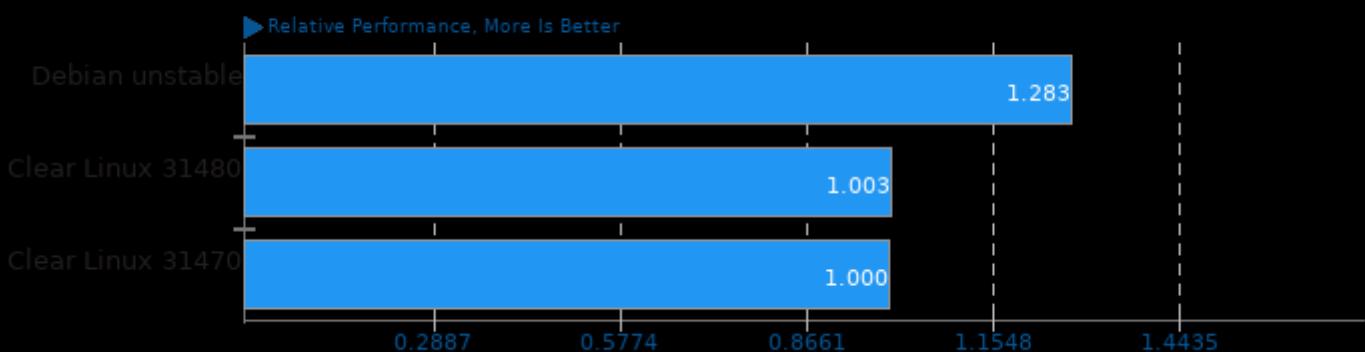
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/sqlite, pts/sqlite-speedtest, pts/redis and pts/rocksdb

## Geometric Mean Of Encoding Tests

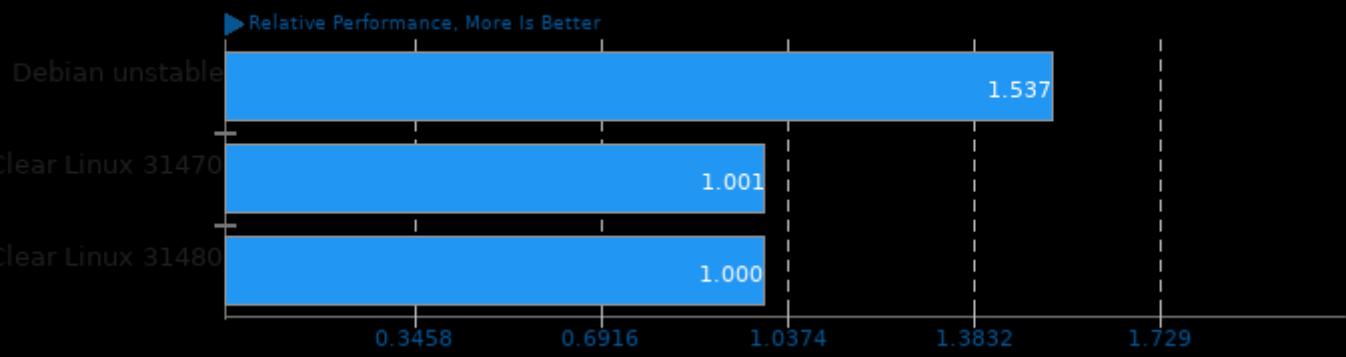
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/encode-mp3, pts/encode-flac and pts/svt-vp9

### Geometric Mean Of HPC - High Performance Computing Tests

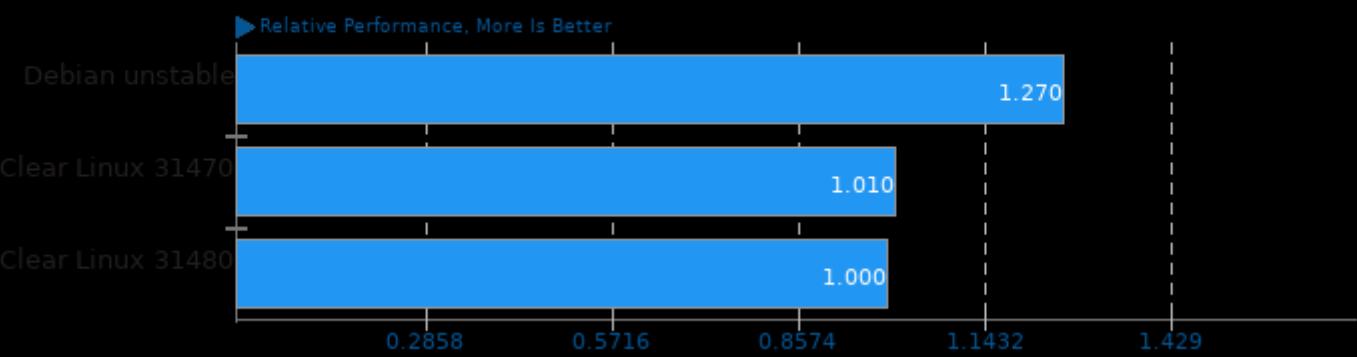
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/npb, pts/rodinia, pts/parboil, pts/askap, pts/mt-dgemm, pts/gromacs, pts/minife, pts/mrbayes and pts/qmcpack

### Geometric Mean Of Imaging Tests

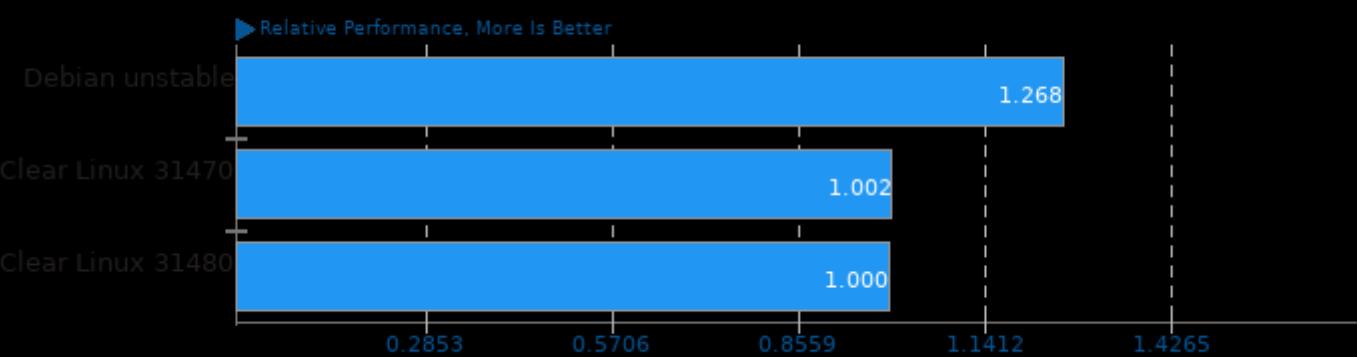
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



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

### Geometric Mean Of Common Kernel Benchmarks Tests

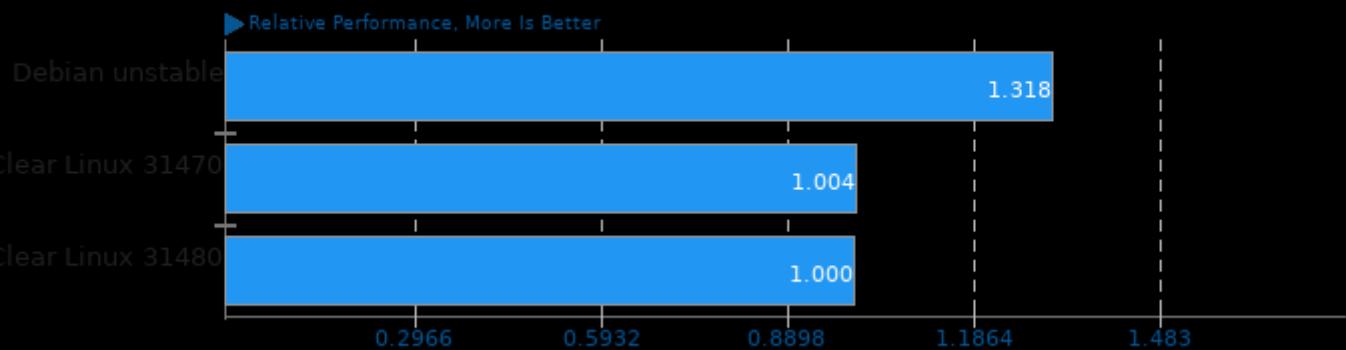
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/apache, pts/sqlite-speedtest, pts/openssl and pts/rocksdb

### Geometric Mean Of MPI Benchmarks Tests

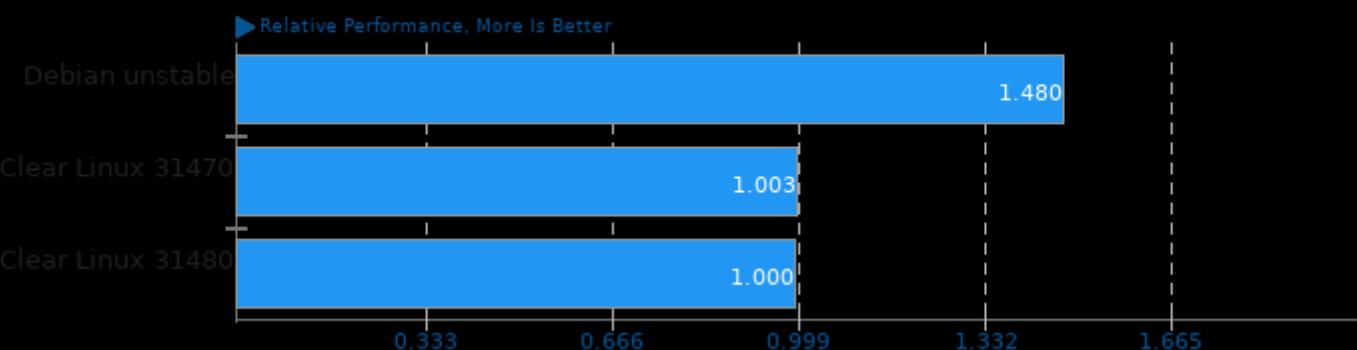
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/askap, pts/gromacs, pts/qmcpack, pts/mrbayes, pts/npb and pts/minife

### Geometric Mean Of Multi-Core Tests

Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/askap, pts/n-queens, pts/svt-vp9, pts/rodinia, pts/parboil, pts/npb, pts/smallpt, pts/mt-dgemm, pts/graphics-magick and pts/gromacs

### Geometric Mean Of NVIDIA GPU Compute Tests

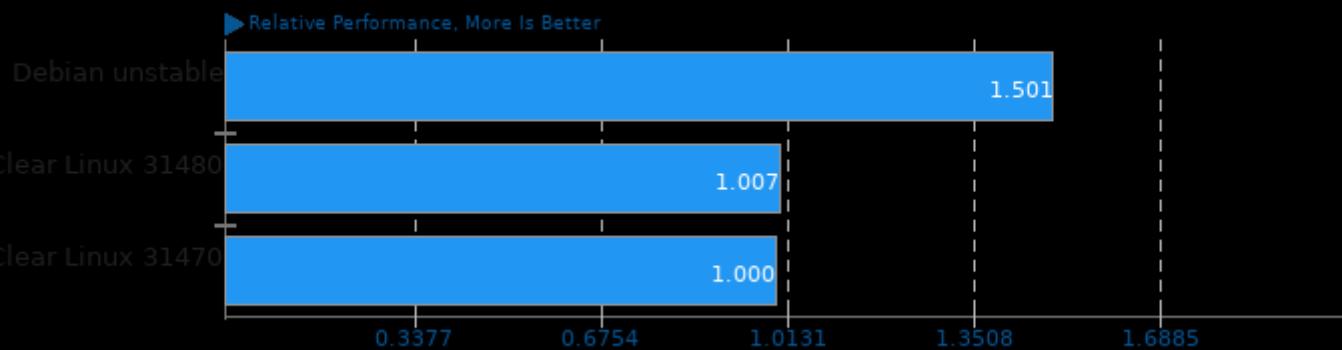
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/gromacs and pts/rodinia

## Geometric Mean Of OpenCL Tests

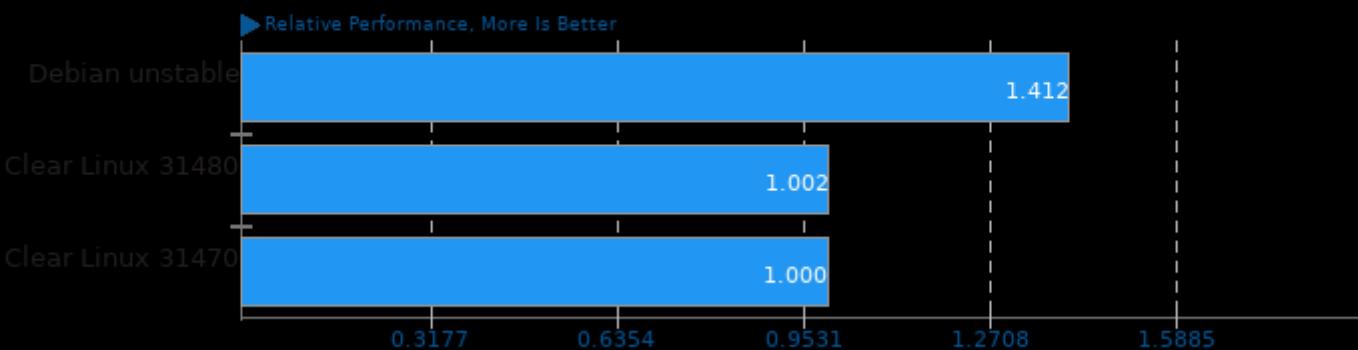
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/rodrinia and pts/parboil

## Geometric Mean Of OpenMPI Tests

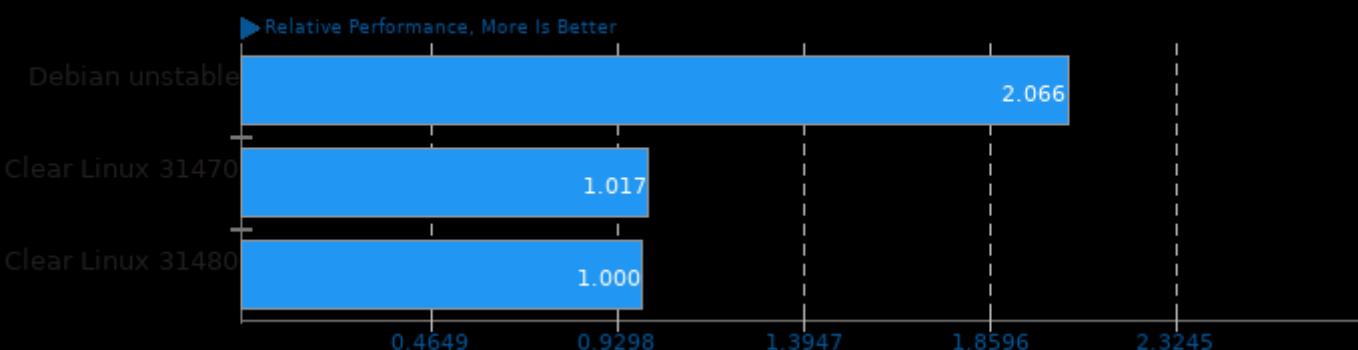
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/parboil, pts/minife, pts/rodrinia, pts/mrbayes, pts/qmcpack and pts/askap

## Geometric Mean Of Programmer / Developer System Benchmarks Tests

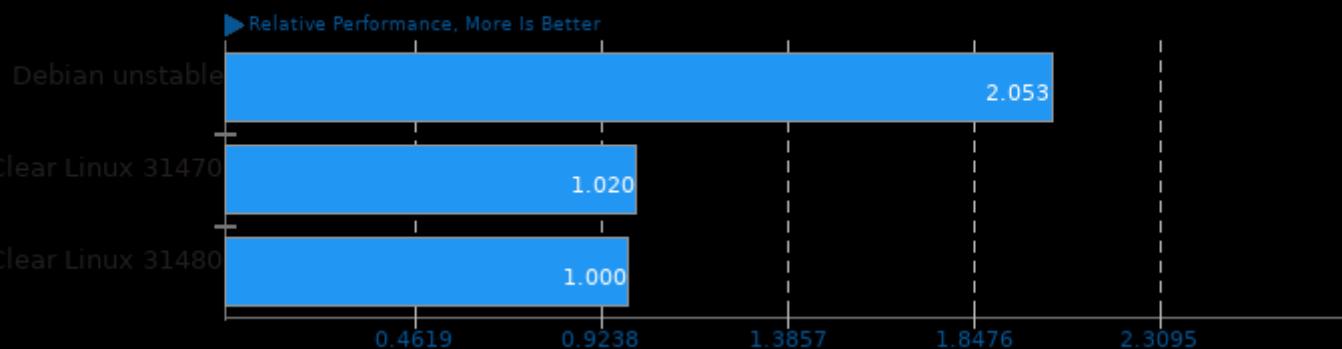
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/sqlite-speedtest and pts/mt-dgemm

### Geometric Mean Of Scientific Computing Tests

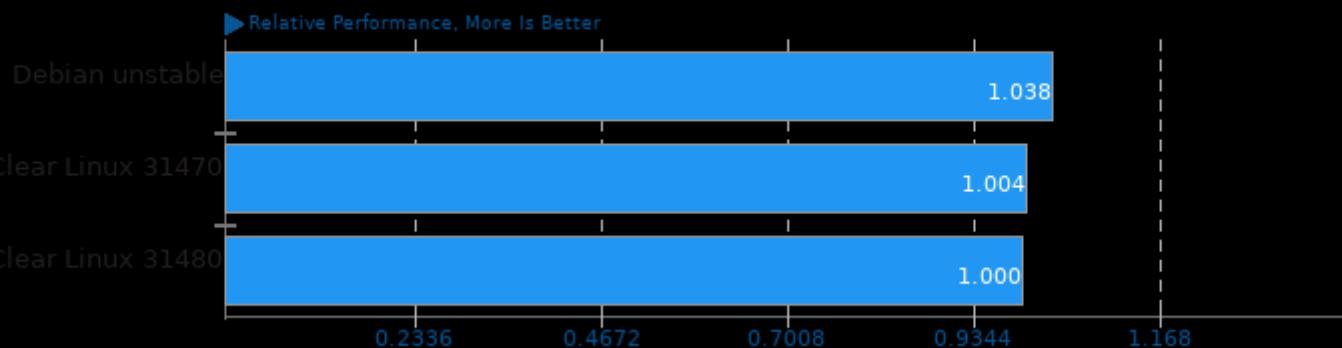
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/mt-dgemm, pts/gromacs, pts/minife, pts/mrbayes and pts/qmcpack

### Geometric Mean Of Server Tests

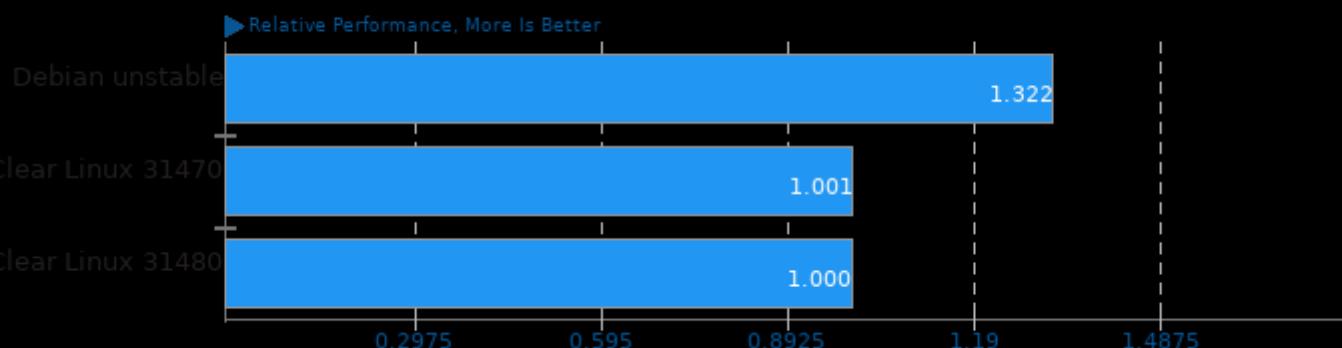
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/apache, pts/nginx, pts/redis, pts/rocksdb, pts/openssl, pts/sqlite and pts/sqlite-speedtest

### Geometric Mean Of Server CPU Tests

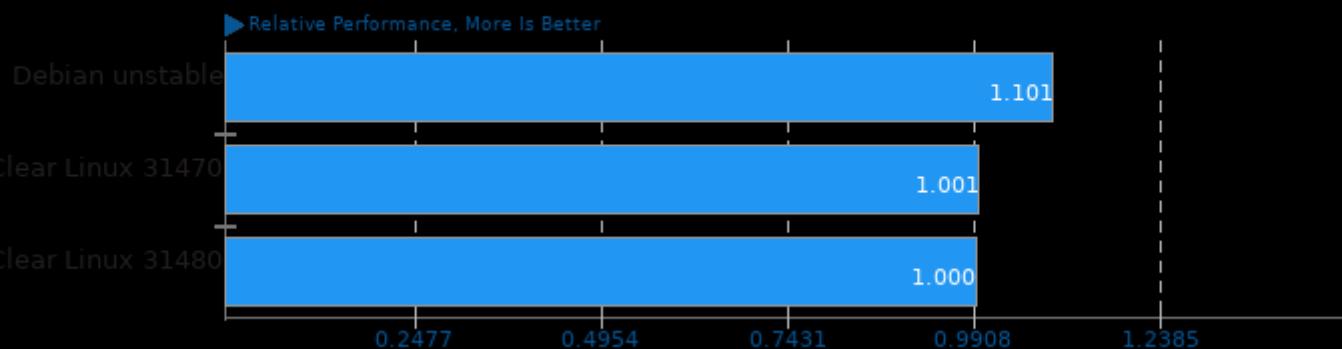
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/npb, pts/rodinia, pts/svt-vp9, pts/openssl, pts/tjbench and pts/redis

**Geometric Mean Of Single-Threaded Tests**

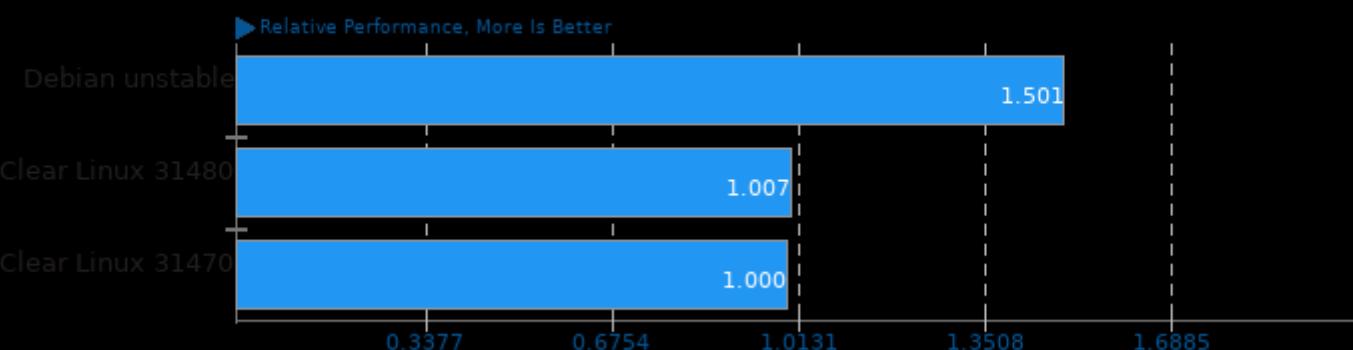
Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/encode-flac, pts/encode-mp3, pts/tjbench, pts/redis and pts/nginx

**Geometric Mean Of Common Workstation Benchmarks Tests**

Result Composite - Ryzen 7 3700X Clear Linux Assembler JCC Comp



Geometric mean based upon tests: pts/rodinia and pts/parboil

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 8 March 2024 19:57.*