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terminaltest

AMD GX-420GI Dual Channel

Automated Executive Summary

AMD GX-420CA SOC had the most wins, coming in first place for 64% of the tests.

Test Systems:

AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20

AMD G-T56N

Processor: AMD G-T56N @ 1.65GHz (2 Cores), Motherboard: HP 17E2 (K30 v01.20 BIOS), Chipset: AMD 14h Root Complex, Memory: 2 x GB DDR3-800MT/s, Disk: 120GB SSDPR-CL100-120-, Graphics: AMD Radeon HD 6320, Audio: AMD Wrestler HDMI Audio, Network: Broadcom NetLink BCM57781 PCIe

OS: Debian 11, Kernel: 5.10.0-18-amd64 (x86_64), Vulkan: 1.0.2, Compiler: GCC 10.2.1 20210110, File-System: ext4,

Screen Resolution: 640x480

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-Km9U7s/gcc-10-10.2.1/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-Km9U7s/gcc-10-10.2.1/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-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 - CPU Microcode: 0x500010d
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Not affected + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

AMD G-T52R - AMD Radeon HD 6310 - Inventec Z CLASS

AMD G-T52R

Processor: AMD G-T52R (1 Core), Motherboard: Inventec Z CLASS (1.0F BIOS), Chipset: AMD 14h Root Complex, Memory: 1 x 2 GB DDR3-1333MT/s 37352E4138334331, Disk: 120GB SSDPR-CL100-120-, Graphics: AMD Radeon HD 6310, Audio: AMD Wrestler HDMI Audio, Network: Realtek RTL8111/8168/8411 + Qualcomm Atheros AR93xx

OS: Debian 11, Kernel: 5.10.0-18-amd64 (x86_64), Vulkan: 1.0.2, Compiler: GCC 10.2.1 20210110, File-System: ext4, Screen Resolution: 1024x768

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-Km9U7s/gcc-10-10.2.1/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-Km9U7s/gcc-10-10.2.1/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-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: CPU Microcode: 0x5000028
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Not affected + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

AMD G-T48E - AMD Radeon HD 6250 - Inventec D CLASS

AMD G-T48E

Processor: AMD G-T48E (2 Cores), Motherboard: Inventec D CLASS (3.0E BIOS), Chipset: AMD 14h Root Complex, Memory: 1 x 4 GB DDR3-1600MT/s 4B4E574D58312D45, Disk: 120GB SSDPR-CL100-120-, Graphics: AMD Radeon HD 6250, Audio: AMD Wrestler HDMI Audio, Network: Realtek RTL8111/8168/8411

OS: Debian 11, Kernel: 5.10.0-18-amd64 (x86_64), Vulkan: 1.0.2, Compiler: GCC 10.2.1 20210110, File-System: ext4, Screen Resolution: 1024x768

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-Km9U7s/gcc-10-10.2.1/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-Km9U7s/gcc-10-10.2.1/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-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: CPU Microcode: 0x5000101
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Not affected + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40

AMD GX-217GA SOC

Processor: AMD GX-217GA SOC @ 1.65GHz (2 Cores), Motherboard: HP 2187 (L40 v02.10 BIOS), Chipset: AMD 16h Root Complex, Memory: 2 x GB DDR3-1600MT/s, Disk: 128GB SSSTC CV8-8E128-, Graphics: AMD Radeon HD 8280E, Audio: AMD Kabini HDMI/DP, Network: Realtek RTL8111/8168/8411

OS: Debian 11, Kernel: 5.10.0-18-amd64 (x86_64), Vulkan: 1.0.2, Compiler: GCC 10.2.1 20210110, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-Km9U7s/gcc-10-10.2.1/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-Km9U7s/gcc-10-10.2.1/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-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 - CPU Microcode: 0x700010b
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Mitigation of untrained return thunk; SMT disabled + 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 Retpolines STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

AMD GX-420CA SOC - AMD Radeon HD 8400E - HP 213D (L40

AMD GX-420CA SOC

Processor: AMD GX-420CA SOC @ 2.00GHz (4 Cores), Motherboard: HP 213D (L40 v2.05 BIOS), Chipset: AMD 16h Root Complex, Memory: 2 x GB DDR3-1600MT/s HMT425S6CFR6A-PB, Disk: 128GB SSSTC CV8-8E128-, Graphics: AMD Radeon HD 8400E, Audio: AMD Kabini HDMI/DP, Network: Realtek RTL8111/8168/8411

OS: Debian 11, Kernel: 5.10.0-18-amd64 (x86_64), Vulkan: 1.0.2, Compiler: GCC 10.2.1 20210110, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-Km9U7s/gcc-10-10.2.1/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-Km9U7s/gcc-10-10.2.1/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-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 - CPU Microcode: 0x700010b
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Mitigation of untrained return thunk; SMT disabled + 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 Retpolines STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

AMD Embedded G GX-420GI Radeon R7E - AMD Radeon

AMD Embedded G GX-420GI Radeon R7E

Processor: AMD Embedded G GX-420GI Radeon R7E @ 2.00GHz (2 Cores / 4 Threads), Motherboard: HP 8158 (M40 v01.09 BIOS), Chipset: AMD 15h, Memory: 1 x 8 GB DDR4-1866MT/s HMA81GS6AFR8N-UH, Disk: 128GB SSSTC CV8-8E128-, Graphics: AMD Radeon R5/R6/R7, Audio: AMD Kabini HDMI/DP, Network: Realtek RTL8111/8168/8411 + Intel 8260

OS: Debian 11, Kernel: 5.10.0-18-amd64 (x86_64), Vulkan: 1.0.2, Compiler: GCC 10.2.1 20210110, File-System: ext4, Screen Resolution: 800x600

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-Km9U7s/gcc-10-10.2.1/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-Km9U7s/gcc-10-10.2.1/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-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: 0x600611a
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Mitigation of untrained return thunk; SMT vulnerable + 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 Retpolines IBPB: conditional STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

AMD GX-420GI Dual Channel

Processor: AMD Embedded G GX-420GI Radeon R7E @ 2.00GHz (2 Cores / 4 Threads), Motherboard: HP 8158 (M40 v01.09 BIOS), Chipset: AMD 15h, Memory: 2 x 4 GB DDR4-1866MT/s Samsung M471A5244CB0-CRC, Disk: 128GB SSSTC CV8-8E128-, Graphics: AMD Radeon R5/R6/R7, Audio: AMD Kabini HDMI/DP, Network: Realtek RTL8111/8168/8411 + Intel 8260

OS: Debian 11, Kernel: 5.10.0-18-amd64 (x86_64), Vulkan: 1.0.2, Compiler: GCC 10.2.1 20210110, File-System: ext4, Screen Resolution: 1920x1080

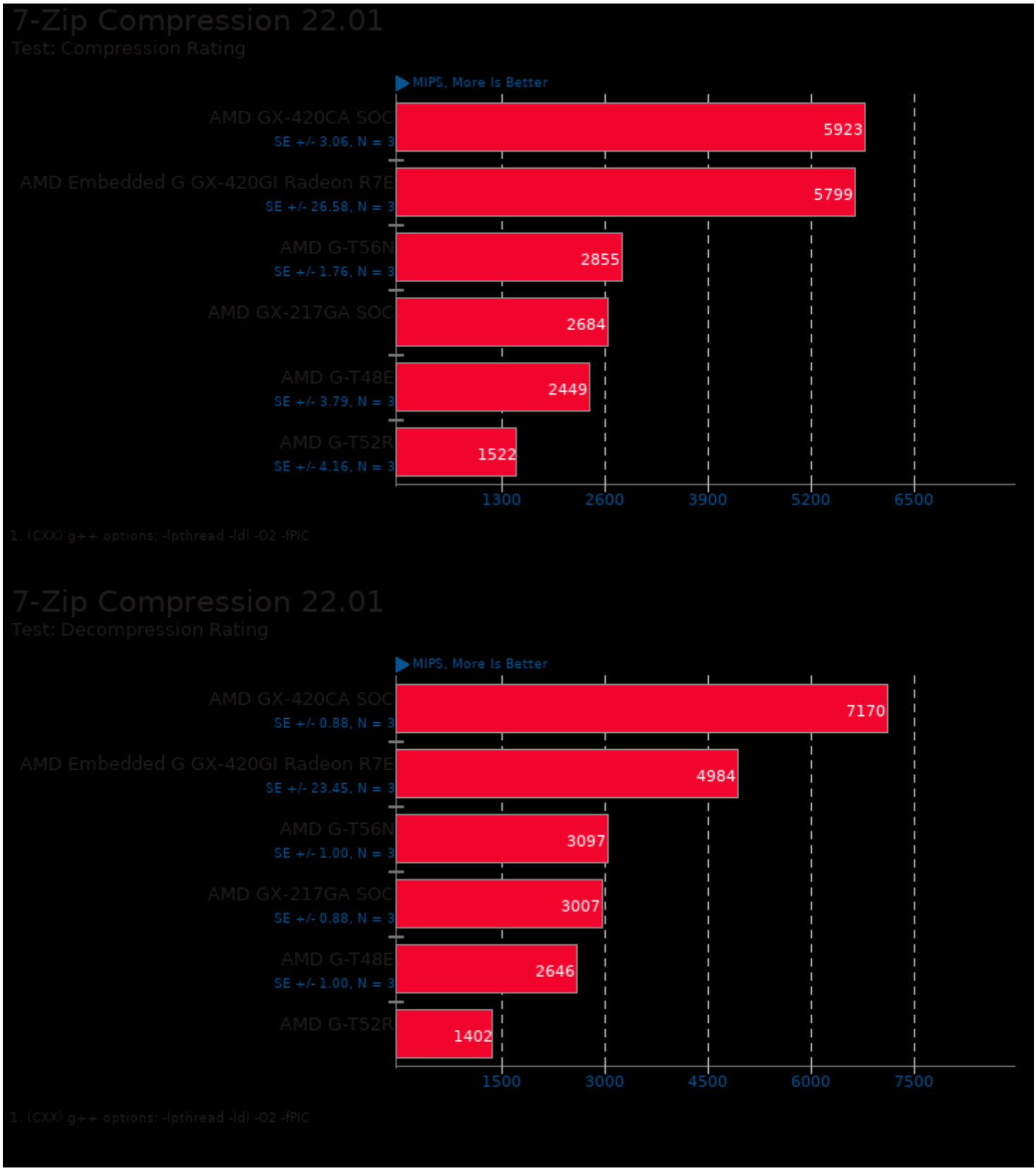
Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-Km9U7s/gcc-10-10.2.1/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-Km9U7s/gcc-10-10.2.1/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-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: 0x600611a
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Mitigation of untrained return thunk; SMT vulnerable + 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 Retpolines IBPB: conditional STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

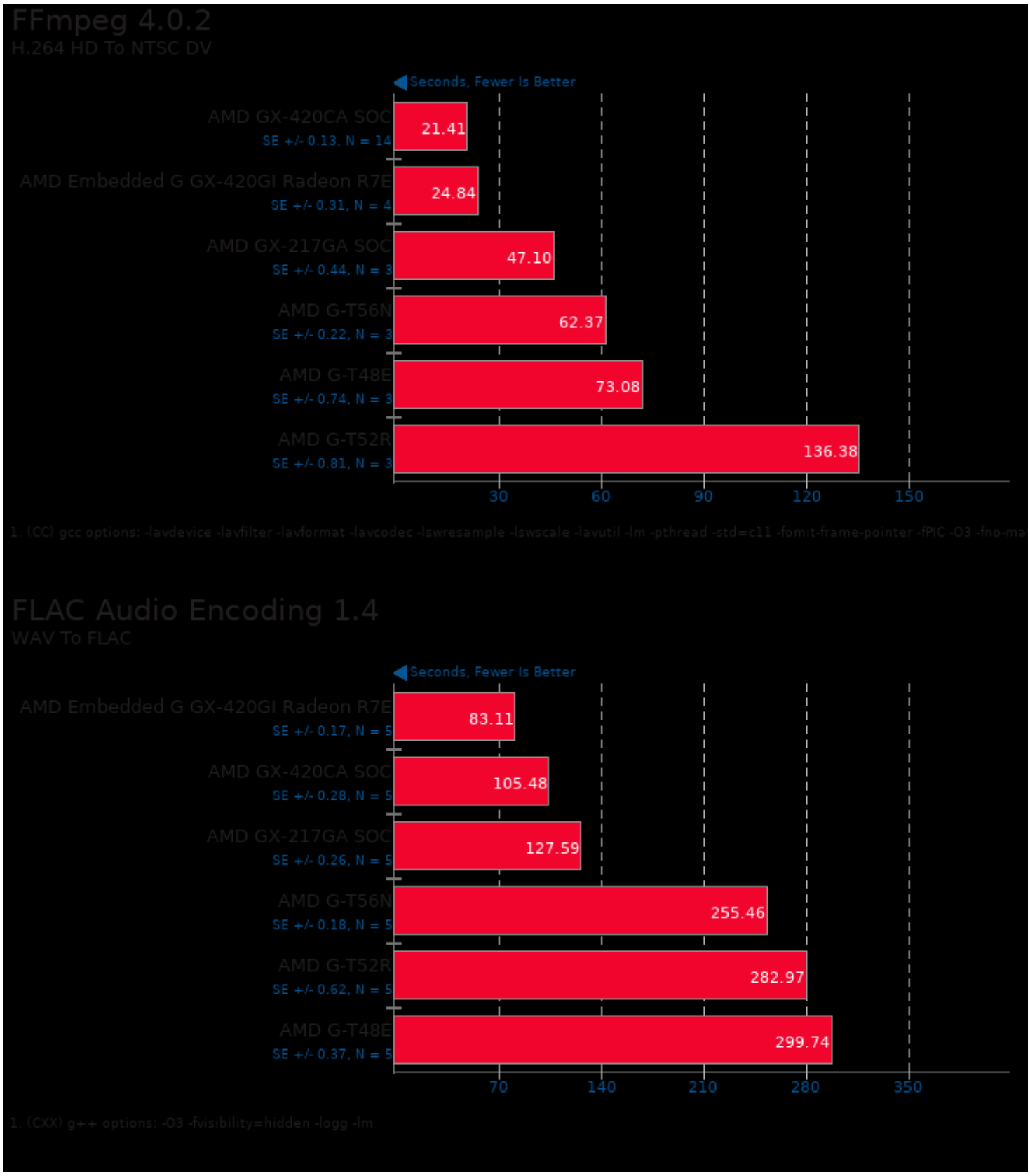
terminaltest

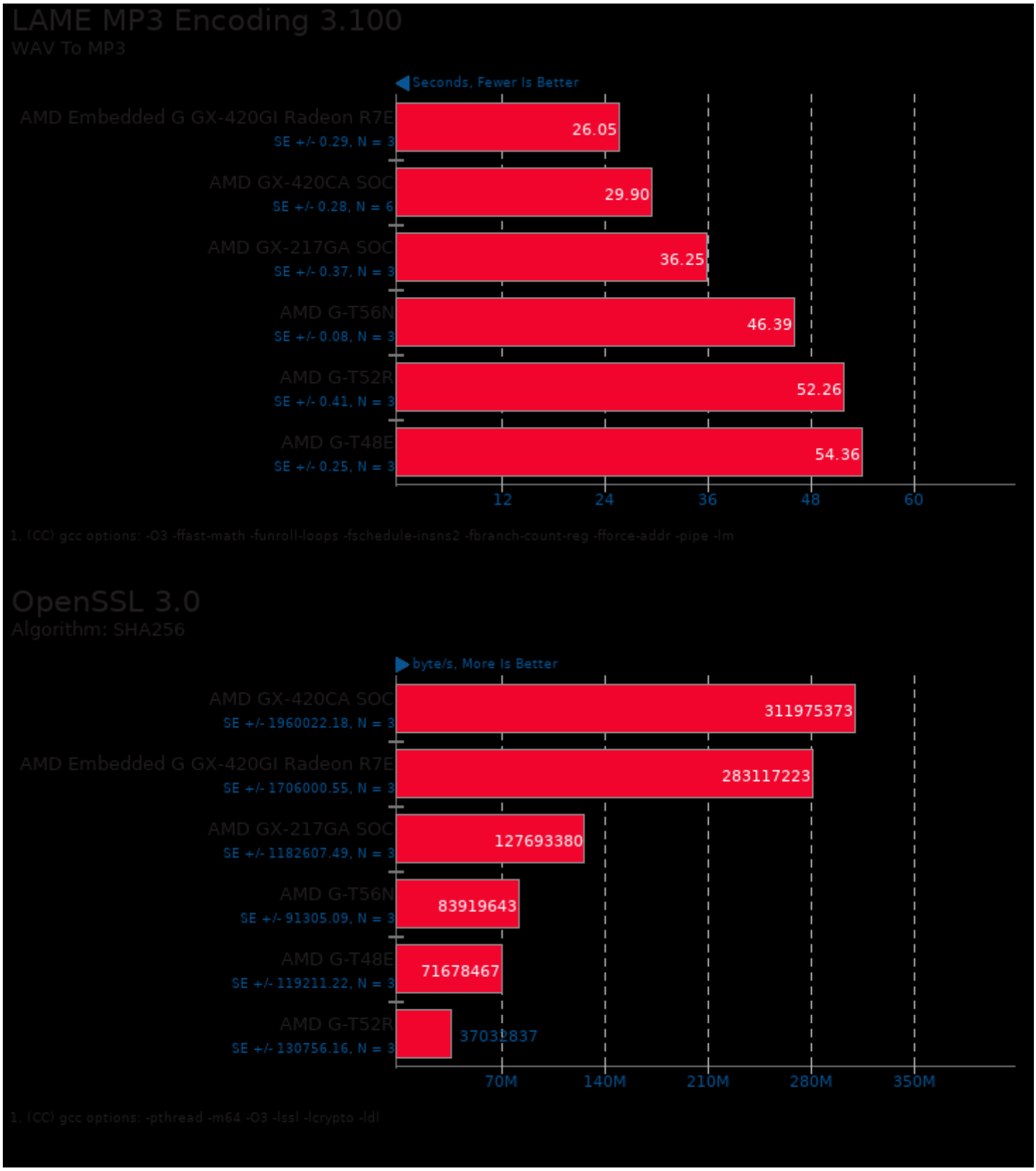
	AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20	AMD G-T56N	AMD G-T52R - AMD Radeon HD 6310 - Invent ec Z CLASS	AMD G-T52R	AMD G-T48E - AMD Radeon HD 6250 - Invent ec D CLASS	AMD G-T48E	AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40	AMD GX-217GA SOC	AMD GX-420CA SOC - AMD Radeon HD 8400E - HP 213D (L40	AMD GX-420CA SOC	AMD Embedded G GX-420GI Radeon R7E - AMD Radeon	AMD Embedded G GX-420GI Radeon R7E	AMD GX-420GI Dual Channel
7-Zip Compression - Compression Rating (MIPS)		2855		**1522**		2449		2684		**5923**		5799	
Normalized		48.2%		25.7%		41.35%		45.31%		100%		97.91%	
Standard Deviation		0.1%		0.5%		0.3%				0.1%		0.8%	
7-Zip Compression - D.R (MIPS)		3097		**1402**		2646		3007		**7170**		4984	
Normalized		43.19%		19.55%		36.9%		41.94%		100%		69.51%	
Standard Deviation		0.1%				0.1%		0.1%		0%		0.8%	
FFmpeg - H.2.H.T.N.D (sec)		62.373		**136.377**		73.083		47.103		**21.414**		24.844	
Normalized		34.33%		15.7%		29.3%		45.46%		100%		86.19%	
Standard Deviation		0.6%		1%		1.7%		1.6%		2.3%		2.5%	
FLAC Audio Encoding - WAV To FLAC		255.460		282.974		**299.744**		127.588		105.477		**83.113**	
Normalized		32.53%		29.37%		27.73%		65.14%		78.8%		100%	
Standard Deviation		0.2%		0.5%		0.3%		0.4%		0.6%		0.5%	
LAME MP3 Encoding - WAV To MP3		46.394		52.257		**54.360**		36.248		29.897		**26.054**	
Normalized		56.16%		49.86%		47.93%		71.88%		87.15%		100%	
Standard Deviation		0.3%		1.4%		0.8%		1.7%		2.3%		1.9%	
OpenSSL - SHA256		83919643		**37032837**		71678467		12769380		**311975373**		28311723	
Normalized		26.9%		11.87%		22.98%		40.93%		100%		90.75%	
Standard Deviation		0.2%		0.6%		0.3%		1.6%		1.1%		1%	
OpenSSL - RSA4096 (sign/s)		64.7		**29.5**		55.1		63.8		**154.6**		135.2	
Normalized		41.85%		19.08%		35.64%		41.27%		100%		87.45%	
Standard Deviation		0.1%		0.2%		0%		0.1%		0.1%		0.3%	

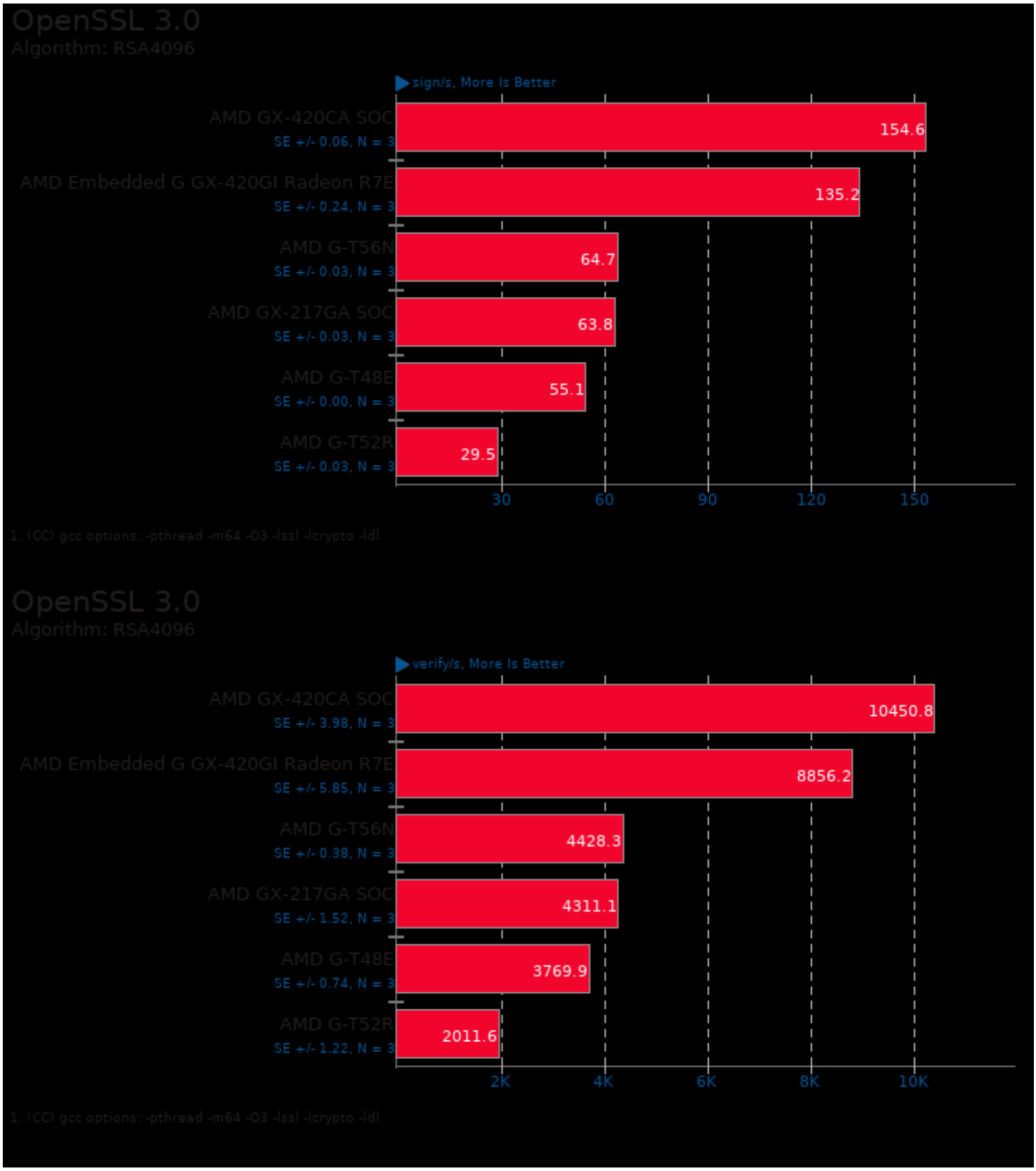
terminaltest

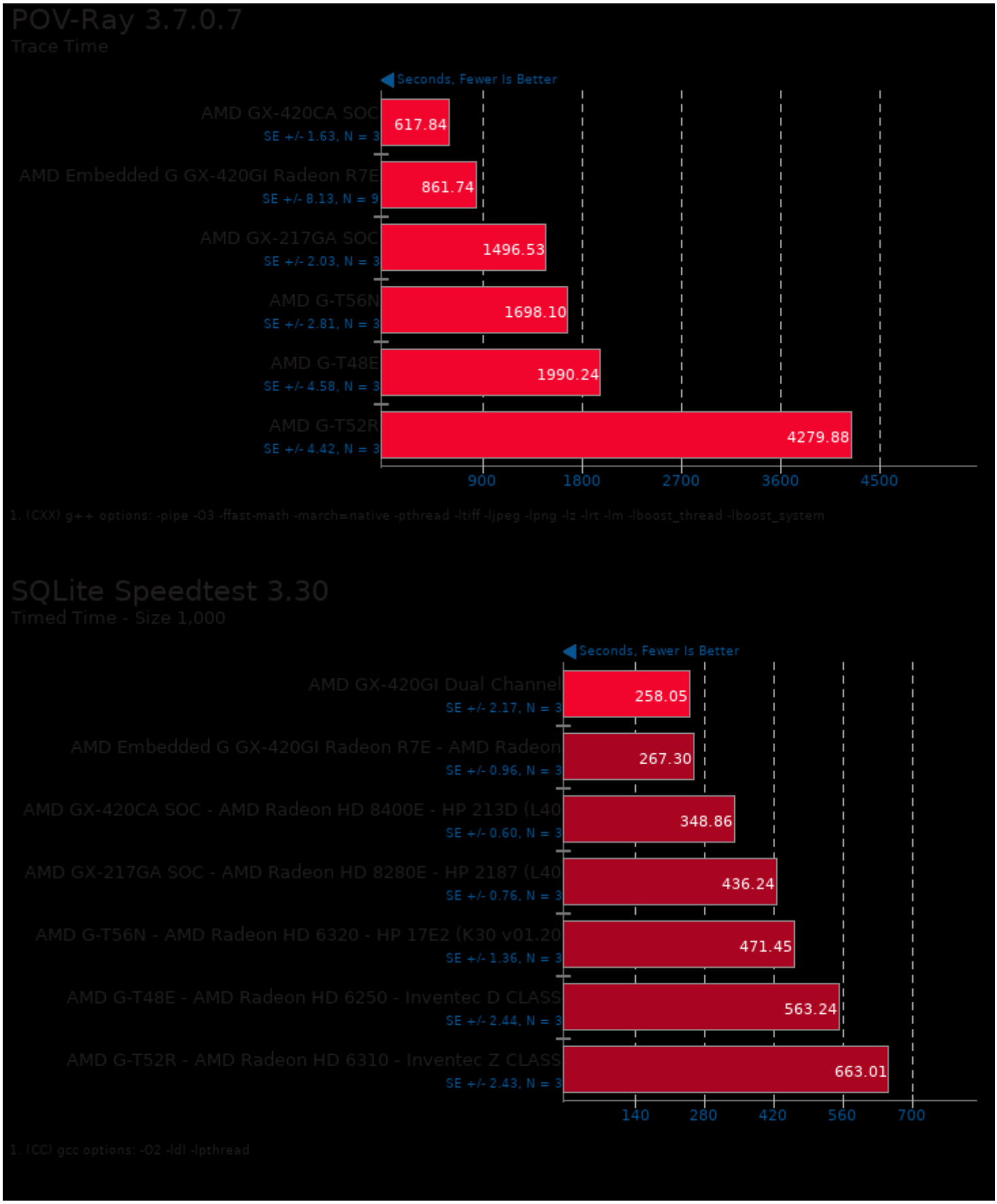
OpenSSL - RSA4096 (verify/s)	4428	**2012**	3770	4311	**10451**	8856		
Normalized	42.37%	19.25%	36.07%	41.25%	100%	84.74%		
Standard Deviation	0%	0.1%	0%	0.1%	0.1%	0.1%		
POV-Ray - Trace Time	1698	**4280**	1990	1497	**617.844**	861.739		
Normalized	36.38%	14.44%	31.04%	41.29%	100%	71.7%		
Standard Deviation	0.3%	0.2%	0.4%	0.2%	0.5%	2.8%		
SQLite Speedtest - Timed Time - Size 1,000 (sec)	471.449	**663.014**	563.244	436.239	348.858	267.304	**258.052**	
Normalized	54.74%	38.92%	45.82%	59.15%	73.97%	96.54%	100%	
Standard Deviation	0.5%	0.6%	0.8%	0.3%	0.3%	0.6%	1.5%	
Sysbench - RAM / Memory (MiB/sec)	1492	**1215**	1281	2732	**3551**	1549	1559	
Normalized	42.02%	34.21%	36.08%	76.92%	100%	43.62%	43.89%	
Standard Deviation	0.3%	1.1%	0.1%	2.4%	1%	2.3%	0.3%	
Sysbench - CPU	328.72	**149.73**	279.83	1563	**3790**	2813	2803	
Normalized	8.67%	3.95%	7.38%	41.24%	100%	74.23%	73.97%	
Standard Deviation	0%	0%	0%	0%	0%	0.3%	0.8%	
x264 - Bosphorus 4K (FPS)	0.56	**0.24**	0.5	0.88	**2.09**	1.77		
Normalized	26.79%	11.48%	23.92%	42.11%	100%	84.69%		
Standard Deviation	1%	2.4%	0%	0%	0.6%	1.5%		
x264 - Bosphorus 1080p (FPS)	2.43	**0.98**	2.07	3.84	**8.88**	7.52		
Normalized	27.36%	11.04%	23.31%	43.24%	100%	84.68%		
Standard Deviation	0.6%	0%	0.6%	0.7%	0.8%	2.2%		

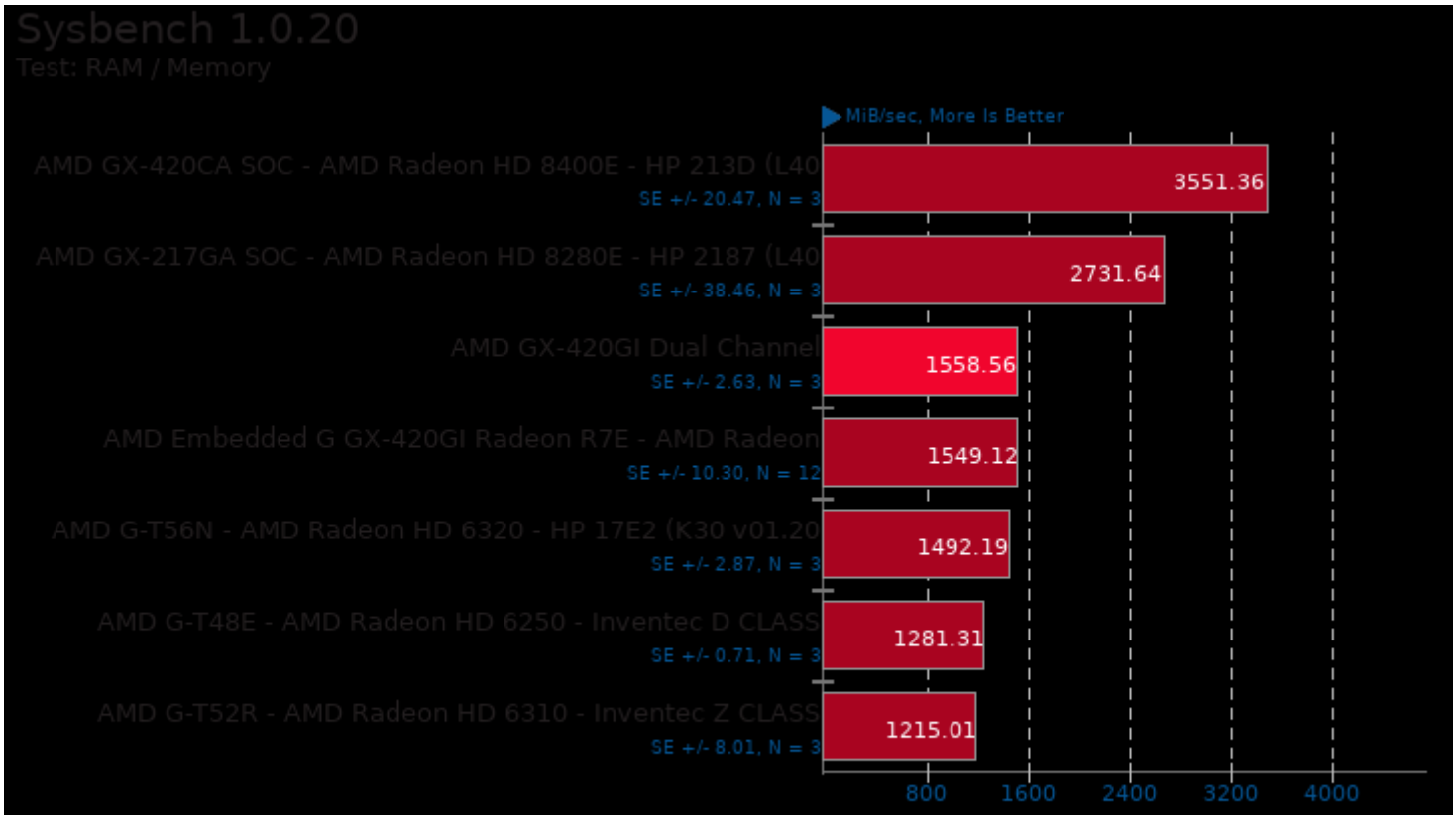

7-Zip Compression 22.01
Test: Compression Rating
MIPS, More Is Better
AMD GX-420CA SOC
SE +/- 3.06, N = 3
5923
AMD Embedded G GX-420GI Radeon R7E
SE +/- 26.58, N = 3
5799
AMD G-T56N
SE +/- 1.76, N = 3
2855
AMD GX-217GA SOC
2684
AMD G-T48E
SE +/- 3.79, N = 3
2449
AMD G-T52R
SE +/- 4.16, N = 3
1522
1300
2600
3900
5200
6500
1. (CXX) g++ options: -lpthread -ldl -O2 -fPIC
7-Zip Compression 22.01
Test: Decompression Rating
MIPS, More Is Better
AMD GX-420CA SOC
SE +/- 0.88, N = 3
7170
AMD Embedded G GX-420GI Radeon R7E
SE +/- 23.45, N = 3
4984
AMD G-T56N
SE +/- 1.00, N = 3
3097
AMD GX-217GA SOC
SE +/- 0.88, N = 3
3007
AMD G-T48E
SE +/- 1.00, N = 3
2646
AMD G-T52R
1402
1500
3000
4500
6000
7500
1. (CXX) g++ options: -lpthread -ldl -O2 -fPIC

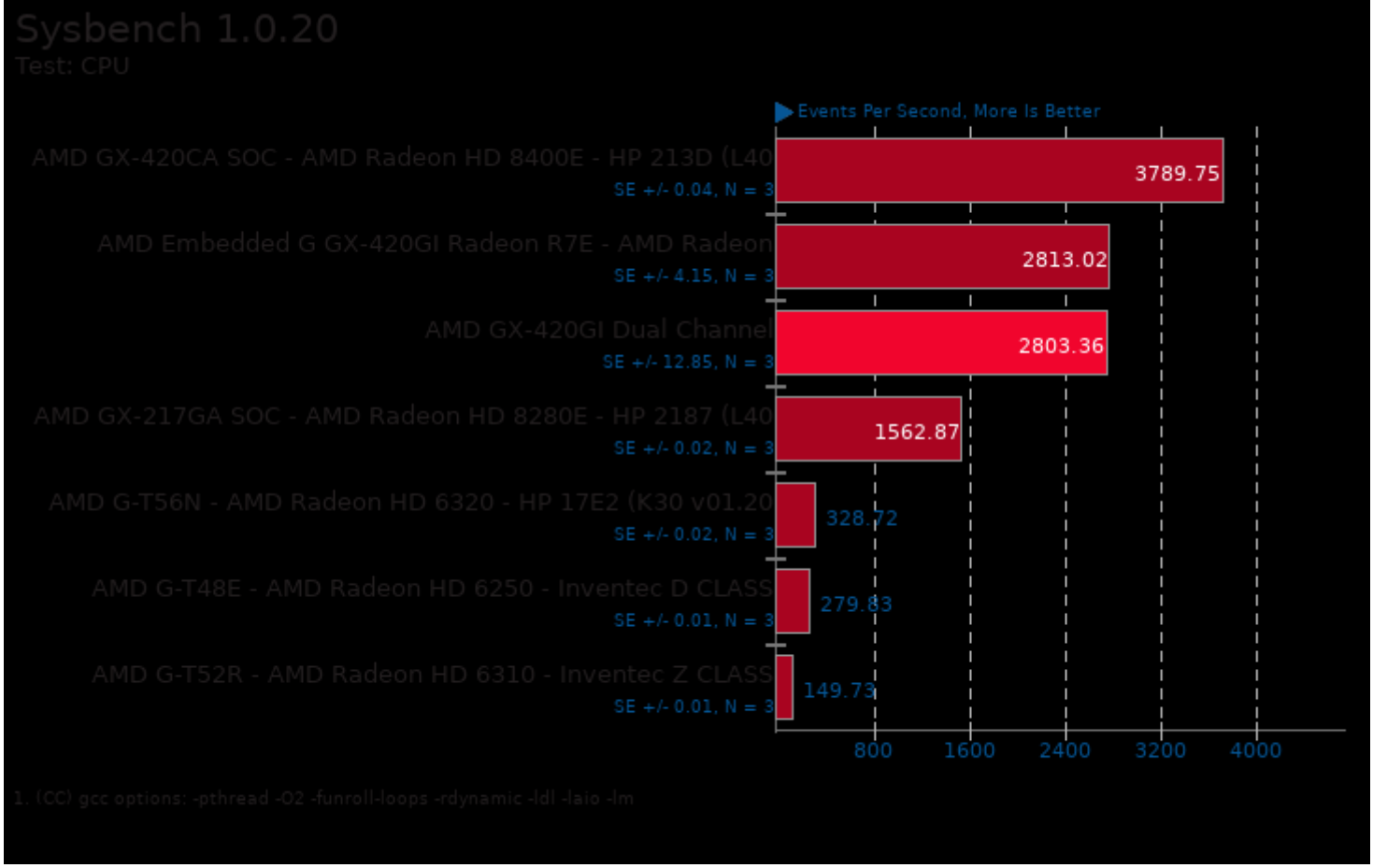

FFmpeg 4.0.2
H.264 HD To NTSC DV
Seconds, Fewer Is Better
AMD GX-420CA SOC
SE +/- 0.13, N = 14
21.41
AMD Embedded G GX-420GI Radeon R7E
SE +/- 0.31, N = 4
24.84
AMD GX-217GA SOC
SE +/- 0.44, N = 3
47.10
AMD G-T56N
SE +/- 0.22, N = 3
62.37
AMD G-T48E
SE +/- 0.74, N = 3
73.08
AMD G-T52R
SE +/- 0.81, N = 3
136.38
30
60
90
120
150
1. (CC) gcc options: -lavdevice -lavfilter -lavformat -lavcodec -lswresample -lswscale -lavutil -lm -pthread -std=c11 -fomit-frame-pointer -fPIC -O3 -fno-ma
FLAC Audio Encoding 1.4
WAV To FLAC
Seconds, Fewer Is Better
AMD Embedded G GX-420GI Radeon R7E
SE +/- 0.17, N = 5
83.11
AMD GX-420CA SOC
SE +/- 0.28, N = 5
105.48
AMD GX-217GA SOC
SE +/- 0.26, N = 5
127.59
AMD G-T56N
SE +/- 0.18, N = 5
255.46
AMD G-T52R
SE +/- 0.62, N = 5
282.97
AMD G-T48E
SE +/- 0.37, N = 5
299.74
70
140
210
280
350
1. (CXX) g++ options: -O3 -fvisibility=hidden -logg -lm

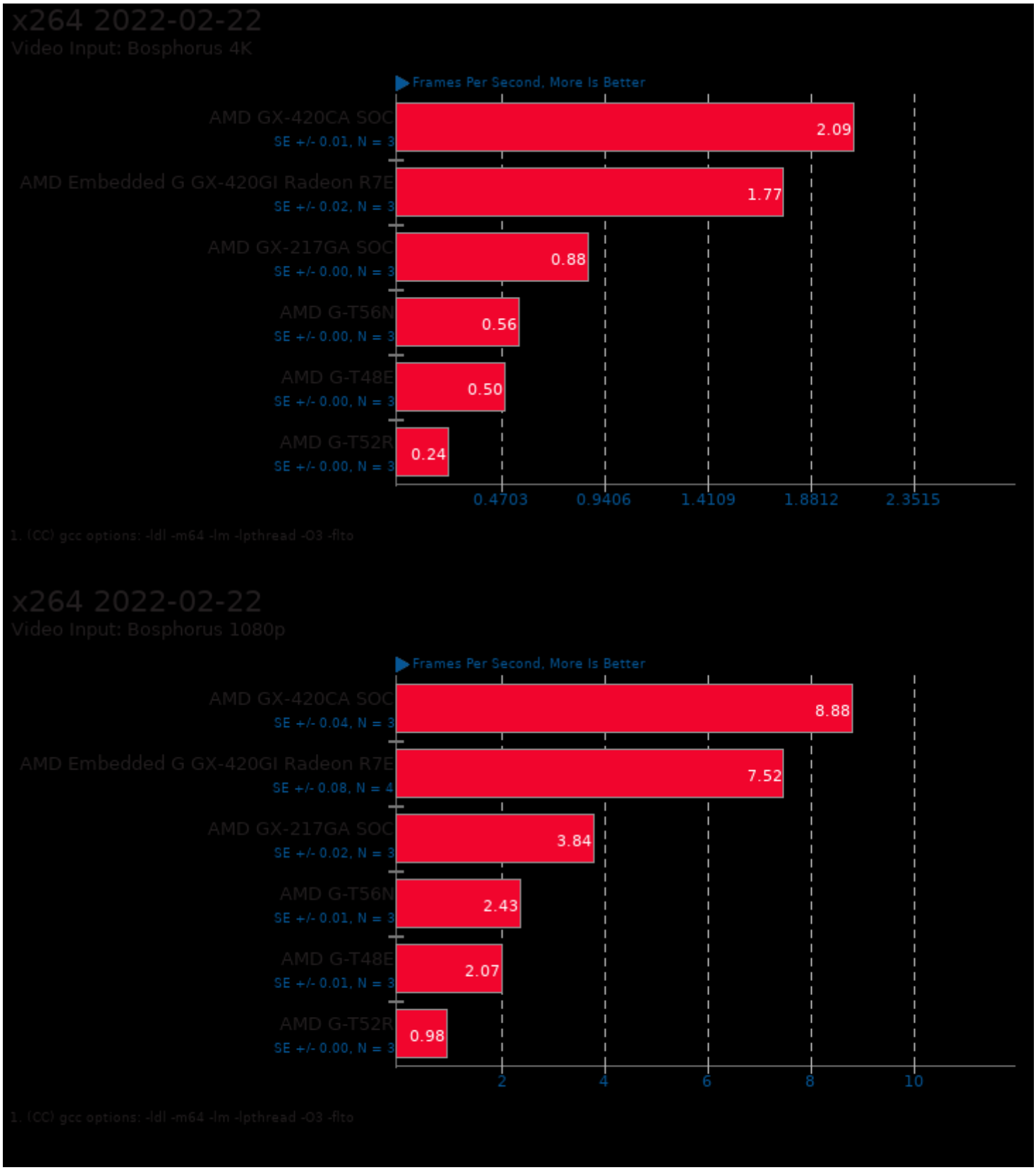

LAME MP3 Encoding 3.100
WAV To MP3
Seconds, Fewer Is Better
AMD Embedded G GX-420GI Radeon R7E
SE +/- 0.29, N = 3
26.05
AMD GX-420CA SOC
SE +/- 0.28, N = 6
29.90
AMD GX-217GA SOC
SE +/- 0.37, N = 3
36.25
AMD G-T56N
SE +/- 0.08, N = 3
46.39
AMD G-T52R
SE +/- 0.41, N = 3
52.26
AMD G-T48E
SE +/- 0.25, N = 3
54.36
12
24
36
48
60
1. (CC) gcc options: -O3 -ffast-math -funroll-loops -fschedule-insns2 -fbranch-count-reg -fforce-addr -pipe -lm
OpenSSL 3.0
Algorithm: SHA256
byte/s, More Is Better
AMD GX-420CA SOC
SE +/- 1960022.18, N = 3
311975373
AMD Embedded G GX-420GI Radeon R7E
SE +/- 1706000.55, N = 3
283117223
AMD GX-217GA SOC
SE +/- 1182607.49, N = 3
127693380
AMD G-T56N
SE +/- 91305.09, N = 3
83919643
AMD G-T48E
SE +/- 119211.22, N = 3
71678467
AMD G-T52R
SE +/- 130756.16, N = 3
37032837
70M
140M
210M
280M
350M
1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl


OpenSSL 3.0
Algorithm: RSA4096
sign/s, More Is Better
AMD GX-420CA SOC
SE +/- 0.06, N = 3
154.6
AMD Embedded G GX-420GI Radeon R7E
SE +/- 0.24, N = 3
135.2
AMD G-T56N
SE +/- 0.03, N = 3
64.7
AMD GX-217GA SOC
SE +/- 0.03, N = 3
63.8
AMD G-T48E
SE +/- 0.00, N = 3
55.1
AMD G-T52R
SE +/- 0.03, N = 3
29.5
30
60
90
120
150
1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl
OpenSSL 3.0
Algorithm: RSA4096
verify/s, More Is Better
AMD GX-420CA SOC
SE +/- 3.98, N = 3
10450.8
AMD Embedded G GX-420GI Radeon R7E
SE +/- 5.85, N = 3
8856.2
AMD G-T56N
SE +/- 0.38, N = 3
4428.3
AMD GX-217GA SOC
SE +/- 1.52, N = 3
4311.1
AMD G-T48E
SE +/- 0.74, N = 3
3769.9
AMD G-T52R
SE +/- 1.22, N = 3
2011.6
2K
4K
6K
8K
10K
1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl


POV-Ray 3.7.0.7
Trace Time
Seconds, Fewer Is Better
AMD GX-420CA SOC
SE +/- 1.63, N = 3
617.84
AMD Embedded G GX-420GI Radeon R7E
SE +/- 8.13, N = 9
861.74
AMD GX-217GA SOC
SE +/- 2.03, N = 3
1496.53
AMD G-T56N
SE +/- 2.81, N = 3
1698.10
AMD G-T48E
SE +/- 4.58, N = 3
1990.24
AMD G-T52R
SE +/- 4.42, N = 3
4279.88
900
1800
2700
3600
4500
1. (CXX) g++ options: -pipe -O3 -ffast-math -march=native -pthread -ltiff -ljpeg -lpng -lz -lrt -lm -lboost_thread -lboost_system
SQLite Speedtest 3.30
Timed Time - Size 1,000
Seconds, Fewer Is Better
AMD GX-420GI Dual Channel
SE +/- 2.17, N = 3
258.05
AMD Embedded G GX-420GI Radeon R7E - AMD Radeon
SE +/- 0.96, N = 3
267.30
AMD GX-420CA SOC - AMD Radeon HD 8400E - HP 213D (L40
SE +/- 0.60, N = 3
348.86
AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40
SE +/- 0.76, N = 3
436.24
AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20
SE +/- 1.36, N = 3
471.45
AMD G-T48E - AMD Radeon HD 6250 - Inventec D CLASS
SE +/- 2.44, N = 3
563.24
AMD G-T52R - AMD Radeon HD 6310 - Inventec Z CLASS
SE +/- 2.43, N = 3
663.01
140
280
420
560
700
1. (CC) gcc options: -O2 -ldl -lpthread


Sysbench 1.0.20
Test: RAM / Memory
MiB/sec, More Is Better
AMD GX-420CA SOC - AMD Radeon HD 8400E - HP 213D (L40
SE +/- 20.47, N = 3
3551.36
AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40
SE +/- 38.46, N = 3
2731.64
AMD GX-420GI Dual Channel
SE +/- 2.63, N = 3
1558.56
AMD Embedded G GX-420GI Radeon R7E - AMD Radeon
SE +/- 10.30, N = 12
1549.12
AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20
SE +/- 2.87, N = 3
1492.19
AMD G-T48E - AMD Radeon HD 6250 - Inventec D CLASS
SE +/- 0.71, N = 3
1281.31
AMD G-T52R - AMD Radeon HD 6310 - Inventec Z CLASS
SE +/- 8.01, N = 3
1215.01
800
1600
2400
3200
4000
1. (CC) gcc options: -pthread -O2 -funroll-loops -rdynamic -ldl -laio -lm


Sysbench 1.0.20
Test: CPU
Events Per Second, More Is Better
AMD GX-420CA SOC - AMD Radeon HD 8400E - HP 213D (L40
SE +/- 0.04, N = 3
3789.75
AMD Embedded G GX-420GI Radeon R7E - AMD Radeon
SE +/- 4.15, N = 3
2813.02
AMD GX-420GI Dual Channel
SE +/- 12.85, N = 3
2803.36
AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40
SE +/- 0.02, N = 3
1562.87
AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20
SE +/- 0.02, N = 3
328.72
AMD G-T48E - AMD Radeon HD 6250 - Inventec D CLASS
SE +/- 0.01, N = 3
279.83
AMD G-T52R - AMD Radeon HD 6310 - Inventec Z CLASS
SE +/- 0.01, N = 3
149.73
800
1600
2400
3200
4000
1. (CC) gcc options: -pthread -O2 -funroll-loops -rdynamic -ldl -laio -lm



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 00:48.