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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

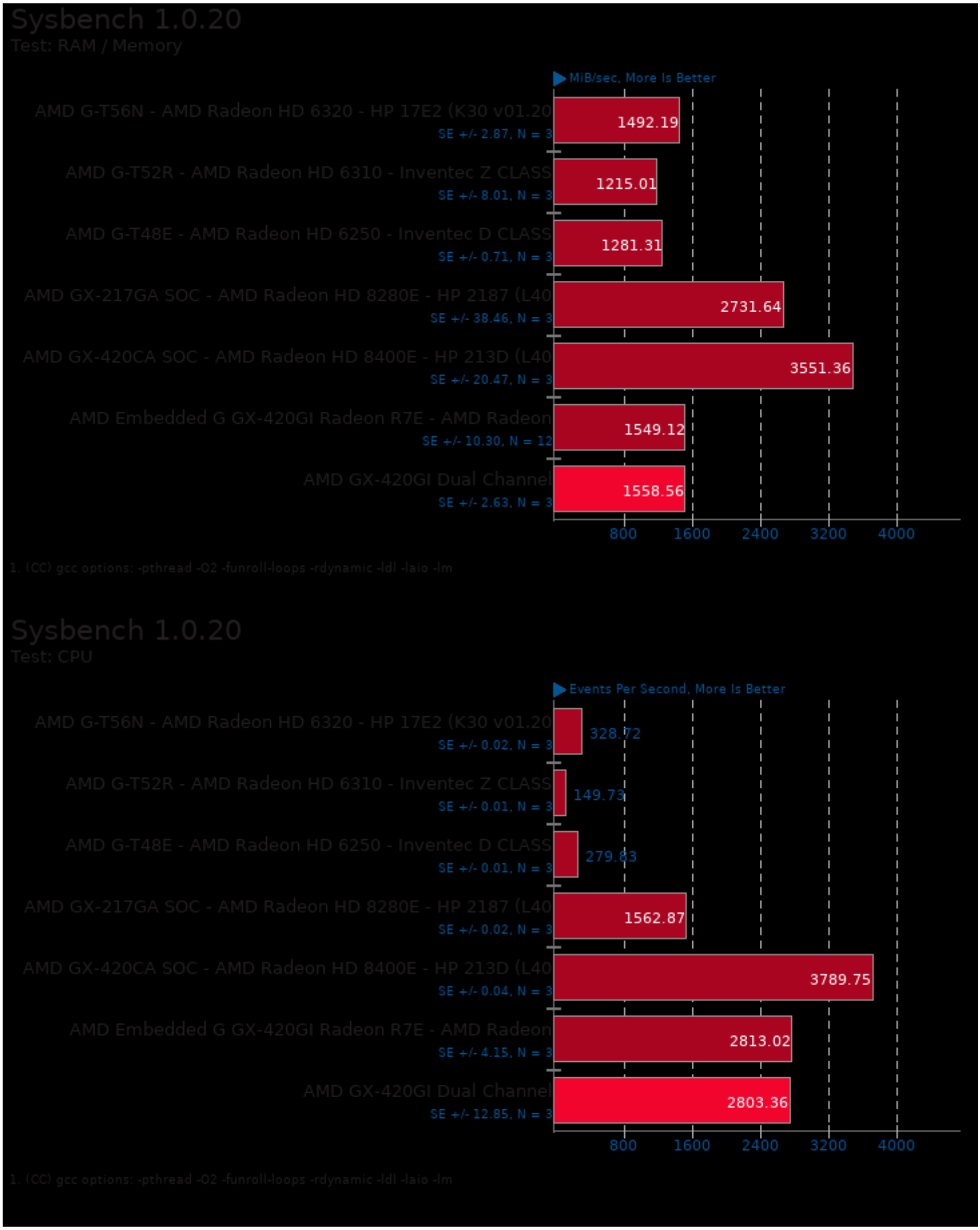
Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --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

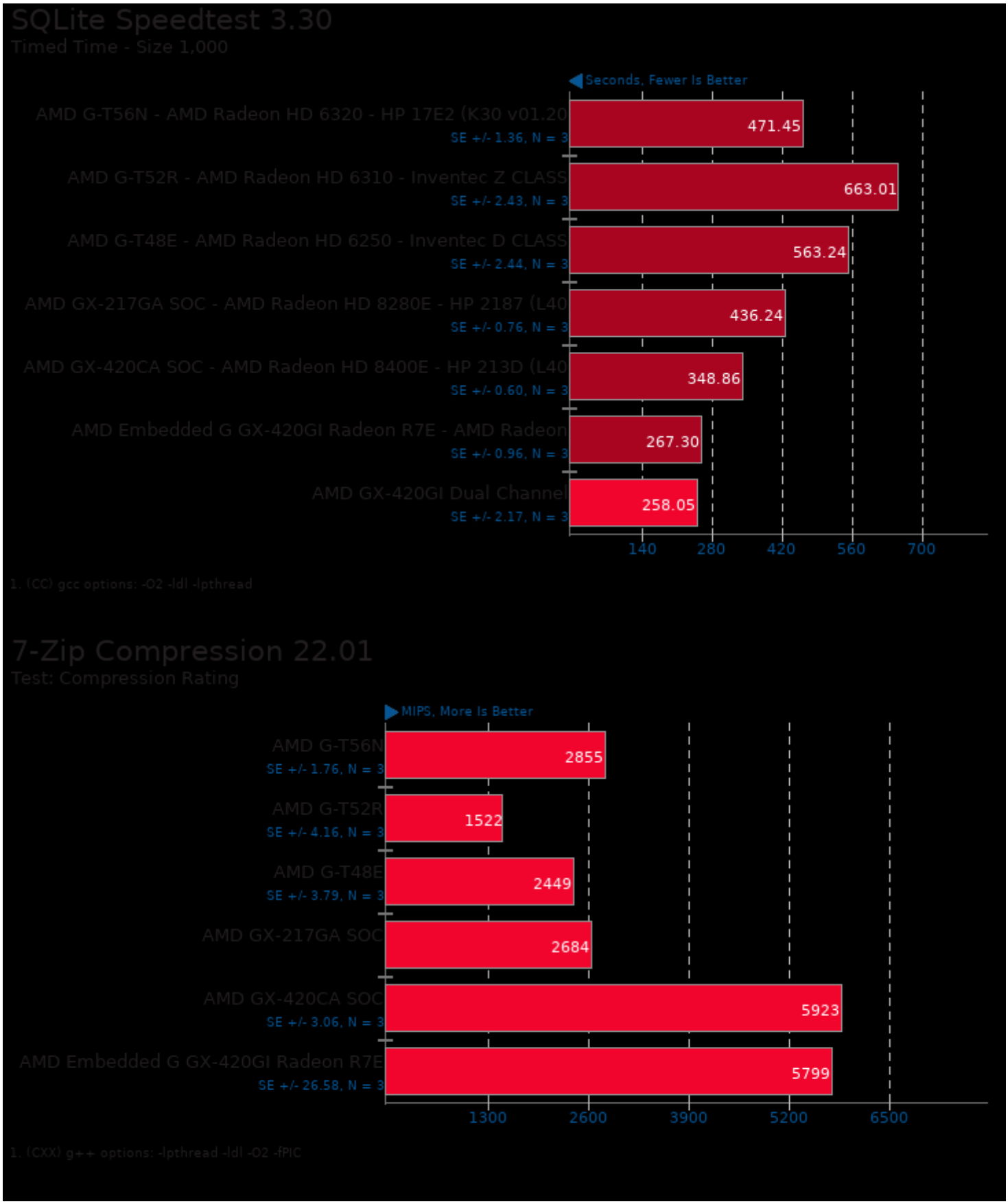
# terminaltest

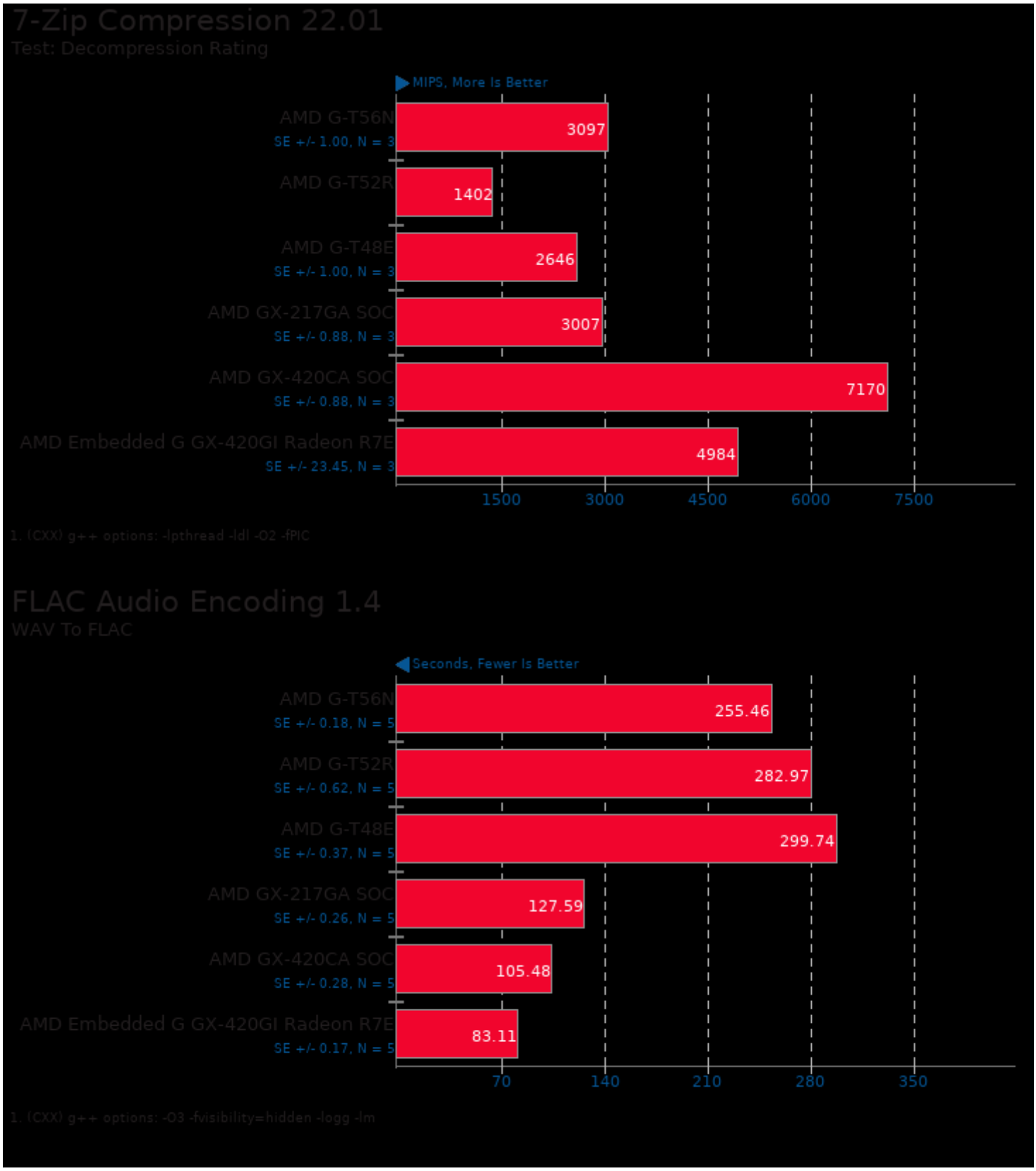
| | AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20 | AMD G-T56N | AMD G-T52R - AMD Radeon HD 6310 - Invent ec Z CLASS | AMD G-T52R | AMD G-T48E - AMD Radeon HD 6250 - Invent ec D CLASS | AMD G-T48E | AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40 | AMD GX-217GA SOC | AMD GX-420CA SOC - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **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% |
| **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% |
| **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% | |
| **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% | |

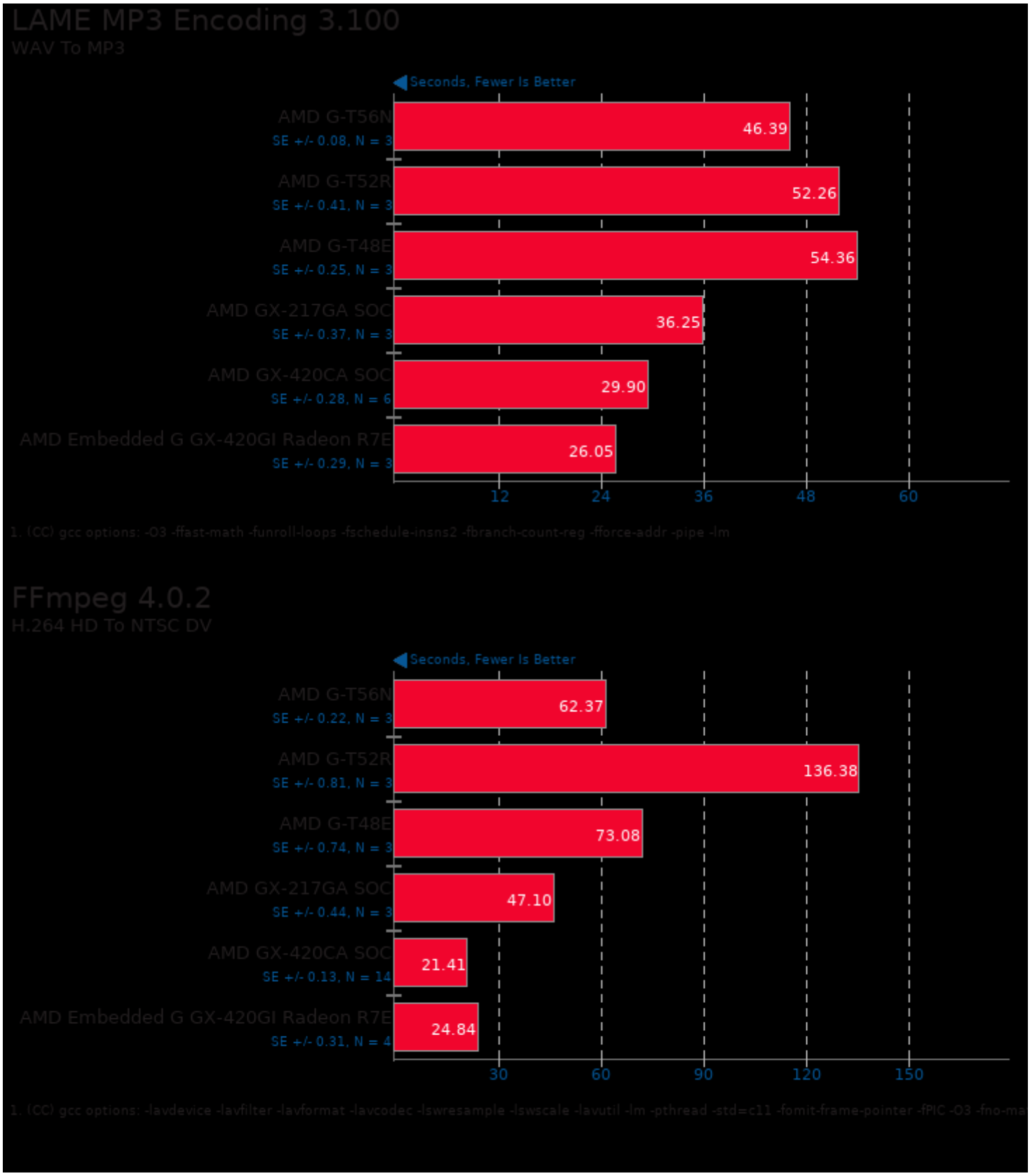
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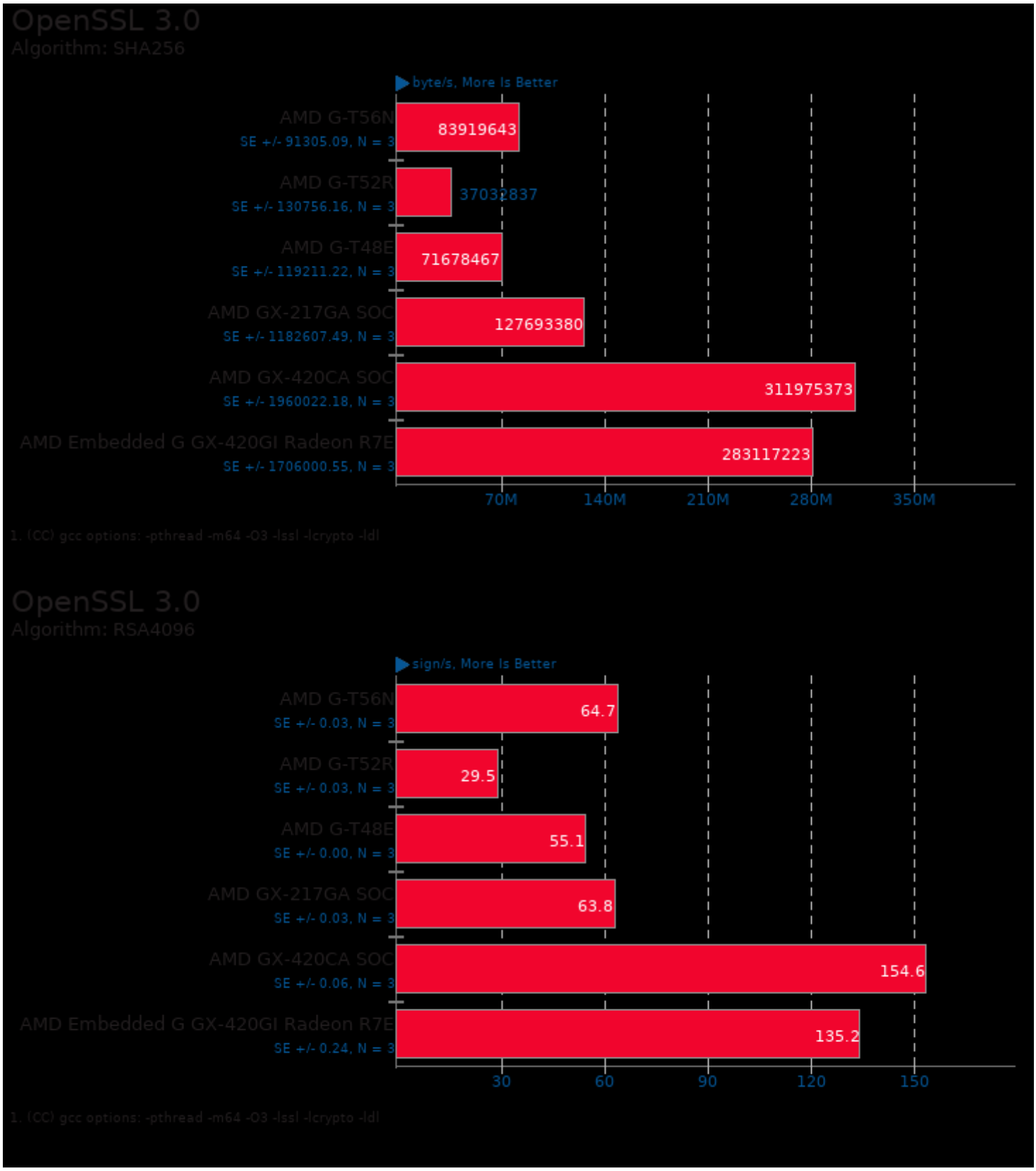
| | | | | | | |
|---|---|---|---|---|---|---|
| **FFmpeg - H.2.H.T.N.D (sec)** | 62.373 | **136.377** | 73.083 | 47.103 | **21.414** | 24.844 |
| **Normalized** | 34.33% | 15.7% | 29.3% | 45.46% | 100% | 86.19% |
| **Standard Deviation** | 0.6% | 1% | 1.7% | 1.6% | 2.3% | 2.5% |
| **OpenSSL - SHA256** | 839196 43 | **370328 37** | 716784 67 | 127693 380 | **311975 373** | 283117 223 |
| **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% |
| **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% |
| **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% |

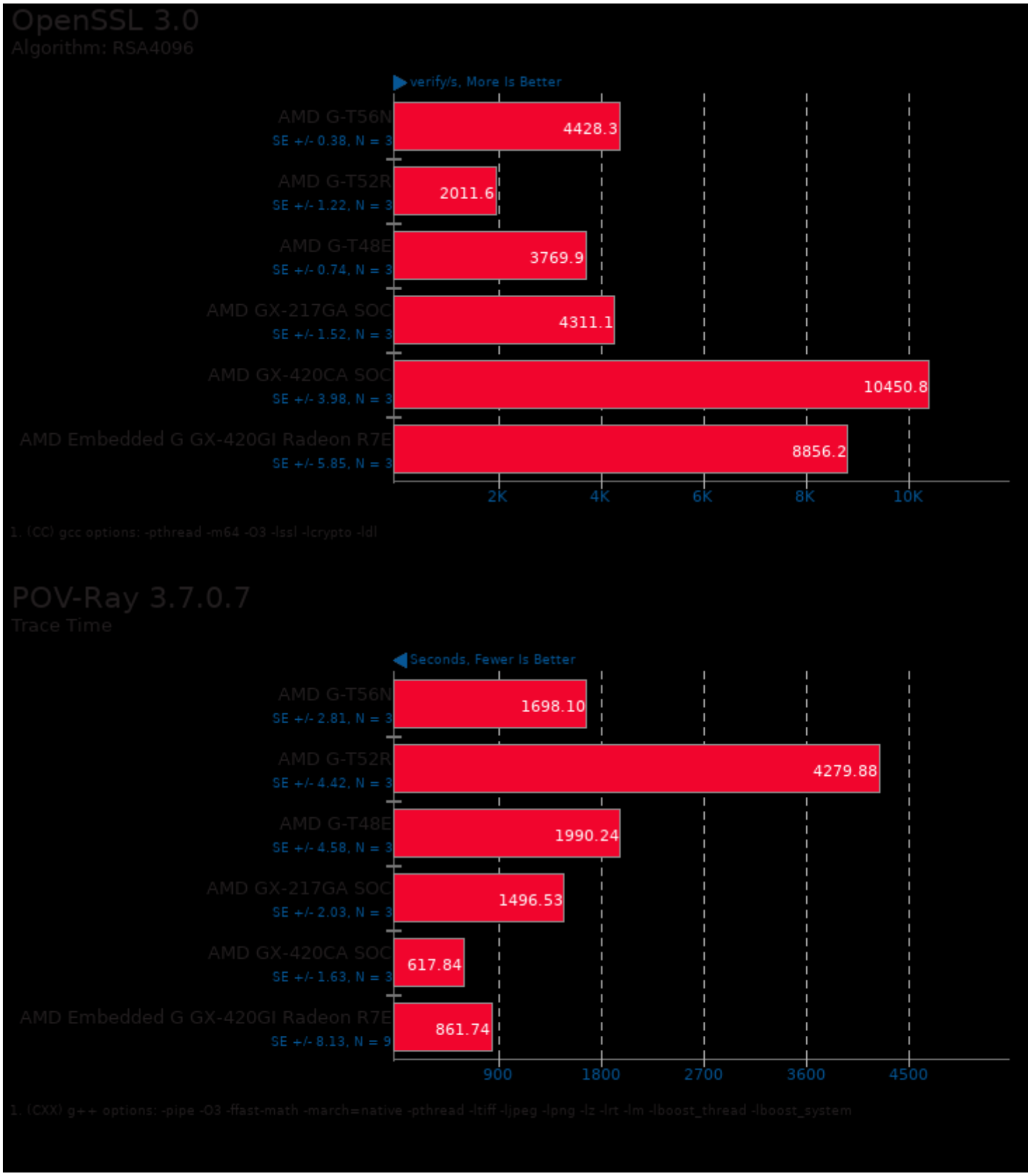

Sysbench 1.0.20
Test: RAM / Memory
MiB/sec, More Is Better
AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20
SE +/- 2.87, N = 3
1492.19
AMD G-T52R - AMD Radeon HD 6310 - Inventec Z CLASS
SE +/- 8.01, N = 3
1215.01
AMD G-T48E - AMD Radeon HD 6250 - Inventec D CLASS
SE +/- 0.71, N = 3
1281.31
AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40
SE +/- 38.46, N = 3
2731.64
AMD GX-420CA SOC - AMD Radeon HD 8400E - HP 213D (L40
SE +/- 20.47, N = 3
3551.36
AMD Embedded G GX-420GI Radeon R7E - AMD Radeon
SE +/- 10.30, N = 12
1549.12
AMD GX-420GI Dual Channel
SE +/- 2.63, N = 3
1558.56
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 G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20
SE +/- 0.02, N = 3
328.72
AMD G-T52R - AMD Radeon HD 6310 - Inventec Z CLASS
SE +/- 0.01, N = 3
149.73
AMD G-T48E - AMD Radeon HD 6250 - Inventec D CLASS
SE +/- 0.01, N = 3
279.83
AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40
SE +/- 0.02, N = 3
1562.87
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
800
1600
2400
3200
4000
1. (CC) gcc options: -pthread -O2 -funroll-loops -rdynamic -ldl -laio -lm

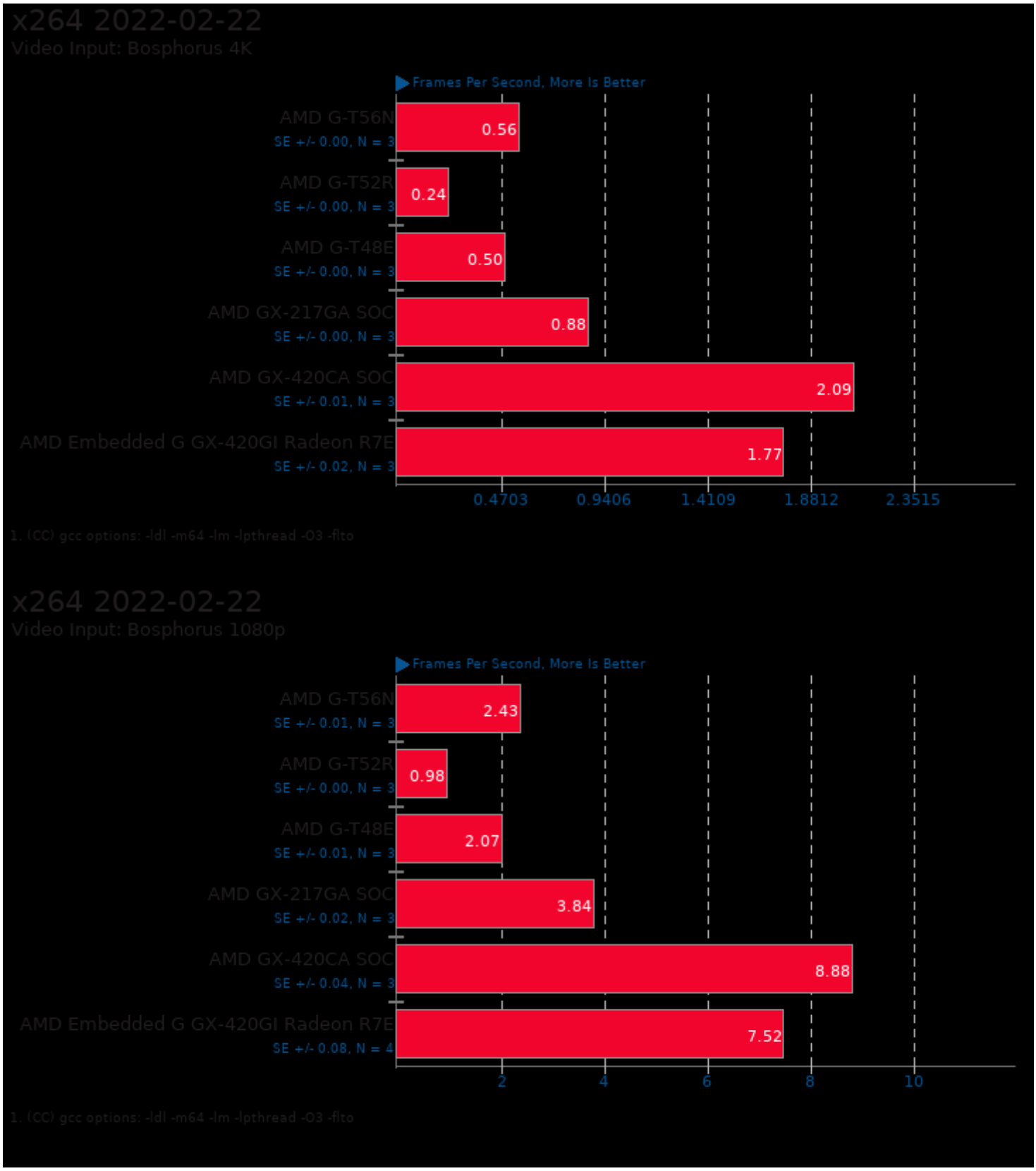

SQLite Speedtest 3.30
Timed Time - Size 1,000
Seconds, Fewer Is Better
AMD G-T56N - AMD Radeon HD 6320 - HP 17E2 (K30 v01.20
SE +/- 1.36, N = 3
471.45
AMD G-T52R - AMD Radeon HD 6310 - Inventec Z CLASS
SE +/- 2.43, N = 3
663.01
AMD G-T48E - AMD Radeon HD 6250 - Inventec D CLASS
SE +/- 2.44, N = 3
563.24
AMD GX-217GA SOC - AMD Radeon HD 8280E - HP 2187 (L40
SE +/- 0.76, N = 3
436.24
AMD GX-420CA SOC - AMD Radeon HD 8400E - HP 213D (L40
SE +/- 0.60, N = 3
348.86
AMD Embedded G GX-420GI Radeon R7E - AMD Radeon
SE +/- 0.96, N = 3
267.30
AMD GX-420GI Dual Channel
SE +/- 2.17, N = 3
258.05
140
280
420
560
700
1. (CC) gcc options: -O2 -ldl -lpthread
7-Zip Compression 22.01
Test: Compression Rating
MIPS, More Is Better
AMD G-T56N
SE +/- 1.76, N = 3
2855
AMD G-T52R
SE +/- 4.16, N = 3
1522
AMD G-T48E
SE +/- 3.79, N = 3
2449
AMD GX-217GA SOC
2684
AMD GX-420CA SOC
SE +/- 3.06, N = 3
5923
AMD Embedded G GX-420GI Radeon R7E
SE +/- 26.58, N = 3
5799
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 G-T56N
SE +/- 1.00, N = 3
3097
AMD G-T52R
1402
AMD G-T48E
SE +/- 1.00, N = 3
2646
AMD GX-217GA SOC
SE +/- 0.88, N = 3
3007
AMD GX-420CA SOC
SE +/- 0.88, N = 3
7170
AMD Embedded G GX-420GI Radeon R7E
SE +/- 23.45, N = 3
4984
1500
3000
4500
6000
7500
1. (CXX) g++ options: -lpthread -ldl -O2 -fPIC
FLAC Audio Encoding 1.4
WAV To FLAC
Seconds, Fewer Is Better
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
AMD GX-217GA SOC
SE +/- 0.26, N = 5
127.59
AMD GX-420CA SOC
SE +/- 0.28, N = 5
105.48
AMD Embedded G GX-420GI Radeon R7E
SE +/- 0.17, N = 5
83.11
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 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
AMD GX-217GA SOC
SE +/- 0.37, N = 3
36.25
AMD GX-420CA SOC
SE +/- 0.28, N = 6
29.90
AMD Embedded G GX-420GI Radeon R7E
SE +/- 0.29, N = 3
26.05
12
24
36
48
60
1. (CC) gcc options: -O3 -ffast-math -funroll-loops -fschedule-insns2 -fbranch-count-reg -fforce-addr -pipe -lm
FFmpeg 4.0.2
H.264 HD To NTSC DV
Seconds, Fewer Is Better
AMD G-T56N
SE +/- 0.22, N = 3
62.37
AMD G-T52R
SE +/- 0.81, N = 3
136.38
AMD G-T48E
SE +/- 0.74, N = 3
73.08
AMD GX-217GA SOC
SE +/- 0.44, N = 3
47.10
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
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


OpenSSL 3.0
Algorithm: SHA256
byte/s, More Is Better
AMD G-T56N
SE +/- 91305.09, N = 3
83919643
AMD G-T52R
SE +/- 130756.16, N = 3
37032837
AMD G-T48E
SE +/- 119211.22, N = 3
71678467
AMD GX-217GA SOC
SE +/- 1182607.49, N = 3
127693380
AMD GX-420CA SOC
SE +/- 1960022.18, N = 3
311975373
AMD Embedded G GX-420GI Radeon R7E
SE +/- 1706000.55, N = 3
283117223
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 G-T56N
SE +/- 0.03, N = 3
64.7
AMD G-T52R
SE +/- 0.03, N = 3
29.5
AMD G-T48E
SE +/- 0.00, N = 3
55.1
AMD GX-217GA SOC
SE +/- 0.03, N = 3
63.8
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
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 G-T56N
SE +/- 0.38, N = 3
4428.3
AMD G-T52R
SE +/- 1.22, N = 3
2011.6
AMD G-T48E
SE +/- 0.74, N = 3
3769.9
AMD GX-217GA SOC
SE +/- 1.52, N = 3
4311.1
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
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 G-T56N
SE +/- 2.81, N = 3
1698.10
AMD G-T52R
SE +/- 4.42, N = 3
4279.88
AMD G-T48E
SE +/- 4.58, N = 3
1990.24
AMD GX-217GA SOC
SE +/- 2.03, N = 3
1496.53
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
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




*This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 05:38.*