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# WoW Benchmark Results

Benchmark results for the hardware platforms considered (UDOO BOLT V3 and Raspberry Pi 4B) in context of the WoW Project.

## Test Systems:

### AMD Ryzen Embedded V1202B

Processor: AMD Ryzen Embedded V1202B @ 2.30GHz (2 Cores / 4 Threads), Motherboard: Seco C40 (1.05 R.C. 8 BIOS), Chipset: AMD Raven/Raven2, Memory: 16GB, Disk: 31GB DF4032, Graphics: AMD Radeon Vega / Mobile 1GB (1000/1200MHz), Audio: AMD Raven/Raven2/Fenghuang, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 20.04, Kernel: 5.11.0-38-generic (x86_64), Desktop: GNOME Shell 3.36.9, Display Server: X Server 1.20.11, Vulkan: 1.0.2, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/usr,hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686

--with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0x810100b
Python Notes: Python 3.8.10
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional STIBP: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

## ARMv8 Cortex-A72

Processor: ARMv8 Cortex-A72 @ 1.50GHz (4 Cores), Motherboard: BCM2835 Raspberry Pi 4 Model B Rev 1.4, Memory: 8GB, Disk: 32GB USD

OS: Ubuntu 20.04, Kernel: 5.4.0-1045-raspi (aarch64), Compiler: GCC 9.3.0, File-System: ext4

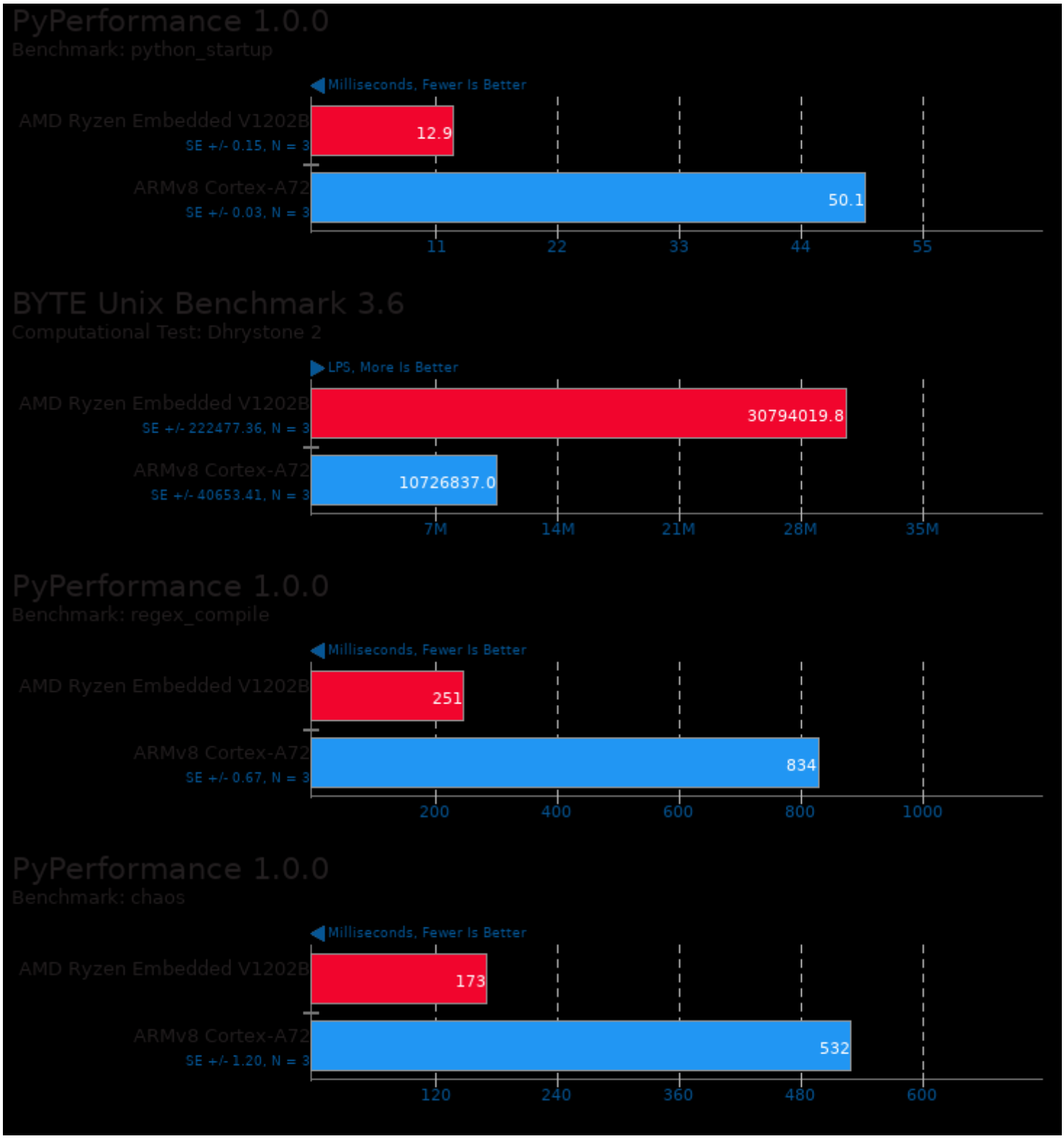
Kernel Notes: snd_bcm2835.enable_compat_alsa=0 snd_bcm2835.enable_hdmi=1
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-objc-gc=auto --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-target-system-zlib=auto -v
Processor Notes: Scaling Governor: cpufreq-dt ondemand
Python Notes: Python 3.8.10
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Vulnerable + srbds: Not affected + tsx_async_abort: Not affected

| | AMD Ryzen Embedded V1202B | ARMv8 Cortex-A72 |
|---|---|---|
| **PyPerformance - python_startup (Milliseconds)** | **12.9** | **50.1** |
| **Normalized** | 100% | 25.75% |
| **Standard Deviation** | 2.1% | 0.1% |
| **BYTE Unix Benchmark - Dhrystone 2 (LPS)** | **30794020** | **10726837** |
| **Normalized** | 100% | 34.83% |
| **Standard Deviation** | 1.3% | 0.7% |
| **PyPerformance - regex_compile (Milliseconds)** | **251** | **834** |
| **Normalized** | 100% | 30.1% |
| **Standard Deviation** | | 0.1% |
| **PyPerformance - chaos (Milliseconds)** | **173** | **532** |
| **Normalized** | 100% | 32.52% |
| **Standard Deviation** | | 0.4% |
| **PyPerformance - nbody (Milliseconds)** | **194** | **558** |
| **Normalized** | 100% | 34.77% |
| **Standard Deviation** | 0.3% | 0.2% |
| **PyPerformance - float (Milliseconds)** | **160** | **573** |
| **Normalized** | 100% | 27.92% |
| **Standard Deviation** | | 0.6% |
| **PyBench - T.F.A.T.T (Milliseconds)** | **1395** | **4504** |
| **Normalized** | 100% | 30.97% |
| **Standard Deviation** | 0.1% | 0.8% |
| **PyPerformance - django_template (Milliseconds)** | **85.8** | **323** |
| **Normalized** | 100% | 26.56% |
| **Standard Deviation** | 0.2% | 0.2% |
| **7-Zip Compression - C.S.T (MIPS)** | **9024** | **3650** |
| **Normalized** | 100% | 40.45% |
| **Standard Deviation** | 0.5% | 0.4% |
| **PyPerformance - crypto_pyaes (Milliseconds)** | **155** | **502** |

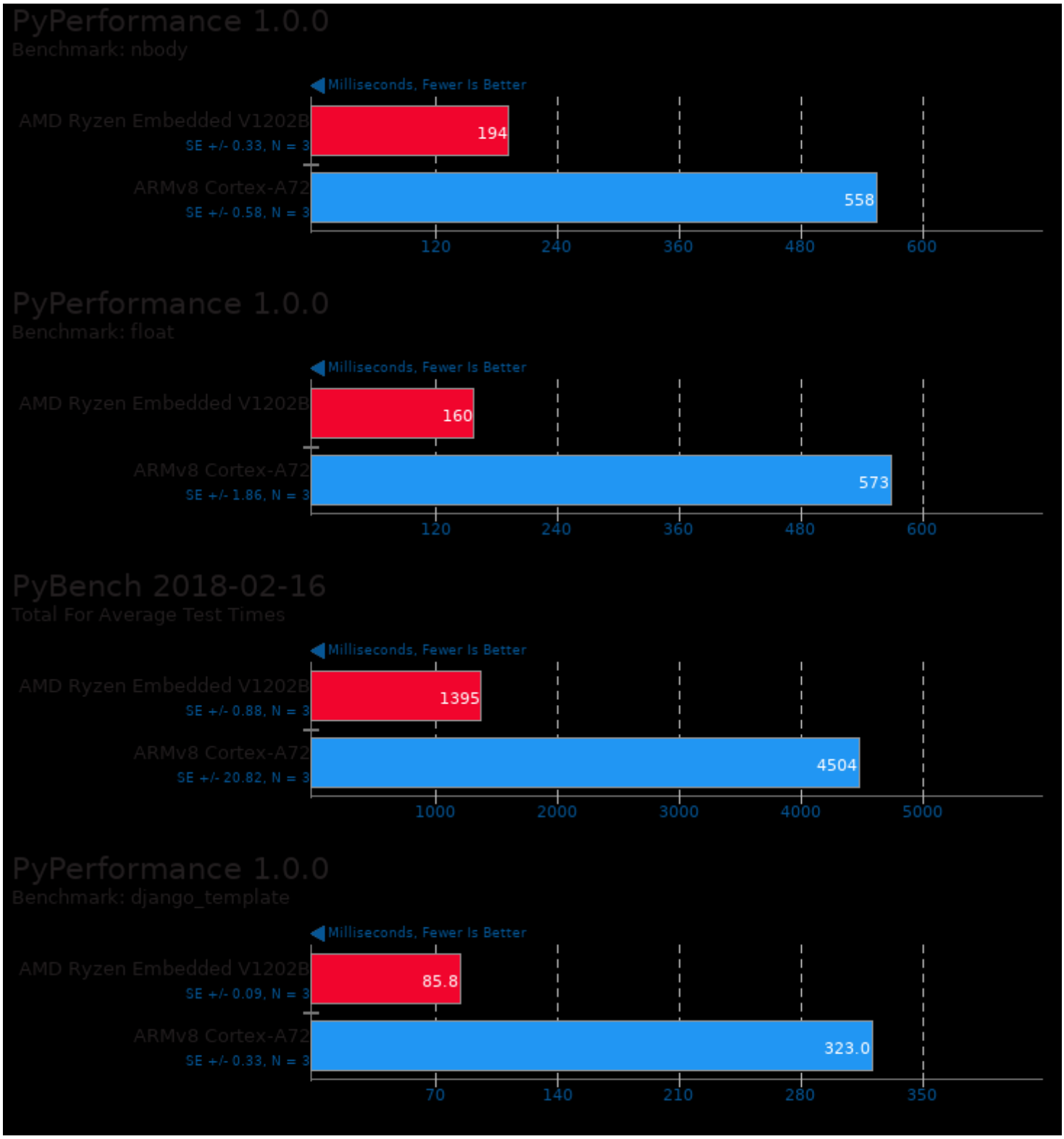
# WoW Benchmark Results

| | | |
|---|---|---|
| **Normalized** | 100% | 30.88% |
| **PyPerformance - json_loads (Milliseconds)** | **37.9** | **113** |
| **Normalized** | 100% | 33.54% |
| **Standard Deviation** | 0.4% | |

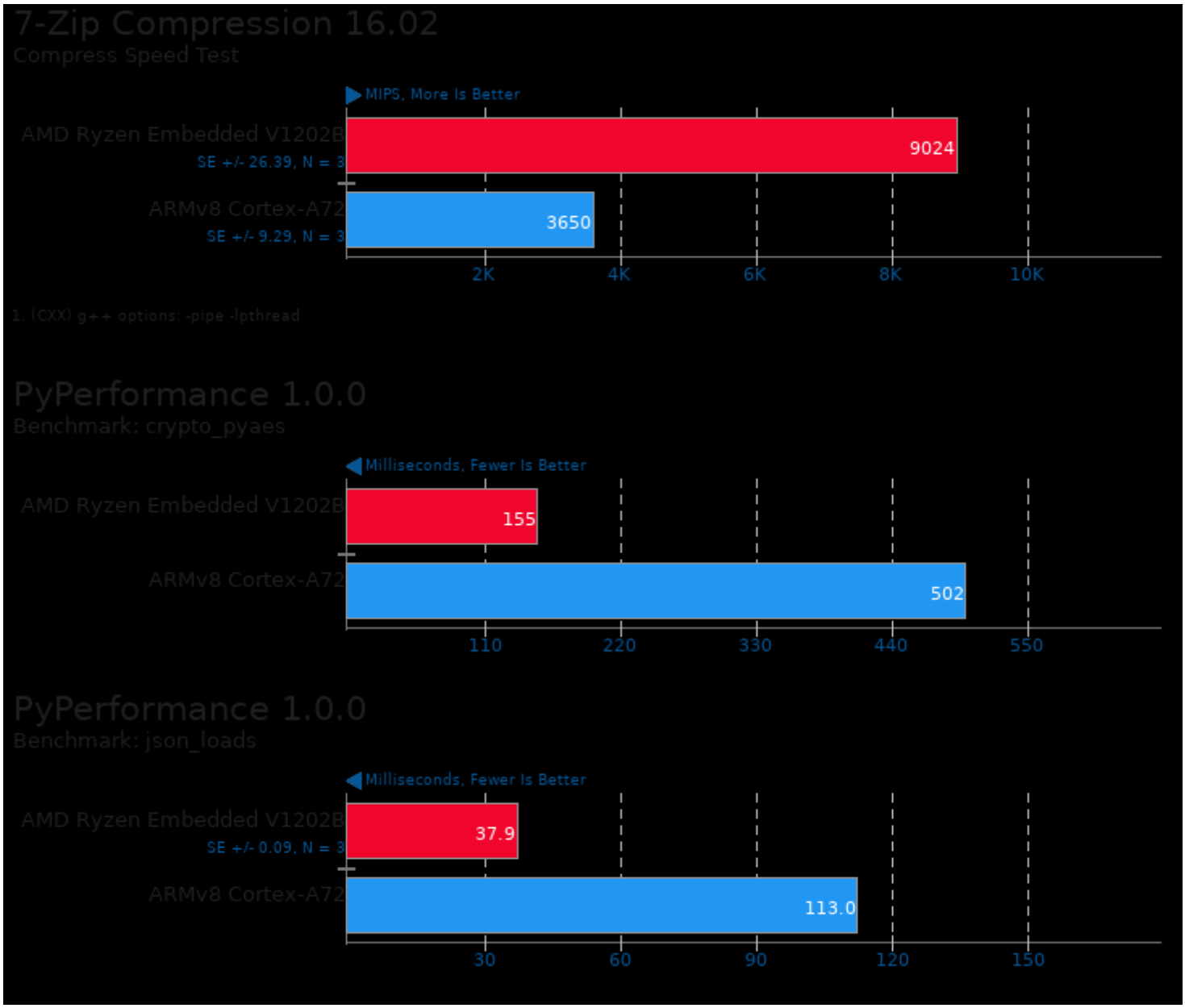
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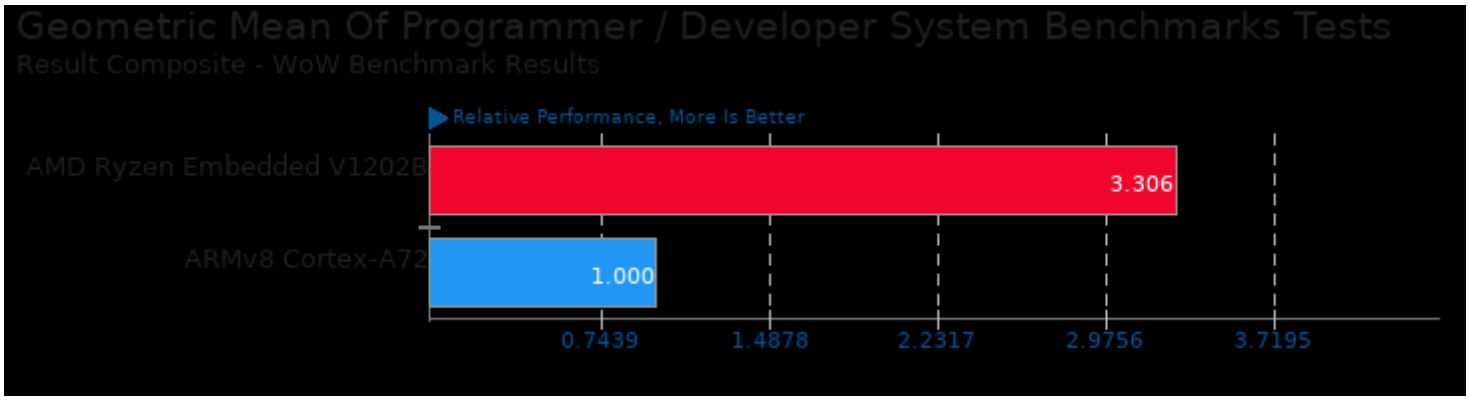


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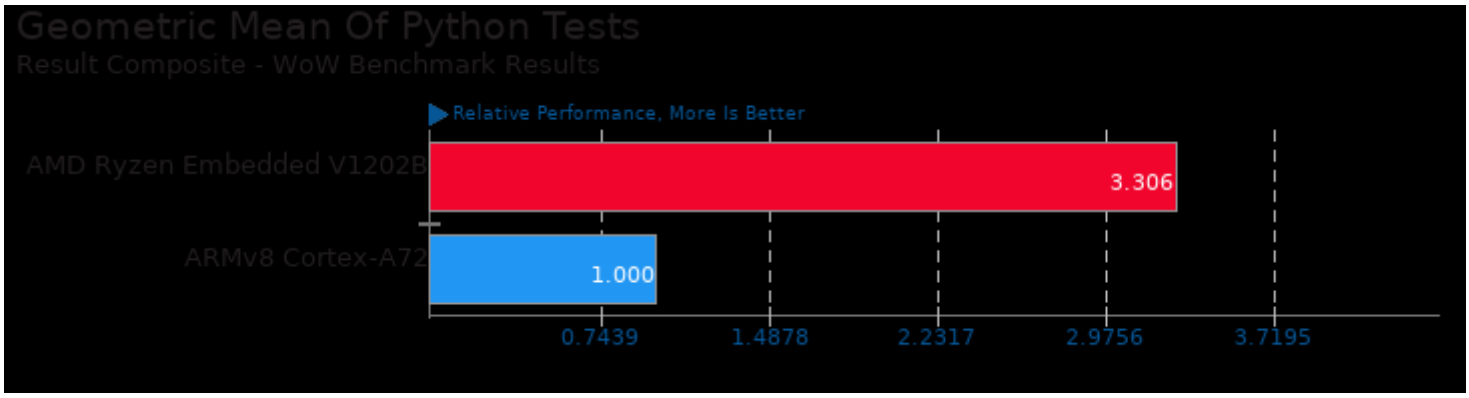


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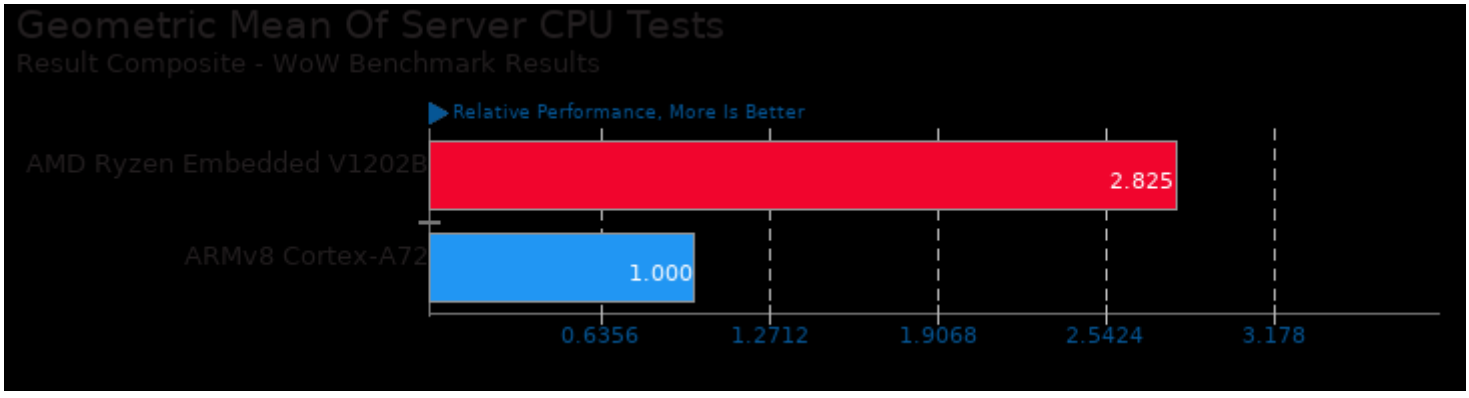
These geometric means are based upon test groupings / test suites for this result file.



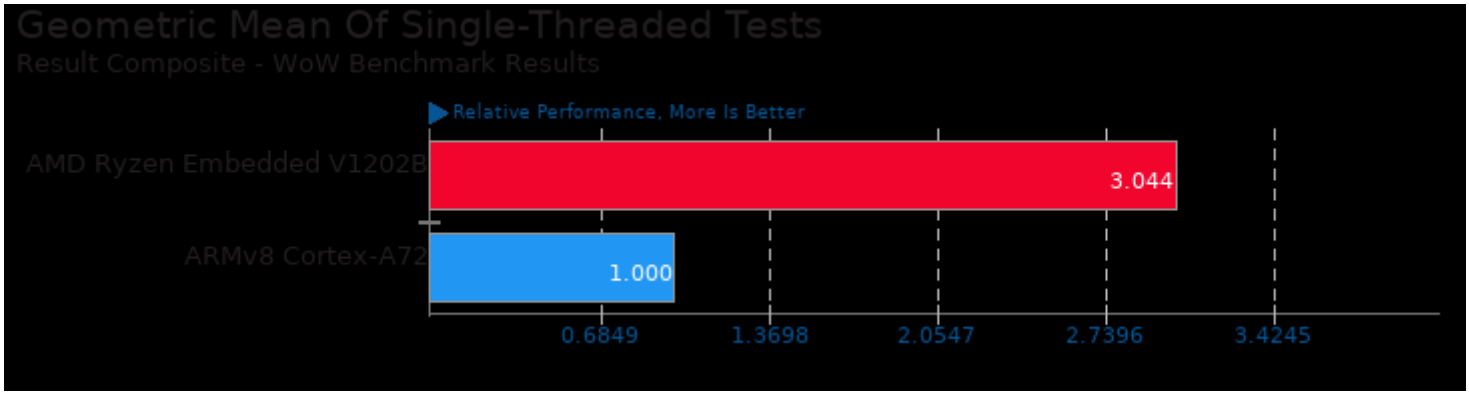

Geometric mean based upon tests: pts/pyperformance and pts/pybench




Geometric mean based upon tests: pts/pybench and pts/pyperformance




Geometric mean based upon tests: pts/compress-7zip and pts/pybench



# WoW Benchmark Results

Geometric mean based upon tests: pts/byte and pts/pybench

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 01:08.*