www.phoronix-test-suite.com

AMD Athlon 200GE - Integrated Graphics Benchmarks

AMD Athlon 200GE testing on Ubuntu Linux for a future article on phoronix.com.

Automated Executive Summary

Ryzen 3 2200G had the most wins, coming in first place for 76% of the tests.

Test Systems:

Core i3 8100

Processor: Intel Core i3-8100 @ 3.60GHz (4 Cores), Motherboard: ASRock Z370M-ITX/ac (P3.10 BIOS), Chipset: Intel 8th Gen Core, Memory: 8192MB, Disk: 525GB 2115 + 60GB DREVO X1 SSD, Graphics: Intel UHD 630 3072MB (1100MHz), Audio: Realtek ALC892, Monitor: DELL S2409W, Network: Intel Connection + Intel Dual Band Wireless-AC 3168NGW

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen

Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT disabled

Core i3 7100

Processor: Intel Core i3-7100 @ 3.90GHz (2 Cores / 4 Threads), Motherboard: Gigabyte B250M-DS3H-CF (F9 BIOS), Chipset: Intel Xeon E3-1200 v6/7th + B250, Memory: 8192MB, Disk: 525GB 2115 + 250GB Western Digital WDS250G1B0A-, Graphics: Intel HD 630 3072MB (1100MHz), Audio: Realtek ALC887-VD, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT vulnerable

Pentium G4400

Processor: Intel Pentium G4400 @ 3.30GHz (2 Cores), Motherboard: MSI B150M MORTAR (MS-7972) v2.0 (C.40 BIOS), Chipset: Intel Xeon E3-1200 v5/E3-1500, Memory: 8192MB, Disk: 120GB Samsung SSD 850 + 525GB 2115, Graphics: Intel HD 510 3072MB (1000MHz), Audio: Realtek ALC892, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT disabled

Core i3 4130

Processor: Intel Core i3-4130 @ 3.40GHz (2 Cores / 4 Threads), Motherboard: Intel DH87RL (RLH8710H.86A.0317.2013.0426.1724 BIOS), Chipset: Intel 4th Gen Core DRAM, Memory: 1536MB, Disk: 128GB TOSHIBA THNSNH12 + 525GB 2115, Graphics: Intel Haswell 1536MB (1150MHz), Audio: Intel Xeon E3-1200 v3/4th, Monitor: DELL S2409W, Network: Intel Connection I217-V

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT vulnerable

Ryzen 3 2200G

Processor: AMD Ryzen 3 2200G @ 3.50GHz (4 Cores), Motherboard: MSI B350M GAMING PRO (MS-7A39) v1.0 (2.H0 BIOS), Chipset: AMD Device 15d0, Memory: 7168MB, Disk: 525GB 2115 + 32GB Flash Disk + 29GB INTEL MEMPEK1W032GA, Graphics: MSI AMD Radeon Vega / Radeon Vega Mobile 1024MB, Audio: AMD Device 15de, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5 (LLVM 6.0.1), Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
Graphics Notes: GLAMOR
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: __user pointer sanitization + Full AMD retpoline IBPB + SSB disabled via prctl and seccomp

A10-7850K

Processor: AMD A10-7850K APU @ 3.70GHz (2 Cores / 4 Threads), Motherboard: Gigabyte F2A88XM-D3H (F5 BIOS), Chipset: AMD Family 15h, Memory: 7168MB, Disk: 525GB 2115 + 120GB KINGSTON SV300S3, Graphics: AMD Radeon R7 1024MB, Audio: AMD Kaveri HDMI/DP, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5 (LLVM 6.0.1), Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

Processor Notes: Scaling Governor: acpi-cpufreq ondemand
Graphics Notes: GLAMOR
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: __user pointer sanitization + Full AMD retpoline + SSB disabled via prctl and seccomp

Core i5 3470

Processor: Intel Core i5-3470 @ 3.60GHz (4 Cores), Motherboard: ECS H61H2-I3 v1.0 (4.6.5 BIOS), Chipset: Intel Xeon E3-1200 v2/3rd, Memory: 4096MB, Disk: 120GB Samsung SSD 850 + 525GB 2115, Graphics: Intel Ivybridge Desktop 1536MB (1100MHz), Audio: VIA VT1705, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.2 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT disabled

Core i7 5775C

Processor: Intel Core i7-5775C @ 3.70GHz (4 Cores / 8 Threads), Motherboard: MSI Z97-G45 GAMING (MS-7821) v1.0 (V2.9 BIOS), Chipset: Intel Broadwell-U- DMI, Memory: 16384MB, Disk: 120GB CT120BX100SSD1 + 525GB 2115, Graphics: Intel Iris Pro 6200 3072MB (1150MHz), Audio: Intel Broadwell-U Audio, Monitor: DELL S2409W, Network: Qualcomm Atheros Killer E220x Gigabit

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT vulnerable

Core i5 8400

Processor: Intel Core i5-8400 @ 4.00GHz (6 Cores), Motherboard: MSI Z370M MORTAR (MS-7B54) v1.0 (1.40 BIOS), Chipset: Intel 8th Gen Core, Memory: 8192MB, Disk: 525GB 2115 + 128GB ADATA SX6000NP, Graphics: Intel UHD 630 3072MB (1050MHz), Audio: Realtek ALC892, Monitor: DELL S2409W, Network: Intel Connection

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT disabled

Pentium G3258

Processor: Intel Pentium G3258 @ 3.20GHz (2 Cores), Motherboard: Gigabyte H97M-D3H (F2 BIOS), Chipset: Intel 4th Gen Core DRAM, Memory: 8192MB, Disk: 250GB SAMSUNG HD253GJ + 525GB 2115, Graphics: Intel Haswell Desktop 1536MB (1100MHz), Audio: Intel Xeon E3-1200 v3/4th, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion; VMX: conditional cache flushes SMT disabled

A10-7870K

Processor: AMD A10-7870K Radeon R7 12 Compute Cores 4C+8G @ 3.90GHz (2 Cores / 4 Threads), Motherboard: ASUS A88XM-E (2001 BIOS), Chipset: AMD Family 15h, Memory: 15360MB, Disk: 525GB 2115 + 250GB Samsung SSD 850, Graphics: ASUS AMD Radeon R7 1024MB, Audio: AMD Kaveri HDMI/DP, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5 (LLVM 6.0.1), Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
Graphics Notes: GLAMOR
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: __user pointer sanitization + Full AMD retpoline + SSB disabled via prctl and seccomp

Core i7 8700K

Processor: Intel Core i7-8700K @ 4.70GHz (6 Cores / 12 Threads), Motherboard: ASUS TUF Z370-PLUS GAMING (1002 BIOS), Chipset: Intel 8th Gen Core, Memory: 16384MB, Disk: 525GB 2115 + 128GB THNSN5128GPU7 TOSHIBA, Graphics: Intel UHD 630 3072MB (1200MHz), Audio: Realtek ALC887-VD, Monitor: DELL P2415Q, Network: Intel Connection

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5, Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: KPTI + __user pointer sanitization + Full generic retpoline IBPB IBRS_FW + SSB disabled via prctl and seccomp + PTE Inversion

Athlon 200GE

Processor: AMD Athlon 200GE @ 3.20GHz (2 Cores / 4 Threads), Motherboard: Gigabyte A320M-S2H-CF (F23 BIOS), Chipset: AMD Device 15d0, Memory: 7168MB, Disk: 525GB 2115 + 240GB TOSHIBA-RC100, Graphics: Gigabyte AMD Radeon Vega / Radeon Vega Mobile 1GB, Audio: AMD Device 15de, Monitor: DELL P2415Q, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.10, Kernel: 4.18.0-7-generic (x86_64), Desktop: GNOME Shell 3.30.0, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.5 Mesa 18.1.5 (LLVM 6.0.1), Compiler: GCC 8.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
Python Notes: Python 2.7.15+ + Python 3.6.6+
Security Notes: __user pointer sanitization + Full AMD retpoline IBPB + SSB disabled via prctl and seccomp

200GE-P1-3200

Processor: AMD Athlon 200GE @ 3.20GHz (2 Cores / 4 Threads), Motherboard: Gigabyte B450 I AORUS PRO WIFI-CF (F50 BIOS), Chipset: AMD Raven/Raven2, Memory: 30GB, Disk: 1000GB Samsung SSD 970 EVO 1TB + 6001GB Western Digital WD60EZAZ-00S + 2 x 5001GB Seagate ST5000LM000-2AN1, Graphics: llvmpipe (1000/1600MHz), Audio: AMD Raven/Raven2/Fenghuang, Network: Intel I211 + Intel-AC 9260

OS: ManjaroLinux 21.3.7, Kernel: 5.4.210-1-MANJARO (x86_64), Desktop: KDE Plasma 5.24.6, Display Server: X Server 1.21.1.4, OpenGL: 4.5 Mesa 22.1.6 (LLVM 14.0.6 256 bits), Compiler: GCC 12.1.1 20220730 + Clang 14.0.6 + LLVM 14.0.6, File-System: ext4, Screen Resolution: 1920x1200

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-werror --enable-__cxa_atexit --enable-bootstrap --enable-cet=auto --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-default-ssp --enable-gnu-indirect-function --enable-gnu-unique-object --enable-languages=c,c++,ada,fortran,go,lto,objc,obj-c++,d --enable-libstdcxx-backtrace --enable-link-serialization=1 --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-build-config=bootstrap-lto --with-linker-hash-style=gnu
Processor Notes: Scaling Governor: acpi-cpufreq schedutil (Boost: Enabled) - CPU Microcode: 0x8101016
Graphics Notes: GLAMOR - vBIOS Version: 113-RAVEN-114
Python Notes: Python 3.10.5
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: 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 Retpolines IBPB: conditional STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

200GE-P1

Processor: AMD Athlon 200GE @ 3.20GHz (2 Cores / 4 Threads), Motherboard: Gigabyte B450 I AORUS PRO WIFI-CF (F50 BIOS), Chipset: AMD Raven/Raven2, Memory: 30GB, Disk: 1000GB Samsung SSD 970 EVO 1TB + 6001GB Western Digital WD60EZAZ-00S + 2 x 5001GB Seagate ST5000LM000-2AN1, Graphics: AMD Radeon Vega 3 2GB (1000/1600MHz), Audio: AMD Raven/Raven2/Fenghuang, Network: Intel I211 + Intel-AC 9260

OS: ManjaroLinux 21.3.7, Kernel: 5.4.210-1-MANJARO (x86_64), Desktop: KDE Plasma 5.24.6, Display Server: X Server 1.21.1.4, OpenGL: 4.6 Mesa 22.1.6 (LLVM 14.0.6 DRM 3.35), Vulkan: 1.3.211, Compiler: GCC 12.1.1 20220730 + Clang 14.0.6 + LLVM 14.0.6, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-werror --enable-__cxa_atexit --enable-bootstrap --enable-cet=auto --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-default-ssp --enable-gnu-indirect-function --enable-gnu-unique-object --enable-languages=c,c++,ada,fortran,go,lto,objc,obj-c++,d --enable-libstdcxx-backtrace --enable-link-serialization=1 --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-build-config=bootstrap-lto --with-linker-hash-style=gnu
Processor Notes: Scaling Governor: acpi-cpufreq schedutil (Boost: Enabled) - CPU Microcode: 0x8101016
Graphics Notes: GLAMOR - BAR1 / Visible vRAM Size: 2048 MB - vBIOS Version: 113-RAVEN-114
Python Notes: Python 3.10.5
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: 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 Retpolines IBPB: conditional STIBP: disabled RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

AMD Athlon 200GE - Integrated Graphics Benchmarks

Phoronix Test Suite

	Core i3 8100	Core i3 7100	Pentium G4400	Core i3 4130	Ryzen 3 2200G	A10-7850K	Core i5 3470	Core i7 5775C	Core i5 8400	Pentium G3258	A10-7870K	Core i7 8700K	Athlon 200GE	200GE-P1-3200	200GE-P1
ET: Legacy - Renderer2 - 1920 x 1080 (FPS)	93.60	80.13	52.27	65.03	143.83	74.60	45.03	118.10	105.73	49.60	81.03	116.27	115.50		138.2
Normalized	65.08%	55.71%	36.34%	45.21%	100%	51.87%	31.31%	82.11%	73.51%	34.49%	56.34%	80.84%	80.3%		96.09%
Standard Deviation	0.2%	0.3%	0.1%	3.1%	0.6%	0.4%	0.1%	0.3%	0.5%	0.3%	0.3%	0.4%	1%		1%
Tesseract - 1920 x 1080 (FPS)	62.33	57.87	34.26	41.56	159.83	60.50	21.54	101.76	62.38	27.45	67.67	71.34	78.75		80.29225
Normalized	39%	36.21%	21.44%	26%	100%	37.85%	13.48%	63.67%	39.03%	17.17%	42.34%	44.63%	49.27%		50.24%
Standard Deviation	0.7%	0.8%	0.9%	1.1%	0.7%	1.3%	0.1%	0.3%	0.7%	0.4%	0.5%	2%	0.3%		0.1%
Unigine Superposition - 1920 x 1080 - Fullscreen - Low - OpenGL	10.20	9.40	5.70		25.20	7.80		14.70	10	4	9	11.60	10.60		13.1
Normalized	40.48%	37.3%	22.62%		100%	30.95%		58.33%	39.68%	15.87%	35.71%	46.03%	42.06%		51.98%
Standard Deviation															0%
Xonotic - 1920 x 1080 - Low (FPS)	210	181	126	156	308	172	109	309	261	116	183	297	237		284.219905 3
Normalized	67.96%	58.58%	40.78%	50.49%	99.68%	55.66%	35.28%	100%	84.47%	37.54%	59.22%	96.12%	76.7%		91.98%
Standard Deviation	0.3%	0.8%	0%	2%	0.7%	0.4%	0.1%	0.4%	0.2%	0.8%	0.3%	0.6%	0.2%		0.4%
Xonotic - 1920 x 1080 - High (FPS)	126	113	62.12	76.24	220.47	105.86	44.78	215.56	133.11	51.60	120.27	151.21	140.72		171.227910 3
Normalized	57.15%	51.25%	28.18%	34.58%	100%	48.02%	20.31%	97.77%	60.38%	23.4%	54.55%	68.59%	63.83%		77.66%
Standard Deviation	0.1%	0%	0.1%	0.1%	0.3%	0.3%	0%	0.5%	0.2%	0.4%	0%	0.8%	1.8%		0.3%
Xonotic - 1920 x 1080 - Ultra (FPS)	97.50	88.96	48.29	60.14	186.11	90.96	20.23	174.14	100.73	40.20	104.22	116.49	106.64		123.536746 2
Normalized	52.39%	47.8%	25.95%	32.31%	100%	48.87%	10.87%	93.57%	54.12%	21.6%	56%	62.59%	57.3%		66.38%
Standard Deviation	0.2%	0.1%	0.1%	0.3%	0.4%	0.3%	0.1%	0.6%	0.1%	0.3%	0%	0.2%	0.7%		0.4%

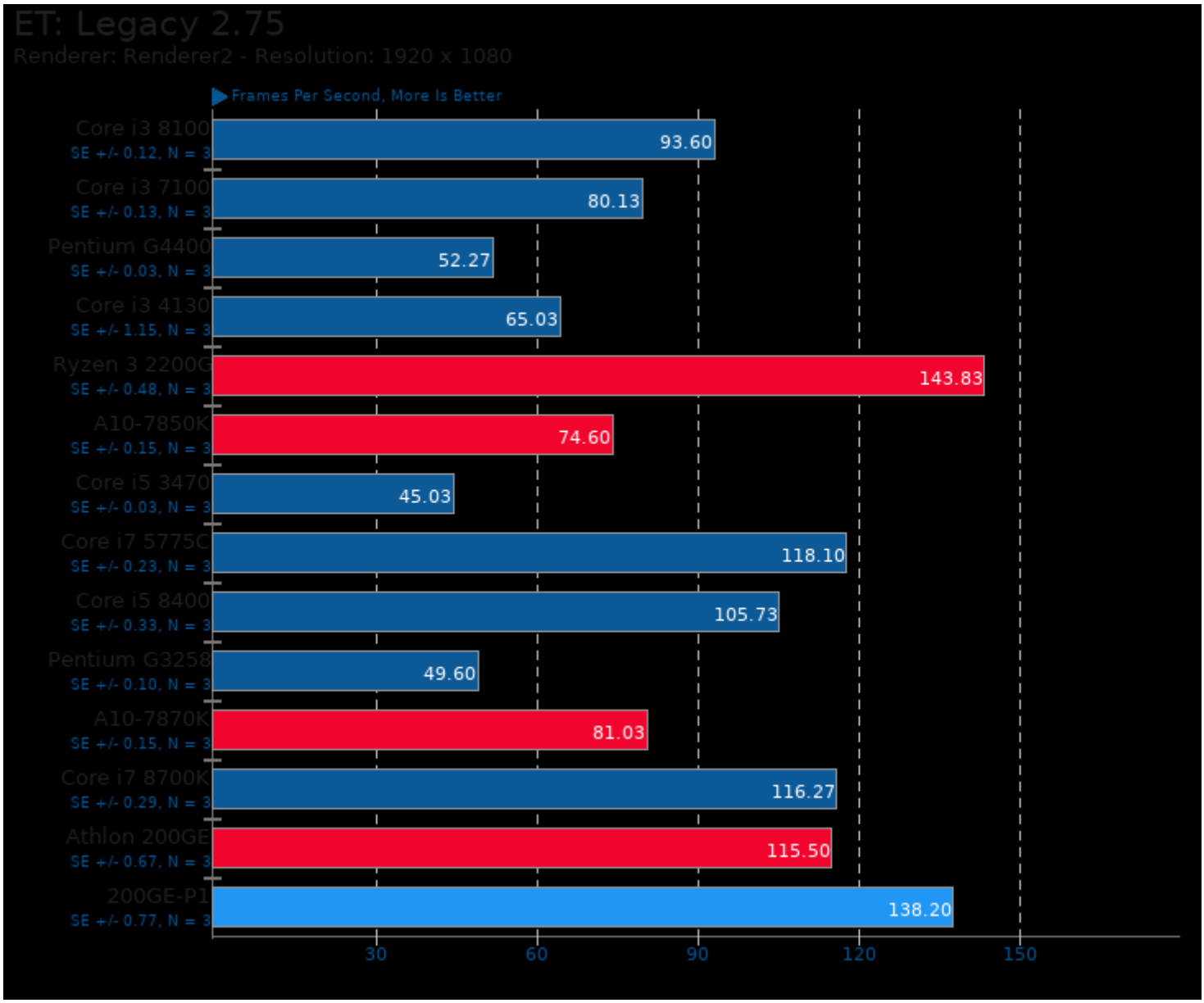
AMD Athlon 200GE - Integrated Graphics Benchmarks

Xonotic - 1920 x 1080 - Ultimate (FPS)	70.11	64.32	35.24	42.70	**137.58**	65.43	**11.64**	122.77	71.02	27.75	75.53	81.52	70.39	80.1594779
Normalized	50.96%	46.75%	25.61%	31.04%	100%	47.56%	8.46%	89.24%	51.62%	20.17%	54.9%	59.25%	51.16%	58.26%
Standard Deviation	0.1%	0%	0%	0.4%	0.3%	1.9%	0%	0.4%	0.1%	0.1%	0.1%	0.2%	0.6%	0.1%
GpuTest - Furmark - 1920 x 1080 - Fullscreen (Points)	663	592	330	355	**1340**	453	**203**	1074	658	259	497	817	679	721
Normalized	49.48%	44.18%	24.63%	26.49%	100%	33.81%	15.15%	80.15%	49.1%	19.33%	37.09%	60.97%	50.67%	53.81%
Standard Deviation				0.7%		0.3%		0.2%		1.4%	0.8%			0%
GpuTest - Triangle - 1920 x 1080 - Fullscreen (Points)	44538	38546	**14783**	42565	**194493**	67350	26626	80327	54247	29549	80674	63997	108022	107525
Normalized	22.9%	19.82%	7.6%	21.89%	100%	34.63%	13.69%	41.3%	27.89%	15.19%	41.48%	32.9%	55.54%	55.28%
Standard Deviation	0.1%	0.1%	0%	2.1%	0.1%	0%	0%	4.8%	0.2%	0.1%	0%	0.8%	0%	0%
GpuTest - Pixmark Piano - 1920 x 1080 - Fullscreen (Points)	125	119	62	77	**289**	163	**34**	280	119	59	197	155	97	120
Normalized	43.25%	41.18%	21.45%	26.64%	100%	56.4%	11.76%	96.89%	41.18%	20.42%	68.17%	53.63%	33.56%	41.52%
Standard Deviation													0.6%	0%
GpuTest - Pixmark Volplosion - 1920 x 1080 - Fullscreen (Points)	732	316	163	230	719	429	**102**	**778**	317	177	517	413	245	298
Normalized	94.09%	40.62%	20.95%	29.56%	92.42%	55.14%	13.11%	100%	40.75%	22.75%	66.45%	53.08%	31.49%	38.3%
Standard Deviation	189.7%													0%
GLmark2 - 1920 x 1080 (Score)	565	487	**171**	463	**1163**	481	313	936	595	307	571	688	732	
Normalized	48.58%	41.87%	14.7%	39.81%	100%	41.36%	26.91%	80.48%	51.16%	26.4%	49.1%	59.16%	62.94%	

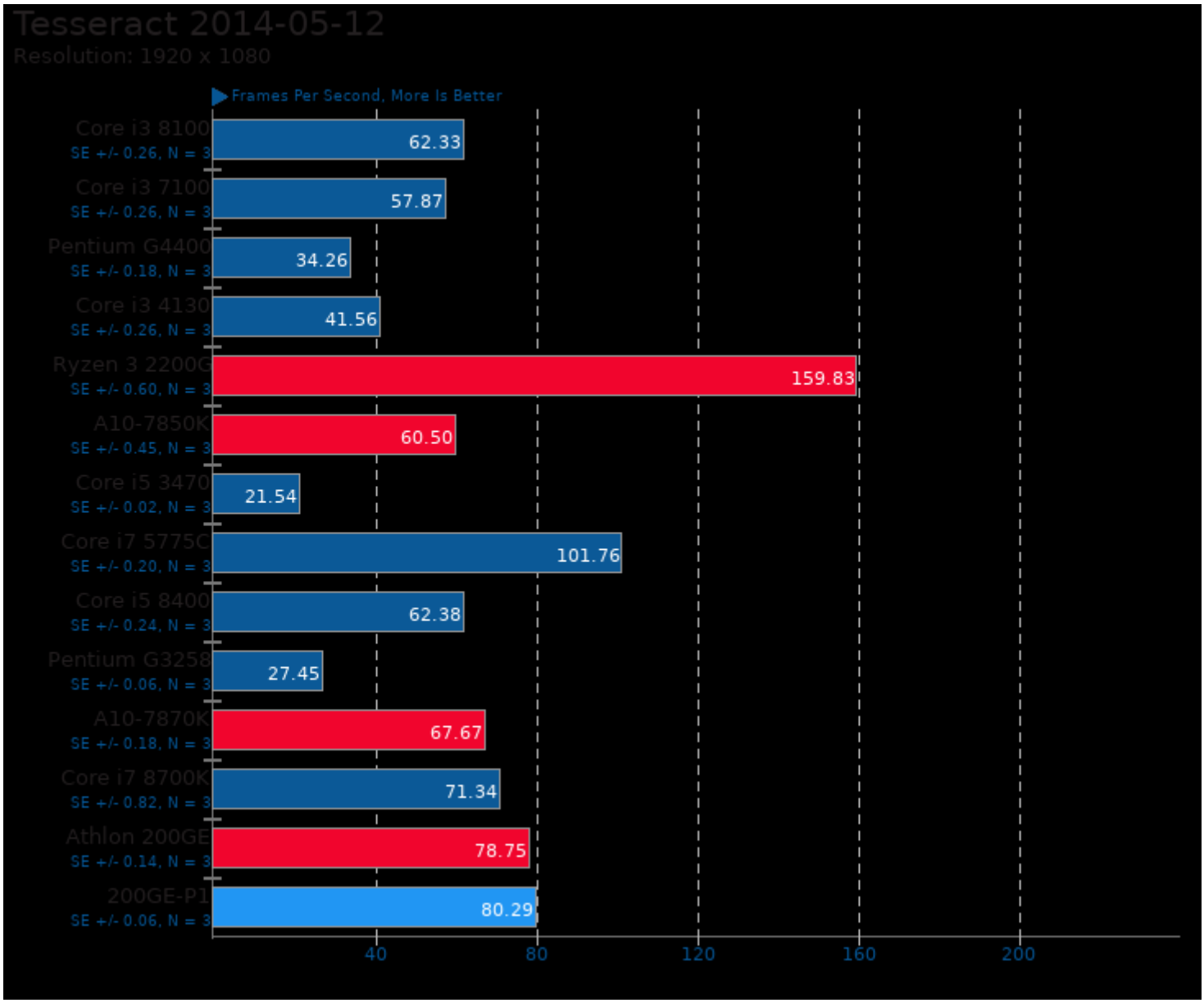
AMD Athlon 200GE - Integrated Graphics Benchmarks

VKMark - 1920 x 1080 (VKMark Score)	1694	1420	984	706	1913	**2604**	1814	**439**	2008	1140
Normalized	65.05%	54.53%	37.79%	27.11%	73.46%	100%	69.66%	16.86%	77.11%	43.78%
Standard Deviation	0.2%	0.4%	0.1%	0.1%	14.2%	0.5%	0.4%	0.9%	0.2%	7.8%

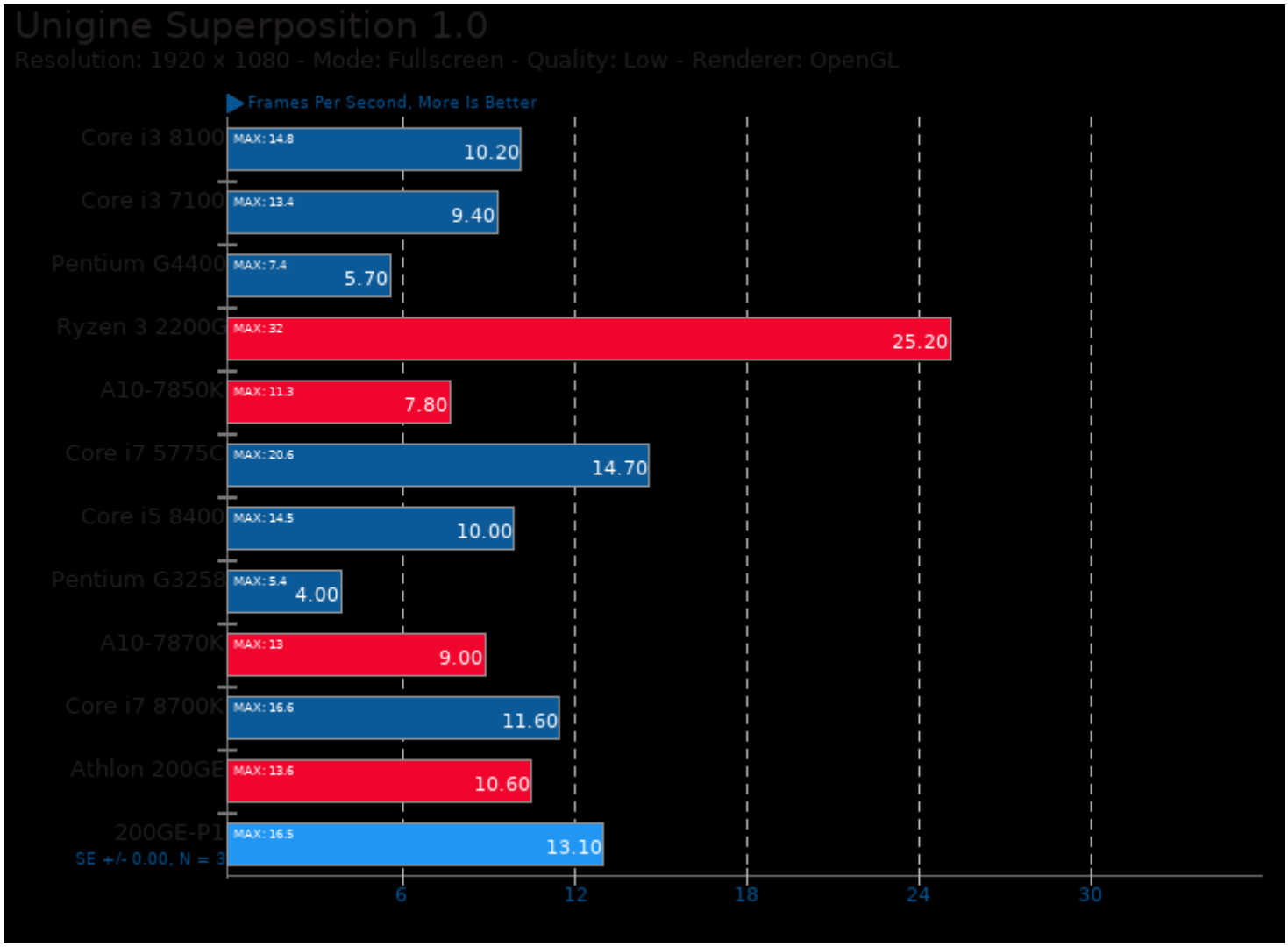
AMD Athlon 200GE - Integrated Graphics Benchmarks



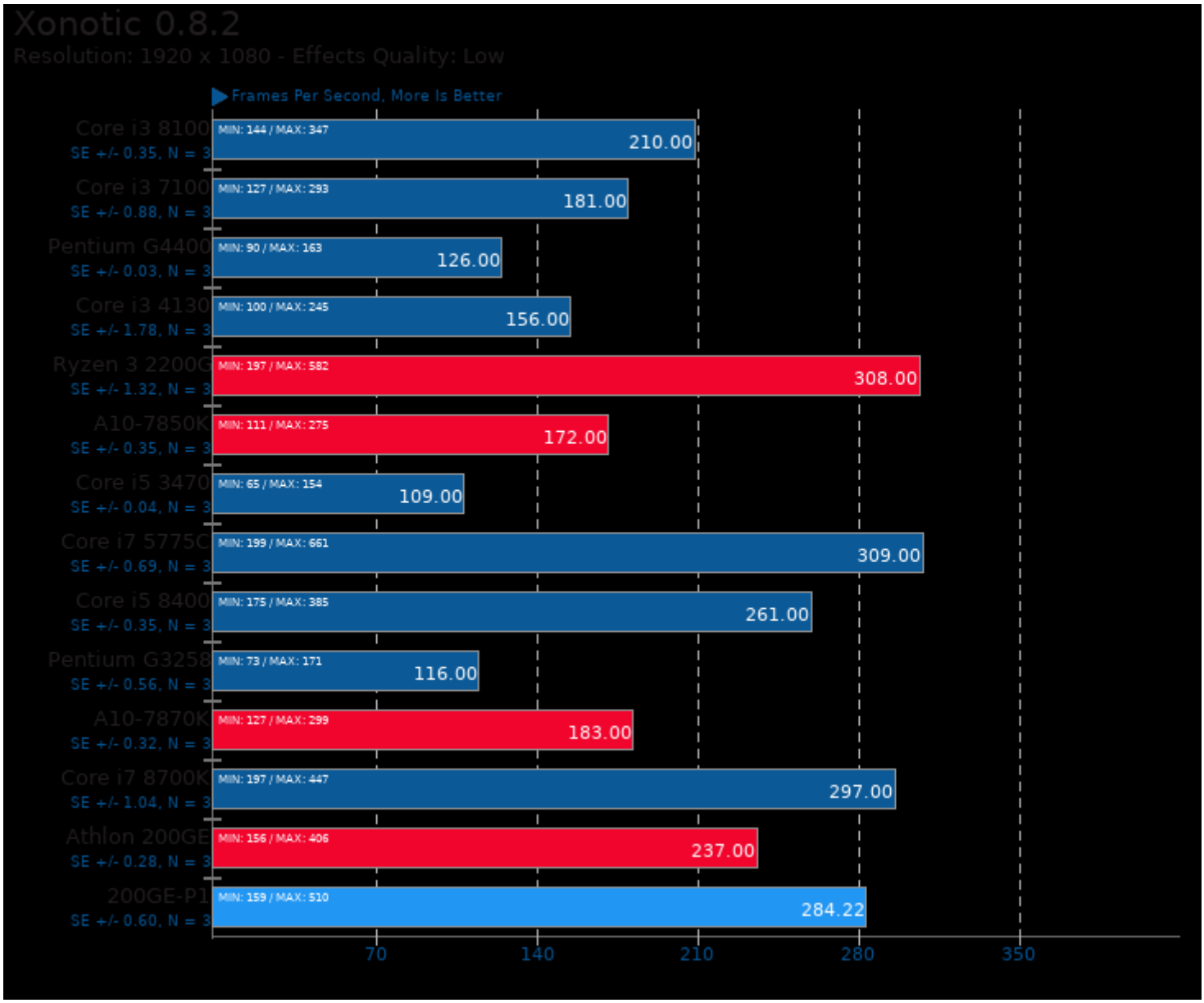
AMD Athlon 200GE - Integrated Graphics Benchmarks



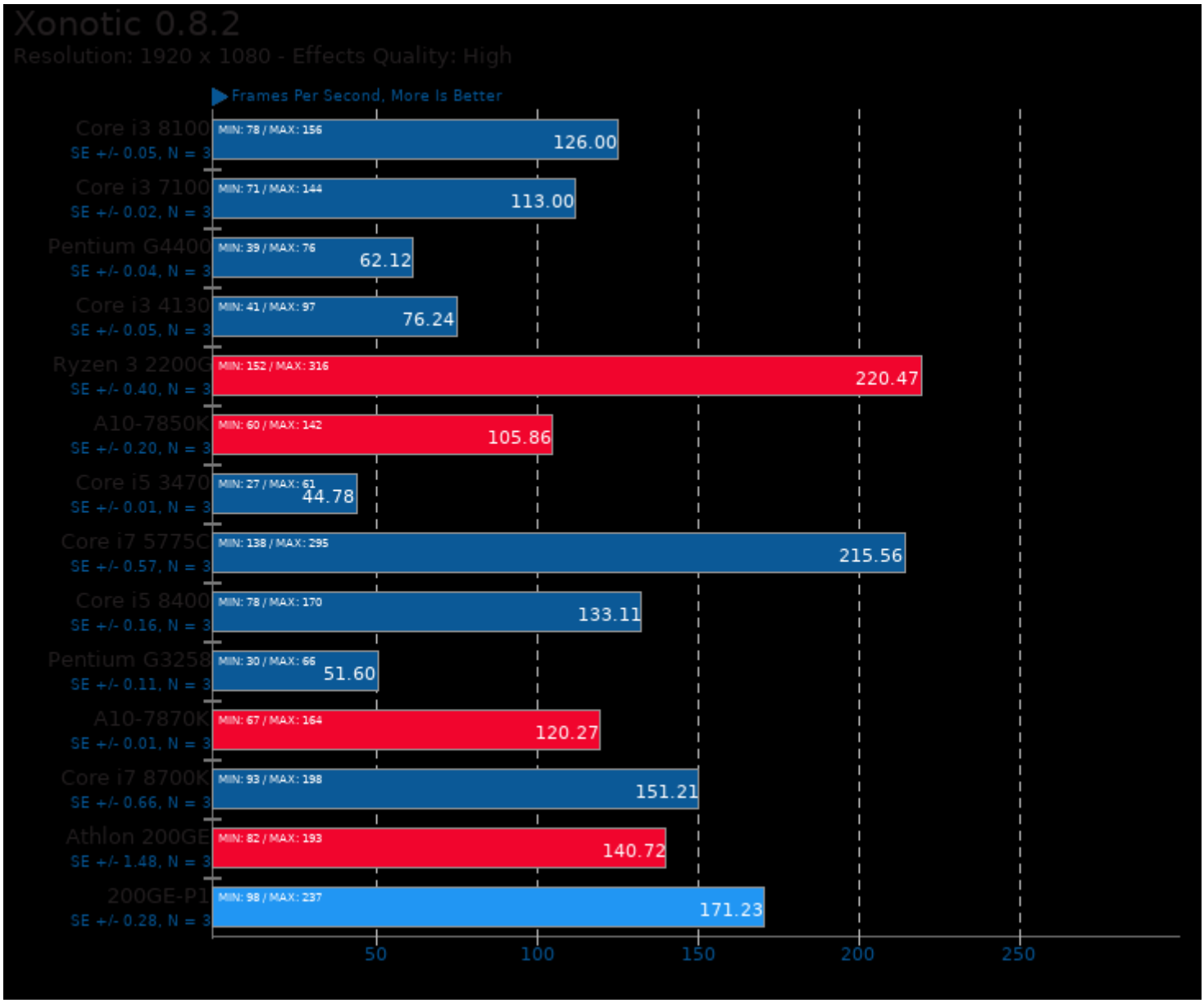
AMD Athlon 200GE - Integrated Graphics Benchmarks



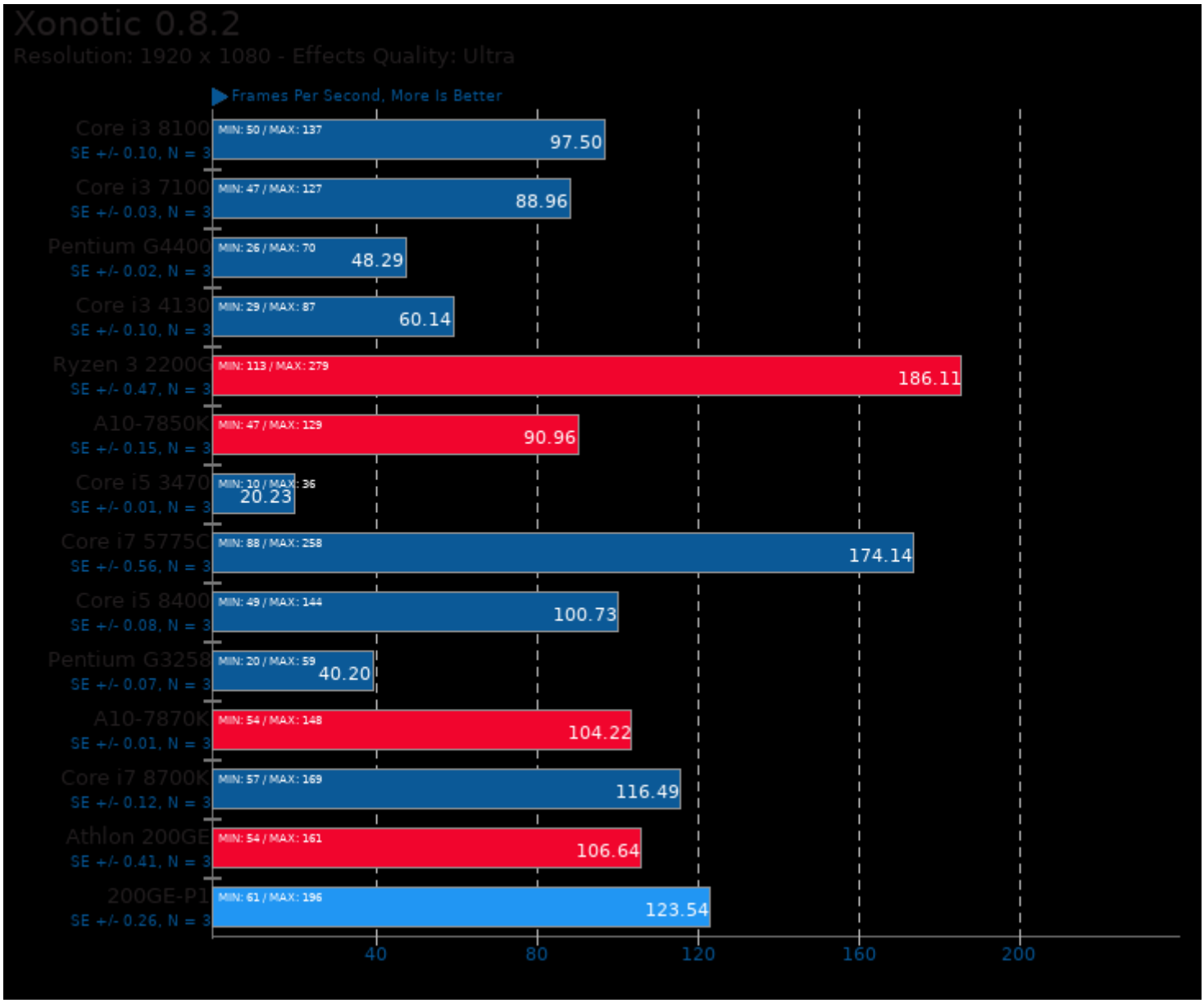
AMD Athlon 200GE - Integrated Graphics Benchmarks



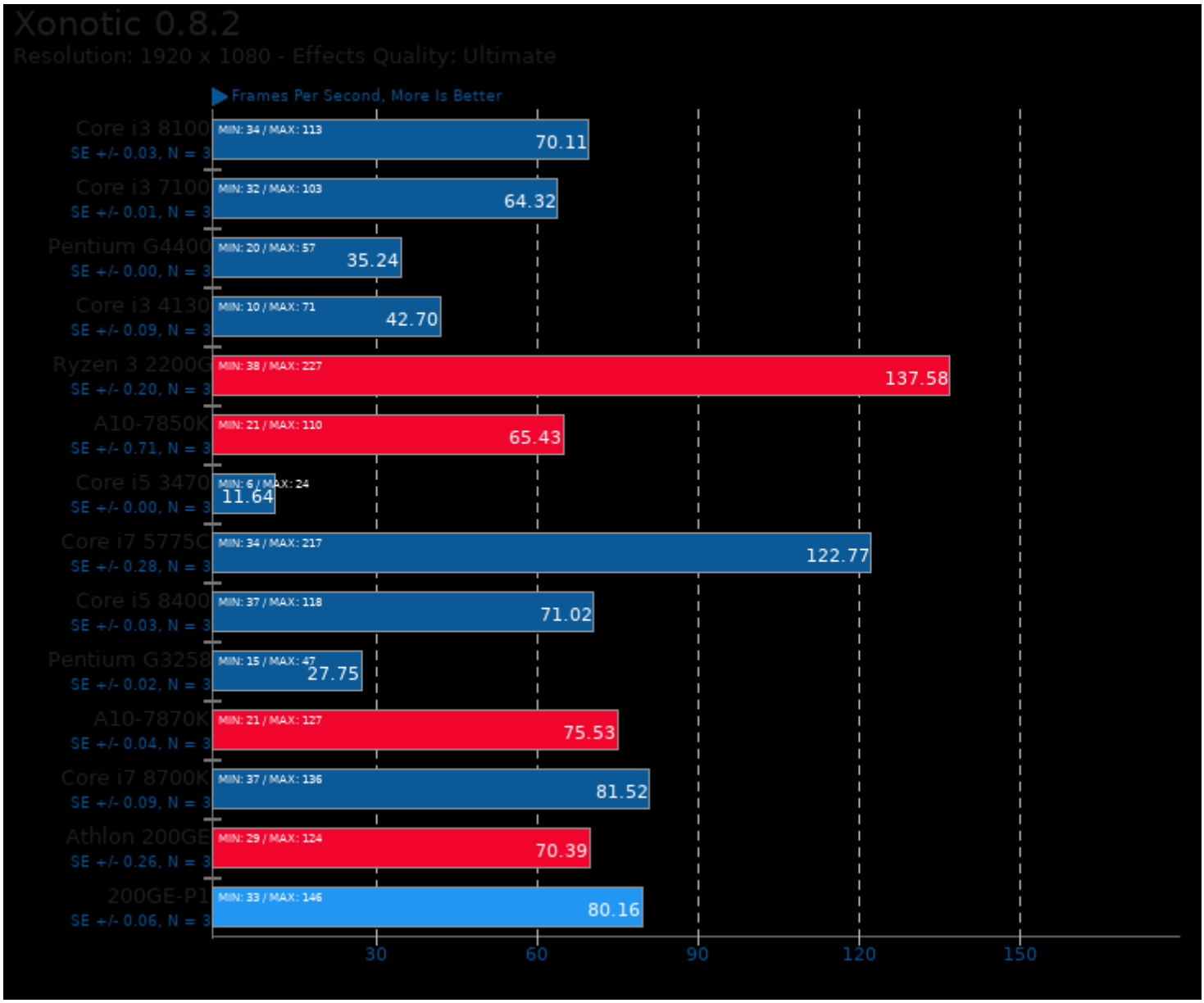
AMD Athlon 200GE - Integrated Graphics Benchmarks



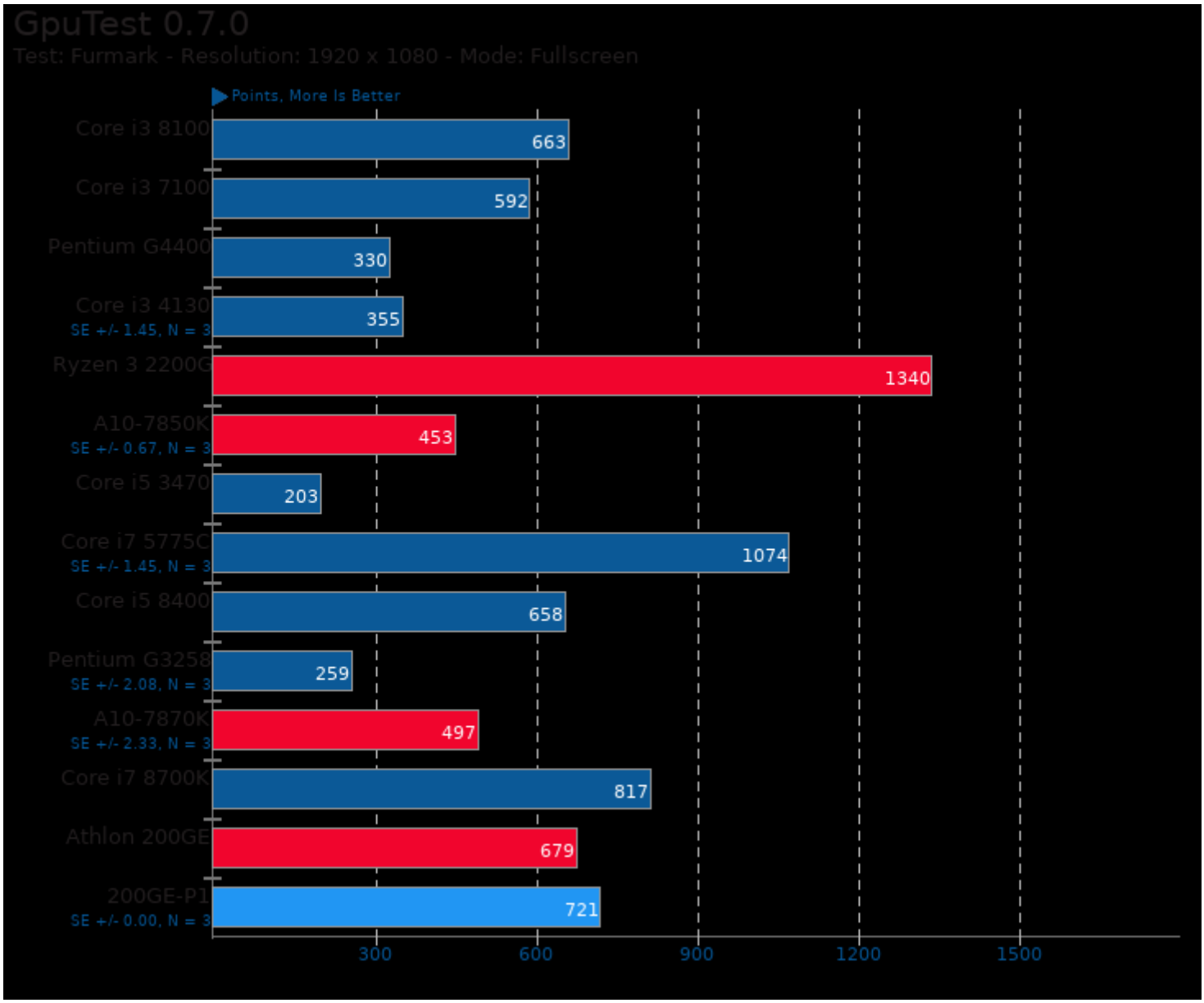
AMD Athlon 200GE - Integrated Graphics Benchmarks



AMD Athlon 200GE - Integrated Graphics Benchmarks

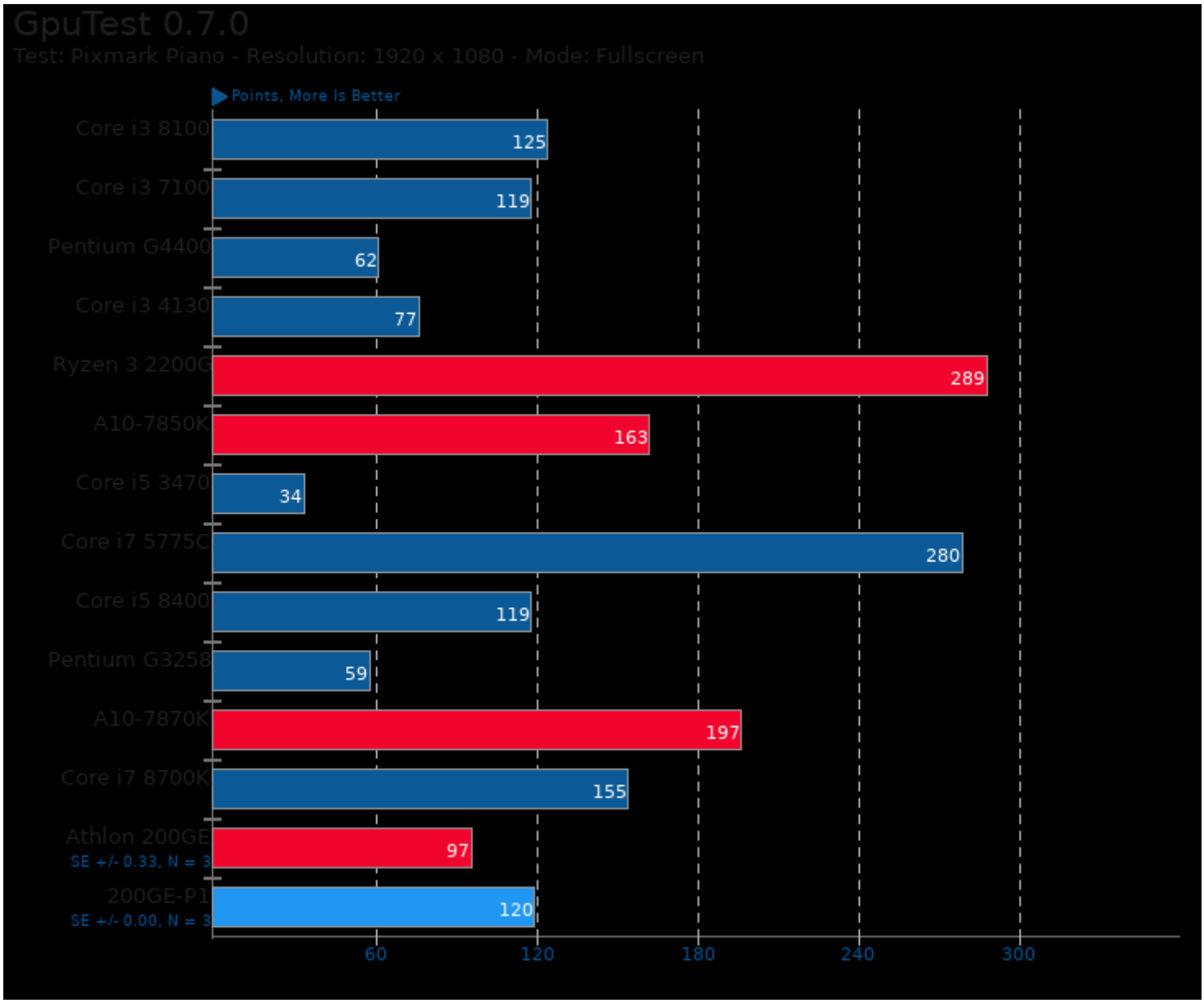


AMD Athlon 200GE - Integrated Graphics Benchmarks

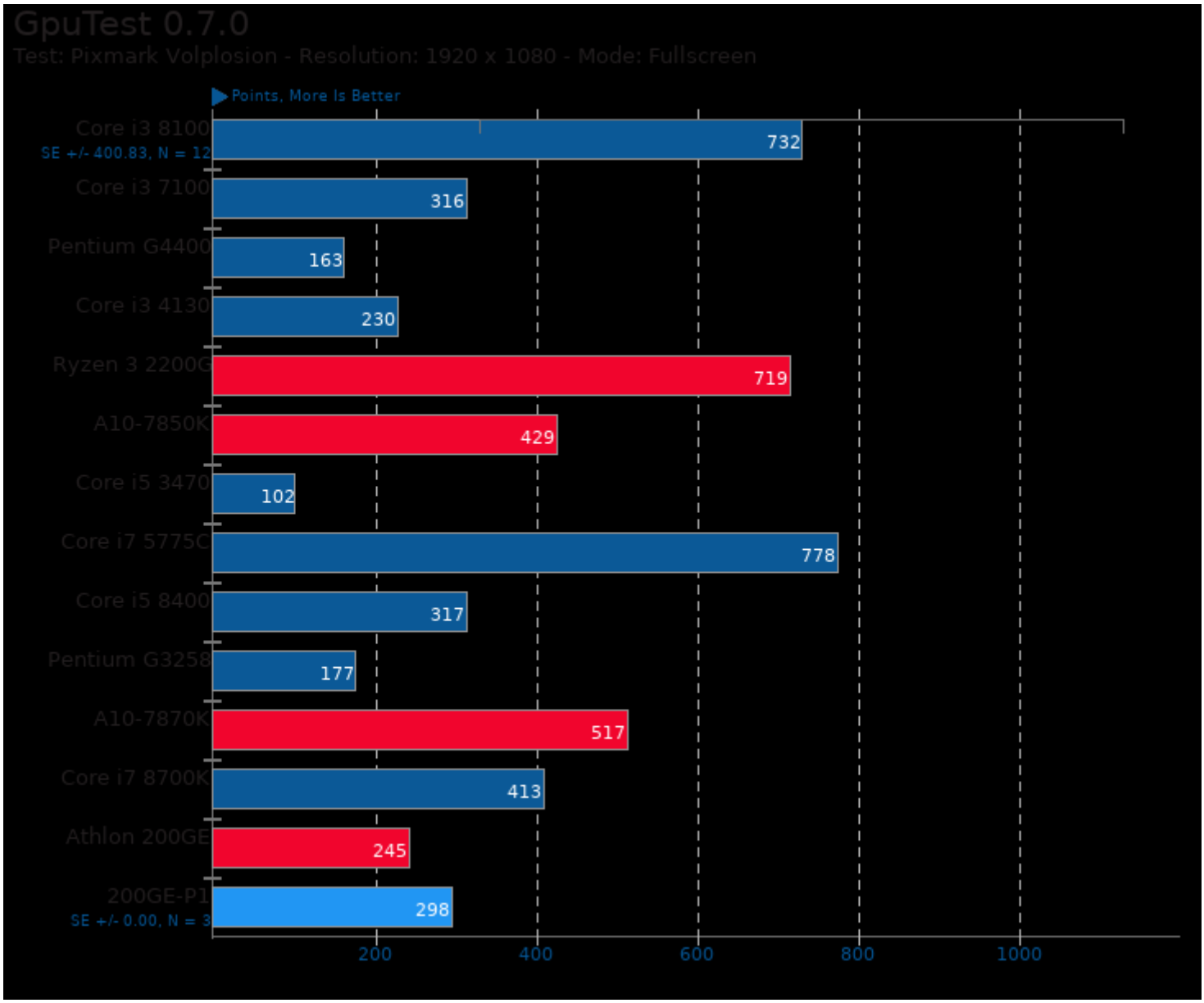


AMD Athlon 200GE - Integrated Graphics Benchmarks

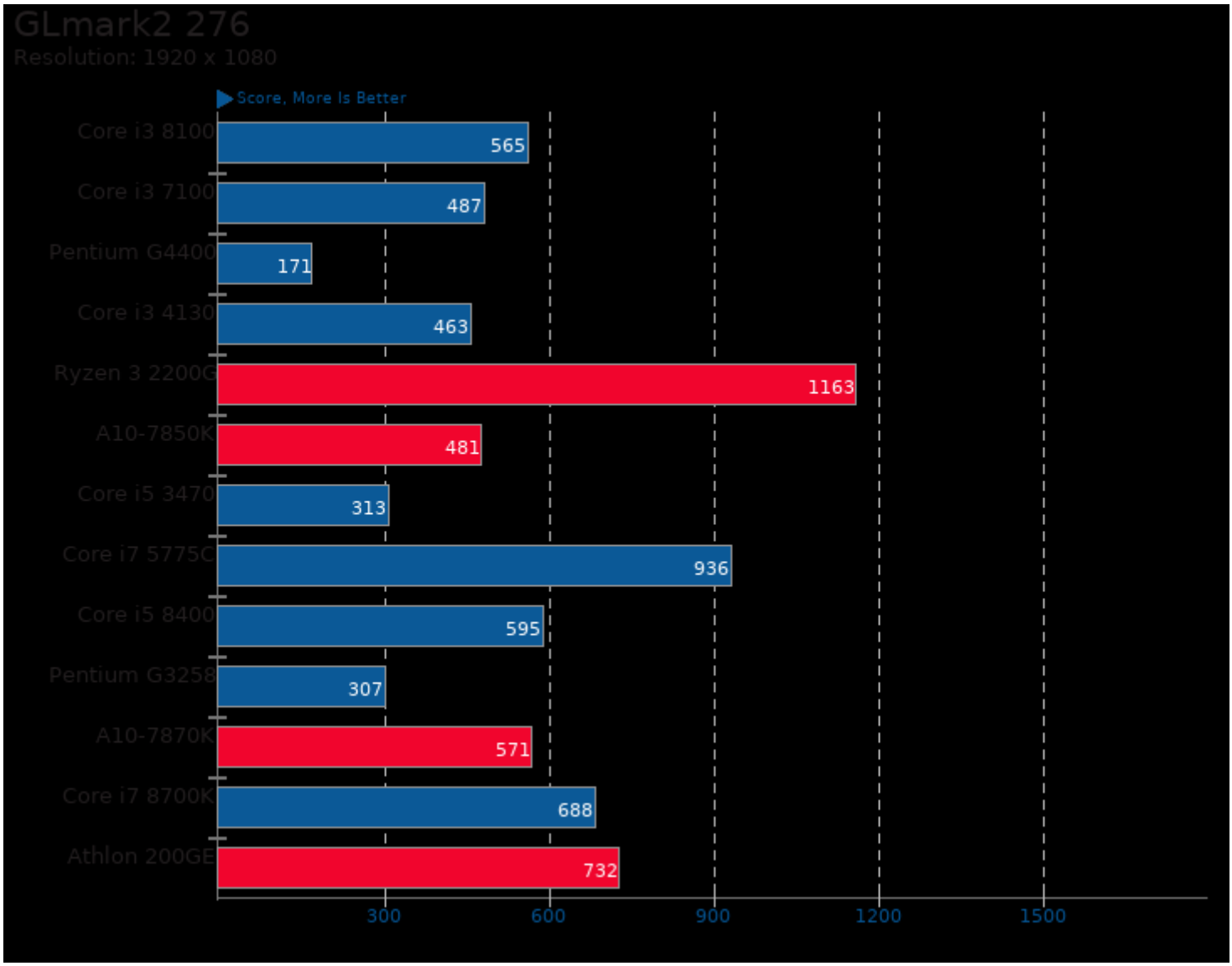
AMD Athlon 200GE - Integrated Graphics Benchmarks



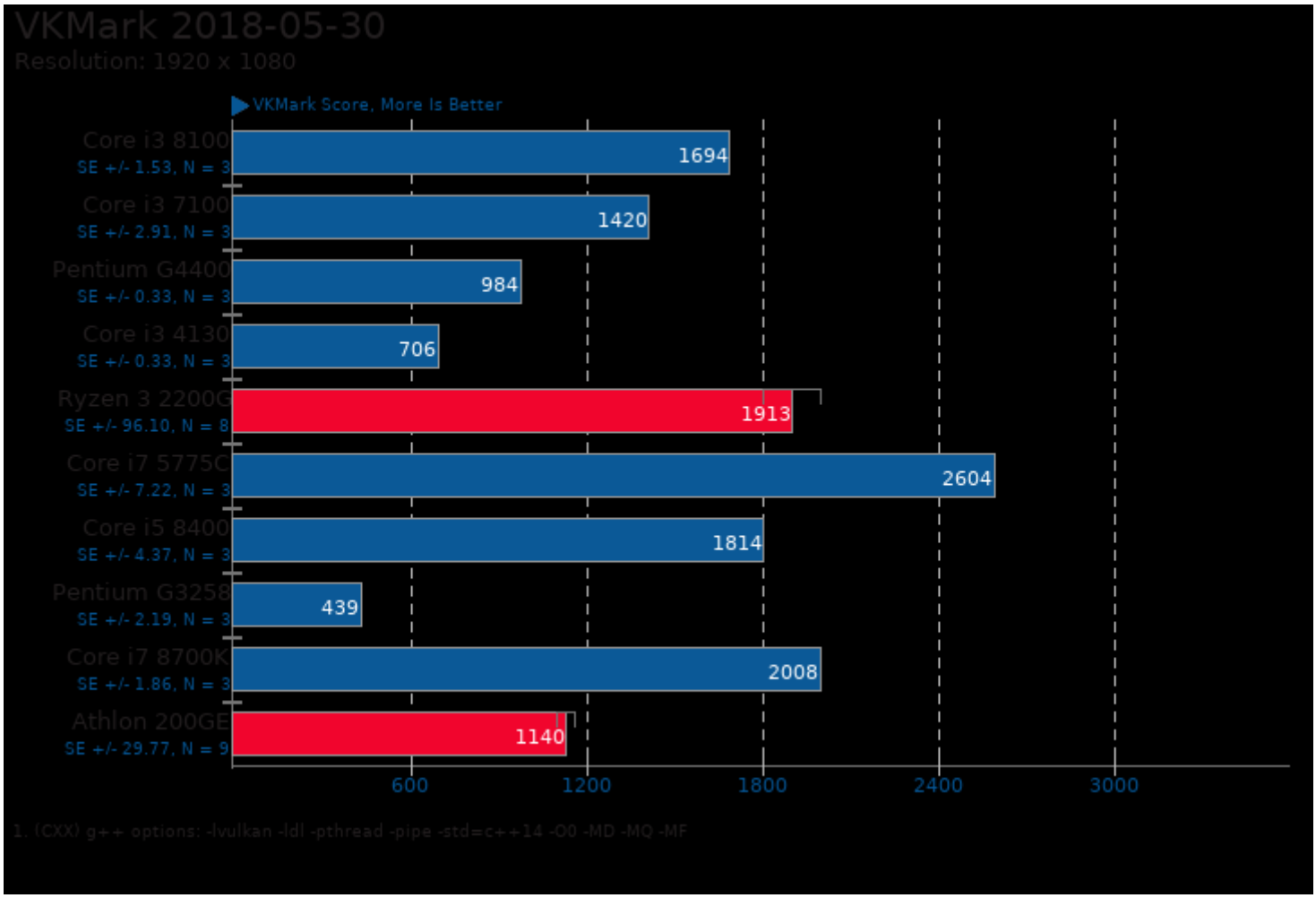
AMD Athlon 200GE - Integrated Graphics Benchmarks



AMD Athlon 200GE - Integrated Graphics Benchmarks



AMD Athlon 200GE - Integrated Graphics Benchmarks



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 20:09.