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40-Way Linux PC Benchmark Comparison

40-way Linux system comparison from the benchmark lab.

Automated Executive Summary

Xeon E3-1270 v5 had the most wins, coming in first place for 30% of the tests.

Based on the geometric mean of all complete results, the fastest (Xeon E3-1245 v5) was 4.237x the speed of the slowest (Phenom II X3 710).

Test Systems:

2 x Xeon E5540

Processor: 2 x Intel Xeon E5540 @ 2.53GHz (16 Cores), Motherboard: SUN ASSY X4170, Chipset: Intel 5520 I/O + ICH10R, Memory: 18 x 2048 MB DDR3-800MHz Hyundai, Disk: 2 x 147GB Seagate ST914603SSUN146G + 6 x 300GB H106030SDSUN300G, Graphics: ASPEED ASPEED Family, Network: Intel 82575EB Gigabit Connection

OS: Ubuntu 15.04, Kernel: 4.6.0-999-generic (x86_64) 20160506, Compiler: GCC 4.9.2, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,c++,java,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

A10-5800K

Processor: AMD A10-5800K APU @ 3.80GHz (4 Cores), Motherboard: Gigabyte F2A68HM-H, Chipset: AMD Family 15h, Memory: 1 x 8192 MB DDR3-1866MHz, Disk: 240GB OCZ ARC100, Graphics: ASUS AMD Radeon HD 7850 / R7 265 / R9 270 1024SP (300/150MHz), Audio: Realtek ALC887-VD, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 16.04, Kernel: 4.6.0-999-generic (x86_64) 20160505, Desktop: Unity 7.4.0, Display Server: X Server 1.18.3, Display Driver: radeon 7.7.0, OpenGL: 4.1 Mesa 11.3.0-devel (git-a1f6988 2016-05-06 xenial-oibaf-ppa) Gallium 0.4, Compiler: GCC 5.3.1 20160413, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

A10-7800

Processor: AMD A10-7800 Radeon R7 12 Compute Cores 4C+8G @ 3.50GHz (4 Cores), Motherboard: MSI A78M-E35 (MS-7721) v6.0, Chipset: AMD Family 15h, Memory: 2 x 4096 MB DDR3-1333MHz Corsair CMZ16GX3M4A1600C9, Disk: 500GB Western Digital WD5000AZRX-0, Graphics: MSI AMD Radeon R7 1024MB (351MHz), Audio: AMD Kaveri HDMI/DP, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 16.04, Kernel: 4.6.0-999-generic (x86_64) 20160505, Desktop: Unity 7.4.0, Display Server: X Server 1.18.3, Display Driver: radeon 7.7.0, OpenGL: 4.1 Mesa 11.3.0-devel (git-a1f6988 2016-05-06 xenial-oibaf-ppa) Gallium 0.4, Compiler: GCC 5.3.1 20160413, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

A10-7850K #1

Processor: AMD A10-7850K APU with Radeon R7 @ 3.70GHz (4 Cores), Motherboard: ASUS A88X-PRO, Chipset: AMD Family 15h, Memory: 2 x 2048 MB DDR3-1600MHz, Disk: 120GB INTEL SSDSC2BW12, Graphics: ASUS AMD Radeon R7 512MB (351MHz), Audio: AMD Kaveri HDMI/DP, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 16.04, Kernel: 4.4.0-6-generic (x86_64), Desktop: Unity 7.4.0, Display Server: X Server 1.17.3, Display Driver: radeon 7.6.1, OpenGL: 4.1 Mesa 11.1.2 Gallium 0.4, Compiler: GCC 7.0.0 20160507, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran

Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

A10-7850K #2

Processor: AMD A10-7850K APU with Radeon R7 @ 3.70GHz (4 Cores), Motherboard: Gigabyte F2A88XM-D3H, Chipset: AMD Family 15h, Memory: 2 x 4096 MB DDR3-1333MHz, Disk: 120GB KINGSTON SV300S3, Graphics: AMD Radeon R7 1024MB (351MHz), Audio: AMD Kaveri HDMI/DP, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 16.04, Kernel: 4.6.0-999-generic (x86_64) 20160506, Desktop: Unity 7.4.0, Display Server: X Server 1.17.3, Display Driver: radeon 7.6.1, OpenGL: 4.1 Mesa 11.2.0-devel (git-3c9ed20 2016-02-21 xenial-oibaf-ppa) Gallium 0.4, Compiler: GCC 5.3.1 20160211, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

A10-7870K

Processor: AMD A10-7870K Radeon R7 12 Compute Cores 4C+8G @ 3.90GHz (4 Cores), Motherboard: ASUS A88XM-E, Chipset: AMD Family 15h, Memory: 2 x 8192 MB DDR3-1333MHz, Disk: 250GB Samsung SSD 850, Graphics: ASUS AMD Radeon R7 1024MB (355MHz), Audio: AMD Kaveri HDMI/DP, Network: Realtek RTL8111/8168/8411

OS: Fedora 22, Kernel: 4.6.0-0.rc6.git2.1.fc25.x86_64 (x86_64) 20160504, Desktop: GNOME Shell 3.16.4, Display Server: X Server 1.17.4, Display Driver: radeon 7.5.0, OpenGL: 3.3 Mesa 10.6.9 (git-8957b69) Gallium 0.4, Compiler: GCC 5.3.1 20160406, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-redhat-linux --disable-libgcj --disable-libunwind-exceptions --enable-__cxa_atexit --enable-bootstrap --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-initfini-array --enable-languages=c,c++,objc,obj-c++,fortran,ada,go,lto --enable-libmpx --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch_32=i686 --with-default-libstdcxx-abi=gcc4-compatible --with-isl --with-linker-hash-style=gnu --with-tune=generic
Disk Notes: CFQ / data=ordered,relatime,rw,seclabel
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
System Notes: SELinux: Enabled.

A6-7400K

Processor: AMD A6-7400K Radeon R5 6 Compute Cores 2C+4G @ 3.50GHz (2 Cores), Motherboard: ASRock FM2A58M-VG3+ R2.0, Chipset: AMD Family 15h, Memory: 2 x 4096 MB DDR3-2132MHz Kingston, Disk: 120GB OCZ VECTOR150, Graphics: AMD Radeon R5 1024MB (351MHz), Audio: AMD FCH Azalia, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.04, Kernel: 3.19.0-15-generic (x86_64), Compiler: GCC 7.0.0 20160507, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

A8-3870

Processor: AMD A8-3870 APU @ 3.00GHz (4 Cores), Motherboard: Gigabyte GA-A75M-UD2H, Chipset: AMD Family 12h Root Complex, Memory: 2 x 2048 MB 1333MHz, Disk: 120GB INTEL SSDSC2BW12, Graphics: Gigabyte AMD

Radeon HD 6550D 512MB (282MHz), Audio: AMD BeaverCreek HDMI Audio, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.04, Kernel: 4.6.0-999-generic (x86_64) 20160506, Desktop: Unity 7.3.2, Display Server: X Server 1.17.1, Display Driver: radeon 7.5.0, Compiler: GCC 4.9.2, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,c++,java,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

Core i3 2100

Processor: Intel Core i3-2100 @ 3.10GHz (4 Cores), Motherboard: MSI H61M-P31/W8 (MS-7788) v1.0, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 2 x 2048 MB DDR3-1067MHz OCZ3BE1600C8LV2G, Disk: 500GB Seagate ST500DM002-1BD14, Graphics: Intel HD 2000 (1100MHz), Audio: Realtek ALC887-VD, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 16.04, Kernel: 4.6.0-999-generic (x86_64) 20160506, Display Server: X Server 1.17.3, Display Driver: intel 2.99.917, Compiler: GCC 5.3.1 20151219, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i3 2120

Processor: Intel Core i3-2120 @ 3.30GHz (4 Cores), Motherboard: BIOSTAR B75MU3B v5.0, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 1 x 4096 MB DDR3-1333MHz, Disk: 2000GB Seagate ST2000DM001-1E61, Graphics: Intel HD 2000 (1100MHz), Audio: Realtek ALC662 rev1, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.10, Kernel: 4.6.0-999-generic (x86_64) 20160506, Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 11.0.2, Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i3 4130

Processor: Intel Core i3-4130 @ 3.40GHz (4 Cores), Motherboard: Intel DH87RL, Chipset: Intel 4th Gen Core DRAM, Memory: 2 x 1024 MB DDR3-1333MHz, Disk: 128GB TOSHIBA THNSNH12, Graphics: Intel Device 041e (1150MHz), Audio: Intel Xeon E3-1200 v3/4th, Network: Intel Connection I217-V

OS: Ubuntu 14.04, Kernel: 4.0.0-999-generic (x86_64) 20150310, Compiler: GCC 4.2.1 + Clang 3.9.0-svn267343-1~exp1, File-System: btrfs, Screen Resolution: 1024x768

Disk Notes: DEADLINE / relatime,rw,space_cache,ssd

Processor Notes: Scaling Governor: intel_pstate performance

Core i3 5010U

Processor: Intel Core i3-5010U @ 2.10GHz (4 Cores), Motherboard: Intel NUC5i3RYB, Chipset: Intel Broadwell-U-OPI, Memory: 8192MB, Disk: 256GB TS256GSSD370, Graphics: Intel Broadwell-U (900MHz), Audio: Intel Broadwell-U Audio, Network: Intel Connection + Intel Wireless 7265

OS: Ubuntu 15.04, Kernel: 4.1.0-999-generic (x86_64) 20150529, Desktop: Unity 7.3.2, Display Server: X Server 1.17.1, Display Driver: intel 2.99.917, Compiler: GCC 7.0.0 20160506, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave
System Notes: Disk Scheduler: DEADLINE.

Core i5 2400S

Processor: Intel Core i5-2400S @ 3.30GHz (4 Cores), Motherboard: ASRock Z68 Pro3, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 2 x 2048 MB DDR3-1600MHz, Disk: 250GB SAMSUNG HD253GJ, Graphics: Intel Gen6 (1100MHz), Audio: Intel 6 /C200, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.04, Kernel: 3.19.0-15-generic (x86_64), Compiler: GCC 7.0.0 20160507, File-System: xfs, Screen Resolution: 1024x768

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran
Disk Notes: DEADLINE / attr2,inode64,noquota,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i5 2500K

Processor: Intel Core i5-2500K @ 3.70GHz (4 Cores), Motherboard: ASRock H61M-VG3, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 2048MB, Disk: 1000GB Western Digital WD10EZRX-00A, Graphics: Intel Gen6 (1100MHz), Audio: Realtek ALC662 rev1, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 14.04, Kernel: 4.1.0-999-generic (x86_64) 20150607, Compiler: GCC 4.2.1 + Clang 3.9.0-svn267343-1~exp1, File-System: ext4, Screen Resolution: 1024x768

Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i5 3470

Processor: Intel Core i5-3470 @ 3.20GHz (4 Cores), Motherboard: ECS H61H2-I3 v1.0, Chipset: Intel Xeon E3-1200 v2/3rd, Memory: 1 x 4096 MB DDR3-1600MHz, Disk: 1000GB Western Digital WD10EZEX-00K, Graphics: Intel Gen7 (1100MHz), Audio: VIA VT1705, Monitor: VA2431, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 14.04, Kernel: 3.13.0-32-generic (x86_64), Compiler: GCC 4.2.1 + Clang 3.9.0-svn267343-1~exp1, File-System: ext4, Screen Resolution: 1920x1080

Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

Core i5 4670

Processor: Intel Core i5-4670 @ 3.80GHz (4 Cores), Motherboard: MSI B85M-P33 (MS-7817) v1.0, Chipset: Intel 4th Gen Core DRAM, Memory: 2 x 4096 MB DDR3-1600MHz CMY8GX3M2B2133C9, Disk: 63GB SanDisk SDSSDP06, Graphics: Intel HD 4600 (1200MHz), Audio: Intel Xeon E3-1200 v3/4th, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.10, Kernel: 4.6.0-999-generic (x86_64) 20160506, Display Server: X Server 1.17.2, Display Driver: intel 2.99.917, Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i7 3770K

Processor: Intel Core i7-3770K @ 3.90GHz (8 Cores), Motherboard: ECS Z77H2-A2X v1.0, Chipset: Intel Xeon E3-1200 v2/3rd, Memory: 8192MB, Disk: 160GB INTEL SSDSA2M160, Graphics: Intel HD 4000 (1150MHz), Audio: Realtek ALC892, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.04, Kernel: 4.1.0-999-generic (x86_64) 20150525, Desktop: Unity 7.3.2, Display Server: X Server 1.17.1, Display Driver: intel 2.99.917, Compiler: GCC 7.0.0 20160507, File-System: btrfs, Screen Resolution: 1024x768

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran
Disk Notes: DEADLINE / relatime,rw,space_cache,ssd
Processor Notes: Scaling Governor: intel_pstate powersave

Core i7 3960X

Processor: Intel Core i7-3960X @ 3.30GHz (12 Cores), Motherboard: Intel DX79SI, Chipset: Intel Xeon E5/Core, Memory: 8192MB, Disk: 120GB KINGSTON SV300S3, Graphics: Sapphire AMD Radeon HD 6770, Audio: Realtek ALC892, Network: Intel 82579LM Gigabit Connection

OS: Clear Linux 7820, Kernel: 4.5.2-202.native (x86_64), Display Server: X Server 1.18.3, Compiler: GCC 5.3.0 + Clang 3.8.0 + LLVM 3.8.0, File-System: ext4, Screen Resolution: 800x600

Compiler Notes: --build=x86_64-generic-linux --disable-multiarch --disable-multilib --disable-vtable-verify --enable-__cxa_atexit --enable-bootstrap --enable-clocale=gnu --enable-gnu-indirect-function --enable-languages=c,c++,fortran,go --enable-ld=default --enable-libmpx --enable-libstdcxx-pch --enable-lto --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=westmere --with-glibc-version=2.19 --with-gnu-ld --with-isl --with-ppl=yes --with-system-libunwind --with-tune=haswell
Disk Notes: CFQ / data=ordered,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq performance

Core i7 4600U

Processor: Intel Core i7-4600U @ 3.30GHz (4 Cores), Motherboard: CompuLab Intense-PC2 (IPC2), Chipset: Intel Haswell-ULT DRAM, Memory: 2 x 4096 MB DDR3-1600MHz, Disk: 120GB Micron_M500_MTFD, Graphics: Intel Haswell-ULT IGP (1100MHz), Audio: Intel Haswell-ULT HD Audio, Network: Intel Connection I218-LM + Intel Wireless 7260

OS: Ubuntu 16.04, Kernel: 4.6.0-999-generic (x86_64) 20160505, Desktop: Unity 7.4.0, Display Server: X Server 1.18.3, Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 11.3.0-devel (git-a1f6988 2016-05-06 xenial-oibaf-ppa), Compiler: GCC 5.3.1 20160413, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx

--enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i7 4770K

Processor: Intel Core i7-4770K @ 3.90GHz (8 Cores), Motherboard: Gigabyte Z97-HD3, Chipset: Intel 4th Gen Core DRAM, Memory: 2 x 4096 MB DDR3-1600MHz Kingston, Disk: 128GB Crucial_CT128MX1, Graphics: Intel HD 4600 (1250MHz), Audio: Intel Xeon E3-1200 v3/4th, Network: Realtek RTL8111/8168/8411

OS: Fedora 22, Kernel: 4.6.0-0.rc6.git2.1.fc25.x86_64 (x86_64) 20160504, Display Server: X Server 1.17.4, Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 10.6.9 (git-8957b69), Compiler: GCC 5.3.1 20160406, File-System: btrfs, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-redhat-linux --disable-libgcj --disable-libunwind-exceptions --enable-__cxa_atexit --enable-bootstrap --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-initfini-array --enable-languages=c,c++,objc,obj-c++,fortran,ada,go,lto --enable-libmpx --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch_32=i686 --with-default-libstdcxx-abi=gcc4-compatible --with-isl --with-linker-hash-style=gnu --with-tune=generic
Disk Notes: CFQ / relatime,rw,seclabel,space_cache,ssd,subvol=/root,subvolid=257
Processor Notes: Scaling Governor: intel_pstate powersave
System Notes: SELinux: Enabled.

Core i7 4790K

Processor: Intel Core i7-4790K @ 4.40GHz (8 Cores), Motherboard: Gigabyte Z97-HD3P, Chipset: Intel 4th Gen Core DRAM, Memory: 2 x 8192 MB DDR3-1600MHz, Disk: 120GB OCZ TRION100, Graphics: Intel HD 4600 (1250MHz), Audio: Intel Xeon E3-1200 v3/4th, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 16.04, Kernel: 4.6.0-999-generic (x86_64) 20160506, Desktop: Unity 7.4.0, Display Server: X Server 1.17.3, Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 11.0.7, Compiler: GCC 5.3.1 20151219, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i7 4960X

Processor: Intel Core i7-4960X @ 4.00GHz (12 Cores), Motherboard: MSI X79MA-GD45 (MS-7738) v1.0, Chipset: Intel Xeon E7 v2/Xeon, Memory: 2 x 4096 MB DDR3-1600MHz, Disk: 1000GB Seagate ST1000DX001-1CM1, Graphics: AMD FirePro V4800 1024MB (157/300MHz), Audio: Intel C600/X79, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 14.04, Kernel: 3.18.0-999-generic (x86_64) 20141203, Compiler: GCC 4.2.1 + Clang 3.9.0-svn267343-1~exp1, File-System: btrfs, Screen Resolution: 1024x768

Disk Notes: DEADLINE / relatime,rw,space_cache
Processor Notes: Scaling Governor: intel_pstate powersave
System Notes: Disk Scheduler: DEADLINE.

Core i7 5775C

Processor: Intel Core i7-5775C @ 3.70GHz (8 Cores), Motherboard: MSI Z97-G45 GAMING (MS-7821) v1.0, Chipset: Intel Broadwell-U- DMI, Memory: 2 x 8192 MB DDR3-1800MHz, Disk: 120GB CT120BX100SSD1, Graphics: Intel

Broadwell-U (1150MHz), Audio: Intel Broadwell-U Audio, Network: Qualcomm Atheros Killer E220x Gigabit

OS: Ubuntu 16.04, Kernel: 4.6.0-999-generic (x86_64) 20160507, Desktop: Unity 7.4.0, Display Server: X Server 1.17.3, Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 11.3.0-devel (git-4b7e219 2016-02-24 xenial-oibaf-ppa), Compiler: GCC 5.3.1 20160222, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave
System Notes: Disk Scheduler: DEADLINE.

Core i7 5960X

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Xeon E7 v3/Xeon, Memory: 4 x 4096 MB 2133MHz CMK16GX4M4A2666C16, Disk: 120GB INTEL SSDSC2BW12, Graphics: AMD FirePro V7800 2048MB, Audio: Realtek ALC1150, Network: Intel Connection

OS: Debian testing, Kernel: 4.4.0-1-amd64 (x86_64), Display Server: X Server 1.18.2, Display Driver: modesetting 1.18.2, Compiler: GCC 5.3.1 20160323, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i586 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: CFQ / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Core i7 5960X Haswell-E

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: ASRock X99 Extreme3, Chipset: Intel Xeon E5 v3/Core, Memory: 4 x 4096 MB 2400MHz, Disk: 256GB CORSAIR FORCE LX, Graphics: NVIDIA GeForce GTX 770 2048MB, Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 14.10, Kernel: 4.6.0-999-generic (x86_64) 20160506, Desktop: Xfce 4.10, Display Server: X Server 1.16.0, Display Driver: nouveau 1.0.11, OpenGL: 3.3 Mesa 10.3.0 Gallium 0.4, Compiler: GCC 4.9.1, File-System: btrfs, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,c++,java,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / relatime,rw,space_cache,ssd,subvol=/@,subvolid=257
Processor Notes: Scaling Governor: intel_pstate powersave

FX-8150

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS M5A78L-M LX PLUS, Chipset: AMD RS780 + SB7x0/SB8x0/SB9x0, Memory: 1 x 8192 MB 1600MHz, Disk: 120GB Samsung SSD 840, Graphics: AMD FirePro V5800 1024MB (157/300MHz), Audio: Realtek ALC887-VD, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.10, Kernel: 4.6.0-999-generic (x86_64) 20160506, Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: radeon 7.5.99, OpenGL: 3.3 Mesa 11.0.2 Gallium 0.4, Compiler: GCC 5.2.1 20151010, File-System: btrfs, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / relatime,rw,space_cache,ssd,subvol=/@,subvolid=257
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

FX-8350

Processor: AMD FX-8350 Eight-Core @ 4.00GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD RD890 bridge, Memory: 2 x 4096 MB DDR3-2133MHz, Disk: 1000GB Western Digital WD10EARS-00M, Graphics: AMD FirePro V3800 512MB (157/200MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 14.04, Kernel: 3.13.0-40-generic (x86_64), Compiler: GCC 4.2.1 + Clang 3.9.0-svn267343-1~exp1, File-System: ext4, Screen Resolution: 1024x768

Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
System Notes: Disk Scheduler: DEADLINE.

FX-8370

Processor: AMD FX-8370 Eight-Core @ 4.00GHz (8 Cores), Motherboard: ASRock 990FX Killer, Chipset: AMD RD890 bridge, Memory: 2 x 4096 MB DDR3-2400MHz, Disk: 120GB SPCC Solid State, Graphics: AMD FirePro V8700 1024MB (750/850MHz), Audio: Realtek ALC1150, Network: Qualcomm Atheros Killer E220x Gigabit

OS: Ubuntu 15.10, Kernel: 4.6.0-999-generic (x86_64) 20160506, Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: radeon 7.5.99, OpenGL: 3.3 Mesa 11.0.2 Gallium 0.4, Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

FX-8370E

Processor: AMD FX-8370E Eight-Core @ 3.30GHz (8 Cores), Motherboard: ASUS M5A99FX PRO R2.0, Chipset: AMD RD890 bridge, Memory: 2 x 4096 MB DDR3-1866MHz, Disk: 120GB Samsung SSD 850, Graphics: AMD FirePro V5900 2048MB (250/500MHz), Audio: AMD SBx00 Azalia, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.04, Kernel: 3.19.0-15-generic (x86_64), Compiler: GCC 7.0.0 20160507, File-System: btrfs, Screen Resolution: 1024x768

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran
Disk Notes: DEADLINE / relatime,rw,space_cache,ssd
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

Pentium G3258

Processor: Intel Pentium G3258 @ 3.20GHz (2 Cores), Motherboard: Gigabyte H97M-D3H, Chipset: Intel 4th Gen Core DRAM, Memory: 2 x 4096 MB DDR3-1400MHz CMY8GX3M2A2400C11, Disk: 250GB SAMSUNG HD253GJ, Graphics: Intel HD (1100MHz), Audio: Intel Xeon E3-1200 v3/4th, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.10, Kernel: 4.6.0-999-generic (x86_64) 20160505, Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 11.3.0-devel (git-a1f6988 2016-05-06 wily-oibaf-ppa), Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Pentium G4400

Processor: Intel Pentium G4400 @ 3.30GHz (2 Cores), Motherboard: MSI B150M MORTAR (MS-7972) v2.0, Chipset: Intel Skylake, Memory: 8192MB, Disk: 120GB Samsung SSD 850, Graphics: Intel Device 1902 (1000MHz), Audio: Realtek ALC892, Network: Realtek RTL8111/8168/8411

OS: Clear Linux 7820, Kernel: 4.5.2-202.native (x86_64), Compiler: GCC 5.3.0 + Clang 3.8.0 + LLVM 3.8.0, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-generic-linux --disable-multiarch --disable-multilib --disable-vtable-verify --enable-__cxa_atexit --enable-bootstrap --enable-clocale=gnu --enable-gnu-indirect-function --enable-languages=c,c++,fortran,go --enable-ld=default --enable-libmpx --enable-libstdcxx-pch --enable-lto --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=westmere --with-glibc-version=2.19 --with-gnu-ld --with-isl --with-ppl=yes --with-system-libunwind --with-tune=haswell
Disk Notes: CFQ / data=ordered,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq performance

Phenom II X3 710

Processor: AMD Phenom II X3 710 @ 2.60GHz (3 Cores), Motherboard: MSI 890GXM-G65 (MS-7642) v1.0, Chipset: AMD RS880, Memory: 2 x 8192 MB 667MHz, Disk: 250GB Seagate ST3250310AS, Graphics: MSI AMD Radeon HD 4290 320MB (500/667MHz), Audio: AMD SBx00 Azalia, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 15.04, Kernel: 3.19.0-15-generic (x86_64), Compiler: GCC 7.0.0 20160507, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand

Xeon E3-1231 v3

Processor: Intel Xeon E3-1231 v3 @ 3.80GHz (8 Cores), Motherboard: Gigabyte H81M-S1, Chipset: Intel Xeon E3-1200 v3 DRAM, Memory: 2 x 8192 MB DDR3-1600MHz, Disk: 120GB Samsung SSD 850, Graphics: Sapphire AMD Radeon HD 4550, Audio: Realtek ALC887-VD, Network: Realtek RTL8111/8168/8411

OS: Debian testing, Kernel: 4.3.0-1-amd64 (x86_64), Display Server: X Server 1.18.1, Display Driver: modesetting 1.18.1, Compiler: GCC 5.3.1 20160307, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i586 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: CFQ / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Xeon E3-1235L v5

Processor: Intel Xeon E3-1235L v5 @ 2.00GHz (4 Cores), Motherboard: ASRockRack C236M WS, Chipset: Intel Skylake, Memory: 8192MB, Disk: 120GB OCZ TRION150, Graphics: Intel Skylake (1000MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Clear Linux 7820, Kernel: 4.5.2-202.native (x86_64), Display Server: X Server 1.18.3, Compiler: GCC 5.3.0 + Clang 3.8.0 + LLVM 3.8.0, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-generic-linux --disable-multiarch --disable-multilib --disable-vtable-verify --enable-__cxa_atexit --enable-bootstrap --enable-clocale=gnu --enable-gnu-indirect-function --enable-languages=c,c++,fortran,go --enable-ld=default --enable-libmpx --enable-libstdcxx-pch --enable-lto --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=westmere --with-glibc-version=2.19 --with-gnu-ld --with-isl --with-ppl=yes --with-system-libunwind --with-tune=haswell
Disk Notes: CFQ / data=ordered,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq performance

Xeon E3-1245 v5

Processor: Intel Xeon E3-1245 v5 @ 3.50GHz (8 Cores), Motherboard: Supermicro X11SAE-M v1.01, Chipset: Intel Skylake, Memory: 32768MB, Disk: 120GB Samsung SSD 850, Graphics: Intel Device 191d (1150MHz), Audio: Realtek ALC888-VD, Network: Intel Connection

OS: Clear Linux 7820, Kernel: 4.5.2-202.native (x86_64), Display Server: X Server 1.18.3, Compiler: GCC 5.3.0 + Clang 3.8.0 + LLVM 3.8.0, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-generic-linux --disable-multiarch --disable-multilib --disable-vtable-verify --enable-__cxa_atexit --enable-bootstrap --enable-clocale=gnu --enable-gnu-indirect-function --enable-languages=c,c++,fortran,go --enable-ld=default --enable-libmpx --enable-libstdcxx-pch --enable-lto --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=westmere --with-glibc-version=2.19 --with-gnu-ld --with-isl --with-ppl=yes --with-system-libunwind --with-tune=haswell
Disk Notes: CFQ / data=ordered,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq performance

Xeon E3-1260L v5

Processor: Intel Xeon E3-1260L v5 @ 2.90GHz (8 Cores), Motherboard: ASRock E3V5 WS, Chipset: Intel Skylake, Memory: 8192MB, Disk: 120GB INTEL SSDSC2BW12, Graphics: XFX NVIDIA GeForce GT 220, Audio: Realtek ALC892, Network: Intel Connection

OS: Clear Linux 7820, Kernel: 4.5.2-202.native (x86_64), Display Server: X Server 1.18.3, Compiler: GCC 5.3.0 + Clang 3.8.0 + LLVM 3.8.0, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-generic-linux --disable-multiarch --disable-multilib --disable-vtable-verify --enable-__cxa_atexit --enable-bootstrap --enable-clocale=gnu --enable-gnu-indirect-function --enable-languages=c,c++,fortran,go --enable-ld=default --enable-libmpx --enable-libstdcxx-pch --enable-lto --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=westmere --with-glibc-version=2.19 --with-gnu-ld --with-isl --with-ppl=yes --with-system-libunwind --with-tune=haswell
Disk Notes: CFQ / data=ordered,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq performance

Xeon E3-1270 v5

Processor: Intel Xeon E3-1270 v5 @ 4.00GHz (8 Cores), Motherboard: ASUS E3 PRO GAMING V5, Chipset: Intel Sky Lake, Memory: 2 x 4096 MB DDR4-2133MHz, Disk: 120GB Toshiba MKNSSDEC120GB, Graphics: AMD Radeon HD 5750, Audio: Realtek ALC1150, Network: Intel Connection

OS: Debian testing, Kernel: 4.4.0-1-amd64 (x86_64), Display Server: X Server 1.18.3, Display Driver: modesetting 1.18.3, Compiler: GCC 5.3.1 20160409 + Clang 3.6.2-3, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i586 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new

--with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: CFQ / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Xeon E3-1280 v5

Processor: Intel Xeon E3-1280 v5 @ 4.00GHz (8 Cores), Motherboard: MSI C236A WORKSTATION (MS-7998) v1.0, Chipset: Intel Sky Lake, Memory: 16384MB, Disk: 120GB Samsung SSD 850, Graphics: NVIDIA GeForce GTX 680 2048MB (324/324MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 16.04, Kernel: 4.4.0-22-generic (x86_64), Desktop: Unity 7.4.0, Display Server: X Server 1.18.3, Display Driver: NVIDIA 364.19, OpenGL: 4.5.0, OpenCL: OpenCL 1.2 CUDA 8.0.0, Vulkan: 1.0.8, Compiler: GCC 5.3.1 20160413, File-System: ext4, Screen Resolution: 3840x2160

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Xeon E5-1680 v3

Processor: Intel Xeon E5-1680 v3 @ 3.80GHz (16 Cores), Motherboard: ASUS X99-A, Chipset: Intel Xeon E5 v3/Core, Memory: 4 x 4096 MB 2400MHz, Disk: 120GB OCZ ARC100, Graphics: eVGA NVIDIA GeForce GT 740 1024MB, Audio: Intel C610/X99, Network: Intel Connection

OS: Ubuntu 15.04, Kernel: 3.19.0-49-generic (x86_64), Compiler: GCC 7.0.0 20160507, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --disable-multilib --enable-checking=release --enable-languages=c,c++,fortran
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Xeon E5-2687W v3

Processor: Intel Xeon E5-2687W v3 @ 3.50GHz (20 Cores), Motherboard: MSI X99S SLI PLUS (MS-7885) v1.0, Chipset: Intel Xeon E7 v3/Xeon, Memory: 16384MB, Disk: PNY CS1211 120GB + 80GB INTEL SSDSCKGW08, Graphics: AMD FirePro V7900 2048MB, Audio: Realtek ALC892, Monitor: ASUS PB278, Network: Intel Connection

OS: Debian testing, Kernel: 4.5.0-1-amd64 (x86_64), Display Server: X Server 1.18.3, Display Driver: modesetting 1.18.3, OpenGL: 3.3 Mesa 11.1.3 Gallium 0.4, Compiler: GCC 5.3.1 20160409, File-System: ext4, Screen Resolution: 2560x1440

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i586 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: CFQ / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: intel_pstate powersave

Hawk-8370

Processor: AMD FX-8370 Eight-Core @ 4.00GHz (8 Cores), Motherboard: ASUS M5A99FX PRO R2.0, Chipset: AMD RD890 bridge, Memory: 16384MB, Disk: 256GB PLEXTOR PX-256M6 + 3001GB My Book 1235, Audio: Realtek ALC892, Monitor: VX2270, Network: Realtek RTL8111/8168/8411

40-Way Linux PC Benchmark Comparison

OS: Ubuntu 16.04, Kernel: 4.4.0-65-generic (x86_64), OpenCL: OpenCL 2.0 AMD-APP (2264.10), Compiler: GCC 5.4.0 20160609, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,errors=remount-ro,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq performance

40-Way Linux PC Benchmark Comparison

	2xXeon E5540	A10-5800K	A10-7800	A10-7850K #1	A10-7850K #2	A10-7870K	A6-7400K	A8-3870	Core i3 2100	Core i3 2120	Core i3 4130	Core i3 5010U	Core i5 2400S	Core i5 2500K
FFTE-N.6.1.C.F.R (MFLOPS)	3846	3944	3764	4162	3980	4233	3910	3656	4364	4680	5273	3308	4685	4867
Normalized	47.57%	48.79%	46.56%	51.48%	49.23%	52.36%	48.36%	45.23%	53.98%	57.89%	65.23%	40.92%	57.95%	60.2%
Standard Deviation	1.3%	1%	1.5%	0.5%	1%	1.8%	0.7%	2.8%	0.8%	0%	0%	0.1%	0.7%	0.1%

	Core i5 3470	Core i5 4670	Core i7 3770K	Core i7 3960X	Core i7 4600U	Core i7 4770K	Core i7 4790K	Core i7 4960X	Core i7 5775C	Core i7 5960X	Core i7 5960X Haswell-E	FX-8150	FX-8350	FX-8370
FFTE-N.6.1.C.F.R (MFLOPS)	5444	5764	5822	5009	4943	5910	6660	5429	5776	5299	5319	3985	3756	3919
Normalized	67.35%	71.3%	72.02%	61.96%	61.14%	73.1%	82.38%	67.16%	71.45%	65.54%	65.8%	49.3%	46.46%	48.48%
Standard Deviation	0.3%	0.1%	0%	2.3%	1.1%	0.1%	0.3%	0.2%	0.2%	0%	0.1%	2.9%	3.3%	5.5%

	FX-8370E	Pentium G3258	Pentium G4400	Phenom II X3 710	Xeon E3-1231 v3	Xeon E3-1235L v5	Xeon E3-1245 v5	Xeon E3-1265L v5	Xeon E3-1270 v5	Xeon E3-1280 v5	Xeon E5-1680 v3	Xeon E5-2687W v3	Hawk-8370
FFTE-N.6.1.C.F.R (MFLOPS)	3692	4853		**3165**	5754	6271	7943	**8084**	7834	3794	5800	5226	4218
Normalized	45.67%	60.03%		39.15%	71.17%	77.57%	98.25%	100%	96.9%	46.93%	71.75%	64.65%	52.18%
Standard Deviation	22.7%	0.1%		0.6%	0%	0.1%	0.5%	0.2%	0.1%	3%	0.2%	1.6%	1.9%

40-Way Linux PC Benchmark Comparison

Himeno Benchmark - P.P.S (MFLOPS)	1135	712.53	796.83	907.17	830.57	753.02	849.66	542.85	1275	1318	1084	1207	1372	1264	1336	1869	1563	1416	1613	1747
Normalized	43.03%	27%	30.2%	34.38%	31.48%	28.54%	32.5%	20.57%	48.33%	49.96%	41.1%	45.73%	52.01%	47.91%	50.63%	70.84%	59.23%	53.65%	61.13%	66.21%
Standard Deviation	0.7%	0.5%	4.4%	3%	7.7%	1.6%	2.7%	3.5%	3.4%	0.2%	0.6%	0.5%	0.3%	0.2%	0.2%	0.4%	3.3%	0%	0.1%	4.8%
Redis - GET (Reqs/sec)	1513351	1385795	1122118	1204371	1210310	1147789	1177861	1112461	1816069	1574477	1880970	1467023	1765958	1902403	552084	2375702	2079665	1485164	2147712	2491926
Normalized	47.15%	43.17%	34.96%	37.52%	37.71%	35.76%	36.7%	34.66%	56.58%	49.05%	58.6%	45.7%	55.02%	59.27%	17.2%	74.01%	64.79%	46.27%	66.91%	77.63%
Standard Deviation	3.6%	1.1%	1.6%	0.7%	1.3%	1.3%	0.2%	1.2%	0.9%	16.7%	13%	10.2%	3.4%	0.7%	0.4%	6.3%	2.2%	21.5%	7.1%	1.2%

Himeno Benchmark - P.P.S (MFLOPS)	2161	1371	2116	1794	1781	681.56	607.26	694.23	719.04	1592	2153	505.20	1919	2093	2568	2605	2639	2231	2023	1776	732.20
Normalized	81.91%	51.97%	80.18%	67.98%	67.52%	25.83%	23.02%	26.31%	27.25%	60.65%	81.22%	19.55%	72.73%	79.32%	97.31%	98.75%	100%	84.55%	76.65%	63.3%	27.75%
Standard Deviation	1.5%	0.2%	0.3%	0.1%	0.3%	0.3%	0.1%	1.4%	0.8%	0.1%	0.9%	0.4%	0%	0.4%	0.7%	5.6%	0.4%	2%	1.9%	0.3%	0.1%
Redis - GET (Reqs/sec)	2399230	599355	2154295	633169	622992	1209200	1258398	500027	1310867	1991426	2732556	1021057	2515137	2340965	3209832	3098810	3051843	2989953	2002672	657796	1444082
Normalized	74.75%	18.67%	67.12%	19.73%	19.41%	37.67%	39.2%	15.5%	40.88%	62.04%	85.13%	31.81%	78.36%	72.93%	100%	96.35%	95.08%	93.14%	62.39%	20.49%	44.99%
Standard Deviation	2.7%	2.2%	13.5%	3.8%	2.2%	0.4%	0.3%	0.9%	1.7%	2.3%	1.2%	2.1%	15.3%	3.2%	2.4%	0.4%	9.4%	5.9%	0.1%	1%	2%

40-Way Linux PC Benchmark Comparison

Red	1	1	8	8	8	8	8	8	1	1	1	1	1	1	4	1	1	1	1	1	1	5	1	5	5	9	9	4	9	1	1	7	1	1	2	2	2	1	1	6	1
is -	1	0	1	9	6	6	9	3	2	1	5	1	3	3	9	6	5	2	3	7	8	3	6	6	5	2	3	4	7	4	8	4	6	5	1	0	2	9	4	0	0
SE	0	1	5	3	4	8	6	5	4	8	0	3	2	3	3	9	5	9	7	5	3	7	8	0	2	1	9	4	6	2	8	2	2	5	6	0	0	2	5	0	1
T	4	2	2	8	6	8	2	4	5	2	0	2	6	8	6	4	4	3	3	8	6	6	6	3	4	9	7	4	7	9	4	6	4	0	1	4	7	9	7	5	5
(Re	1	5	2	1	1	1	1	6	9	0	5	1	3	8	1	0	5	4	9	8	3	7	5	6	7	6	2	6	5	9	4	2	9	5	1	0	9	9	4	3	3
qs/	7	9	1	4	4	5	8	5	5	7	3	0	0	0	9	5	2	0	3	8	7	7	5	0	1	3	1	2	1	4	6	7	7	3	4	9	1	1	6	4	0
sec	2	7							1	1	5	1	8	5		2	8	2	2	1	6		1							2	8		8	8	7	3	3	2	2		1
Nor	5	4	3	4	3	3	4	3	5	5	6	5	6	6	2	7	7	5	6	7	8	2	7	2	2	4	4	2	4	6	8	3	7	7	9	9	1	8	6	2	4
mali	0	5	6	0	9	9	0	7	6	3	7	1	0	0	2	6	0	8	2	9	3	4	6	5	5	1	2	0	4	4	5	3	3	0	7	0	0	7	6	7	5
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	1	6	2	8	6	5	9	4	3	4	6	7	7	4	6	3	1	8	3	6	7	5	9	8	2	6	6	3	4	6	5	3	%	3	8	7		1	1	%	8
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%		%	%	%		%	%		%
Stan	3	1	0	1	3	0	1	0	3	1	6	0	0	1	1	4	1	1	7	1	1	1	8	5	3	0	2	0	2	0	0	1	9	1	3	1	1	5	3	1	2
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Devi	4	3	2	6	1	3	6	9	4	.	8	6	7	1		6	1	.	5	8	.	1		4	3	6	7	8	8	3	6		4	2	1	%	7	4	4	2	5
ation	%	%	%	%	%	%	%	%	%	7	%	%	%	%		%	%	7	%	%	2	%		%	%	%	%	%	%	%	%		%	%	%		%	%	%	%	%
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Apa	1	2	2	1	1	1	1	1	2	2	1	2	2	3	1	5	2	2	2	2	4	1	4		1	2	2	1	1	2		2		4	4	4		4	4		2
che	6	0	2	9	9	4	0	8	0	0	7	0	5	0	7	2	8	0	7	2	8	9	0		8	0	0	6	9	0		0		2	1	2		7	5		3
Ben	3	7	2	3	7	0	8	9	2	9	3	0	0	6	5	5	8	3	3	5	2	0	1		6	3	3	8	0	8		8		9	0	0		4	0		6
ch	9	2	6	2	1	4	4	3	6	8	4	3	5	5	9	0	1	3	3	6	6	3	7		5	2	9	1	3	3		3		2	9	1		0	2		1
mar	3	7	1	4	5	0	2	2	0	3	6	4	3	3	2	2	7	0	5	5	5	3	7		8	4	3	7	4	1		3		9	1	4		5	7		7
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Nor	3	3	4	3	3	2	2	3	3	3	3	3	4	5	3	1	5	3	5	4	9	3	7		3	3	3	3	3	3		3		8	7	8		9	8		4
mali	1	9	2	6	7	6	0	6	8	9	3	8	7	8	3	0	4	8	2	2	1	6	6		5	8	8	2	6	9		9		1	8	0		0	5		4
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	2	4	4	8	5	7	6	0	5	9	0	1	7	3	5	%	8	7	0	9	9	2	5		5	7	8	0	2	6		6		7	2	0		2	7		9
	2	8	%	1	5	4	5	6	9	7	4	6	2	8	1		9	2	6	8	3	5	2		4	1	4	3	5	8		8		7	7	2		9	6		8
	%	%		%	%	%	%	%	%	%	%	%	%	%	%		%	%	%	%	%	%	%		%	%	%	%	%	%		%		%	%	%		%	%		%
Stan	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	4	0	0		4	0	0	0	0	1		0		0	1	3		0	0		0
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ation	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	2	%		%	%	%		%	%	%	%	%	%		%		%		%		%	%		%
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40-Way Linux PC Benchmark Comparison

Pos tgre SQL pgbench - Buffer Test - Normal Load - Read Write (TPS)	4 8 1 .	1 1 8 .	3 6 . .	3 3 . 6	1 3 7 .	1 3 6 .	9 8 . .	3 2 . .	**1 7 . .**	2 5 . 1	6 8 . 4	2 2 . .	2 5 . .	2 1 . .	4 1 . .	7 5 . .	3 0 . 6	**1 0 4 9**	7 3 . 5	6 3 . 8	1 8 . 4	3 4 . 9	3 4 . 6	2 4 . 8	2 5 . 5	6 9 . 8	4 1 . 5	2 3 . 1	1 0 . 4	3 4 . 0	2 0 . 9	6 3 . 1	3 8 . 9	3 5 . 4	7 6 . 5	3 9 . 4	4 3 . 2	2 9 . 4	4 5 . 1	2 5 . 5
Normalized	4 6 5 %	1 . 9 %	3 5 7 %	3 2 8 %	1 . 0 1 %	1 . 9 1 %	9 4 8 %	3 1 7 %	1 6 6 %	2 4 3 %	6 5 8 %	2 . 1 6 %	2 5 . %	2 0 5 %	4 0 3 %	7 3 3 %	2 . 6 %	1 0 0 %	3 0 0 %	1 . 8 %	3 . 8 %	3 . 0 %	2 . 0 %	2 . 0 %	6 . 7 %	4 7 4 %	2 0 1 %	9 7 8 %	2 3 6 %	6 . 7 %	3 . 2 %	3 . 6 %	3 . 4 %	7 . 3 %	3 8 . %	4 . 2 %	2 . 8 %	4 . 4 %	2 . 4 %
Standard Deviation	6 . 9 %	0 . 9 %	2 . 3 %	1 . 2 %	2 % .	3 . 5 %	1 . 4 %	2 . 6 %	5 4 . 8 %	6 . 2 %	1 . 9 %	1 % .	4 0 . 3 %	1 . 7 %	3 . 3 %	8 % .	3 . 1 %	3 . 1 %	1 4 . 9 %	1 . 3 %	5 7 . 1 %	2 . 6 %	1 1 . 7 %	1 . 6 %	7 1 . 9 %	1 . 3 %	1 . 4 %	2 2 . 4 %	0 4 . 7 %	0 4 . 2 %	4 8 . 6 %	3 1 . 5 %	2 0 . 1 %	4 3 . 7 %	0 3 . 9 %	3 1 . 3 %	1 . 9 %	7 . 3 %	1 . 9 %

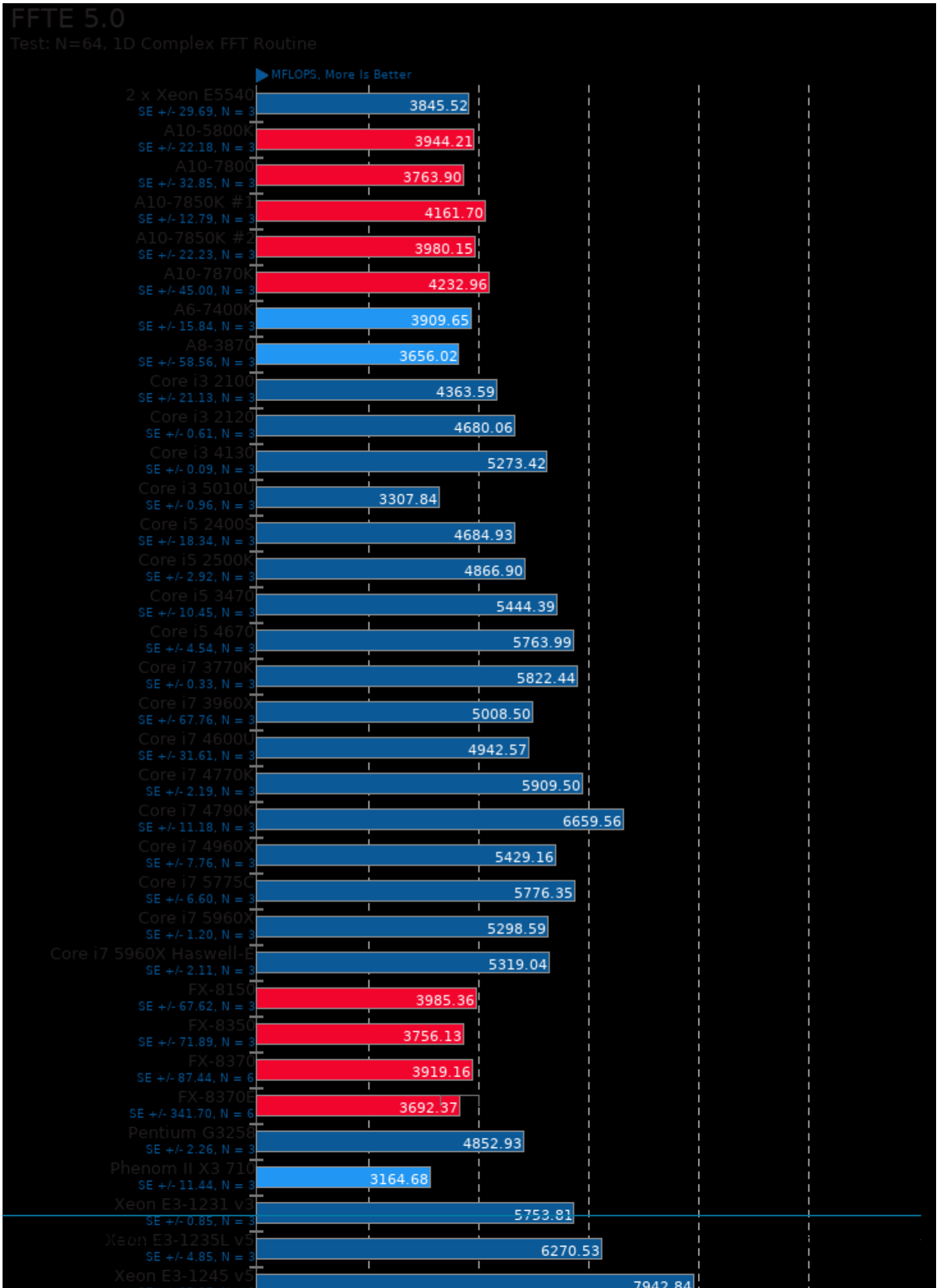
LA 6 8 4 4 3 3 3 3 3 5 4 5 4 5 3 5
MM 1 5 6 1 7 2 2 2 6 5 4 2 0 2 7 2
PS . . . .
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ation % % % % % % % % % % % % % % %
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Lite 4 3 1 2 4 7 7 1 6 6 7 8 6 3 0 4 2 4 3 3 2 9 6 5 0 5 5 7 6 2 6 5 4 3 2 5 5 2 7 7
- 4 8 8 0 . . . . 5 6 2 . . 4 1 0 . . 1 8 . 3 . 4 5 6 9 . . 6 . 6 . . . 4 8 . 4 . .
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D 9 5 3 2 6 6 4 3 3 3 4 1 0 3 7 1 3 8 8 5 0 7 3 5 7 1 7 9 7 6 6 2 4 6 2 2 1 2 5 6
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mali . 6 . . 3 2 5 . . . 8 8 . . . 9 8 5 . 6 . 5 3 4 . . 9 8 . 0 . 7 5 3 . . 7 7 8 6
zed 0 . 6 9 . . . 0 9 3 . . 5 7 5 . . . 5 . 5 . . . 2 5 . . 9 0 7 . . . 8 9 . . . .
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% 7 % 2 9 6 % % % % 4 % % % 7 5 9 % 5 % 7 4 2 % % 7 2 % % 3 1 9 % % % 2 5 1
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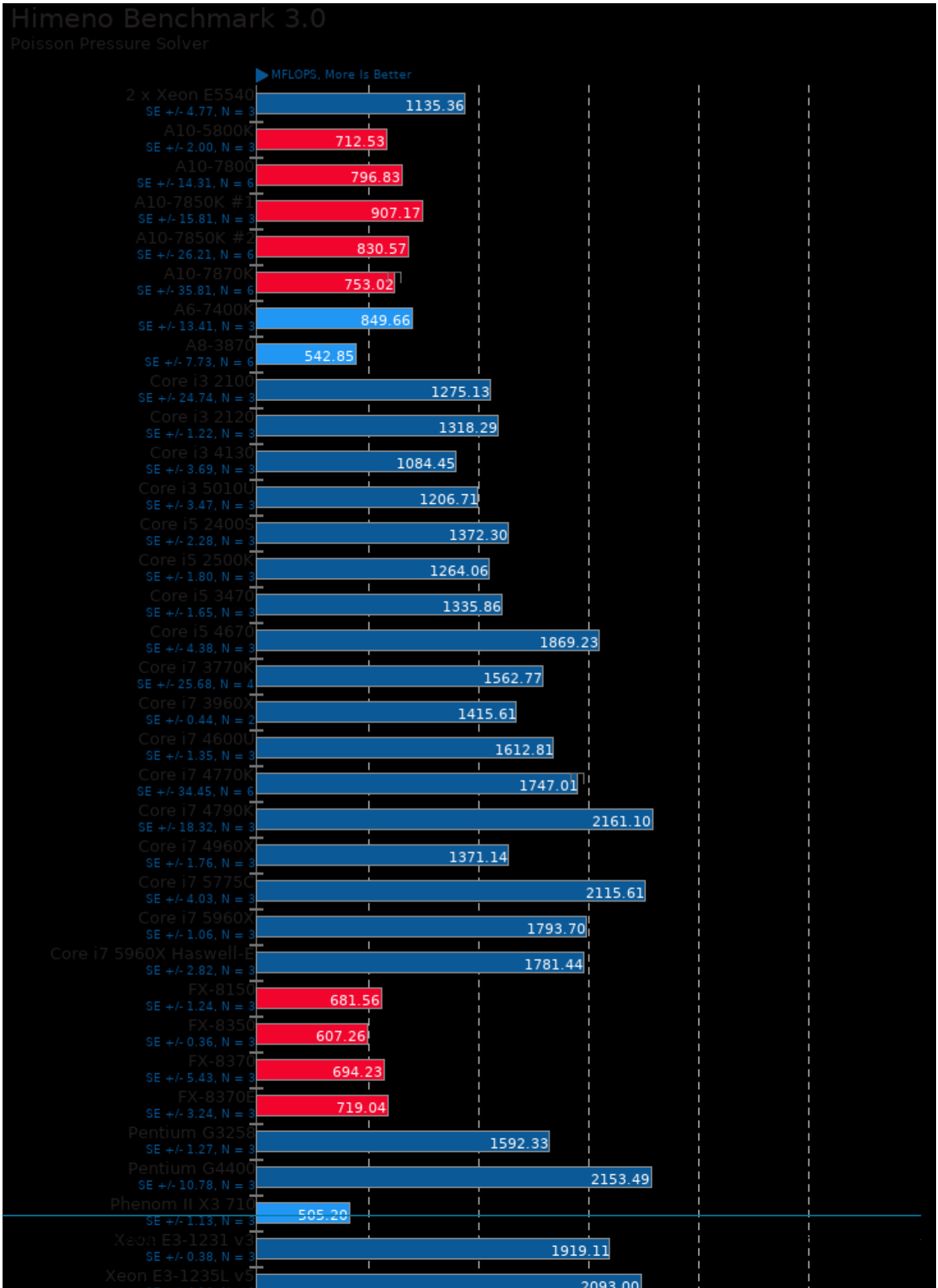
40-Way Linux PC Benchmark Comparison

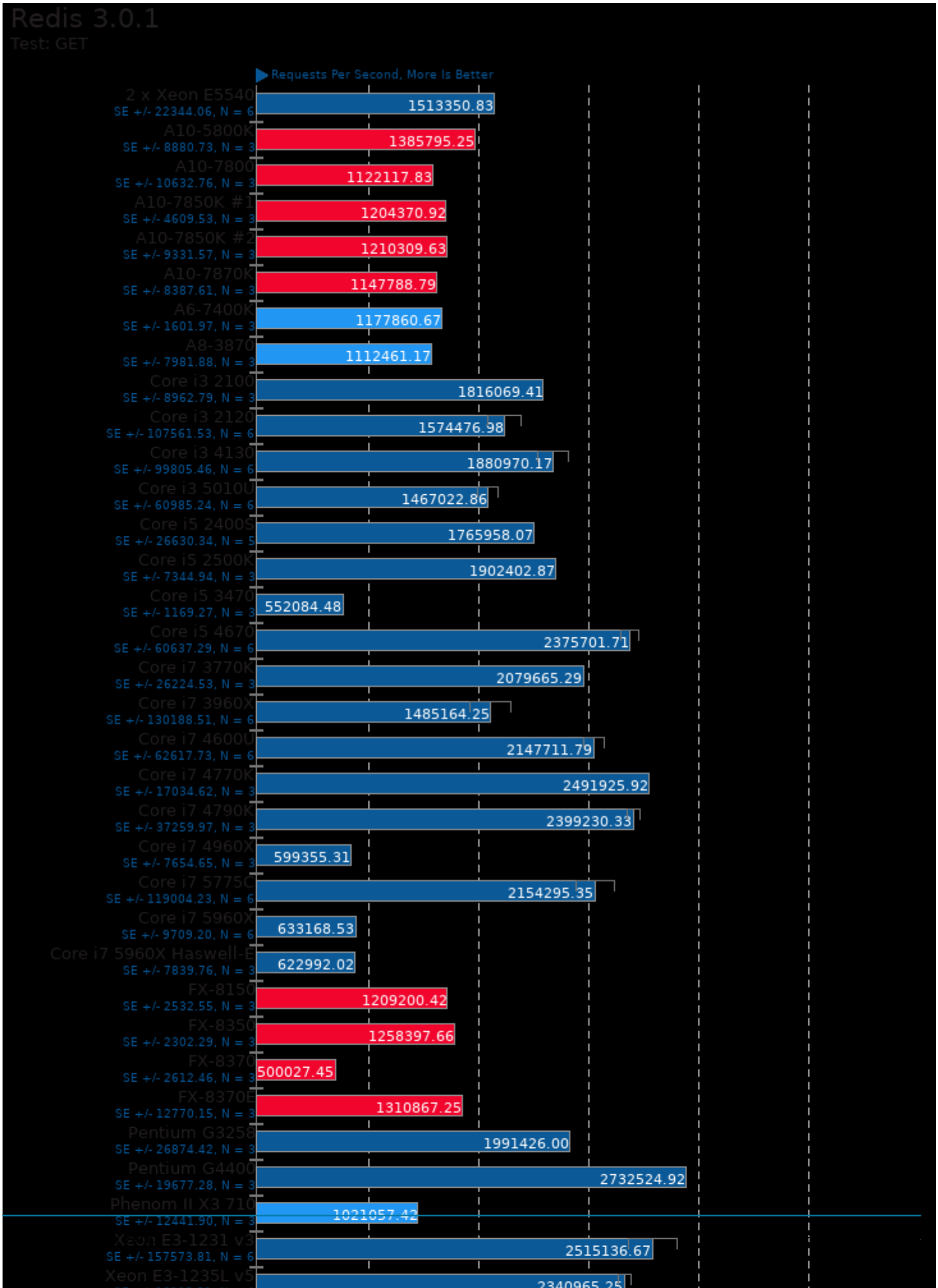
Stan	3	0	1	1	0	4	0	0	2	1	3	0	2	0	6	3	9		0	9	9	2	1	0	1	0	2	0	2	1	1	1	1	3	0	0	0	2	0	0	0
dard	.	.	4	.	%	.	.	.	5	1	.	.	.	.	.	.	.		.	.	.	%	.	.	%	.	%	.	%	9	.	1	%	.	.	.	.	.	.	.	.
Devi	1	1	.	2		1	3	3	.	.	1	3	1	5	9	3	7		3	5	1		7	2		2		4		.	4	.		7	7	4	2	2	5	3	3
ation	%	%	9	%		%	%	%	2	8	%	%	%	%	%	%	%		%	%	%		%	%		%		%		4	%	6		%	%	%	%	%	%	%	%
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Tim	1	2	2	2	2	2	6	2	2	3		4	2			1	1	1	2	1	8		9	6	6	1		1	1	3	2	4	1	1	1	1	8	9	7	5	1
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mali	9	1	2	9	4	5	.	0	8	6		2	9			7	2	7	1	9	1		4	6	7	0		1	0	6	9	2	2	2	2	9	1	6	4	0	7
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	1	1	3	8	2	6	%	4	1	3		6	6			7	3	4	5	%	3		%	4	5	9		1	9	3	1	9	5	2	6	1	8	4	1		7
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Stan	2	0	1	0	1	0	0	0	0	0		0	0			3	1	2	1	1	1		1	1	2	4		1	1	1	0	1	1	0	1	0	1	1	2	2	1
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C-R	1	5	5	5	5	5	1	4	7	6	6	7	4	5	4	2	2	2	5	2	1	2	2	1	1	3	3	2	3	5	4	6	2	3	2	2	1	2	1	1	2
ay -	8	4	7	3	3	0	1	3	0	6	1	9	5	4	8	4	8	2	6	2	9	3	2	2	2	2	3	5	0	5	6	7	3	7	4	4	9	6	1	0	3
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Tim	9	2	6	5	6	6	8	2	8	3	6	4	1	8	4	4	7	0	7	0	5	5	1	9	6	1	3	9	5	3	8	1	8	0	9	4	4	5	9	2	6
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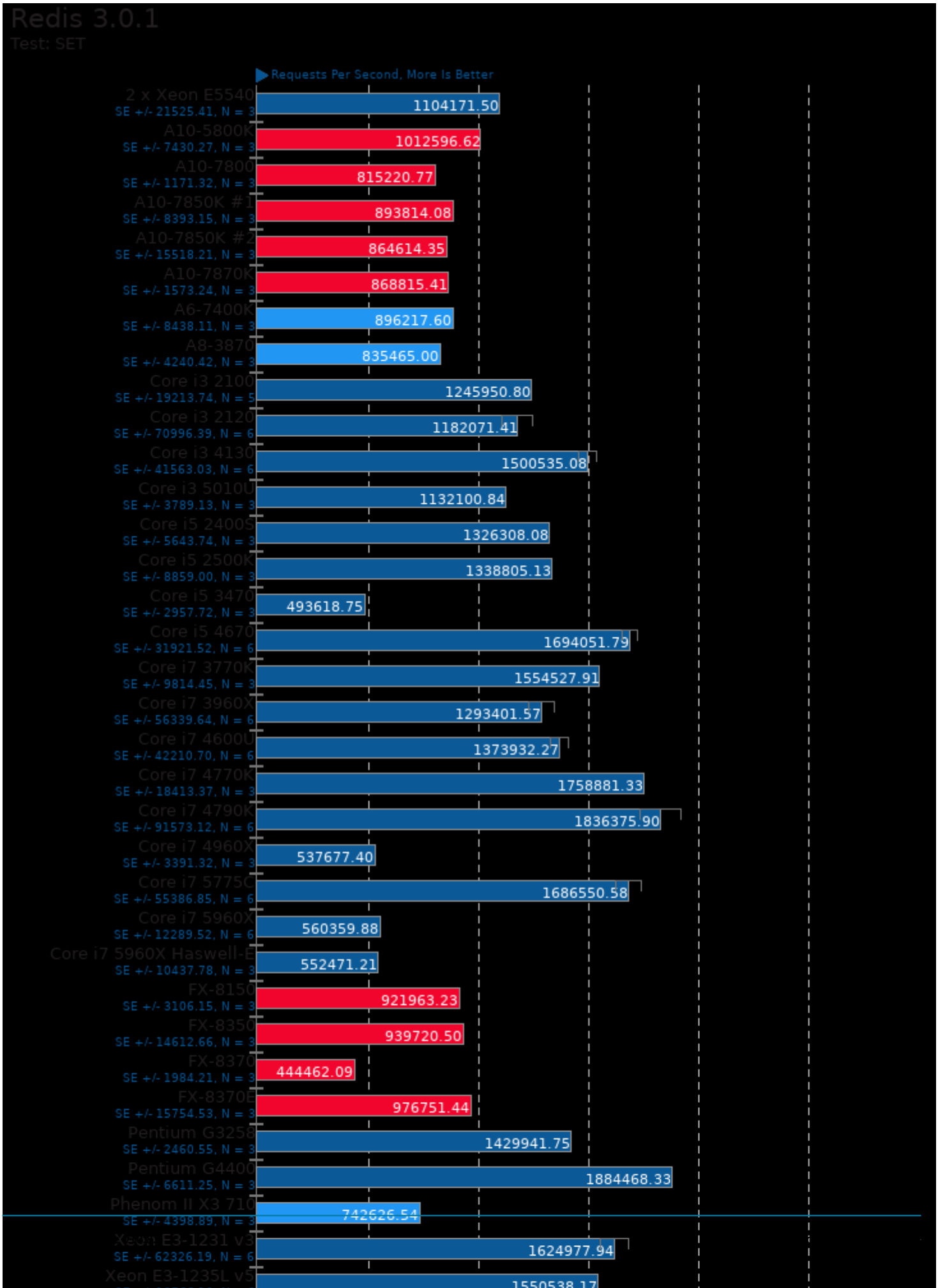
Normalized	58.29%	19.81%	18.79%	20.09%	20.09%	21.12%	9.5%	24.8%	15.3%	16.21%	17.44%	13.46%	23.45%	19.64%	22.08%	43.68%	37.39%	47.86%	19.08%	47.02%	55.98%	46.51%	47.41%	82.53%	82.72%	33.28%	32.07%	42.56%	35.32%	19.44%	23.06%	15.79%	45.66%	28.36%	43.95%	43.33%	56.01%	41.15%	95.8%	100%	46.09%
Standard Deviation	0.1%	1.5%	0.1%	0.2%	0.8%	0.1%	0.1%	2.8%	1.7%	0.9%	0.1%	0%	0.1%	0.2%	0.1%	0.1%	0.2%	0.5%	0%	0.1%	0.1%	0.1%	0.1%	0.5%	0.3%	5.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.3%	0.2%	0.3%	0%	0.1%	1%	0.2%	0.1%
FLAC Audio Encoding - WAV To FLAC (sec)	11.76	9.77	11.48	10.55	11.08	10.32	11.18	13.11	9.79	9.21	8.80	10.50	8.64	10.56	8.72	5.89	6.69	9.49	6.87	5.77	5.14	8.94	6.04	6.70	6.89	9.57	11.75	10.04	9.44	7.94	6.64	15.36	5.91	6.62	5.17	5.11	5.01	5.48	6.02	6.92	9.54
Normalized	42.6%	51.28%	43.64%	47.49%	45.22%	48.55%	44.81%	38.22%	51.17%	54.4%	56.93%	47.71%	57.99%	47.44%	57.45%	85.06%	74.89%	52.79%	72.93%	86.83%	97.47%	56.04%	82.95%	74.78%	72.71%	52.35%	42.64%	49.9%	53.07%	63.1%	75.45%	32.62%	84.77%	75.68%	96.91%	98.04%	100%	91.42%	83.22%	72.4%	52.52%
Standard Deviation	0%	0.1%	0.7%	0.6%	0.7%	0.5%	0.3%	0.1%	1.6%	0.4%	0.1%	0.3%	0.3%	1.1%	0%	0.1%	0.7%	5.3%	2.3%	0.1%	1.5%	0.3%	0.1%	0.8%	2.7%	0.3%	0.1%	0.2%	0.2%	0.1%	0%	0.1%	0.4%	0.1%	0.1%	0.4%	0.3%	4.4%	1.5%	1.5%	0.1%

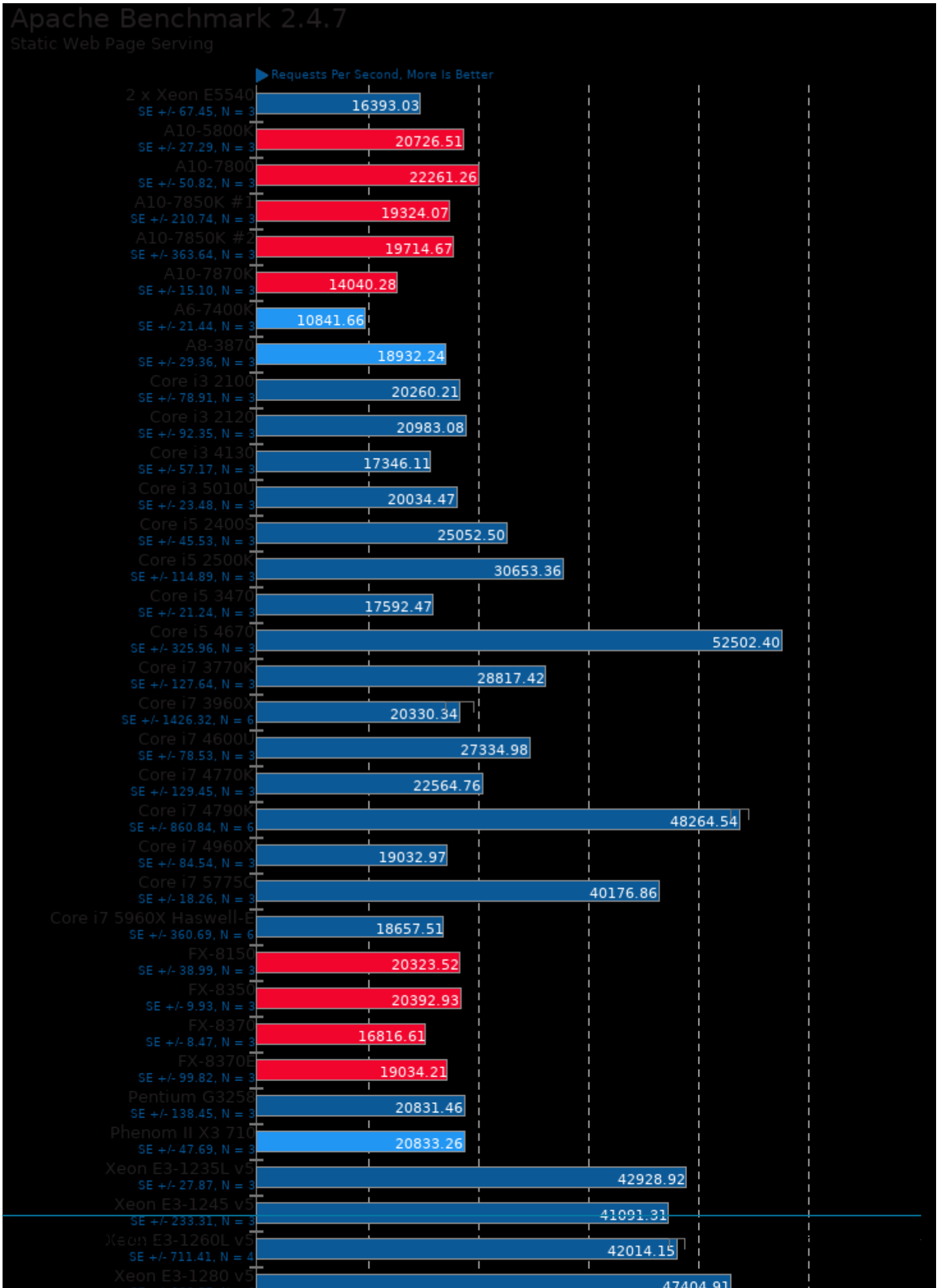
40-Way Linux PC Benchmark Comparison

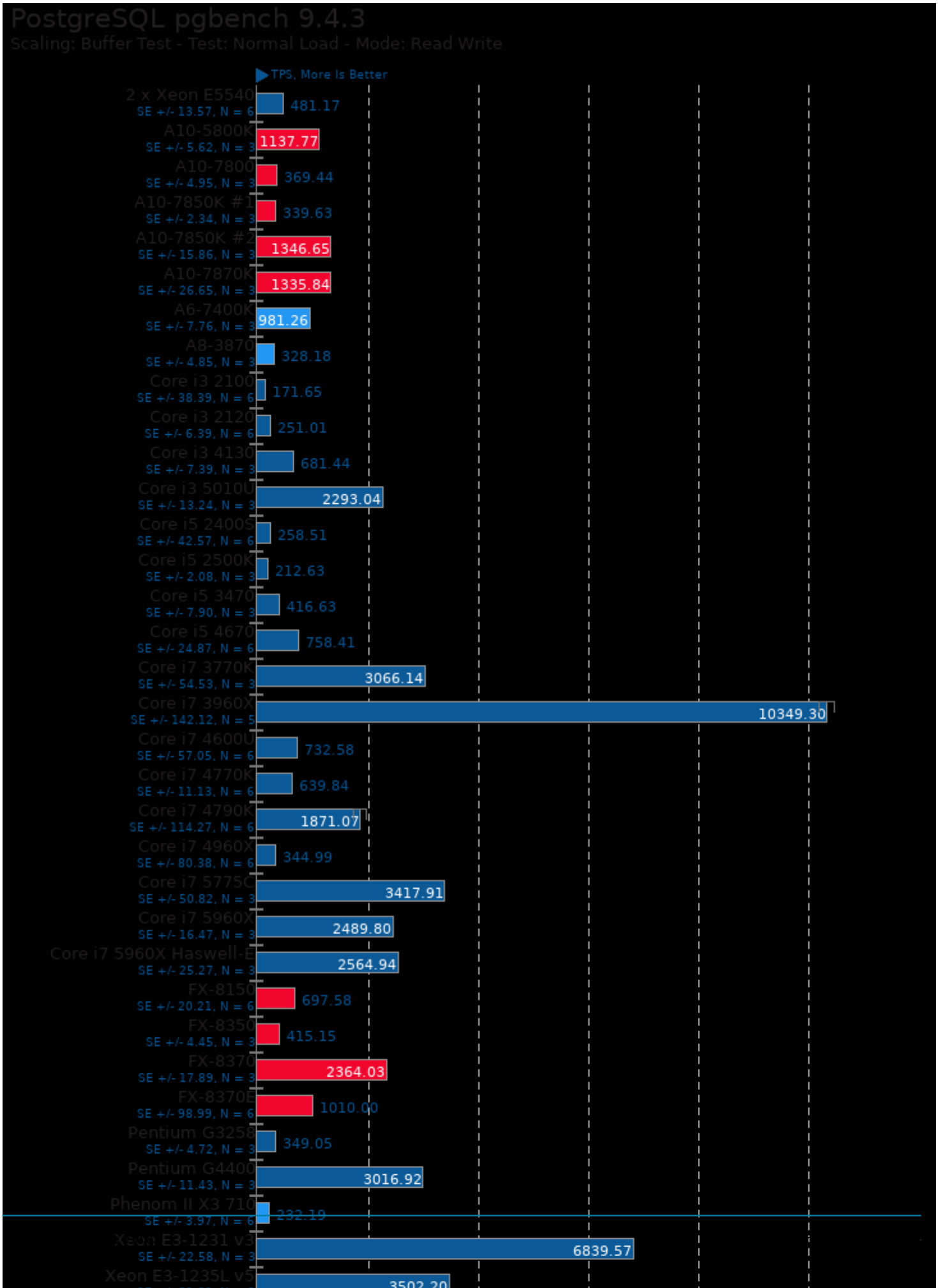

FFTE 5.0
Test: N=64, 1D Complex FFT Routine
MFLOPS, More Is Better
2 x Xeon E5540
SE +/- 29.69, N = 3
3845.52
A10-5800K
SE +/- 22.18, N = 3
3944.21
A10-7800
SE +/- 32.85, N = 3
3763.90
A10-7850K #1
SE +/- 12.79, N = 3
4161.70
A10-7850K #2
SE +/- 22.23, N = 3
3980.15
A10-7870K
SE +/- 45.00, N = 3
4232.96
A6-7400K
SE +/- 15.84, N = 3
3909.65
A8-3870
SE +/- 58.56, N = 3
3656.02
Core i3 2100
SE +/- 21.13, N = 3
4363.59
Core i3 2120
SE +/- 0.61, N = 3
4680.06
Core i3 4130
SE +/- 0.09, N = 3
5273.42
Core i3 5010U
SE +/- 0.96, N = 3
3307.84
Core i5 2400S
SE +/- 18.34, N = 3
4684.93
Core i5 2500K
SE +/- 2.92, N = 3
4866.90
Core i5 3470
SE +/- 10.45, N = 3
5444.39
Core i5 4670
SE +/- 4.54, N = 3
5763.99
Core i7 3770K
SE +/- 0.33, N = 3
5822.44
Core i7 3960X
SE +/- 67.76, N = 3
5008.50
Core i7 4600U
SE +/- 31.61, N = 3
4942.57
Core i7 4770K
SE +/- 2.19, N = 3
5909.50
Core i7 4790K
SE +/- 11.18, N = 3
6659.56
Core i7 4960X
SE +/- 7.76, N = 3
5429.16
Core i7 5775C
SE +/- 6.60, N = 3
5776.35
Core i7 5960X
SE +/- 1.20, N = 3
5298.59
Core i7 5960X Haswell-E
SE +/- 2.11, N = 3
5319.04
FX-8150
SE +/- 67.62, N = 3
3985.36
FX-8350
SE +/- 71.89, N = 3
3756.13
FX-8370
SE +/- 87.44, N = 6
3919.16
FX-8370E
SE +/- 341.70, N = 6
3692.37
Pentium G3258
SE +/- 2.26, N = 3
4852.93
Phenom II X3 710
SE +/- 11.44, N = 3
3164.68
Xeon E3-1231 v3
SE +/- 0.85, N = 3
5753.81
Xeon E3-1235L v5
SE +/- 4.85, N = 3
6270.53
Xeon E3-1245 v5
7942.84

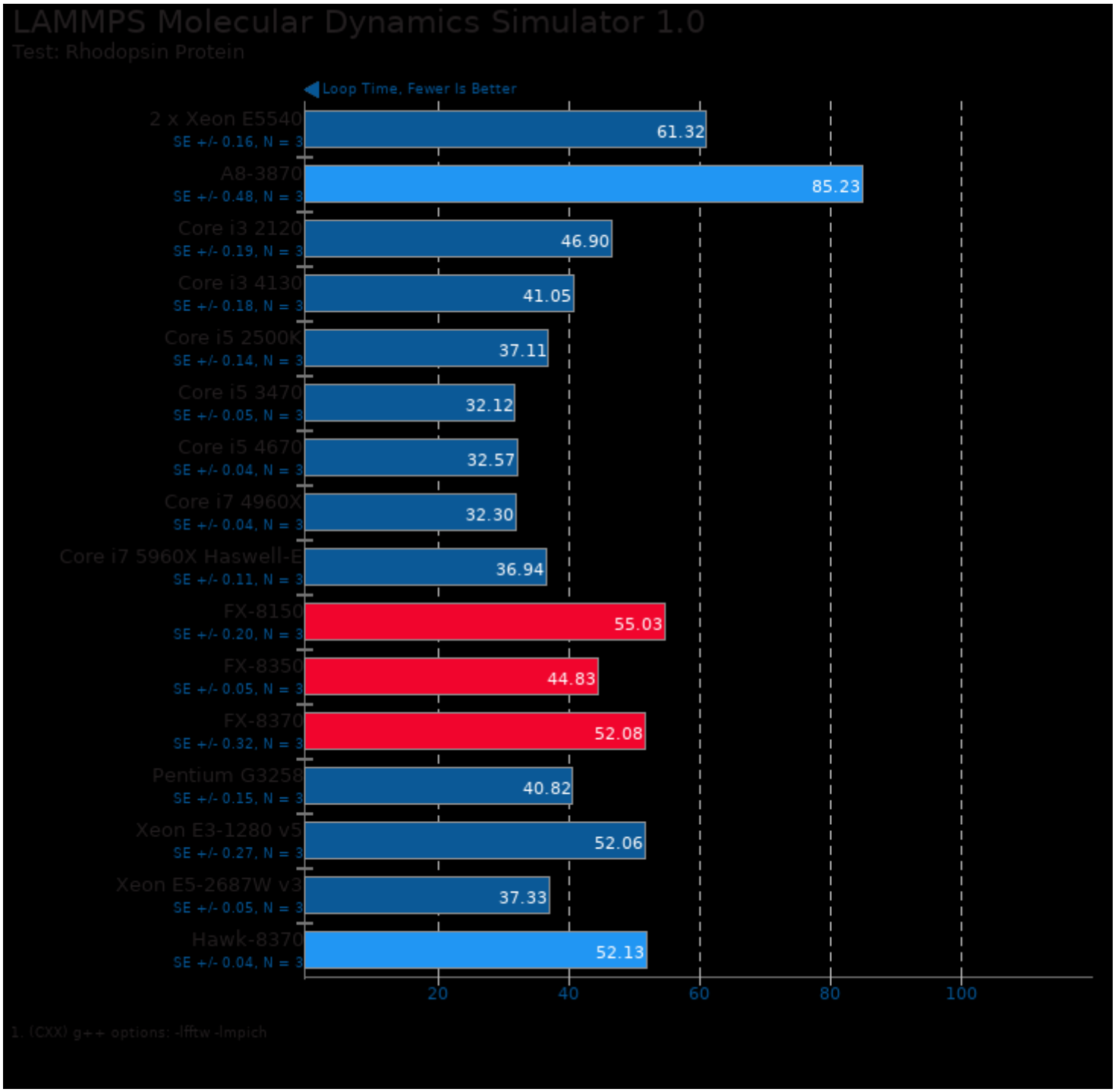

Himeno Benchmark 3.0
Poisson Pressure Solver
MFLOPS, More Is Better
2 x Xeon E5540
SE +/- 4.77, N = 3
1135.36
A10-5800K
SE +/- 2.00, N = 3
712.53
A10-7800
SE +/- 14.31, N = 6
796.83
A10-7850K #1
SE +/- 15.81, N = 3
907.17
A10-7850K #2
SE +/- 26.21, N = 6
830.57
A10-7870K
SE +/- 35.81, N = 6
753.02
A6-7400K
SE +/- 13.41, N = 3
849.66
A8-3870
SE +/- 7.73, N = 6
542.85
Core i3 2100
SE +/- 24.74, N = 3
1275.13
Core i3 2120
SE +/- 1.22, N = 3
1318.29
Core i3 4130
SE +/- 3.69, N = 3
1084.45
Core i3 5010U
SE +/- 3.47, N = 3
1206.71
Core i5 2400S
SE +/- 2.28, N = 3
1372.30
Core i5 2500K
SE +/- 1.80, N = 3
1264.06
Core i5 3470
SE +/- 1.65, N = 3
1335.86
Core i5 4670
SE +/- 4.38, N = 3
1869.23
Core i7 3770K
SE +/- 25.68, N = 4
1562.77
Core i7 3960X
SE +/- 0.44, N = 2
1415.61
Core i7 4600U
SE +/- 1.35, N = 3
1612.81
Core i7 4770K
SE +/- 34.45, N = 6
1747.01
Core i7 4790K
SE +/- 18.32, N = 3
2161.10
Core i7 4960X
SE +/- 1.76, N = 3
1371.14
Core i7 5775C
SE +/- 4.03, N = 3
2115.61
Core i7 5960X
SE +/- 1.06, N = 3
1793.70
Core i7 5960X Haswell-E
SE +/- 2.82, N = 3
1781.44
FX-8150
SE +/- 1.24, N = 3
681.56
FX-8350
SE +/- 0.36, N = 3
607.26
FX-8370
SE +/- 5.43, N = 3
694.23
FX-8370E
SE +/- 3.24, N = 3
719.04
Pentium G3258
SE +/- 1.27, N = 3
1592.33
Pentium G4400
SE +/- 10.78, N = 3
2153.49
Phenom II X3 710
SE +/- 1.13, N = 3
505.20
Xeon E3-1231 v3
SE +/- 0.38, N = 3
1919.11
Xeon E3-1235L v5
2093.00

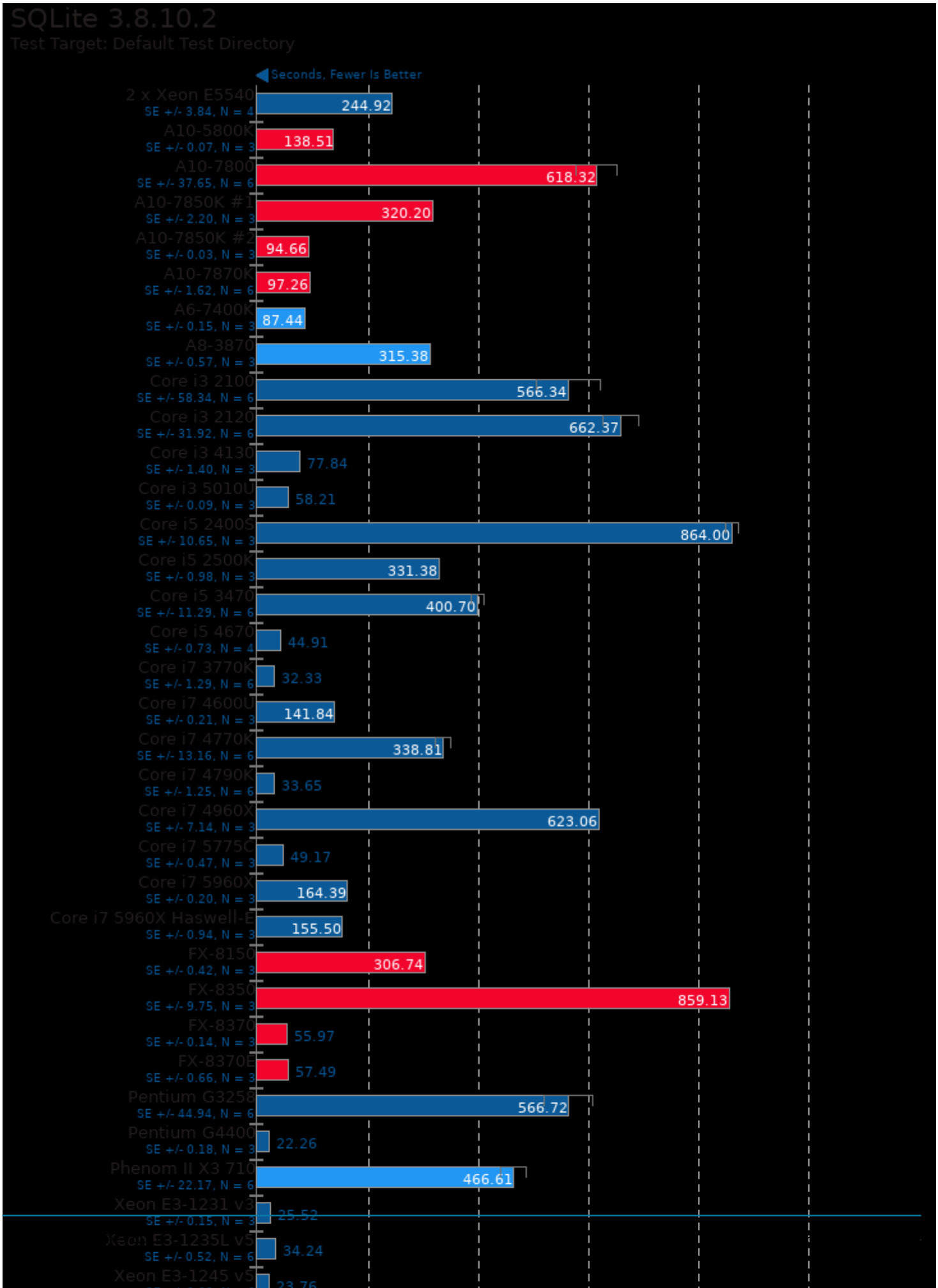

Redis 3.0.1
Test: GET
Requests Per Second, More Is Better
2 x Xeon E5540
SE +/- 22344.06, N = 6
1513350.83
A10-5800K
SE +/- 8880.73, N = 3
1385795.25
A10-7800
SE +/- 10632.76, N = 3
1122117.83
A10-7850K #1
SE +/- 4609.53, N = 3
1204370.92
A10-7850K #2
SE +/- 9331.57, N = 3
1210309.63
A10-7870K
SE +/- 8387.61, N = 3
1147788.79
A6-7400K
SE +/- 1601.97, N = 3
1177860.67
A8-3870
SE +/- 7981.88, N = 3
1112461.17
Core i3 2100
SE +/- 8962.79, N = 3
1816069.41
Core i3 2120
SE +/- 107561.53, N = 6
1574476.98
Core i3 4130
SE +/- 99805.46, N = 6
1880970.17
Core i3 5010U
SE +/- 60985.24, N = 6
1467022.86
Core i5 2400S
SE +/- 26630.34, N = 5
1765958.07
Core i5 2500K
SE +/- 7344.94, N = 3
1902402.87
Core i5 3470
SE +/- 1169.27, N = 3
552084.48
Core i5 4670
SE +/- 60637.29, N = 6
2375701.71
Core i7 3770K
SE +/- 26224.53, N = 3
2079665.29
Core i7 3960X
SE +/- 130188.51, N = 6
1485164.25
Core i7 4600U
SE +/- 62617.73, N = 6
2147711.79
Core i7 4770K
SE +/- 17034.62, N = 3
2491925.92
Core i7 4790K
SE +/- 37259.97, N = 3
2399230.33
Core i7 4960X
SE +/- 7654.65, N = 3
599355.31
Core i7 5775C
SE +/- 119004.23, N = 6
2154295.35
Core i7 5960X
SE +/- 9709.20, N = 6
633168.53
Core i7 5960X Haswell-E
SE +/- 7839.76, N = 3
622992.02
FX-8150
SE +/- 2532.55, N = 3
1209200.42
FX-8350
SE +/- 2302.29, N = 3
1258397.66
FX-8370
SE +/- 2612.46, N = 3
500027.45
FX-8370E
SE +/- 12770.15, N = 3
1310867.25
Pentium G3258
SE +/- 26874.42, N = 3
1991426.00
Pentium G4400
SE +/- 19677.28, N = 3
2732524.92
Phenom II X3 710
SE +/- 12441.90, N = 3
1021057.42
Xeon E3-1231 v3
SE +/- 157573.81, N = 6
2515136.67
Xeon E3-1235L v5
2340965.25

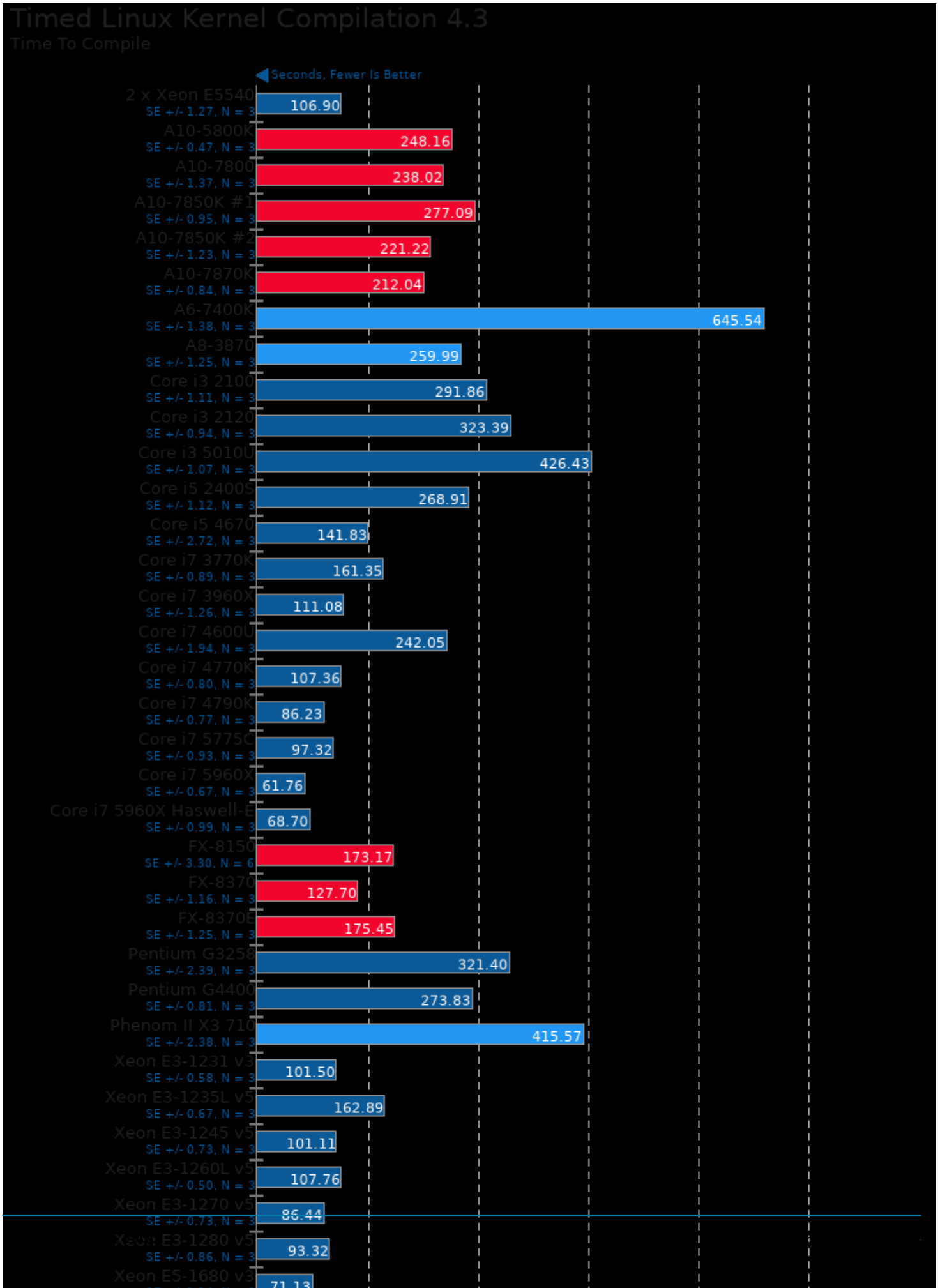

Redis 3.0.1
Test: SET
Requests Per Second, More Is Better
2 x Xeon E5540
SE +/- 21525.41, N = 3
1104171.50
A10-5800K
SE +/- 7430.27, N = 3
1012596.62
A10-7800
SE +/- 1171.32, N = 3
815220.77
A10-7850K #1
SE +/- 8393.15, N = 3
893814.08
A10-7850K #2
SE +/- 15518.21, N = 3
864614.35
A10-7870K
SE +/- 1573.24, N = 3
868815.41
A6-7400K
SE +/- 8438.11, N = 3
896217.60
A8-3870
SE +/- 4240.42, N = 3
835465.00
Core i3 2100
SE +/- 19213.74, N = 5
1245950.80
Core i3 2120
SE +/- 70996.39, N = 6
1182071.41
Core i3 4130
SE +/- 41563.03, N = 6
1500535.08
Core i3 5010U
SE +/- 3789.13, N = 3
1132100.84
Core i5 2400S
SE +/- 5643.74, N = 3
1326308.08
Core i5 2500K
SE +/- 8859.00, N = 3
1338805.13
Core i5 3470
SE +/- 2957.72, N = 3
493618.75
Core i5 4670
SE +/- 31921.52, N = 6
1694051.79
Core i7 3770K
SE +/- 9814.45, N = 3
1554527.91
Core i7 3960X
SE +/- 56339.64, N = 6
1293401.57
Core i7 4600U
SE +/- 42210.70, N = 6
1373932.27
Core i7 4770K
SE +/- 18413.37, N = 3
1758881.33
Core i7 4790K
SE +/- 91573.12, N = 6
1836375.90
Core i7 4960X
SE +/- 3391.32, N = 3
537677.40
Core i7 5775C
SE +/- 55386.85, N = 6
1686550.58
Core i7 5960X
SE +/- 12289.52, N = 6
560359.88
Core i7 5960X Haswell-E
SE +/- 10437.78, N = 3
552471.21
FX-8150
SE +/- 3106.15, N = 3
921963.23
FX-8350
SE +/- 14612.66, N = 3
939720.50
FX-8370
SE +/- 1984.21, N = 3
444462.09
FX-8370E
SE +/- 15754.53, N = 3
976751.44
Pentium G3258
SE +/- 2460.55, N = 3
1429941.75
Pentium G4400
SE +/- 6611.25, N = 3
1884468.33
Phenom II X3 710
SE +/- 4398.89, N = 3
742626.54
Xeon E3-1231 v3
SE +/- 62326.19, N = 6
1624977.94
Xeon E3-1235L v5
1550538.17

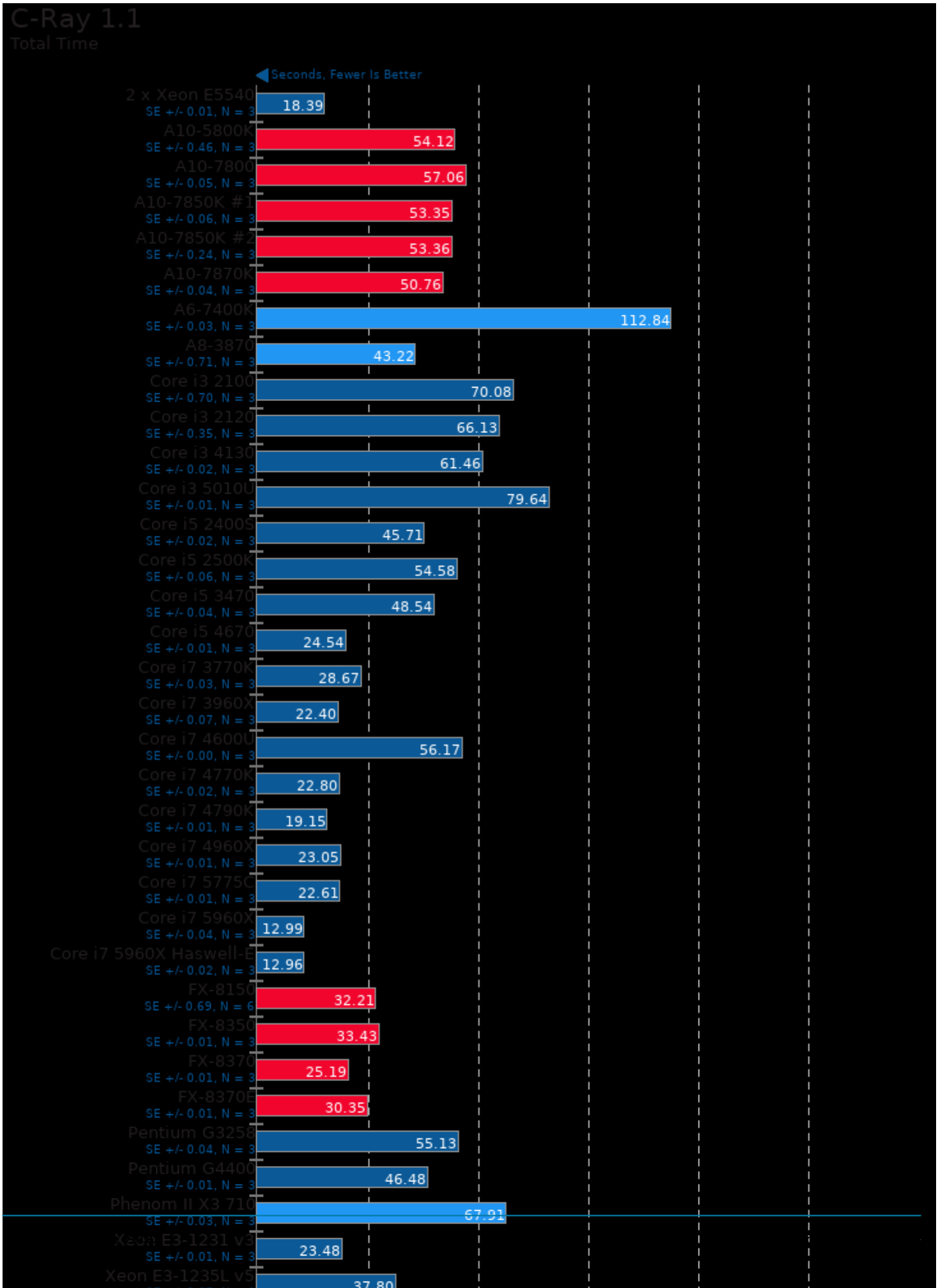

Apache Benchmark 2.4.7
Static Web Page Serving
Requests Per Second, More Is Better
2 x Xeon E5540
SE +/- 67.45, N = 3
16393.03
A10-5800K
SE +/- 27.29, N = 3
20726.51
A10-7800
SE +/- 50.82, N = 3
22261.26
A10-7850K #1
SE +/- 210.74, N = 3
19324.07
A10-7850K #2
SE +/- 363.64, N = 3
19714.67
A10-7870K
SE +/- 15.10, N = 3
14040.28
A6-7400K
SE +/- 21.44, N = 3
10841.66
A8-3870
SE +/- 29.36, N = 3
18932.24
Core i3 2100
SE +/- 78.91, N = 3
20260.21
Core i3 2120
SE +/- 92.35, N = 3
20983.08
Core i3 4130
SE +/- 57.17, N = 3
17346.11
Core i3 5010U
SE +/- 23.48, N = 3
20034.47
Core i5 2400S
SE +/- 45.53, N = 3
25052.50
Core i5 2500K
SE +/- 114.89, N = 3
30653.36
Core i5 3470
SE +/- 21.24, N = 3
17592.47
Core i5 4670
SE +/- 325.96, N = 3
52502.40
Core i7 3770K
SE +/- 127.64, N = 3
28817.42
Core i7 3960X
SE +/- 1426.32, N = 6
20330.34
Core i7 4600U
SE +/- 78.53, N = 3
27334.98
Core i7 4770K
SE +/- 129.45, N = 3
22564.76
Core i7 4790K
SE +/- 860.84, N = 6
48264.54
Core i7 4960X
SE +/- 84.54, N = 3
19032.97
Core i7 5775C
SE +/- 18.26, N = 3
40176.86
Core i7 5960X Haswell-E
SE +/- 360.69, N = 6
18657.51
FX-8150
SE +/- 38.99, N = 3
20323.52
FX-8350
SE +/- 9.93, N = 3
20392.93
FX-8370
SE +/- 8.47, N = 3
16816.61
FX-8370E
SE +/- 99.82, N = 3
19034.21
Pentium G3258
SE +/- 138.45, N = 3
20831.46
Phenom II X3 710
SE +/- 47.69, N = 3
20833.26
Xeon E3-1235L v5
SE +/- 27.87, N = 3
42928.92
Xeon E3-1245 v5
SE +/- 233.31, N = 3
41091.31
Xeon E3-1260L v5
SE +/- 711.41, N = 4
42014.15
Xeon E3-1280 v5
47404.91

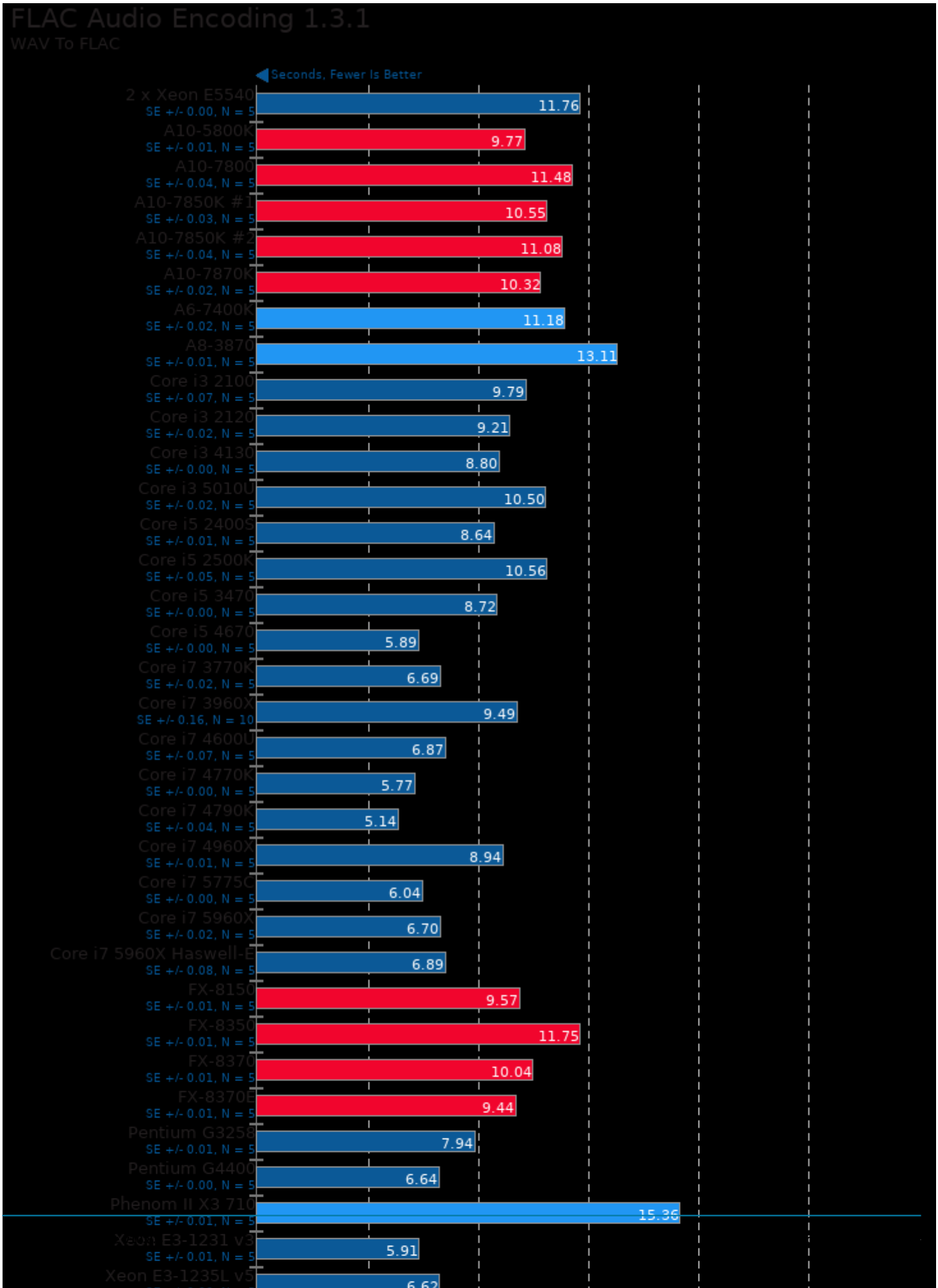

PostgreSQL pgbench 9.4.3
Scaling: Buffer Test - Test: Normal Load - Mode: Read Write
TPS, More Is Better
2 x Xeon E5540
SE +/- 13.57, N = 6
481.17
A10-5800K
SE +/- 5.62, N = 3
1137.77
A10-7800
SE +/- 4.95, N = 3
369.44
A10-7850K #1
SE +/- 2.34, N = 3
339.63
A10-7850K #2
SE +/- 15.86, N = 3
1346.65
A10-7870K
SE +/- 26.65, N = 3
1335.84
A6-7400K
SE +/- 7.76, N = 3
981.26
A8-3870
SE +/- 4.85, N = 3
328.18
Core i3 2100
SE +/- 38.39, N = 6
171.65
Core i3 2120
SE +/- 6.39, N = 6
251.01
Core i3 4130
SE +/- 7.39, N = 3
681.44
Core i3 5010U
SE +/- 13.24, N = 3
2293.04
Core i5 2400S
SE +/- 42.57, N = 6
258.51
Core i5 2500K
SE +/- 2.08, N = 3
212.63
Core i5 3470
SE +/- 7.90, N = 3
416.63
Core i5 4670
SE +/- 24.87, N = 6
758.41
Core i7 3770K
SE +/- 54.53, N = 3
3066.14
Core i7 3960X
SE +/- 142.12, N = 5
10349.30
Core i7 4600U
SE +/- 57.05, N = 6
732.58
Core i7 4770K
SE +/- 11.13, N = 6
639.84
Core i7 4790K
SE +/- 114.27, N = 6
1871.07
Core i7 4960X
SE +/- 80.38, N = 6
344.99
Core i7 5775C
SE +/- 50.82, N = 3
3417.91
Core i7 5960X
SE +/- 16.47, N = 3
2489.80
Core i7 5960X Haswell-E
SE +/- 25.27, N = 3
2564.94
FX-8150
SE +/- 20.21, N = 6
697.58
FX-8350
SE +/- 4.45, N = 3
415.15
FX-8370
SE +/- 17.89, N = 3
2364.03
FX-8370E
SE +/- 98.99, N = 6
1010.00
Pentium G3258
SE +/- 4.72, N = 3
349.05
Pentium G4400
SE +/- 11.43, N = 3
3016.92
Phenom II X3 710
SE +/- 3.97, N = 6
232.19
Xeon E3-1231 v3
SE +/- 22.58, N = 3
6839.57
Xeon E3-1235L v5
3502.20


LAMMPS Molecular Dynamics Simulator 1.0
Test: Rhodopsin Protein
Loop Time, Fewer Is Better
2 x Xeon E5540
SE +/- 0.16, N = 3
61.32
A8-3870
SE +/- 0.48, N = 3
85.23
Core i3 2120
SE +/- 0.19, N = 3
46.90
Core i3 4130
SE +/- 0.18, N = 3
41.05
Core i5 2500K
SE +/- 0.14, N = 3
37.11
Core i5 3470
SE +/- 0.05, N = 3
32.12
Core i5 4670
SE +/- 0.04, N = 3
32.57
Core i7 4960X
SE +/- 0.04, N = 3
32.30
Core i7 5960X Haswell-E
SE +/- 0.11, N = 3
36.94
FX-8150
SE +/- 0.20, N = 3
55.03
FX-8350
SE +/- 0.05, N = 3
44.83
FX-8370
SE +/- 0.32, N = 3
52.08
Pentium G3258
SE +/- 0.15, N = 3
40.82
Xeon E3-1280 v5
SE +/- 0.27, N = 3
52.06
Xeon E5-2687W v3
SE +/- 0.05, N = 3
37.33
Hawk-8370
SE +/- 0.04, N = 3
52.13
20
40
60
80
100
1. (CXX) g++ options: -lfftw -lmpich


SQLite 3.8.10.2
Test Target: Default Test Directory
Seconds, Fewer Is Better
2 x Xeon E5540
SE +/- 3.84, N = 4
244.92
A10-5800K
SE +/- 0.07, N = 3
138.51
A10-7800
SE +/- 37.65, N = 6
618.32
A10-7850K #1
SE +/- 2.20, N = 3
320.20
A10-7850K #2
SE +/- 0.03, N = 3
94.66
A10-7870K
SE +/- 1.62, N = 6
97.26
A6-7400K
SE +/- 0.15, N = 3
87.44
A8-3870
SE +/- 0.57, N = 3
315.38
Core i3 2100
SE +/- 58.34, N = 6
566.34
Core i3 2120
SE +/- 31.92, N = 6
662.37
Core i3 4130
SE +/- 1.40, N = 3
77.84
Core i3 5010U
SE +/- 0.09, N = 3
58.21
Core i5 2400S
SE +/- 10.65, N = 3
864.00
Core i5 2500K
SE +/- 0.98, N = 3
331.38
Core i5 3470
SE +/- 11.29, N = 6
400.70
Core i5 4670
SE +/- 0.73, N = 4
44.91
Core i7 3770K
SE +/- 1.29, N = 6
32.33
Core i7 4600U
SE +/- 0.21, N = 3
141.84
Core i7 4770K
SE +/- 13.16, N = 6
338.81
Core i7 4790K
SE +/- 1.25, N = 6
33.65
Core i7 4960X
SE +/- 7.14, N = 3
623.06
Core i7 5775C
SE +/- 0.47, N = 3
49.17
Core i7 5960X
SE +/- 0.20, N = 3
164.39
Core i7 5960X Haswell-E
SE +/- 0.94, N = 3
155.50
FX-8150
SE +/- 0.42, N = 3
306.74
FX-8350
SE +/- 9.75, N = 3
859.13
FX-8370
SE +/- 0.14, N = 3
55.97
FX-8370E
SE +/- 0.66, N = 3
57.49
Pentium G3258
SE +/- 44.94, N = 6
566.72
Pentium G4400
SE +/- 0.18, N = 3
22.26
Phenom II X3 710
SE +/- 22.17, N = 6
466.61
Xeon E3-1231 v3
SE +/- 0.15, N = 3
25.52
Xeon E3-1235L v5
SE +/- 0.52, N = 6
34.24
Xeon E3-1245 v5
23.76

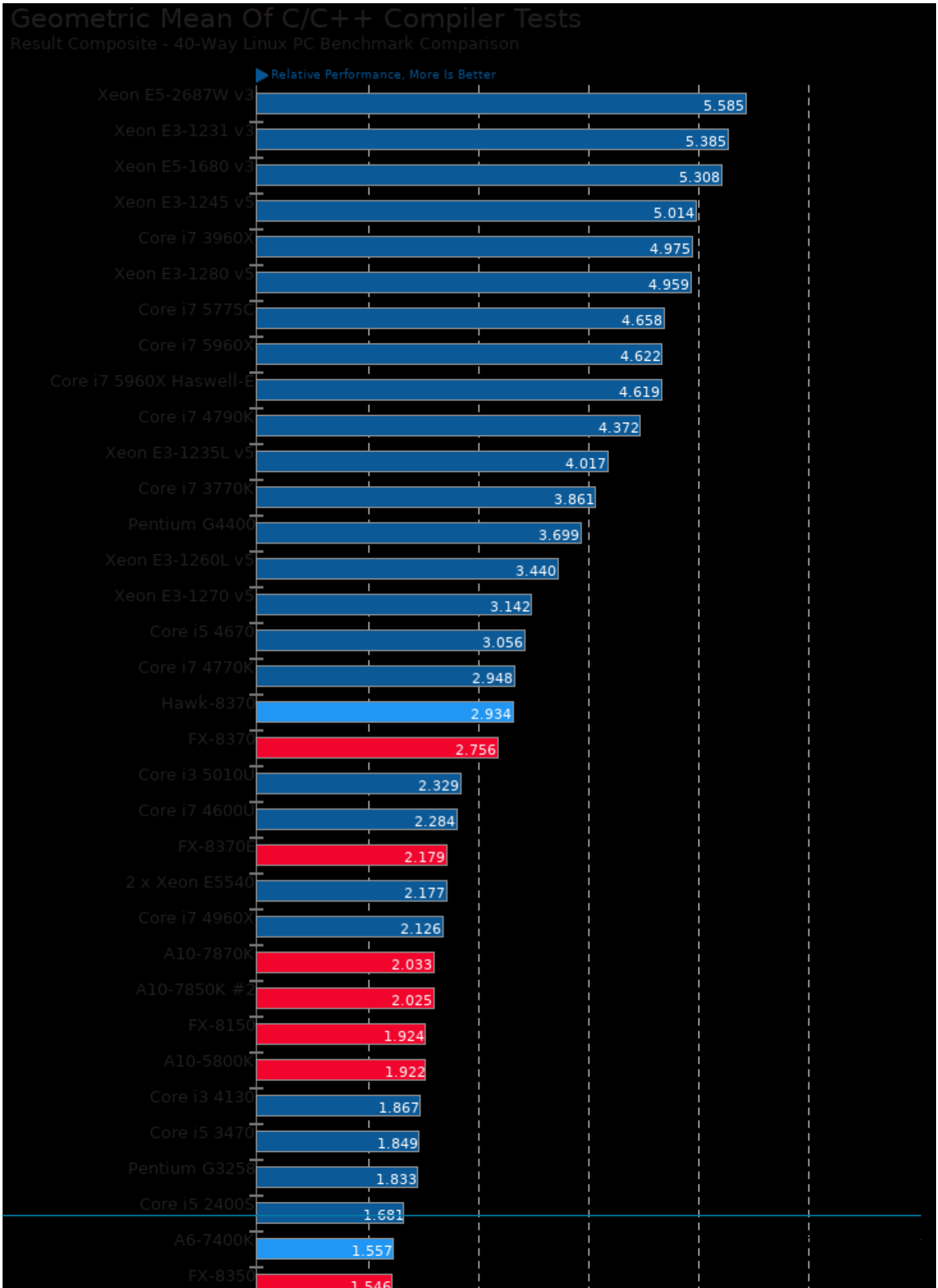

Timed Linux Kernel Compilation 4.3
Time To Compile
Seconds, Fewer Is Better
2 x Xeon E5540
SE +/- 1.27, N = 3
106.90
A10-5800K
SE +/- 0.47, N = 3
248.16
A10-7800
SE +/- 1.37, N = 3
238.02
A10-7850K #1
SE +/- 0.95, N = 3
277.09
A10-7850K #2
SE +/- 1.23, N = 3
221.22
A10-7870K
SE +/- 0.84, N = 3
212.04
A6-7400K
SE +/- 1.38, N = 3
645.54
A8-3870
SE +/- 1.25, N = 3
259.99
Core i3 2100
SE +/- 1.11, N = 3
291.86
Core i3 2120
SE +/- 0.94, N = 3
323.39
Core i3 5010U
SE +/- 1.07, N = 3
426.43
Core i5 2400S
SE +/- 1.12, N = 3
268.91
Core i5 4670
SE +/- 2.72, N = 3
141.83
Core i7 3770K
SE +/- 0.89, N = 3
161.35
Core i7 3960X
SE +/- 1.26, N = 3
111.08
Core i7 4600U
SE +/- 1.94, N = 3
242.05
Core i7 4770K
SE +/- 0.80, N = 3
107.36
Core i7 4790K
SE +/- 0.77, N = 3
86.23
Core i7 5775C
SE +/- 0.93, N = 3
97.32
Core i7 5960X
SE +/- 0.67, N = 3
61.76
Core i7 5960X Haswell-E
SE +/- 0.99, N = 3
68.70
FX-8150
SE +/- 3.30, N = 6
173.17
FX-8370
SE +/- 1.16, N = 3
127.70
FX-8370E
SE +/- 1.25, N = 3
175.45
Pentium G3258
SE +/- 2.39, N = 3
321.40
Pentium G4400
SE +/- 0.81, N = 3
273.83
Phenom II X3 710
SE +/- 2.38, N = 3
415.57
Xeon E3-1231 v3
SE +/- 0.58, N = 3
101.50
Xeon E3-1235L v5
SE +/- 0.67, N = 3
162.89
Xeon E3-1245 v5
SE +/- 0.73, N = 3
101.11
Xeon E3-1260L v5
SE +/- 0.50, N = 3
107.76
Xeon E3-1270 v5
SE +/- 0.73, N = 3
86.44
Xeon E3-1280 v5
SE +/- 0.86, N = 3
93.32
Xeon E5-1680 v3
71.13


C-Ray 1.1
Total Time
Seconds, Fewer Is Better
2 x Xeon E5540
SE +/- 0.01, N = 3
18.39
A10-5800K
SE +/- 0.46, N = 3
54.12
A10-7800
SE +/- 0.05, N = 3
57.06
A10-7850K #1
SE +/- 0.06, N = 3
53.35
A10-7850K #2
SE +/- 0.24, N = 3
53.36
A10-7870K
SE +/- 0.04, N = 3
50.76
A6-7400K
SE +/- 0.03, N = 3
112.84
A8-3870
SE +/- 0.71, N = 3
43.22
Core i3 2100
SE +/- 0.70, N = 3
70.08
Core i3 2120
SE +/- 0.35, N = 3
66.13
Core i3 4130
SE +/- 0.02, N = 3
61.46
Core i3 5010U
SE +/- 0.01, N = 3
79.64
Core i5 2400S
SE +/- 0.02, N = 3
45.71
Core i5 2500K
SE +/- 0.06, N = 3
54.58
Core i5 3470
SE +/- 0.04, N = 3
48.54
Core i5 4670
SE +/- 0.01, N = 3
24.54
Core i7 3770K
SE +/- 0.03, N = 3
28.67
Core i7 3960X
SE +/- 0.07, N = 3
22.40
Core i7 4600U
SE +/- 0.00, N = 3
56.17
Core i7 4770K
SE +/- 0.02, N = 3
22.80
Core i7 4790K
SE +/- 0.01, N = 3
19.15
Core i7 4960X
SE +/- 0.01, N = 3
23.05
Core i7 5775C
SE +/- 0.01, N = 3
22.61
Core i7 5960X
SE +/- 0.04, N = 3
12.99
Core i7 5960X Haswell-E
SE +/- 0.02, N = 3
12.96
FX-8150
SE +/- 0.69, N = 6
32.21
FX-8350
SE +/- 0.01, N = 3
33.43
FX-8370
SE +/- 0.01, N = 3
25.19
FX-8370E
SE +/- 0.01, N = 3
30.35
Pentium G3258
SE +/- 0.04, N = 3
55.13
Pentium G4400
SE +/- 0.01, N = 3
46.48
Phenom II X3 710
SE +/- 0.03, N = 3
67.91
Xeon E3-1231 v3
SE +/- 0.01, N = 3
23.48
Xeon E3-1235L v5
37.80


FLAC Audio Encoding 1.3.1
WAV To FLAC
Seconds, Fewer Is Better
2 x Xeon E5540
SE +/- 0.00, N = 5
11.76
A10-5800K
SE +/- 0.01, N = 5
9.77
A10-7800
SE +/- 0.04, N = 5
11.48
A10-7850K #1
SE +/- 0.03, N = 5
10.55
A10-7850K #2
SE +/- 0.04, N = 5
11.08
A10-7870K
SE +/- 0.02, N = 5
10.32
A6-7400K
SE +/- 0.02, N = 5
11.18
A8-3870
SE +/- 0.01, N = 5
13.11
Core i3 2100
SE +/- 0.07, N = 5
9.79
Core i3 2120
SE +/- 0.02, N = 5
9.21
Core i3 4130
SE +/- 0.00, N = 5
8.80
Core i3 5010U
SE +/- 0.02, N = 5
10.50
Core i5 2400S
SE +/- 0.01, N = 5
8.64
Core i5 2500K
SE +/- 0.05, N = 5
10.56
Core i5 3470
SE +/- 0.00, N = 5
8.72
Core i5 4670
SE +/- 0.00, N = 5
5.89
Core i7 3770K
SE +/- 0.02, N = 5
6.69
Core i7 3960X
SE +/- 0.16, N = 10
9.49
Core i7 4600U
SE +/- 0.07, N = 5
6.87
Core i7 4770K
SE +/- 0.00, N = 5
5.77
Core i7 4790K
SE +/- 0.04, N = 5
5.14
Core i7 4960X
SE +/- 0.01, N = 5
8.94
Core i7 5775C
SE +/- 0.00, N = 5
6.04
Core i7 5960X
SE +/- 0.02, N = 5
6.70
Core i7 5960X Haswell-E
SE +/- 0.08, N = 5
6.89
FX-8150
SE +/- 0.01, N = 5
9.57
FX-8350
SE +/- 0.01, N = 5
11.75
FX-8370
SE +/- 0.01, N = 5
10.04
FX-8370E
SE +/- 0.01, N = 5
9.44
Pentium G3258
SE +/- 0.01, N = 5
7.94
Pentium G4400
SE +/- 0.00, N = 5
6.64
Phenom II X3 710
SE +/- 0.01, N = 5
15.36
Xeon E3-1231 v3
SE +/- 0.01, N = 5
5.91
Xeon E3-1235L v5
6.62

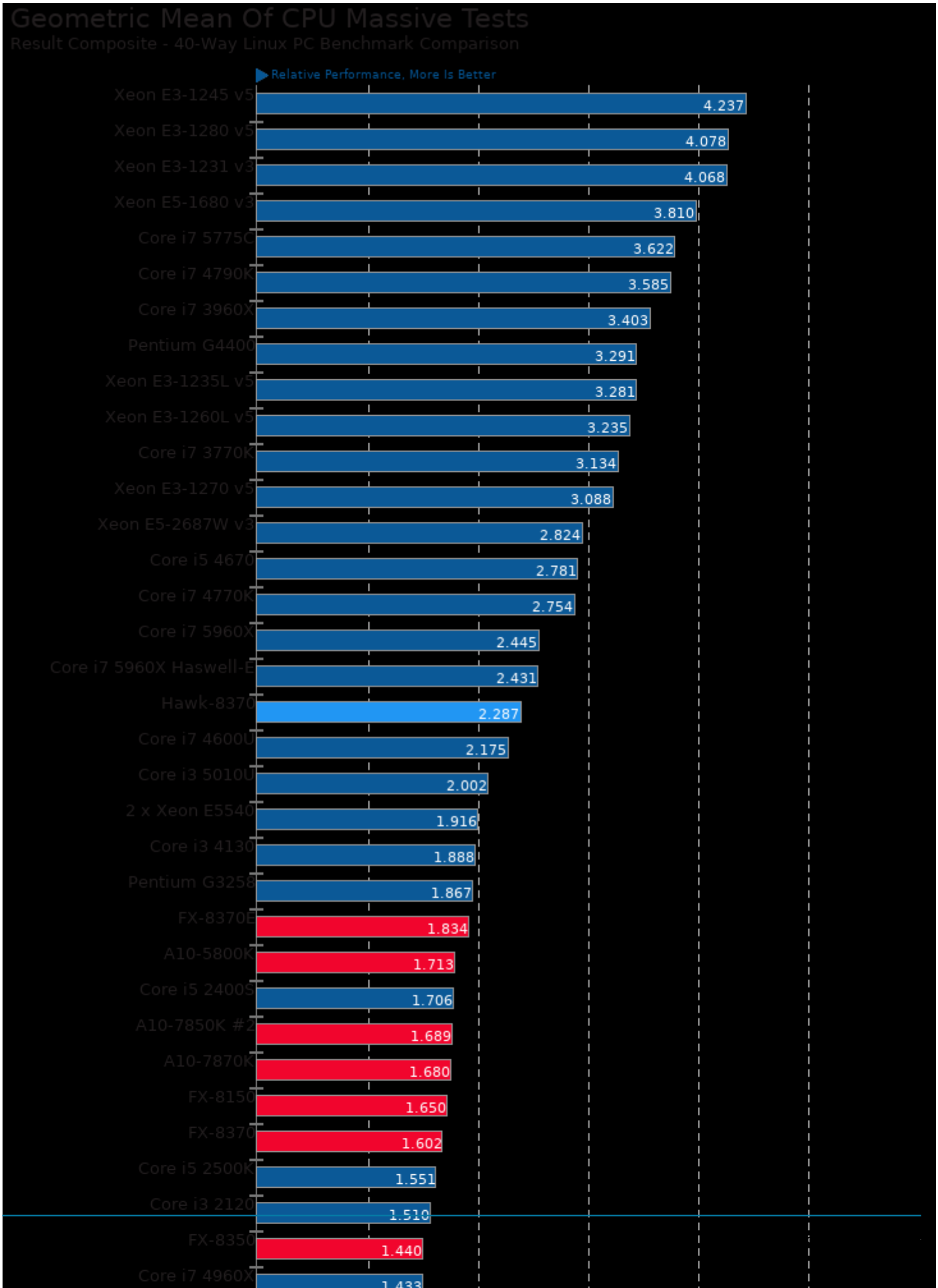
40-Way Linux PC Benchmark Comparison

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


Geometric Mean Of C/C++ Compiler Tests
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Xeon E5-2687W v3 5.585
Xeon E3-1231 v3 5.385
Xeon E5-1680 v3 5.308
Xeon E3-1245 v5 5.014
Core i7 3960X 4.975
Xeon E3-1280 v5 4.959
Core i7 5775C 4.658
Core i7 5960X 4.622
Core i7 5960X Haswell-E 4.619
Core i7 4790K 4.372
Xeon E3-1235L v5 4.017
Core i7 3770K 3.861
Pentium G4400 3.699
Xeon E3-1260L v5 3.440
Xeon E3-1270 v5 3.142
Core i5 4670 3.056
Core i7 4770K 2.948
Hawk-8370 2.934
FX-8370 2.756
Core i3 5010U 2.329
Core i7 4600U 2.284
FX-8370E 2.179
2 x Xeon E5540 2.177
Core i7 4960X 2.126
A10-7870K 2.033
A10-7850K #2 2.025
FX-8150 1.924
A10-5800K 1.922
Core i3 4130 1.867
Core i5 3470 1.849
Pentium G3258 1.833
Core i5 2400S 1.681
A6-7400K 1.557
FX-8350 1.546

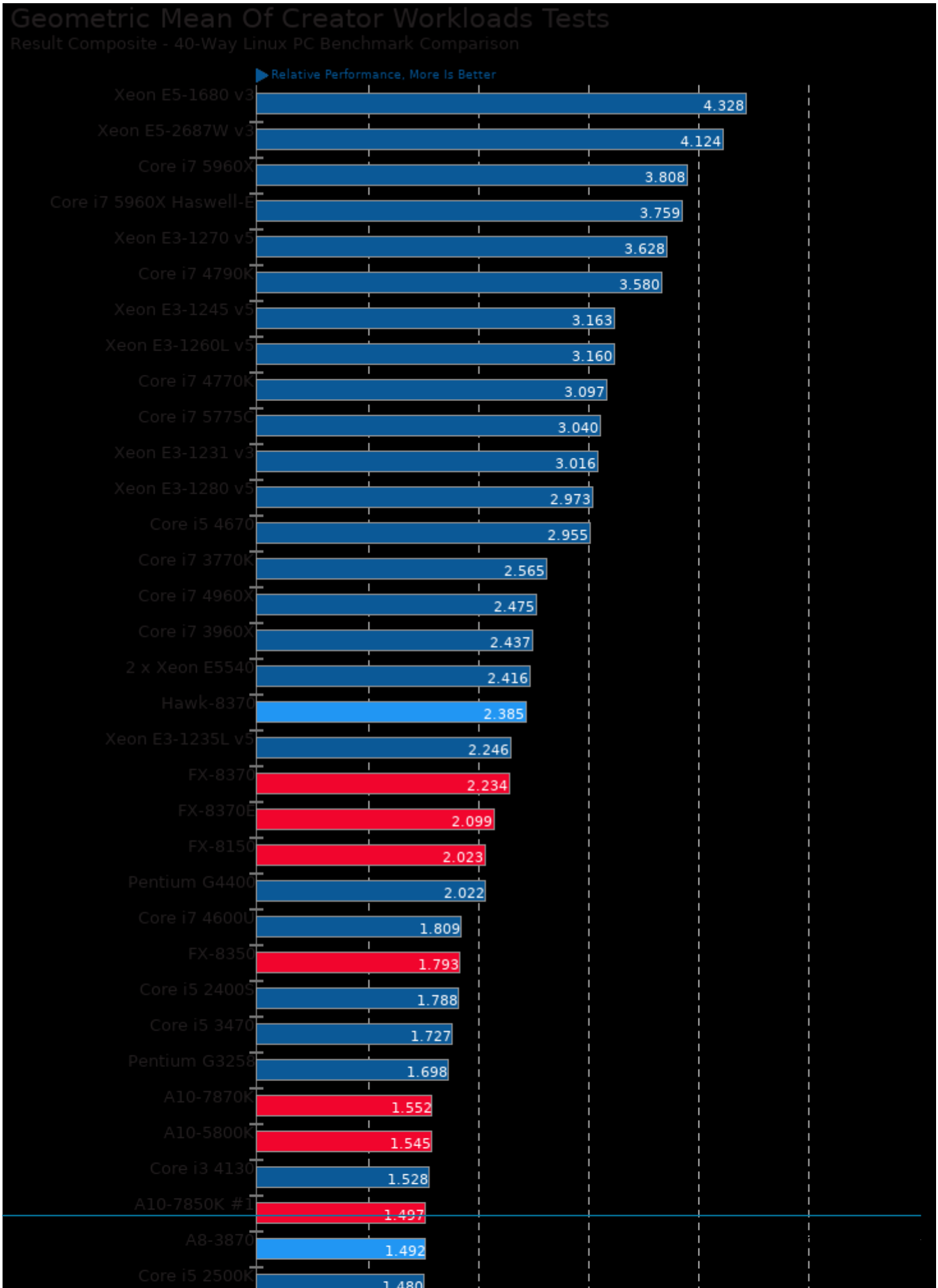
40-Way Linux PC Benchmark Comparison

Geometric mean based upon tests: pts/himeno, pts/c-ray, pts/encode-flac, pts/pgbench, pts/apache and pts/lammps


Geometric Mean Of CPU Massive Tests
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Xeon E3-1245 v5 4.237
Xeon E3-1280 v5 4.078
Xeon E3-1231 v3 4.068
Xeon E5-1680 v3 3.810
Core i7 5775C 3.622
Core i7 4790K 3.585
Core i7 3960X 3.403
Pentium G4400 3.291
Xeon E3-1235L v5 3.281
Xeon E3-1260L v5 3.235
Core i7 3770K 3.134
Xeon E3-1270 v5 3.088
Xeon E5-2687W v3 2.824
Core i5 4670 2.781
Core i7 4770K 2.754
Core i7 5960X 2.445
Core i7 5960X Haswell-E 2.431
Hawk-8370 2.287
Core i7 4600U 2.175
Core i3 5010U 2.002
2 x Xeon E5540 1.916
Core i3 4130 1.888
Pentium G3258 1.867
FX-8370E 1.834
A10-5800K 1.713
Core i5 2400S 1.706
A10-7850K #2 1.689
A10-7870K 1.680
FX-8150 1.650
FX-8370 1.602
Core i5 2500K 1.551
Core i3 2120 1.510
FX-8350 1.440
Core i7 4960X 1.433

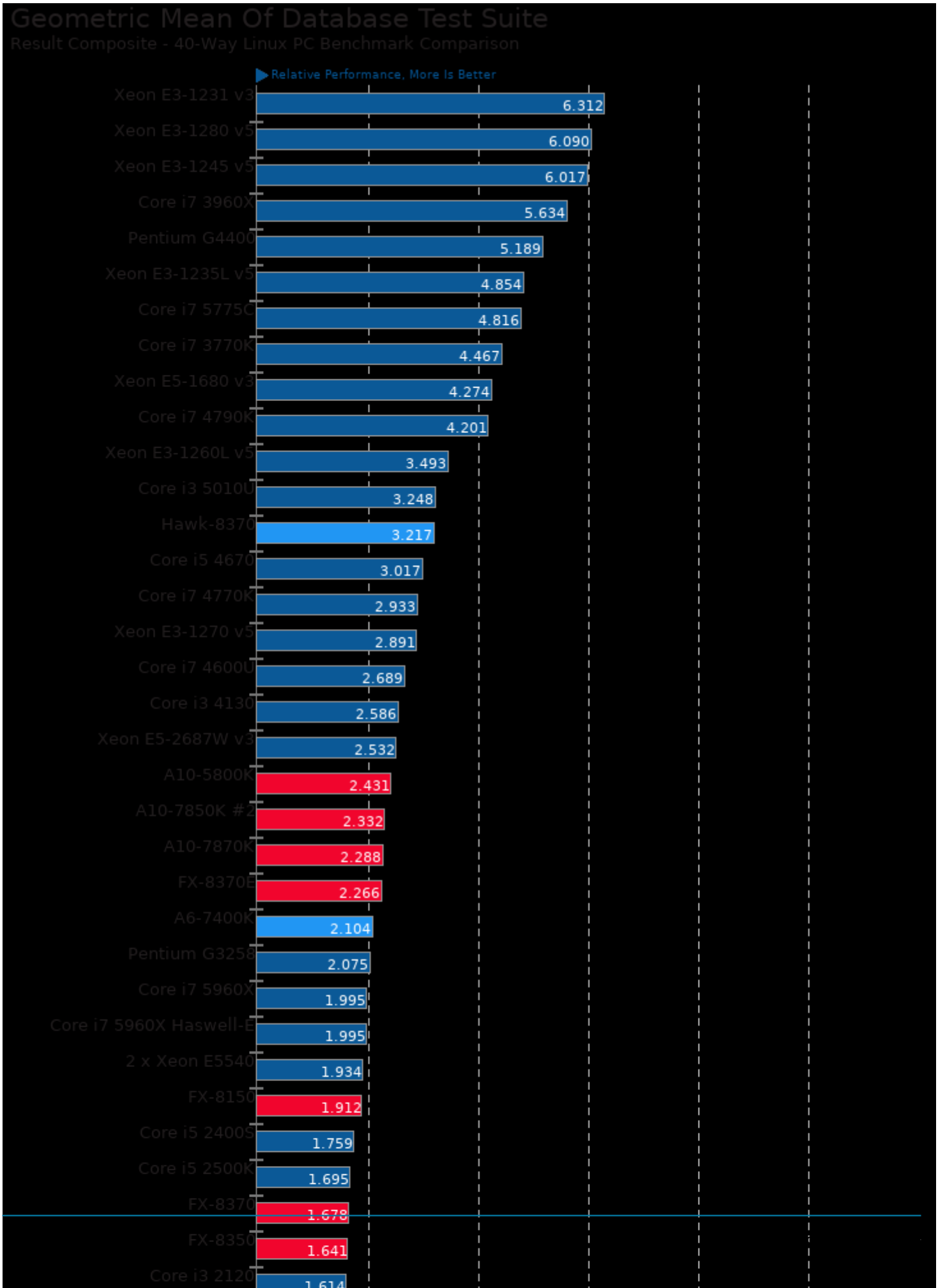
40-Way Linux PC Benchmark Comparison

Geometric mean based upon tests: pts/apache, pts/build-linux-kernel, pts/c-ray, pts/encode-flac, pts/himeno, pts/lammps, pts/pgbench and pts/redis


Geometric Mean Of Creator Workloads Tests
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Xeon E5-1680 v3
4.328
Xeon E5-2687W v3
4.124
Core i7 5960X
3.808
Core i7 5960X Haswell-E
3.759
Xeon E3-1270 v5
3.628
Core i7 4790K
3.580
Xeon E3-1245 v5
3.163
Xeon E3-1260L v5
3.160
Core i7 4770K
3.097
Core i7 5775C
3.040
Xeon E3-1231 v3
3.016
Xeon E3-1280 v5
2.973
Core i5 4670
2.955
Core i7 3770K
2.565
Core i7 4960X
2.475
Core i7 3960X
2.437
2 x Xeon E5540
2.416
Hawk-8370
2.385
Xeon E3-1235L v5
2.246
FX-8370
2.234
FX-8370E
2.099
FX-8150
2.023
Pentium G4400
2.022
Core i7 4600U
1.809
FX-8350
1.793
Core i5 2400S
1.788
Core i5 3470
1.727
Pentium G3258
1.698
A10-7870K
1.552
A10-5800K
1.545
Core i3 4130
1.528
A10-7850K #1
1.497
A8-3870
1.492
Core i5 2500K
1.480

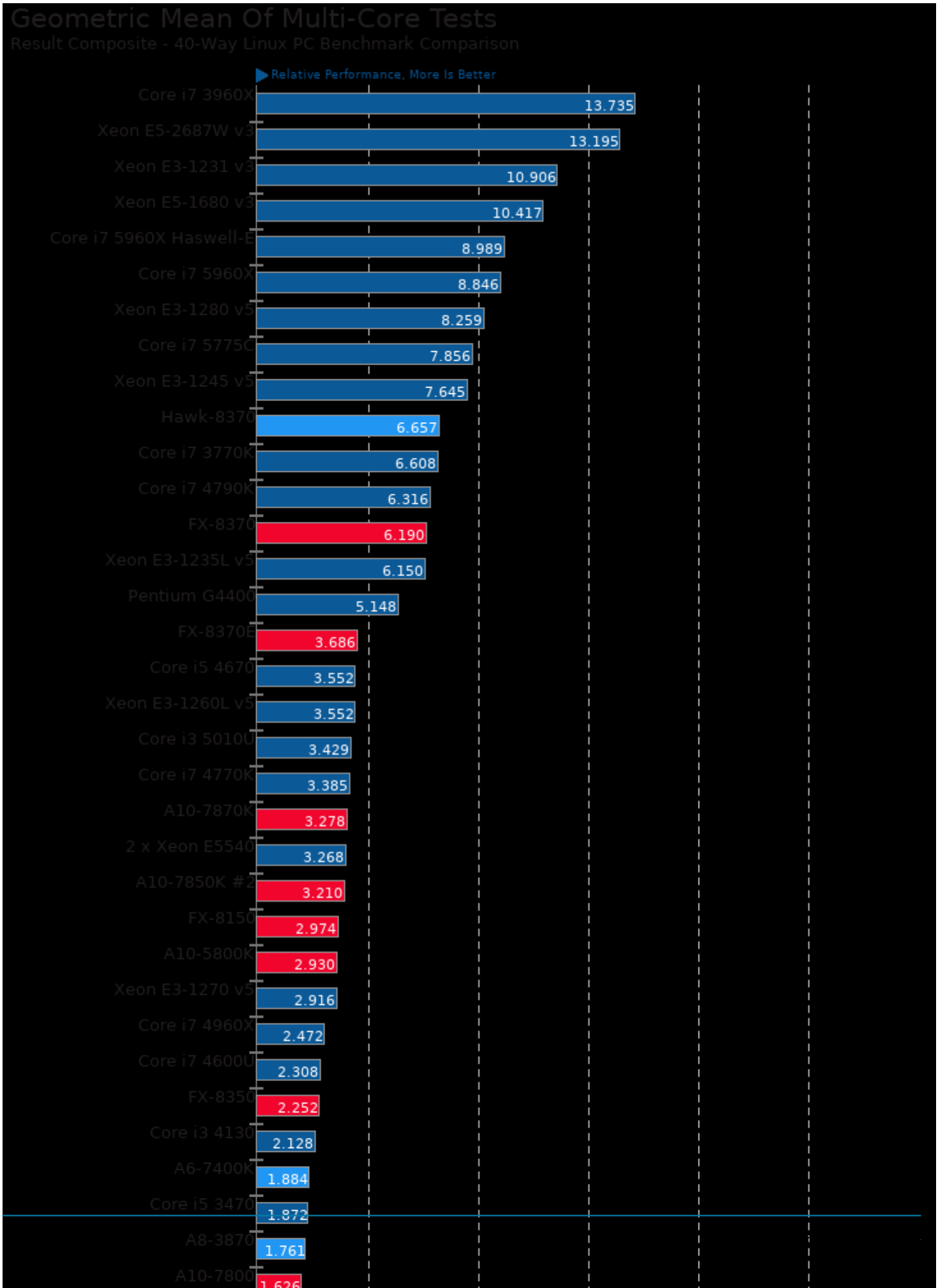
40-Way Linux PC Benchmark Comparison

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


Geometric Mean Of Database Test Suite
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Xeon E3-1231 v3 6.312
Xeon E3-1280 v5 6.090
Xeon E3-1245 v5 6.017
Core i7 3960X 5.634
Pentium G4400 5.189
Xeon E3-1235L v5 4.854
Core i7 5775C 4.816
Core i7 3770K 4.467
Xeon E5-1680 v3 4.274
Core i7 4790K 4.201
Xeon E3-1260L v5 3.493
Core i3 5010U 3.248
Hawk-8370 3.217
Core i5 4670 3.017
Core i7 4770K 2.933
Xeon E3-1270 v5 2.891
Core i7 4600U 2.689
Core i3 4130 2.586
Xeon E5-2687W v3 2.532
A10-5800K 2.431
A10-7850K #2 2.332
A10-7870K 2.288
FX-8370E 2.266
A6-7400K 2.104
Pentium G3258 2.075
Core i7 5960X 1.995
Core i7 5960X Haswell-E 1.995
2 x Xeon E5540 1.934
FX-8150 1.912
Core i5 2400S 1.759
Core i5 2500K 1.695
FX-8370 1.678
FX-8350 1.641
Core i3 2120 1.614

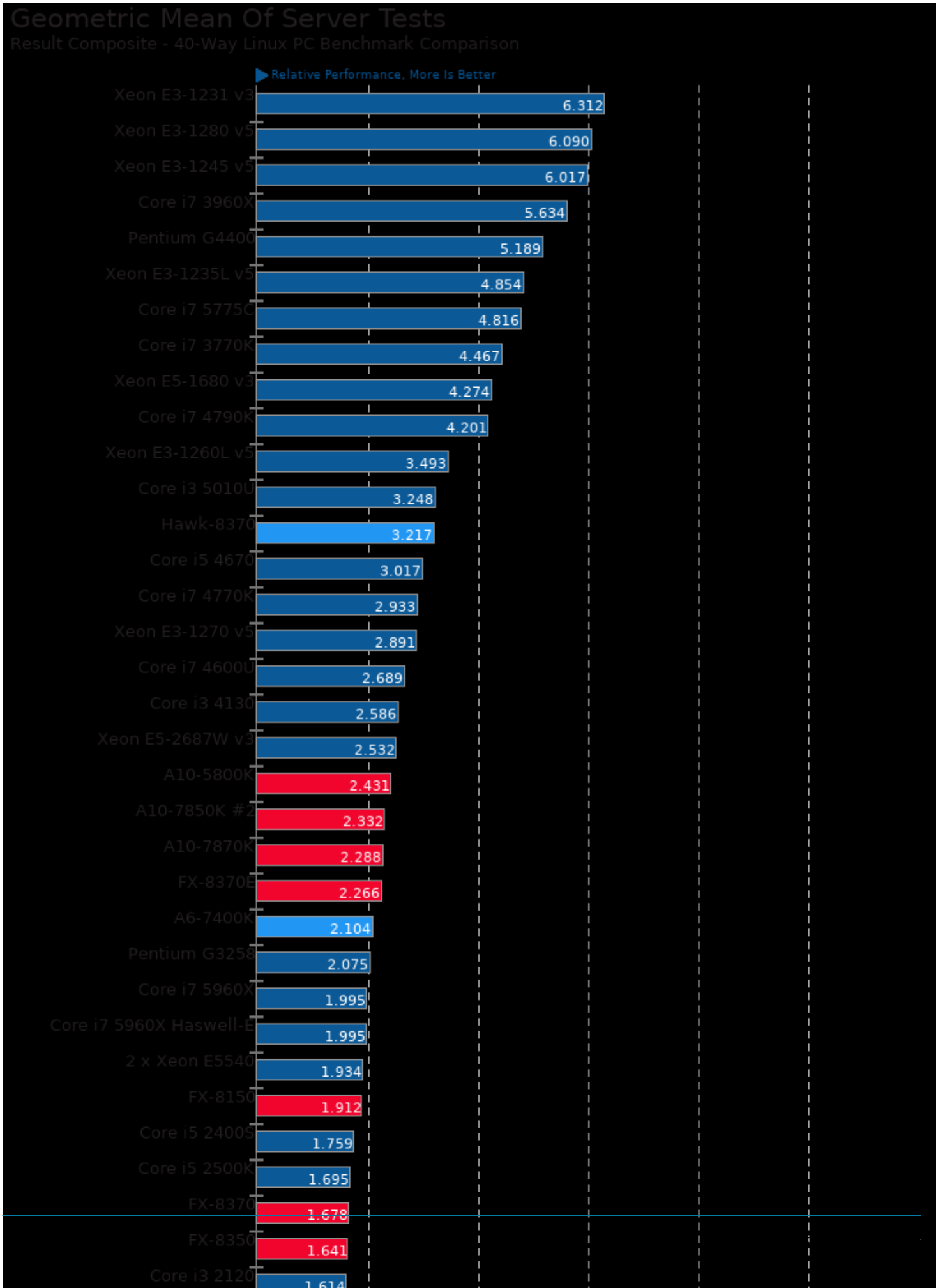
40-Way Linux PC Benchmark Comparison

Geometric mean based upon tests: pts/sqlite, pts/redis and pts/pgbench


Geometric Mean Of Multi-Core Tests
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Core i7 3960X 13.735
Xeon E5-2687W v3 13.195
Xeon E3-1231 v3 10.906
Xeon E5-1680 v3 10.417
Core i7 5960X Haswell-E 8.989
Core i7 5960X 8.846
Xeon E3-1280 v5 8.259
Core i7 5775C 7.856
Xeon E3-1245 v5 7.645
Hawk-8370 6.657
Core i7 3770K 6.608
Core i7 4790K 6.316
FX-8370 6.190
Xeon E3-1235L v5 6.150
Pentium G4400 5.148
FX-8370E 3.686
Core i5 4670 3.552
Xeon E3-1260L v5 3.552
Core i3 5010U 3.429
Core i7 4770K 3.385
A10-7870K 3.278
2 x Xeon E5540 3.268
A10-7850K #2 3.210
FX-8150 2.974
A10-5800K 2.930
Xeon E3-1270 v5 2.916
Core i7 4960X 2.472
Core i7 4600U 2.308
FX-8350 2.252
Core i3 4130 2.128
A6-7400K 1.884
Core i5 3470 1.872
A8-3870 1.761
A10-7800 1.626

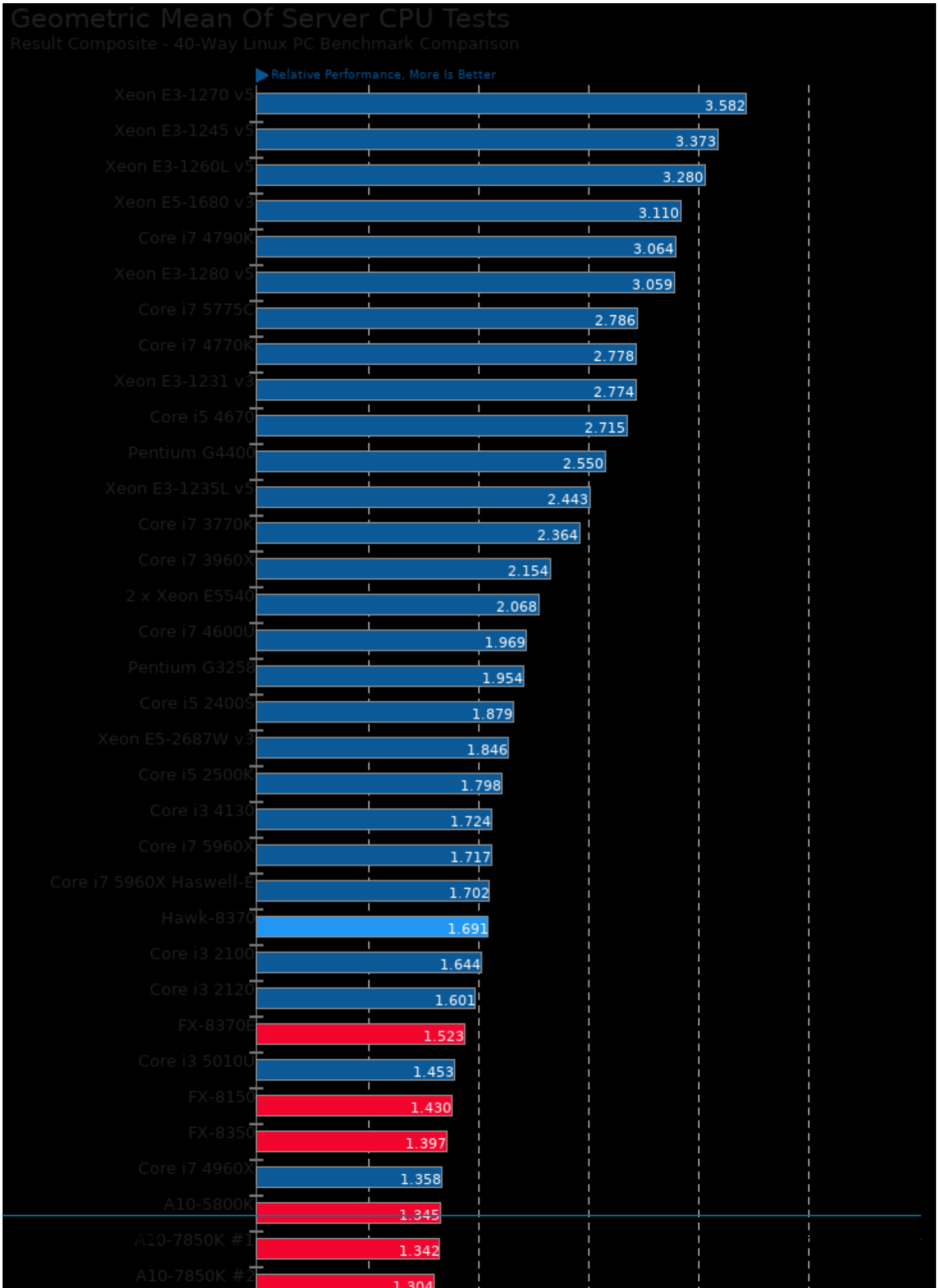
40-Way Linux PC Benchmark Comparison

Geometric mean based upon tests: pts/c-ray, pts/lammps, pts/build-linux-kernel and pts/pgbench


Geometric Mean Of Server Tests
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Xeon E3-1231 v3 6.312
Xeon E3-1280 v5 6.090
Xeon E3-1245 v5 6.017
Core i7 3960X 5.634
Pentium G4400 5.189
Xeon E3-1235L v5 4.854
Core i7 5775C 4.816
Core i7 3770K 4.467
Xeon E5-1680 v3 4.274
Core i7 4790K 4.201
Xeon E3-1260L v5 3.493
Core i3 5010U 3.248
Hawk-8370 3.217
Core i5 4670 3.017
Core i7 4770K 2.933
Xeon E3-1270 v5 2.891
Core i7 4600U 2.689
Core i3 4130 2.586
Xeon E5-2687W v3 2.532
A10-5800K 2.431
A10-7850K #2 2.332
A10-7870K 2.288
FX-8370E 2.266
A6-7400K 2.104
Pentium G3258 2.075
Core i7 5960X 1.995
Core i7 5960X Haswell-E 1.995
2 x Xeon E5540 1.934
FX-8150 1.912
Core i5 2400S 1.759
Core i5 2500K 1.695
FX-8370 1.678
FX-8350 1.641
Core i3 2120 1.614

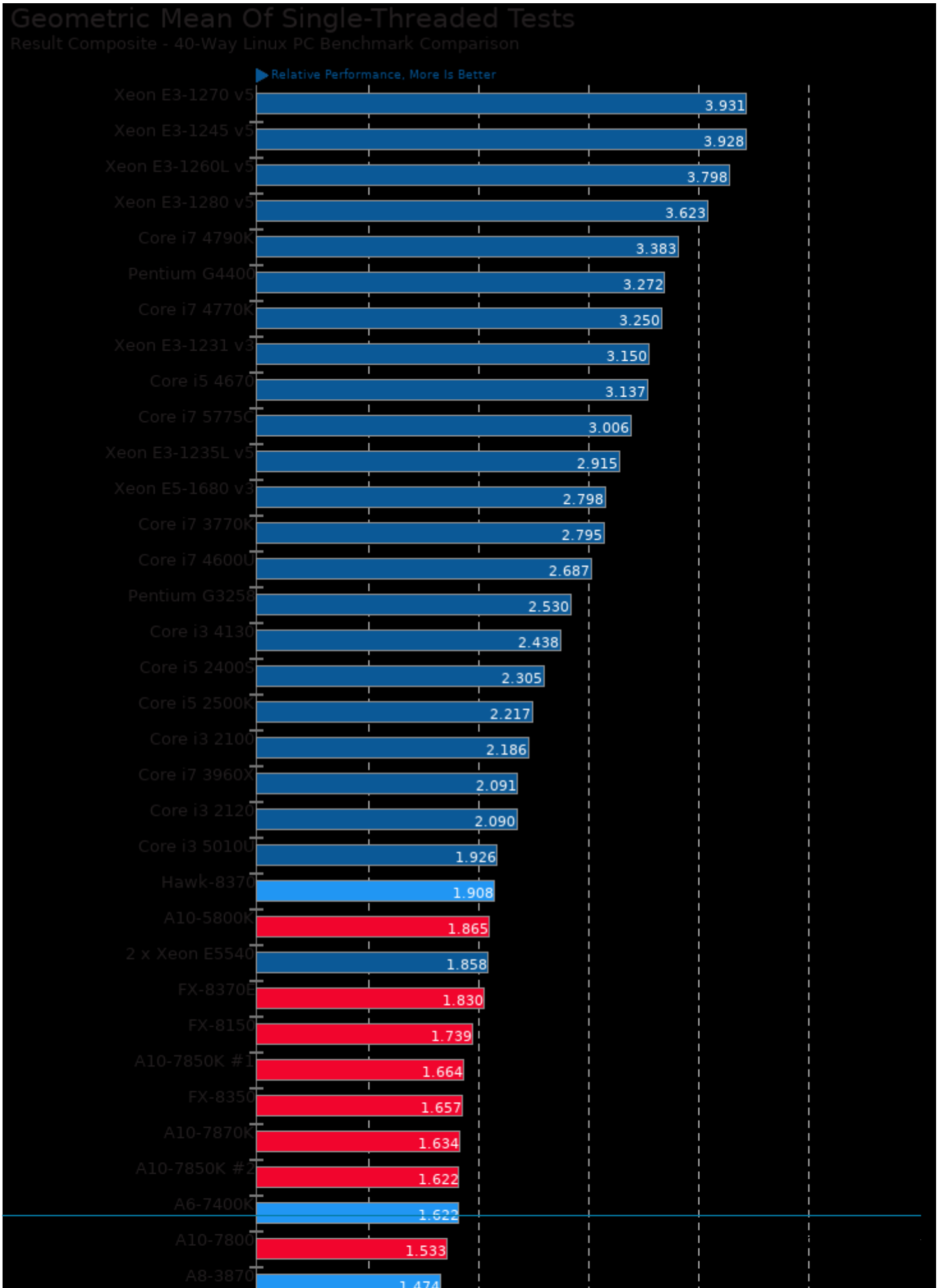
40-Way Linux PC Benchmark Comparison

Geometric mean based upon tests: pts/apache, pts/pgbench, pts/redis and pts/sqlite


Geometric Mean Of Server CPU Tests
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Xeon E3-1270 v5 3.582
Xeon E3-1245 v5 3.373
Xeon E3-1260L v5 3.280
Xeon E5-1680 v3 3.110
Core i7 4790K 3.064
Xeon E3-1280 v5 3.059
Core i7 5775C 2.786
Core i7 4770K 2.778
Xeon E3-1231 v3 2.774
Core i5 4670 2.715
Pentium G4400 2.550
Xeon E3-1235L v5 2.443
Core i7 3770K 2.364
Core i7 3960X 2.154
2 x Xeon E5540 2.068
Core i7 4600U 1.969
Pentium G3258 1.954
Core i5 2400S 1.879
Xeon E5-2687W v3 1.846
Core i5 2500K 1.798
Core i3 4130 1.724
Core i7 5960X 1.717
Core i7 5960X Haswell-E 1.702
Hawk-8370 1.691
Core i3 2100 1.644
Core i3 2120 1.601
FX-8370E 1.523
Core i3 5010U 1.453
FX-8150 1.430
FX-8350 1.397
Core i7 4960X 1.358
A10-5800K 1.345
A10-7850K #1 1.342
A10-7850K #2 1.304

40-Way Linux PC Benchmark Comparison

Geometric mean based upon tests: pts/himeno, pts/build-linux-kernel, pts/c-ray and pts/redis


Geometric Mean Of Single-Threaded Tests
Result Composite - 40-Way Linux PC Benchmark Comparison
Relative Performance, More Is Better
Xeon E3-1270 v5 3.931
Xeon E3-1245 v5 3.928
Xeon E3-1260L v5 3.798
Xeon E3-1280 v5 3.623
Core i7 4790K 3.383
Pentium G4400 3.272
Core i7 4770K 3.250
Xeon E3-1231 v3 3.150
Core i5 4670 3.137
Core i7 5775C 3.006
Xeon E3-1235L v5 2.915
Xeon E5-1680 v3 2.798
Core i7 3770K 2.795
Core i7 4600U 2.687
Pentium G3258 2.530
Core i3 4130 2.438
Core i5 2400S 2.305
Core i5 2500K 2.217
Core i3 2100 2.186
Core i7 3960X 2.091
Core i3 2120 2.090
Core i3 5010U 1.926
Hawk-8370 1.908
A10-5800K 1.865
2 x Xeon E5540 1.858
FX-8370E 1.830
FX-8150 1.739
A10-7850K #1 1.664
FX-8350 1.657
A10-7870K 1.634
A10-7850K #2 1.622
A6-7400K 1.622
A10-7800 1.533
A8-3870 1.474

40-Way Linux PC Benchmark Comparison

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

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 16:09.