



testserv

2 x Intel Xeon E5-2678 v3 testing with a HP ProLiant DL360 Gen9 (P89 BIOS) and Matrox MGA G200EH on Ubuntu 18.04 via the Phoronix Test Suite.

Test Systems:

DL380 G7 2x5670 8x4096MB DDR3-1333MT

Processor: 2 x Intel Xeon X5670 @ 2.93GHz (12 Cores), Motherboard: HP ProLiant DL380 G7 (P67 BIOS), Chipset: Intel 5520 I/O + ICH10, Memory: 8 x 4096 MB DDR3-1333MT/s, Disk: 2 x 512GB LOGICAL VOLUME, Graphics: AMD ES1000, Monitor: BenQ FP73G, Network: 4 x Broadcom NetXtreme II BCM5709

OS: Ubuntu 18.04, Kernel: 5.4.0-65-generic (x86_64), Display Server: X Server 1.20.8, Compiler: GCC 7.5.0, File-System: overlaysfs, Screen Resolution: 1024x768

Kernel Notes: Transparent Huge Pages: madvise

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++ --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: pcc-cpufreq performance - CPU Microcode: 0x1f
Security Notes: itlb_multihit: KVM: Mitigation of Split huge pages + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT disabled + mds: Vulnerable: Clear buffers attempted no microcode; SMT disabled + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW RSB filling + srbsds: Not affected + tsx_async_abort: Not affected
```

DL360p 2xE5-2690v1 8x16384MB DDR3-1333MT

Processor: 2 x Intel Xeon E5-2690 0 @ 2.90GHz (16 Cores), Motherboard: HP ProLiant DL360p Gen8 (P71 BIOS), Chipset: Intel Xeon E5/Core, Memory: 8 x 16384 MB DDR3-1333MT/s, Disk: 4 x 600GB HUC106060CSS600, Graphics: Matrox MGA G200EH, Monitor: BenQ FP73G, Network: 4 x Broadcom NetXtreme BCM5719 PCIe

OS: Ubuntu 18.04, Kernel: 5.4.0-80-generic (x86_64), Display Server: X Server 1.20.8, Compiler: GCC 7.5.0, File-System: overlayfs, Screen Resolution: 1280x1024

```
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++ --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 - CPU Microcode: 0x71a
Security Notes: itlb_multihit: KVM: Mitigation of Split huge pages + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT disabled + mds: Mitigation of Clear buffers; SMT disabled + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW RSB filling + srbsds: Not affected + tsx_async_abort: Not affected
```

DL360 Gen9 2xE5-2678v3 8x16384MB DDR4-2133MT

Processor: 2 x Intel Xeon E5-2678 v3 @ 3.30GHz (24 Cores), Motherboard: HP ProLiant DL360 Gen9 (P89 BIOS), Chipset: Intel Xeon E7 v3/Xeon, Memory: 8 x 16384 MB DDR4-2133MT/s 752369-081, Disk: 63GB, Graphics: Matrox MGA G200EH, Monitor: BenQ FP73G, Network: 4 x Broadcom NetXtreme BCM5719 PCIe

OS: Ubuntu 18.04, Kernel: 5.4.0-80-generic (x86_64), Display Server: X Server 1.20.8, Compiler: GCC 7.5.0, File-System: overlayfs, Screen Resolution: 1280x1024

```
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++ --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 - CPU Microcode: 0x46
Security Notes: itlb_multihit: KVM: Mitigation of Split huge pages + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT disabled + mds: Mitigation of Clear buffers; SMT disabled + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW RSB filling + srbsds: Not affected + tsx_async_abort: Not affected
```

	DL380 G7 2x5670 8x4096MB DDR3-1333MT	DL360p 2xE5-2690v1 8x16384MB DDR3-1333MT	DL360 Gen9 2xE5-2678v3 8x16384MB DDR4-2133MT
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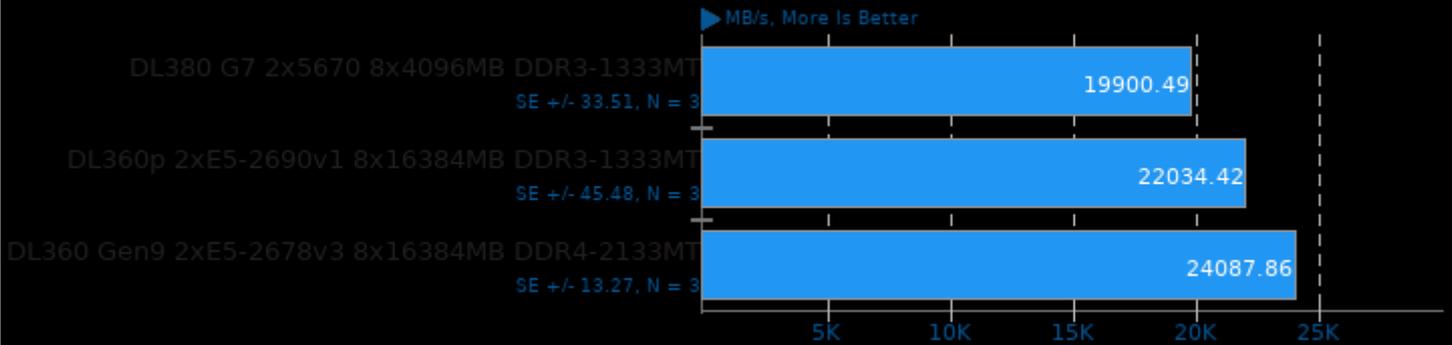
RAMspeed SMP - Add - Integer (MB/s)	1990	22034	24088
Normalized	82.62%	91.48%	100%
Standard Deviation	0.3%	0.4%	0.1%

RAMspeed SMP - Copy - Integer (MB/s)	17466	16967	20521
Normalized	85.11%	82.68%	100%
Standard Deviation	1%	0.1%	0.1%
RAMspeed SMP - Scale - Integer (MB/s)	17288	17168	20460
Normalized	84.5%	83.91%	100%
Standard Deviation	0.3%	0.1%	0.1%
RAMspeed SMP - Triad - Integer (MB/s)	19549	19456	22314
Normalized	87.61%	87.19%	100%
Standard Deviation	0.3%	0.2%	0.2%
RAMspeed SMP - Average - Integer (MB/s)	18510	18914	22002
Normalized	84.13%	85.96%	100%
Standard Deviation	0.3%	0.1%	0.1%
RAMspeed SMP - Add - Floating Point (MB/s)	19752	18253	23386
Normalized	84.46%	78.05%	100%
Standard Deviation	0.2%	0.4%	0.2%
RAMspeed SMP - Copy - Floating Point	17257	16907	20651
Normalized	83.57%	81.87%	100%
Standard Deviation	0.1%	0.1%	0%
RAMspeed SMP - Scale - Floating Point	17554	16798	20326
Normalized	86.36%	82.64%	100%
Standard Deviation	0.3%	0.1%	0.2%
RAMspeed SMP - Triad - Floating Point	19896	18227	23393
Normalized	85.05%	77.92%	100%
Standard Deviation	0.7%	0.1%	0%
RAMspeed SMP - Average - Floating Point (MB/s)	18094	17557	21920
Normalized	82.55%	80.1%	100%
Standard Deviation	0.6%	0%	0.1%
Stream - Copy (MB/s)	31305	53811	104426
Normalized	29.98%	51.53%	100%
Standard Deviation	0.1%	0.1%	1.2%
Stream - Scale (MB/s)	19270	45077	76243
Normalized	25.27%	59.12%	100%
Standard Deviation	0.3%	0.1%	1%
Stream - Triad (MB/s)	21179	50308	85502
Normalized	24.77%	58.84%	100%
Standard Deviation	0.1%	0.1%	0.8%
Stream - Add (MB/s)	21222	50371	85124
Normalized	24.93%	59.17%	100%
Standard Deviation	0.3%	0.1%	1.6%
CacheBench - Read (MB/s)	2534	2443	2775
Normalized	91.32%	88.04%	100%
Standard Deviation	0%	0%	0%
CacheBench - Write (MB/s)	12158	18318	21625
Normalized	56.22%	84.71%	100%
Standard Deviation	0%	0%	0%
CacheBench - R.M.W (MB/s)	24373	20759	35753
Normalized	68.17%	58.06%	100%
Standard Deviation	0.1%	0%	0%
Crafty - Elapsed Time (Nodes/s)	5406060	4786143	6180559
Normalized	87.47%	77.44%	100%
Standard Deviation	0.3%	0.1%	0.3%
John The Ripper - Blowfish (Real C/S)	10396	13577	19554
Normalized	53.17%	69.43%	100%
Standard Deviation	2%	0.1%	4.8%

John The Ripper - MD5 (Real C/S)	326255	604305	1439800
Normalized	22.66%	41.97%	100%
Standard Deviation	0.7%	0.8%	2.4%
7-Zip Compression - C.S.T (MIPS)	31644	45651	68995
Normalized	45.86%	66.17%	100%
Standard Deviation	1.2%	0.1%	1.6%
Timed PHP Compilation - Time To Compile (sec)	78.943	75.746	53.678
Normalized	68%	70.87%	100%
Standard Deviation	0.8%	0.1%	0.5%
Parallel BZIP2 Compression - 2.F.C (sec)	6.456	4.559	3.217
Normalized	49.83%	70.56%	100%
Standard Deviation	1.1%	0.3%	0.4%
Gzip Compression - L.S.T.A.T.t.g (sec)	46.407	50.982	43.341
Normalized	93.39%	85.01%	100%
Standard Deviation	0.2%	0.1%	0.5%
OpenSSL - R.4.b.P (Signs/sec)	830.6	1596	3107
Normalized	26.73%	51.36%	100%
Standard Deviation	0.3%	0%	0.2%
Apache Benchmark - S.W.P.S (Reqs/sec)	16021	15797	19388
Normalized	82.63%	81.48%	100%
Standard Deviation	0.8%	0.2%	1.9%

RAMspeed SMP 3.5.0

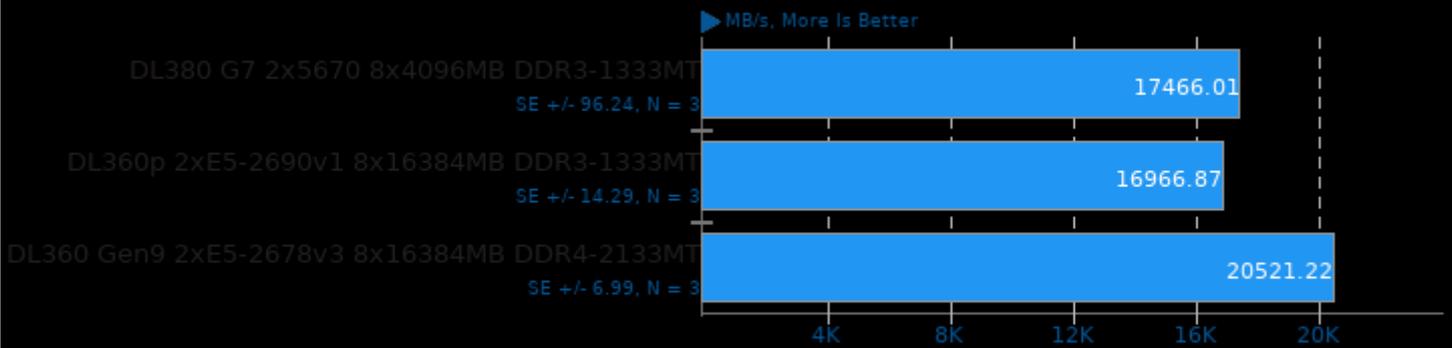
Type: Add - Benchmark: Integer



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

Type: Copy - Benchmark: Integer



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

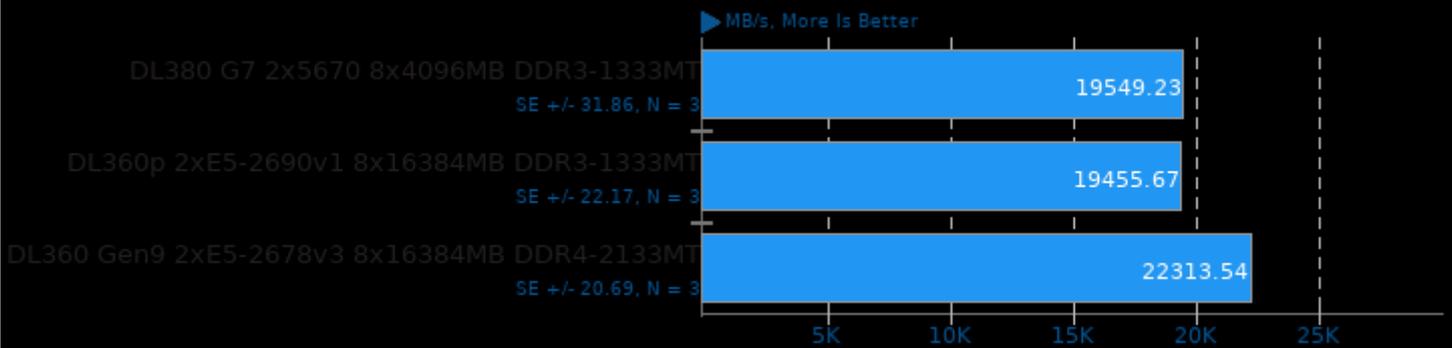
Type: Scale - Benchmark: Integer



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

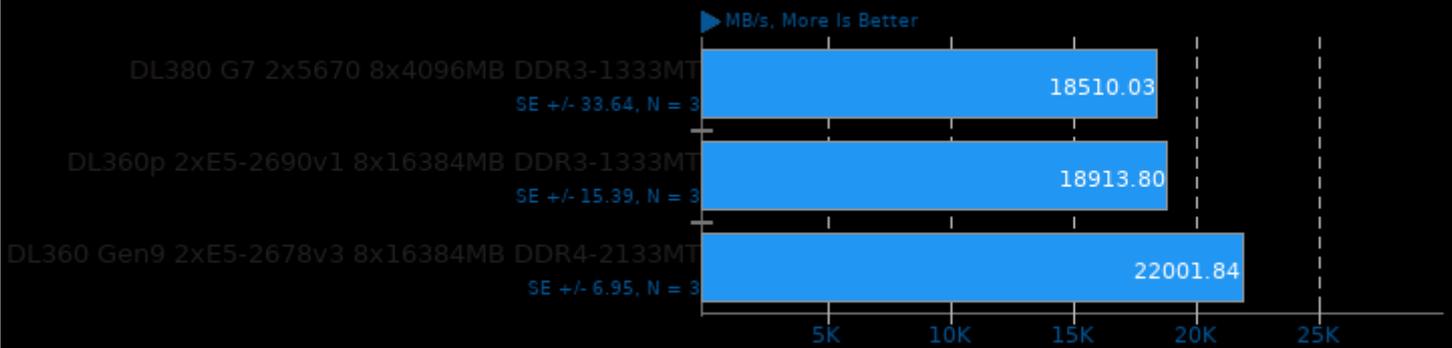
Type: Triad - Benchmark: Integer



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

Type: Average - Benchmark: Integer



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

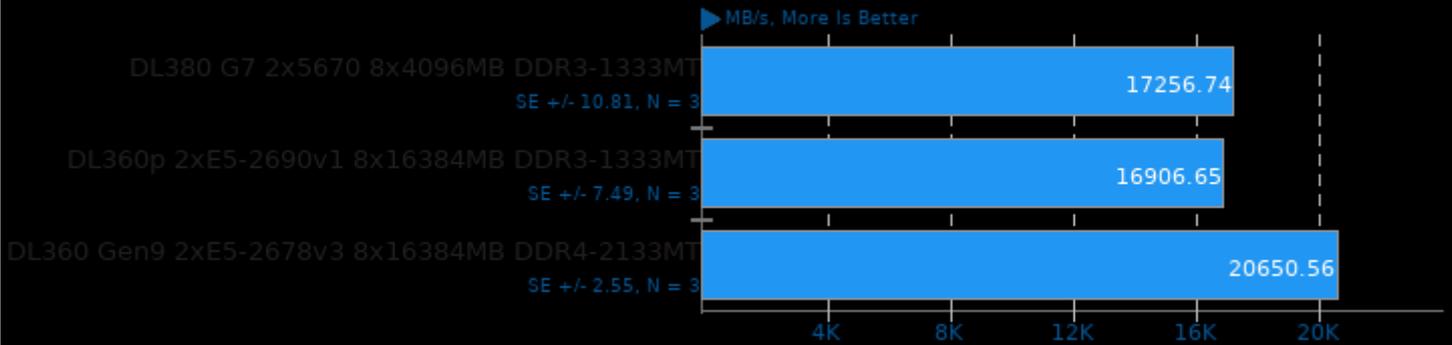
Type: Add - Benchmark: Floating Point



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

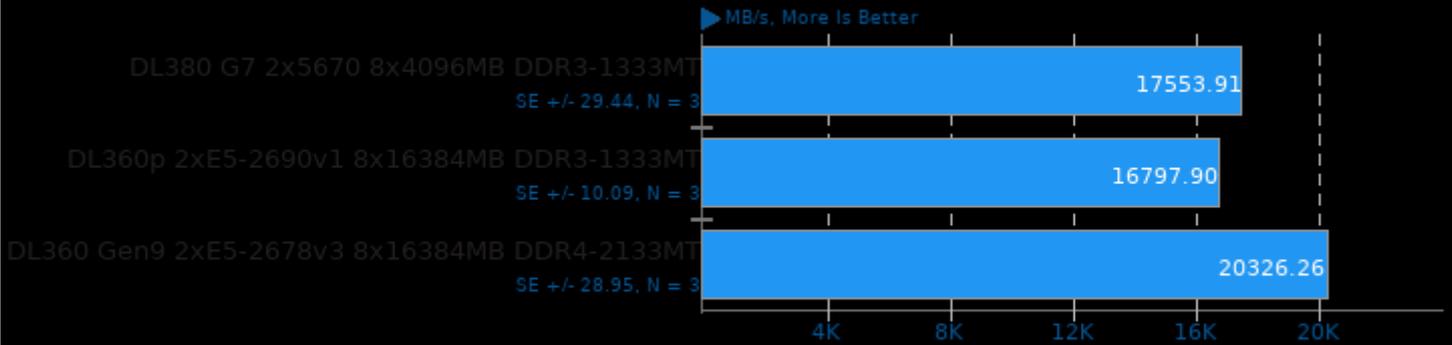
Type: Copy - Benchmark: Floating Point



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

Type: Scale - Benchmark: Floating Point



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

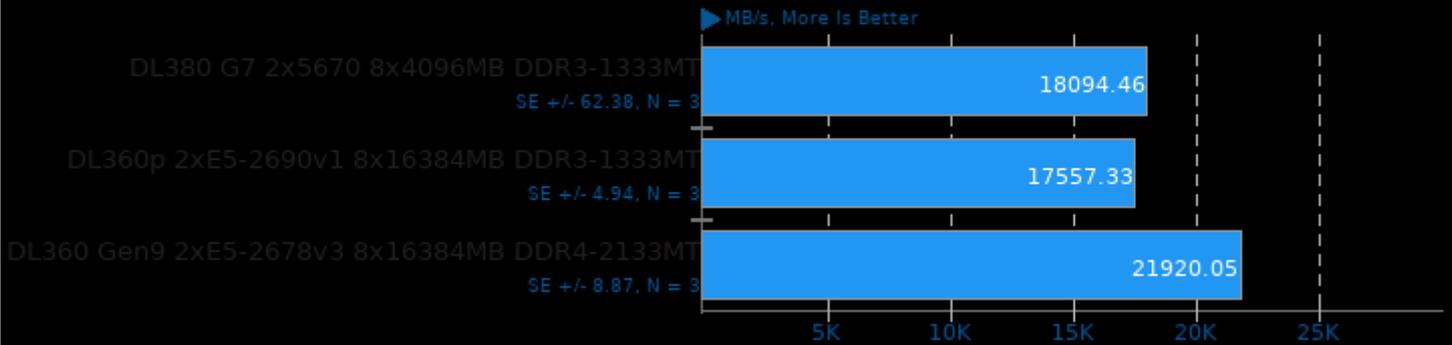
Type: Triad - Benchmark: Floating Point



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

Type: Average - Benchmark: Floating Point



1. (CC) gcc options: -O3 -march=native

Stream 2013-01-17

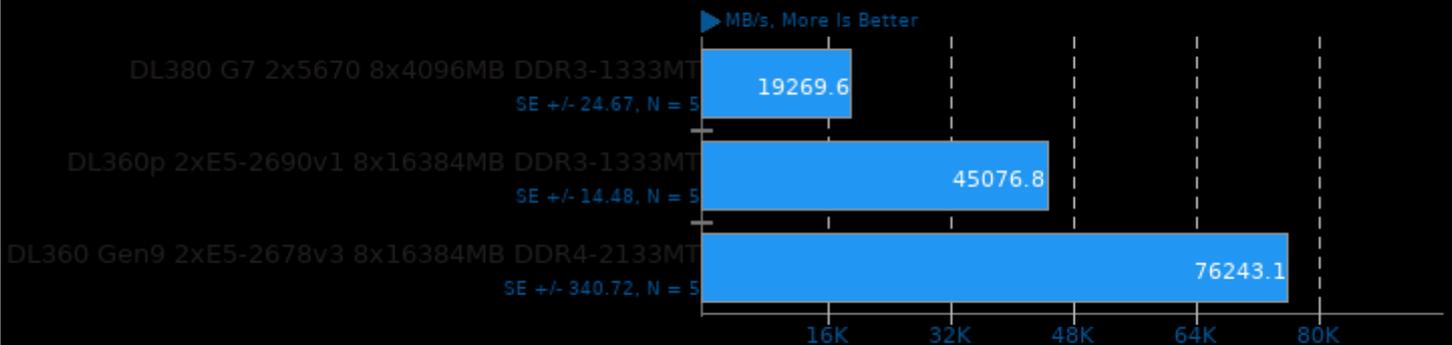
Type: Copy



1. (CC) gcc options: -O3 -march=native -fopenmp

Stream 2013-01-17

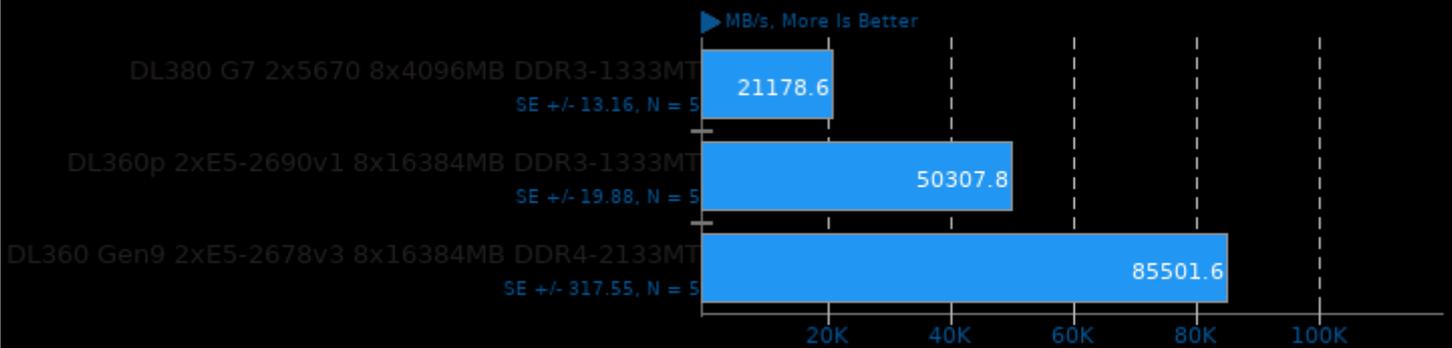
Type: Scale



1. (CC) gcc options: -O3 -march=native -fopenmp

Stream 2013-01-17

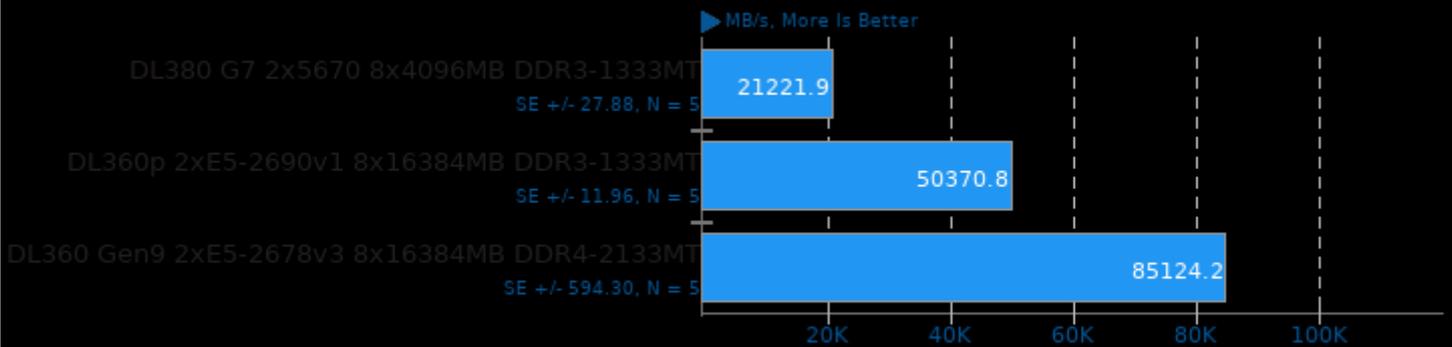
Type: Triad



1. (CC) gcc options: -O3 -march=native -fopenmp

Stream 2013-01-17

Type: Add



1. (CC) gcc options: -O3 -march=native -fopenmp

CacheBench

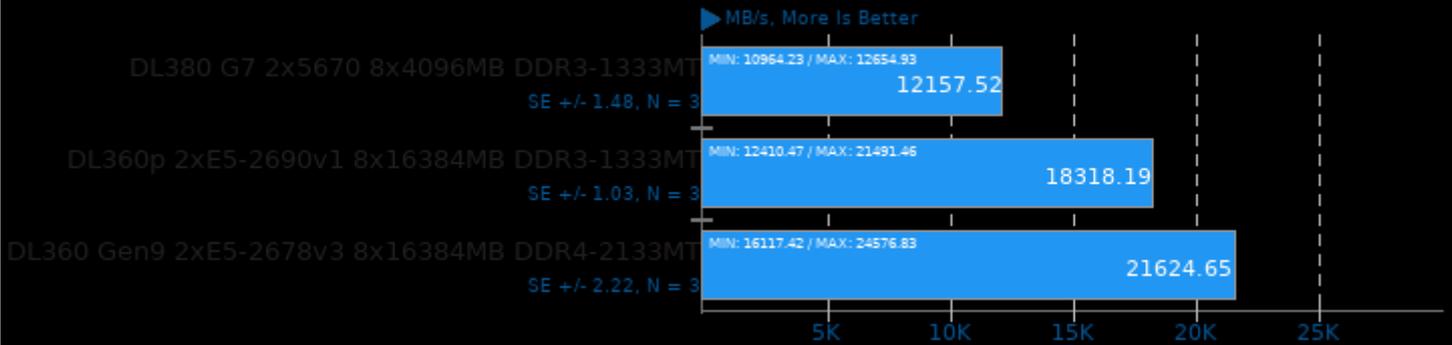
Test: Read



1. (CC) gcc options: -lrt

CacheBench

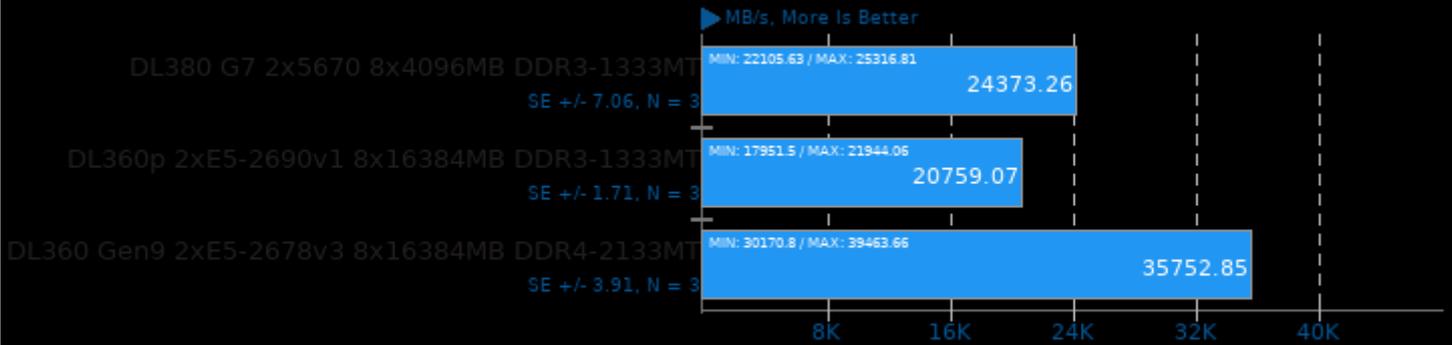
Test: Write



1. (CC) gcc options: -lrt

CacheBench

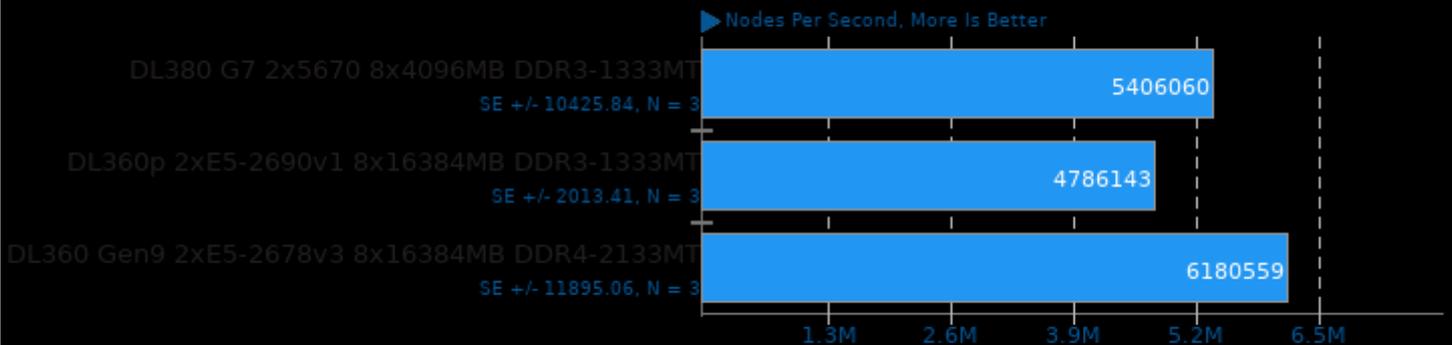
Test: Read / Modify / Write



1. (CC) gcc options: -lrt

Crafty 25.2

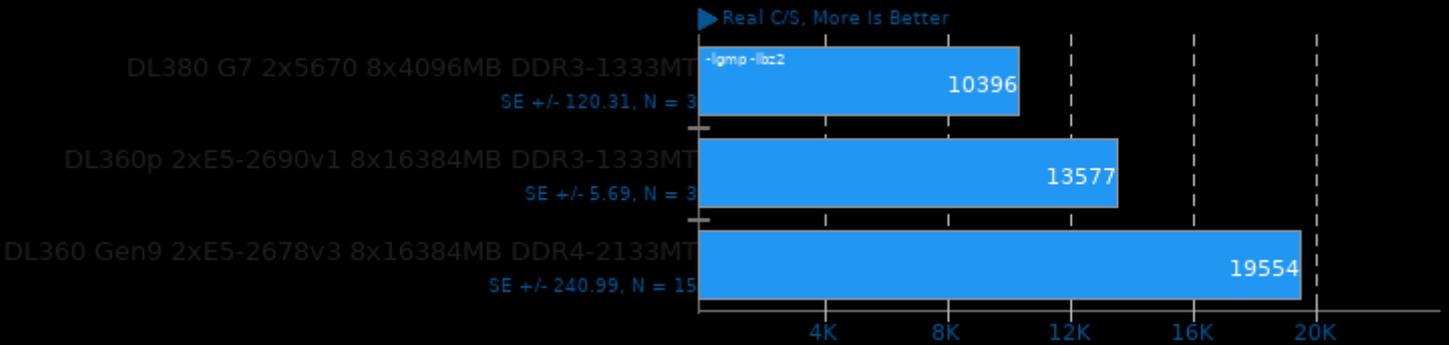
Elapsed Time



1. (CC) gcc options: -pthread -lstdc++ -fprofile-use -lm

John The Ripper 1.9.0-jumbo-1

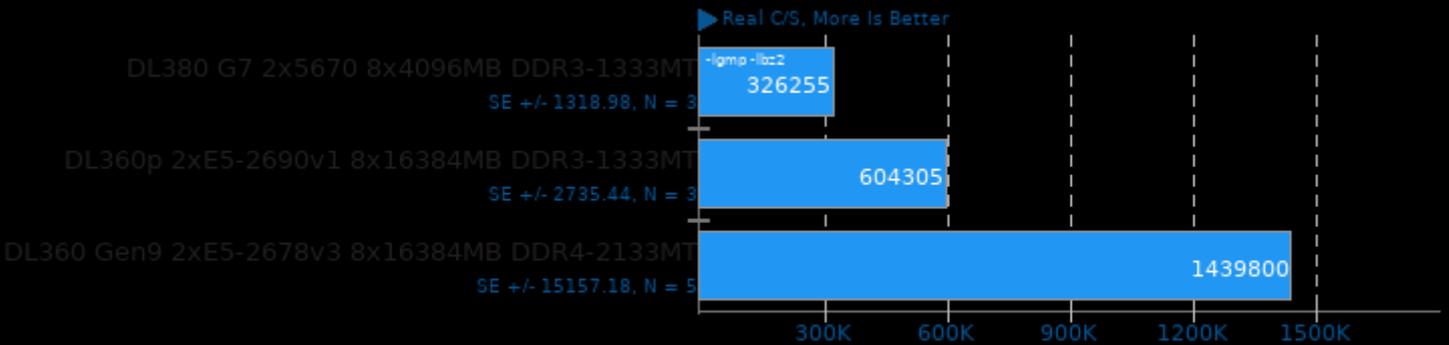
Test: Blowfish



1. (CC) gcc options: -m64 -lssl -lcrypto -fopenmp -pthread -lm -lz -ldl -lcrypt

John The Ripper 1.9.0-jumbo-1

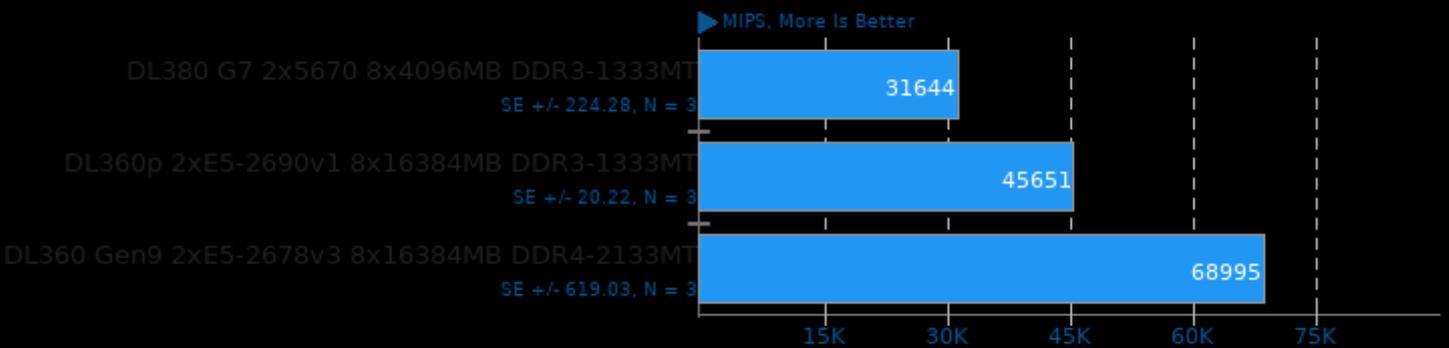
Test: MD5



1. (CC) gcc options: -m64 -lssl -lcrypto -fopenmp -pthread -lm -lz -ldl -lcrypt

7-Zip Compression 16.02

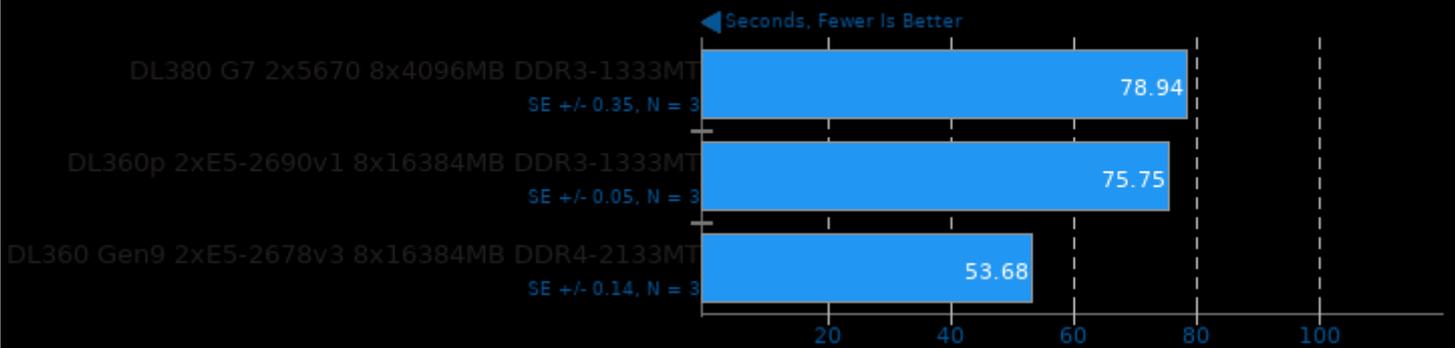
Compress Speed Test



1. (CXX) g++ options: -pipe -pthread

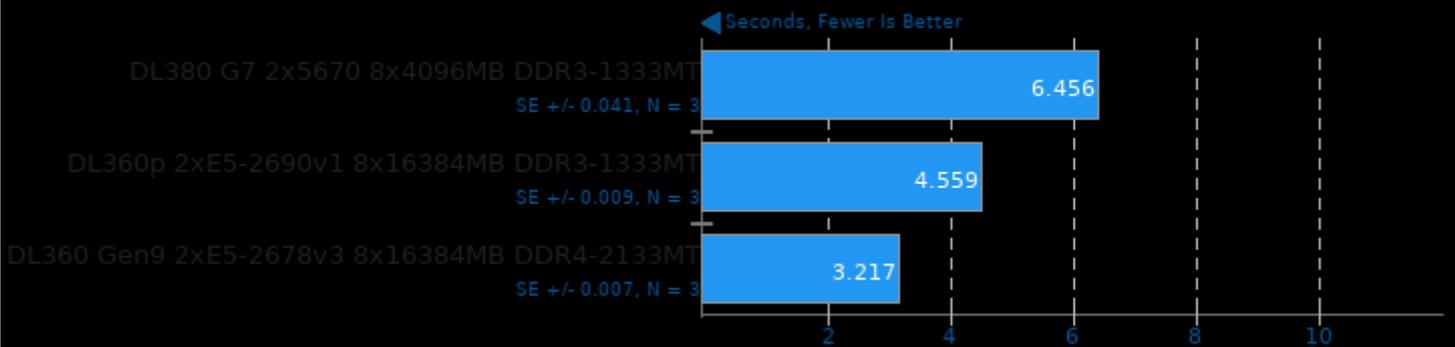
Timed PHP Compilation 7.4.2

Time To Compile



Parallel BZIP2 Compression 1.1.12

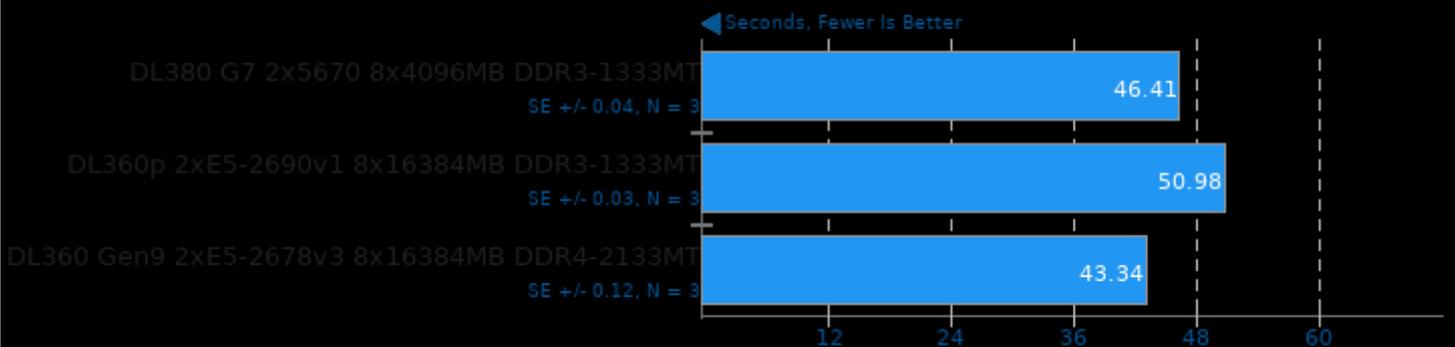
256MB File Compression



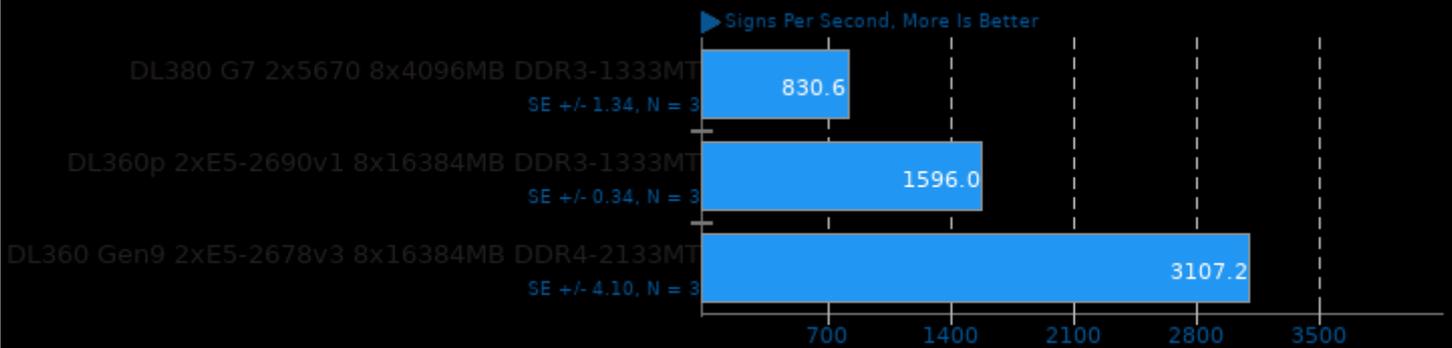
1. (CXX) g++ options: -O2 -pthread -lbz2 -lpthread

Gzip Compression

Linux Source Tree Archiving To .tar.gz



OpenSSL 1.1.1 RSA 4096-bit Performance



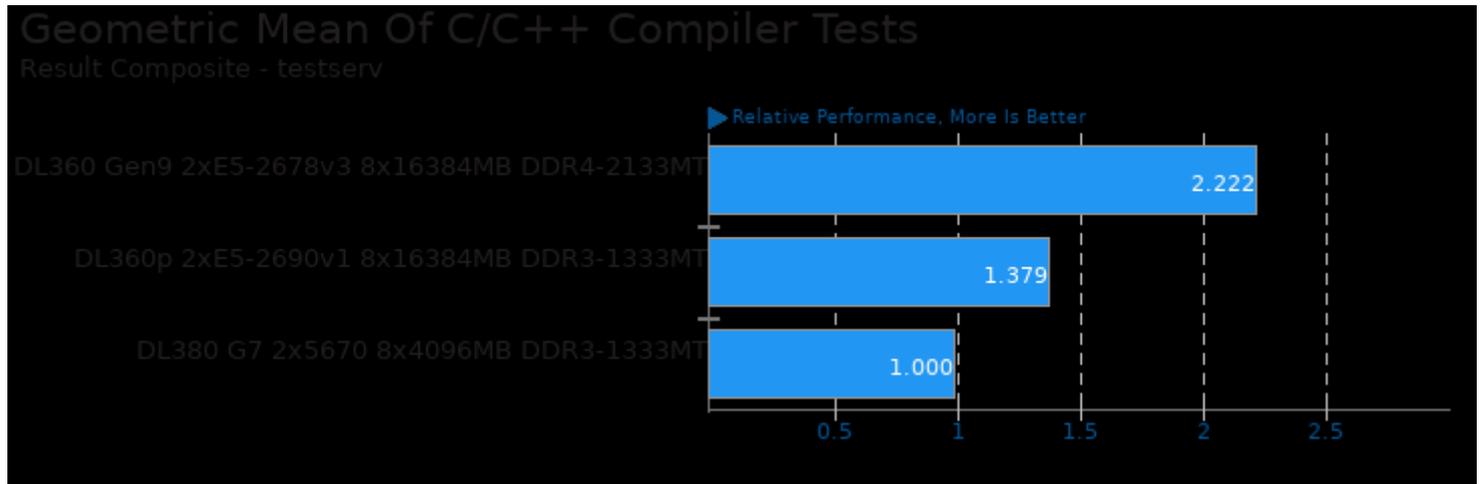
1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl

Apache Benchmark 2.4.29 Static Web Page Serving

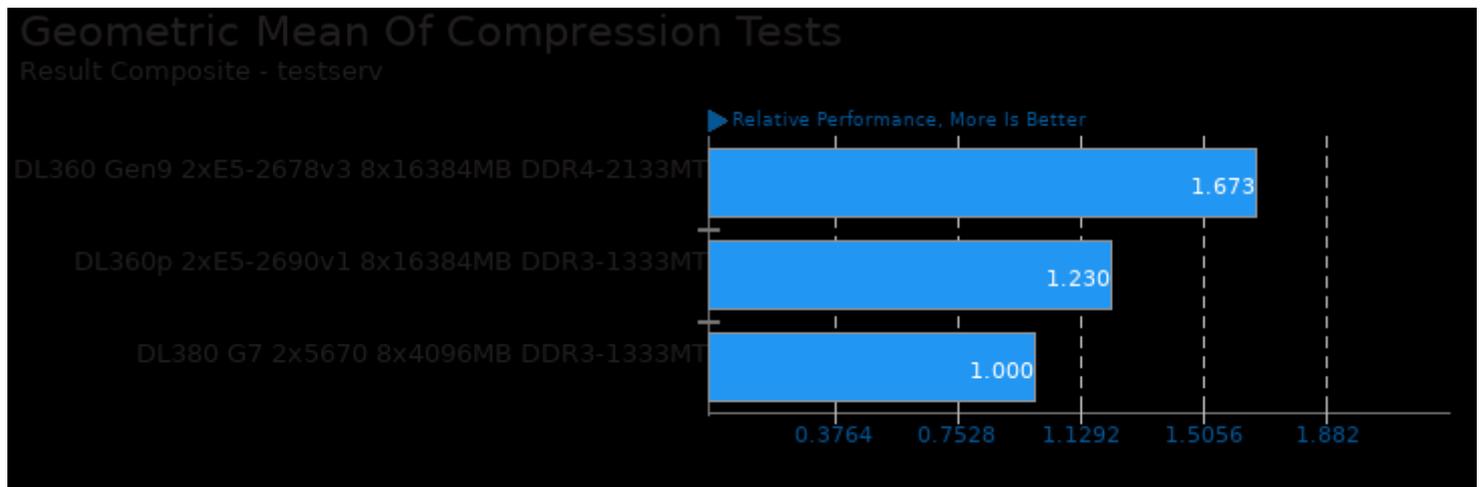


1. (CC) gcc options: -shared -fPIC -O2 -pthread

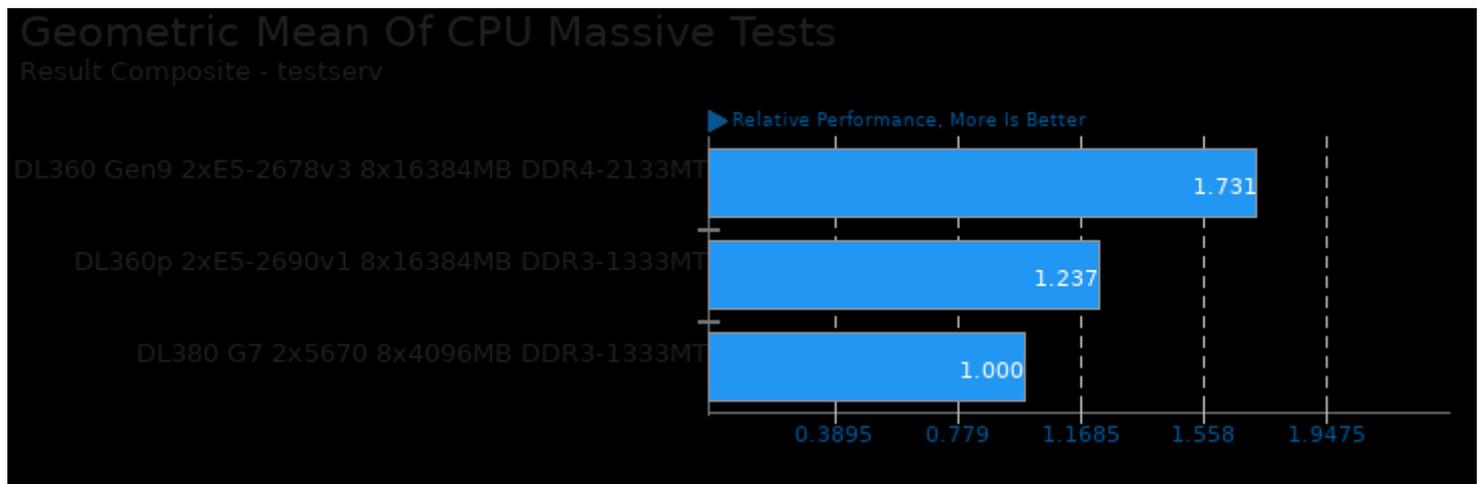
These geometric means are based upon test groupings / test suites for this result file.



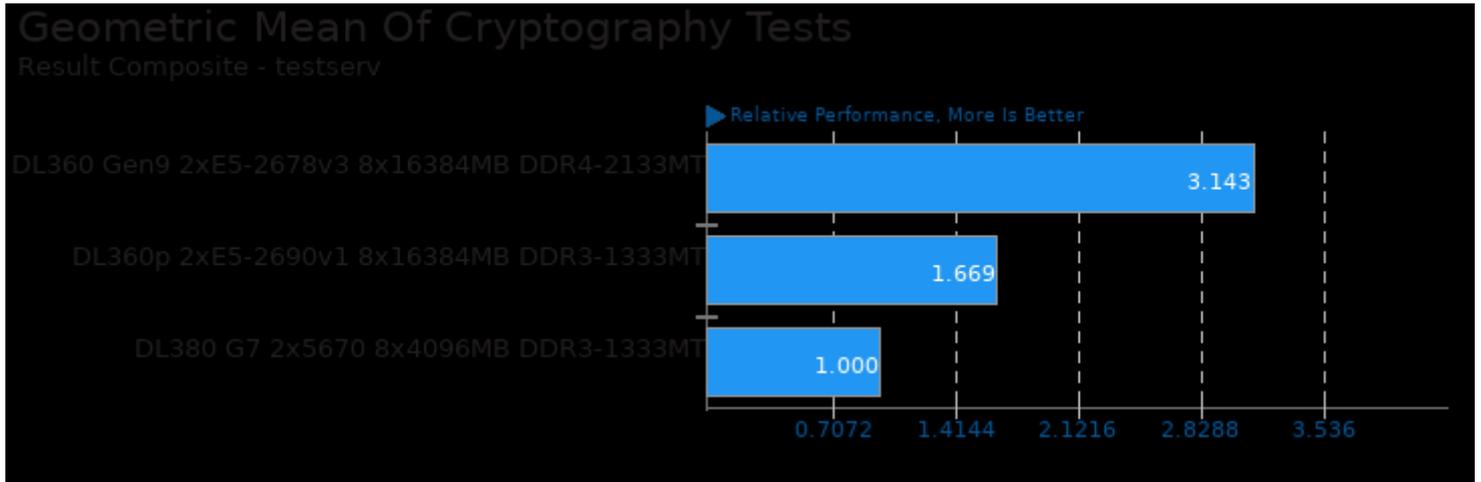
Geometric mean based upon tests: pts/build-php, pts/compress-7zip, pts/apache, pts/john-the-ripper and pts/openssl



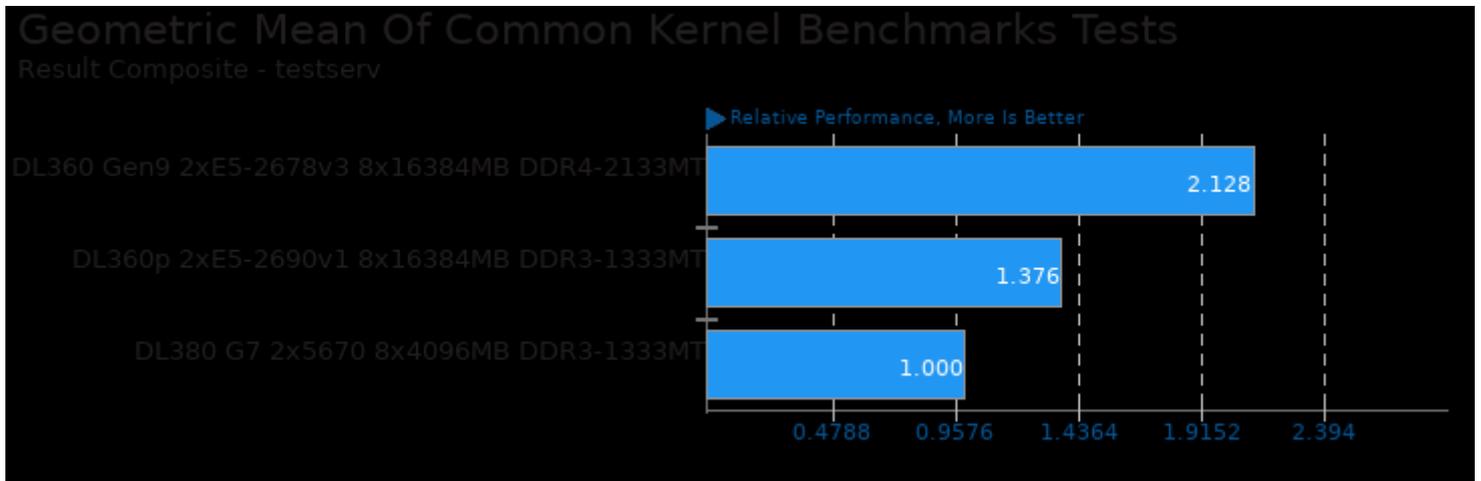
Geometric mean based upon tests: pts/compress-7zip, pts/compress-gzip and pts/compress-pbzip2



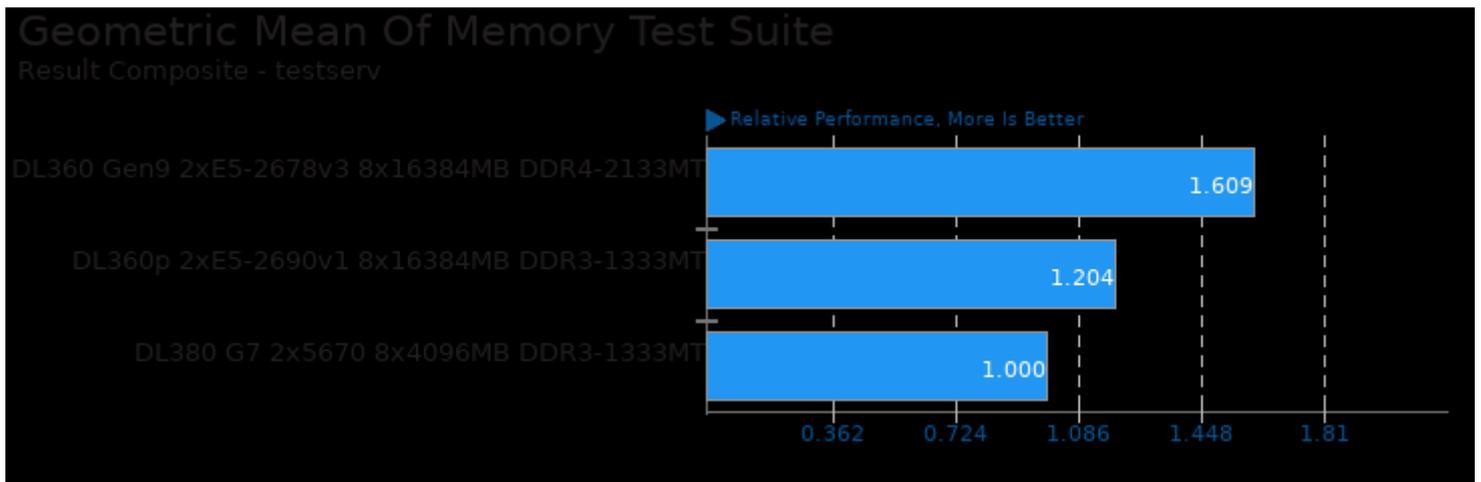
Geometric mean based upon tests: pts/apache, pts/build-php, pts/cachebench, pts/compress-7zip, pts/compress-pbzip2, pts/crafty, pts/john-the-ripper, pts/openssl, pts/ramspeed and pts/stream



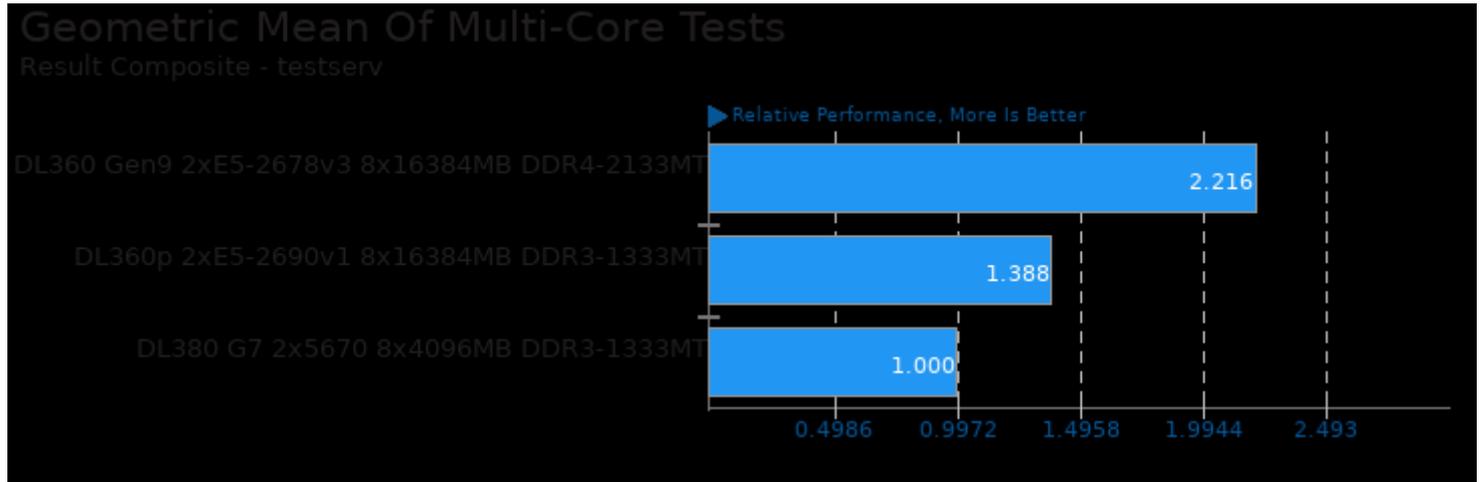
Geometric mean based upon tests: pts/openssl and pts/john-the-ripper



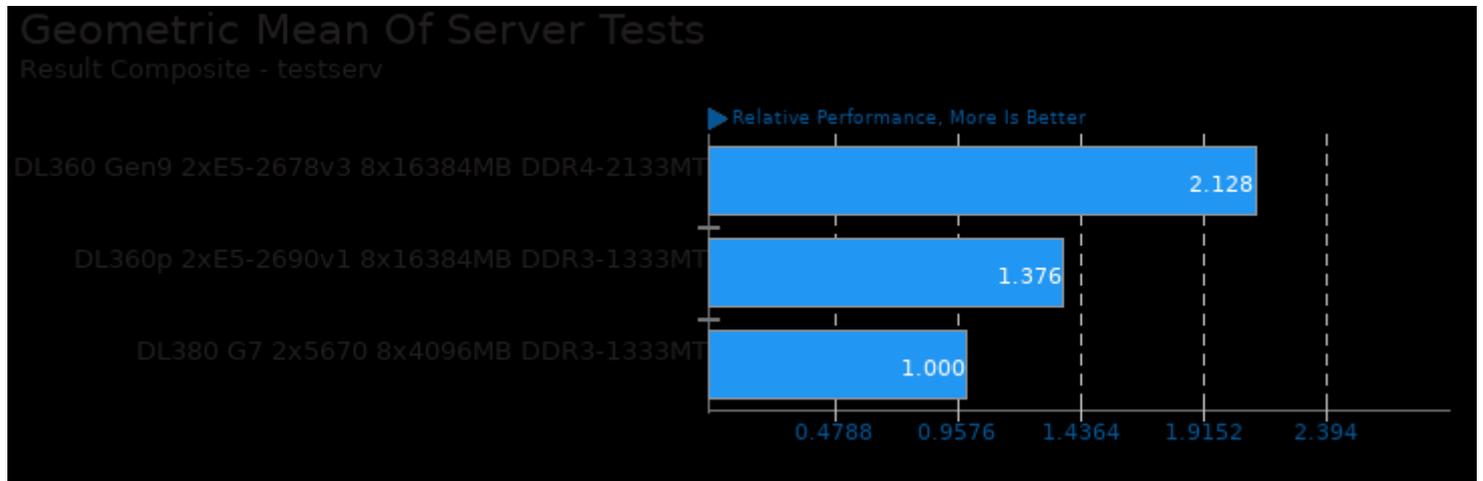
Geometric mean based upon tests: pts/apache and pts/openssl



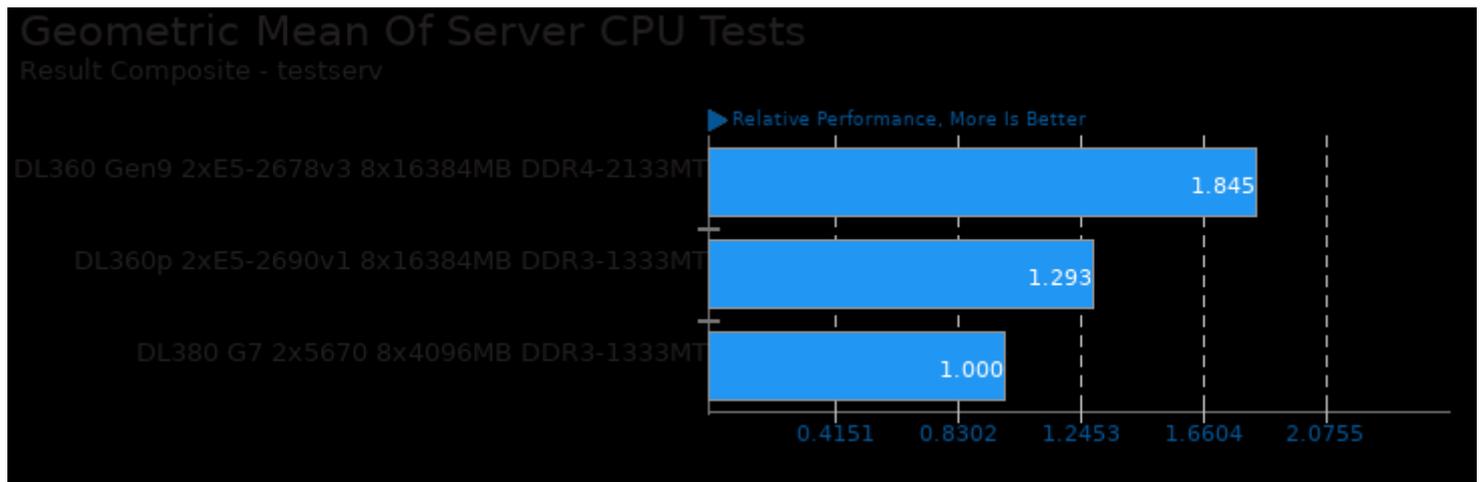
Geometric mean based upon tests: pts/ramspeed, pts/stream and pts/cachebench



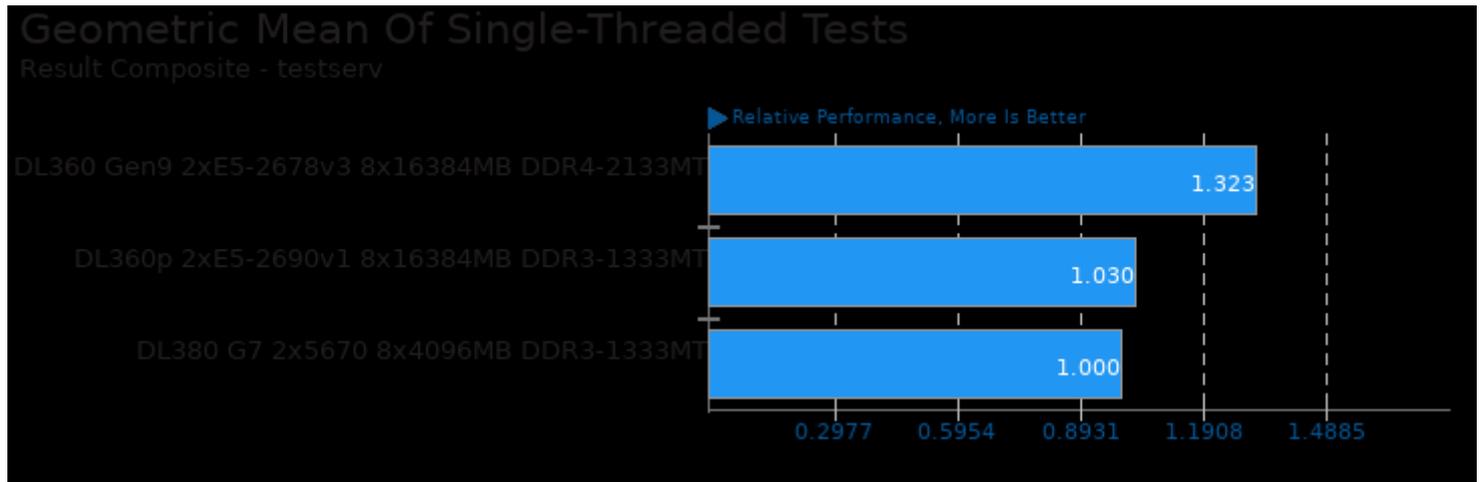
Geometric mean based upon tests: pts/john-the-ripper, pts/compress-7zip, pts/compress-pbzip2 and pts/build-php



Geometric mean based upon tests: pts/apache and pts/openssl



Geometric mean based upon tests: pts/john-the-ripper, pts/compress-7zip, pts/build-php, pts/openssl, pts/ramspeed and pts/stream



Geometric mean based upon tests: pts/cachebench and pts/compress-gzip

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 06:21.