



[www.phoronix-test-suite.com](http://www.phoronix-test-suite.com)

## HP DL380p Gen8 2x2690v1 256GB Ram

2 x Intel Xeon E5-2690 0 testing with a HP ProLiant DL380p Gen8 (P70 BIOS) and Matrox MGA G200EH on Ubuntu 18.04 via the Phoronix Test Suite.

### Test Systems:

#### HP DL380p Gen8 2x2690v1 256GB Ram

Processor: 2 x Intel Xeon E5-2690 0 @ 3.80GHz (16 Cores), Motherboard: HP ProLiant DL380p Gen8 (P70 BIOS), Chipset: Intel Xeon E5/Core, Memory: 16 x 16384 MB DDR3-1333MT/s, Disk: 126GB, Graphics: Matrox MGA G200EH, Monitor: BenQ FP73G, Network: 4 x Broadcom NetXtreme BCM5719 PCIe

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: 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

## HP DL380p Gen8 2x2690v1 256GB Ram

--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

Java Notes: OpenJDK Runtime Environment (build 11.0.11+9-Ubuntu-0ubuntu2.18.04)

Python Notes: Python 2.7.17 + Python 3.6.9

Security Notes: itlb\_multihit: KVM: Mitigation of Split huge pages + I1tf: 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 + srbds: Not affected + tsx\_async\_abort: Not affected

### HP DL380p Gen8 2x2690v1

#### 256GB Ram

|   |            |
|---|------------|
| <b>Numenta Anomaly Benchmark - Time To Completion (sec)</b> | 604.127    |
| Standard Deviation  | 2.8%       |
| <b>Timed GCC Compilation - Time To Compile (sec)</b>        | 1435       |
| Standard Deviation  | 0.3%       |
| <b>Renaissance - Savina Reactors.IO (ms)</b>                | 15952      |
| Standard Deviation  | 5.2%       |
| <b>Blender - Barbershop - CPU-Only (sec)</b>                | 870.34     |
| Standard Deviation  | 0.2%       |
| <b>Rodinia - OpenMP LavaMD (sec)</b>                        | 813.237    |
| Standard Deviation  | 0%         |
| <b>Blender - Classroom - CPU-Only (sec)</b>                 | 778.76     |
| Standard Deviation  | 0.4%       |
| <b>Kvazaar - Bosphorus 4K - Slow (FPS)</b>                  | 1.02       |
| Standard Deviation  | 0%         |
| <b>Kvazaar - Bosphorus 4K - Medium (FPS)</b>                | 1.03       |
| Standard Deviation  | 0.6%       |
| <b>Numpy Benchmark (Score)</b>                              | 209.81     |
| Standard Deviation  | 0.5%       |
| <b>Appleseed - Emily (sec)</b>                              | 555.129806 |
| <b>Blender - Fishy Cat - CPU-Only (sec)</b>                 | 340.56     |
| Standard Deviation  | 0.4%       |
| <b>Radiance Benchmark - Serial (sec)</b>                    | 1024       |
| <b>Renaissance - A.S.P (ms)</b>                             | 5762       |
| Standard Deviation  | 2.2%       |
| <b>Appleseed - Disney Material (sec)</b>                    | 342.704624 |
| <b>Blender - BMW27 - CPU-Only (sec)</b>                     | 203.65     |
| Standard Deviation  | 0.3%       |
| <b>Zstd Compression - 3 - D.S (MB/s)</b>                    | 2140       |
| Standard Deviation  | 0.4%       |
| <b>Zstd Compression - 3 - Compression Speed (MB/s)</b>      | 2130       |
| Standard Deviation  | 2.8%       |
| <b>Kvazaar - Bosphorus 4K - Very Fast (FPS)</b>             | 2.98       |
| Standard Deviation  | 0%         |
| <b>Scikit-Learn (sec)</b>                                   | 154.364    |
| Standard Deviation  | 0%         |
| <b>asmFish - 1.H.M.2.D (Nodes/s)</b>                        | 28078402   |
| Standard Deviation  | 0.5%       |
| <b>Kvazaar - Bosphorus 1080p - Slow (FPS)</b>               | 4.58       |
| Standard Deviation  | 0.2%       |
| <b>Kvazaar - Bosphorus 1080p - Medium (FPS)</b>             | 4.63       |

|  |         |                         |
|--|---------|-------------------------|
| <b>Renaissance - Scala Dotty (ms)</b>                              | 1541    | Standard Deviation 0.2% |
| <b>Radiance Benchmark - SMP Parallel (sec)</b>                     | 337.259 | Standard Deviation 0.5% |
| <b>Zstd Compression - 19, Long Mode - D.S (MB/s)</b>               | 1946    | Standard Deviation 3.6% |
| <b>Zstd Compression - 19, Long Mode - Compression Speed (MB/s)</b> | 32.0    | Standard Deviation 2.3% |
| <b>Hackbench - 32 - Process (sec)</b>                              | 109.775 | Standard Deviation 0.2% |
| <b>x265 - Bosphorus 4K (FPS)</b>                                   | 5.90    | Standard Deviation 0.9% |
| <b>DaCapo Benchmark - Tradebeans (msec)</b>                        | 8924    | Standard Deviation 0.4% |
| <b>Kvazaar - Bosphorus 4K - Ultra Fast (FPS)</b>                   | 6.17    | Standard Deviation 0.1% |
| <b>Timed Linux Kernel Compilation - Time To Compile (sec)</b>      | 93.784  | Standard Deviation 1.5% |
| <b>NAMD - ATPase Simulation - 327,506 Atoms (days/ns)</b>          | 1.69092 | Standard Deviation 1.3% |
| <b>C-Ray - Total Time - 4.1.R.P.P (sec)</b>                        | 91.025  | Standard Deviation 0.3% |
| <b>OpenCV Benchmark (sec)</b>                                      | 90.480  | Standard Deviation 0.1% |
| <b>Sysbench - CPU (Events/sec)</b>                                 | 15732   | Standard Deviation 0%   |
| <b>m-queens - Time To Solve (sec)</b>                              | 79.742  | Standard Deviation 0.1% |
| <b>RAMspeed SMP - Copy - Floating Point (MB/s)</b>                 | 25001   | Standard Deviation 0.2% |
| <b>RAMspeed SMP - Scale - Floating Point (MB/s)</b>                | 25174   | Standard Deviation 0.1% |
| <b>RAMspeed SMP - Average - Floating Point (MB/s)</b>              | 25159   | Standard Deviation 0.1% |
| <b>RAMspeed SMP - Add - Floating Point (MB/s)</b>                  | 25196   | Standard Deviation 0.3% |
| <b>RAMspeed SMP - Average - Integer (MB/s)</b>                     | 26646   | Standard Deviation 0.1% |
| <b>RAMspeed SMP - Copy - Integer (MB/s)</b>                        | 25010   | Standard Deviation 0.1% |
| <b>RAMspeed SMP - Add - Integer (MB/s)</b>                         | 28682   | Standard Deviation 0.2% |
| <b>RAMspeed SMP - Scale - Integer (MB/s)</b>                       | 25461   | Standard Deviation 0.9% |
| <b>Timed PHP Compilation - Time To Compile (sec)</b>               | 61.994  | Standard Deviation 0.2% |
| <b>Rust Mandelbrot - T.T.C.S.P.M (sec)</b>                         | 61.674  | Standard Deviation 0.3% |
| <b>Himeno Benchmark - P.P.S (MFLOPS)</b>                           | 2829    | Standard Deviation 0.3% |
| <b>NAS Parallel Benchmarks - LU.C (Mop/s)</b>                      | 35501   | Standard Deviation 0.7% |
| <b>POV-Ray - Trace Time (sec)</b>                                  | 53.326  |                         |

|   |            |                         |
|---|------------|-------------------------|
| <b>Kvazaar - Bosphorus 1080p - Very Fast (FPS)</b>                | 10.99      | Standard Deviation 1.3% |
| <b>Zstd Compression - 19 - D.S (MB/s)</b>                         | 1802       | Standard Deviation 0.1% |
| <b>Zstd Compression - 19 - Compression Speed (MB/s)</b>           | 33.0       | Standard Deviation 3.8% |
| <b>Zstd Compression - 3, Long Mode - D.S (MB/s)</b>               | 2293       | Standard Deviation 1.9% |
| <b>Zstd Compression - 3, Long Mode - Compression Speed (MB/s)</b> | 506.1      | Standard Deviation 2.5% |
| <b>GIMP - unsharp-mask (sec)</b>                                  | 49.226     | Standard Deviation 2.4% |
| <b>PHPBench - P.B.S (Score)</b>                                   | 440626     | Standard Deviation 0.6% |
| <b>Zstd Compression - 8 - D.S (MB/s)</b>                          | 2151       | Standard Deviation 0.4% |
| <b>Zstd Compression - 8 - Compression Speed (MB/s)</b>            | 699.6      | Standard Deviation 0.4% |
| <b>Stockfish - Total Time (Nodes/s)</b>                           | 21970290   | Standard Deviation 1.2% |
| <b>Zstd Compression - 8, Long Mode - D.S (MB/s)</b>               | 2320       | Standard Deviation 0.7% |
| <b>Zstd Compression - 8, Long Mode - Compression Speed (MB/s)</b> | 588.7      | Standard Deviation 0.3% |
| <b>7-Zip Compression - C.S.T (MIPS)</b>                           | 48438      | Standard Deviation 1.7% |
| <b>PyBench - T.F.A.T.T (Milliseconds)</b>                         | 1559       | Standard Deviation 0.2% |
| <b>Stream - Copy (MB/s)</b>                                       | 64340      | Standard Deviation 0.4% |
| <b>John The Ripper - Blowfish (Real C/S)</b>                      | 13526      | Standard Deviation 0.3% |
| <b>Stress-NG - CPU Stress (Bogo Ops/s)</b>                        | 4087       | Standard Deviation 1.8% |
| <b>Stress-NG - Crypto (Bogo Ops/s)</b>                            | 2025       | Standard Deviation 0.1% |
| <b>Kvazaar - Bosphorus 1080p - Ultra Fast (FPS)</b>               | 22.05      | Standard Deviation 0.5% |
| <b>GIMP - rotate (sec)</b>  | 25.914     | Standard Deviation 0.2% |
| <b>glibc bench - sin (nanoseconds)</b>                            | 46339      | Standard Deviation 0%   |
| <b>libjpeg-turbo tjbench - D.T (Megapixels/sec)</b>               | 127.336020 | Standard Deviation 0.2% |
| <b>glibc bench - cos (nanoseconds)</b>                            | 46254      | Standard Deviation 0.3% |
| <b>GIMP - auto-levels (sec)</b>                                   | 24.018     | Standard Deviation 0%   |
| <b>OpenSSL - R.4.b.P (Signs/sec)</b>                              | 1802       | Standard Deviation 0.1% |
| <b>Redis - SET (Req/sec)</b>                                      | 1277999    | Standard Deviation 0%   |
|   |            | Standard Deviation 1.5% |

**x265 - Bosphorus 1080p (FPS)** 34.99  
Standard Deviation 0.2%

**Redis - GET (Req/s/sec)** 1709321  
Standard Deviation 0.3%

**NAS Parallel Benchmarks - EP.C (Mop/s)** 626.66  
Standard Deviation 1.7%

**DaCapo Benchmark - Jython (msec)** 6576  
Standard Deviation 0.3%

**GIMP - resize (sec)** 11.704  
Standard Deviation 0.6%

**glibc bench - pthread\_once (nanoseconds)** 2.66250  
Standard Deviation 0.1%

**glibc bench - sqrt (nanoseconds)** 5.29693  
Standard Deviation 0%

**x264 - H.2.V.E (FPS)** 68.38  
Standard Deviation 0.2%

**ctx\_clock - C.S.T (Clocks)** 969  
Standard Deviation 0.1%

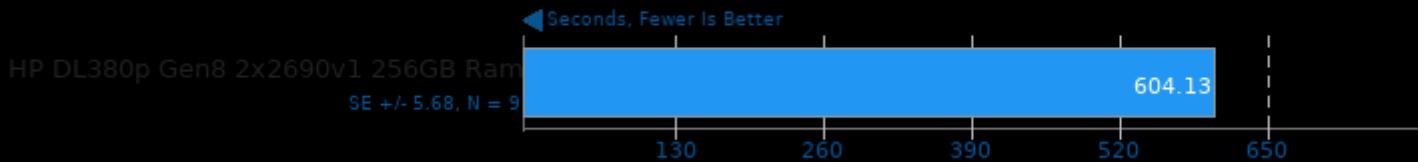
**Stream - Add (MB/s)** 52452  
Standard Deviation 1%

**Stream - Triad (MB/s)** 52678  
Standard Deviation 1%

**Stream - Scale (MB/s)** 47316  
Standard Deviation 0.8%

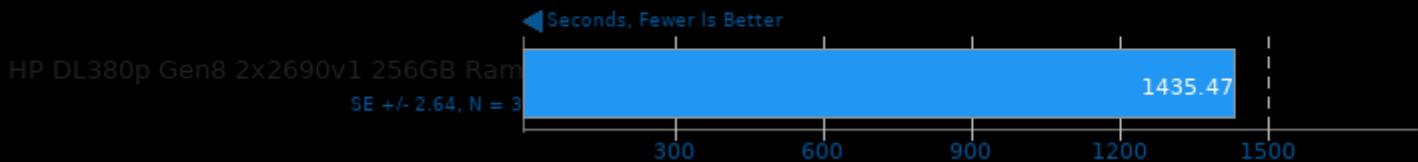
## Numenta Anomaly Benchmark 1.1

Time To Completion



## Timed GCC Compilation 9.3.0

Time To Compile



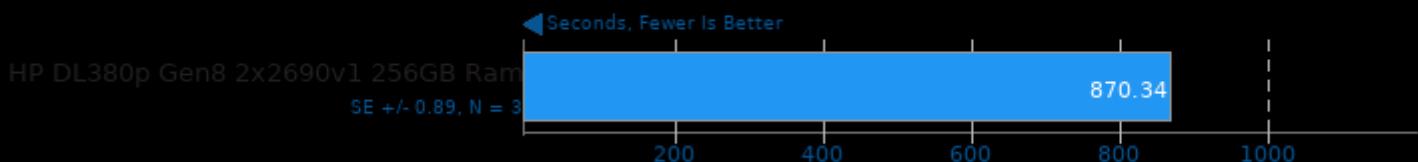
## Renaissance 0.12

Test: Savina Reactors.IO



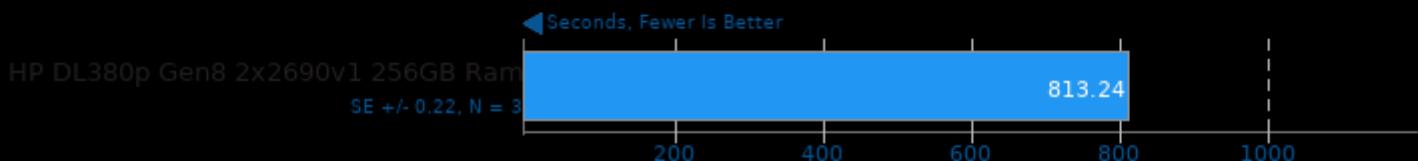
## Blender 2.92

Blend File: Barbershop - Compute: CPU-Only



## Rodinia 3.1

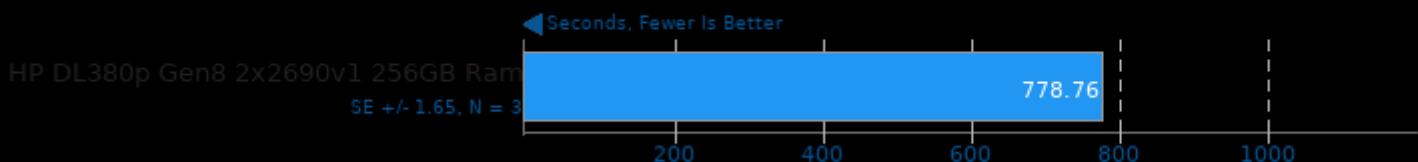
Test: OpenMP LavaMD



1. (CXX) g++ options: -O2 -fOpenCL

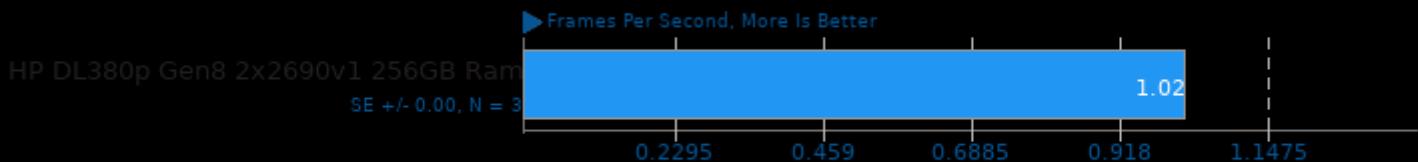
## Blender 2.92

Blend File: Classroom - Compute: CPU-Only



## Kvazaar 2.0

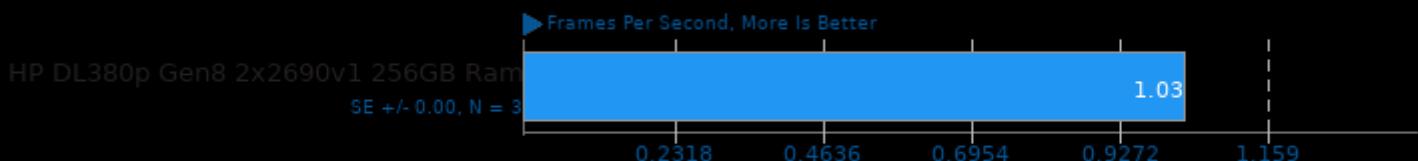
Video Input: Bosphorus 4K - Video Preset: Slow



1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

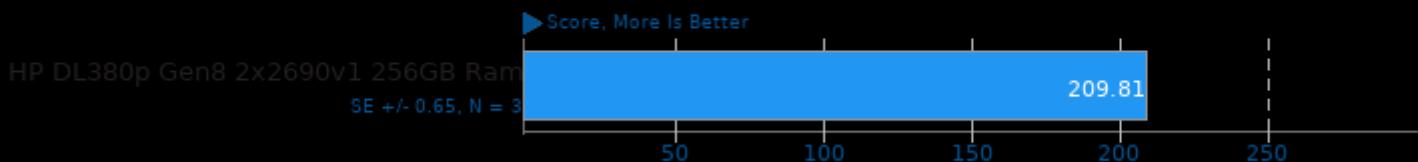
## Kvazaar 2.0

Video Input: Bosphorus 4K - Video Preset: Medium



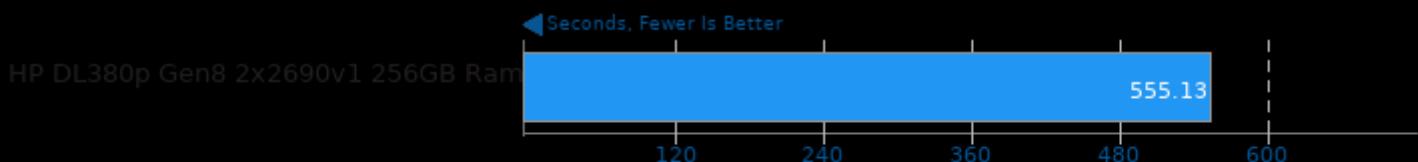
1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

## Numpy Benchmark



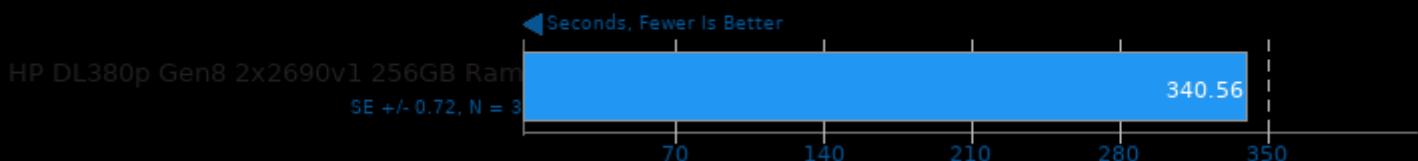
## Appleseed 2.0 Beta

Scene: Emily



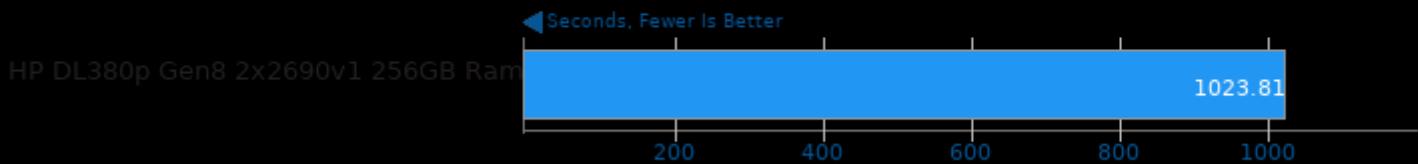
## Blender 2.92

Blend File: Fishy Cat - Compute: CPU-Only



## Radiance Benchmark 5.0

Test: Serial



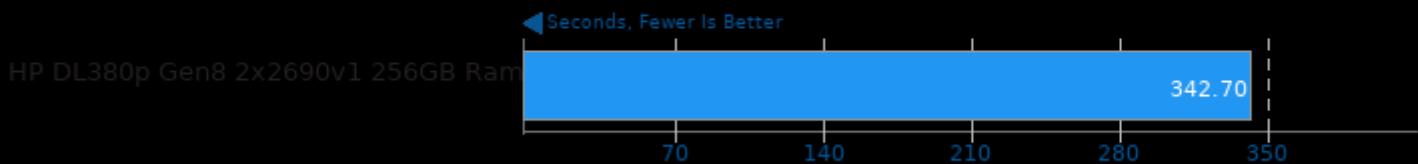
## Renaissance 0.12

Test: Apache Spark PageRank



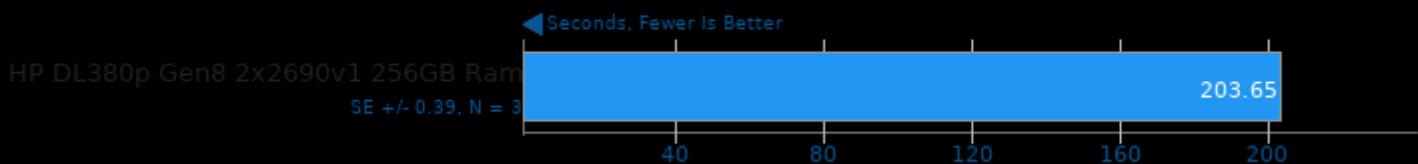
## Appleseed 2.0 Beta

Scene: Disney Material



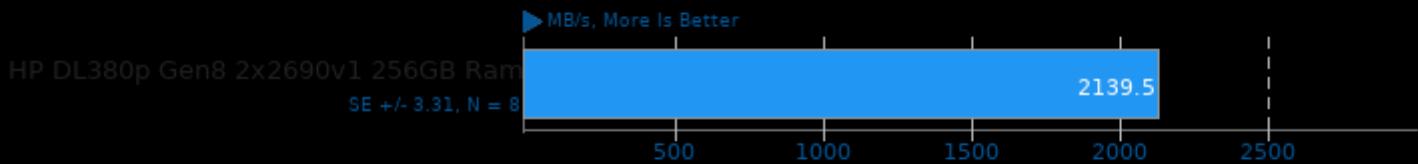
## Blender 2.92

Blend File: BMW27 - Compute: CPU-Only



## Zstd Compression 1.5.0

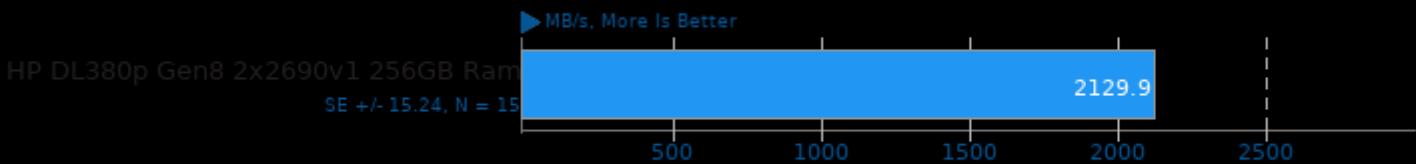
Compression Level: 3 - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma

## Zstd Compression 1.5.0

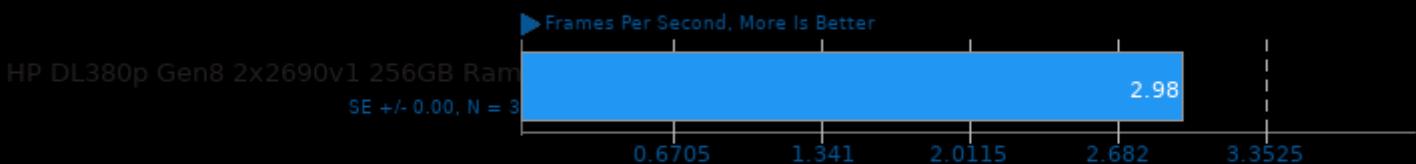
Compression Level: 3 - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma

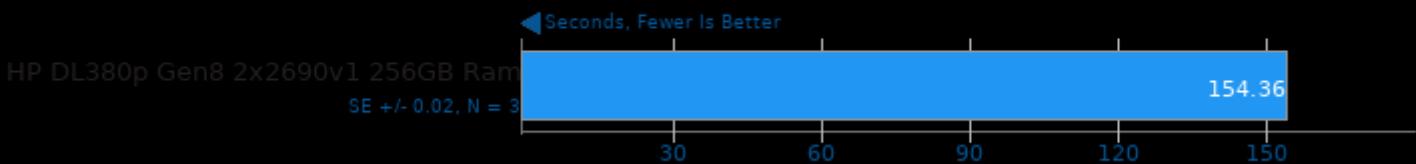
## Kvazaar 2.0

Video Input: Bosphorus 4K - Video Preset: Very Fast



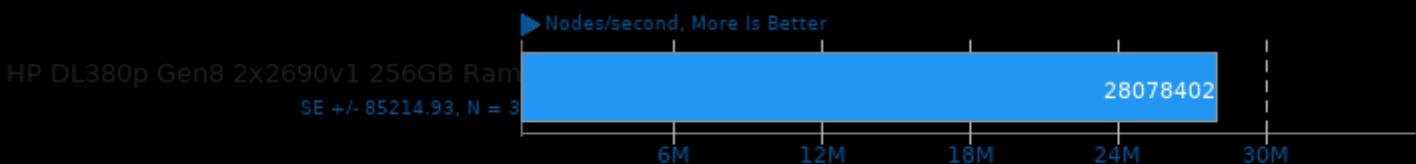
1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

## Scikit-Learn 0.22.1



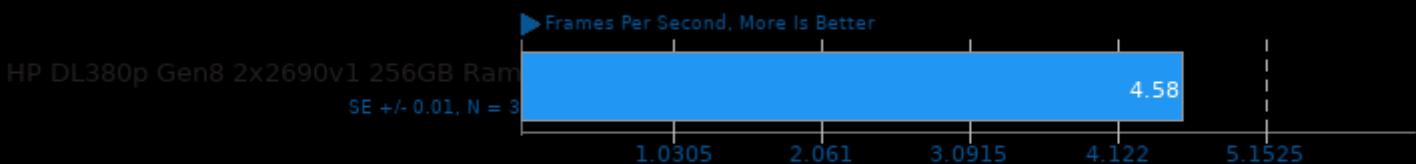
## asmFish 2018-07-23

1024 Hash Memory, 26 Depth



## Kvazaar 2.0

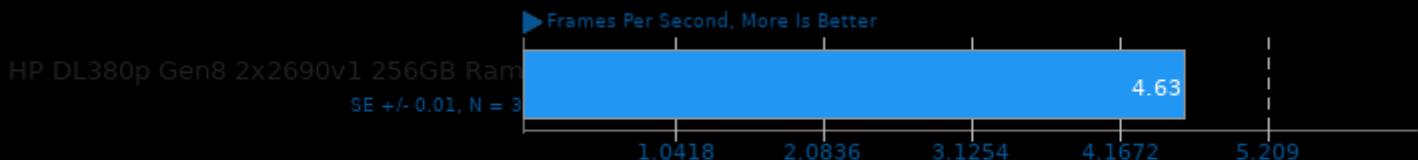
Video Input: Bosphorus 1080p - Video Preset: Slow



1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

## Kvazaar 2.0

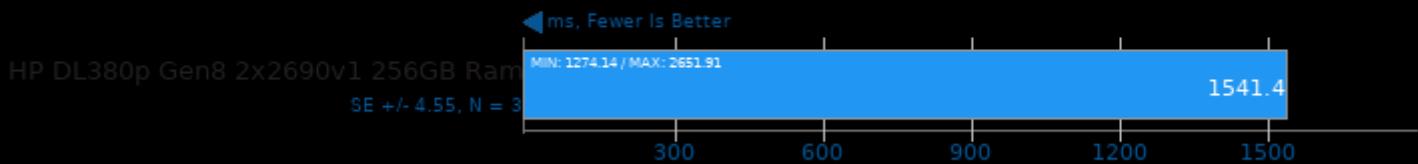
Video Input: Bosphorus 1080p - Video Preset: Medium



1. (CC) gcc options: -pthread -fno-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

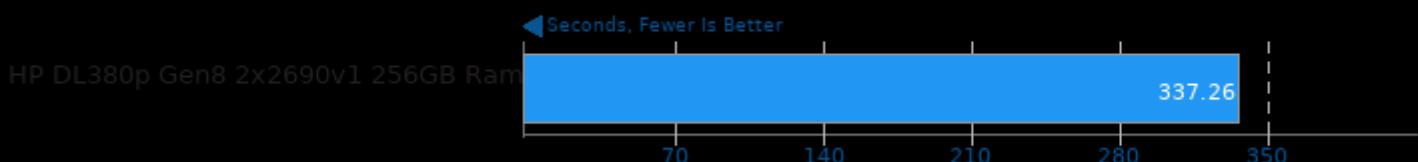
## Renaissance 0.12

Test: Scala Dotty



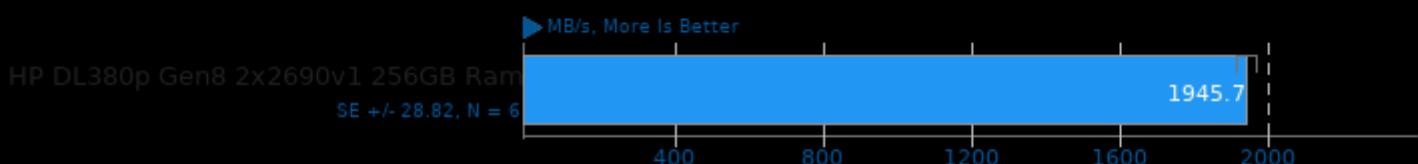
## Radiance Benchmark 5.0

Test: SMP Parallel



## Zstd Compression 1.5.0

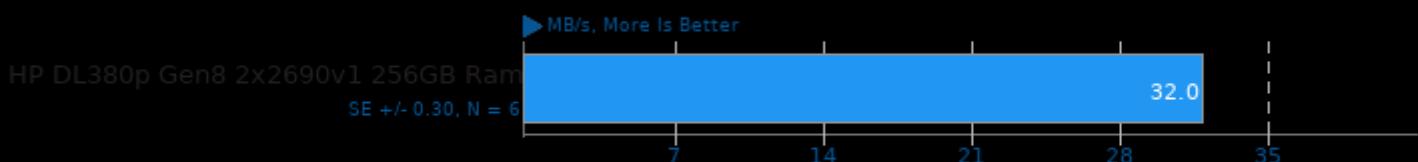
Compression Level: 19, Long Mode - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -lizma

## Zstd Compression 1.5.0

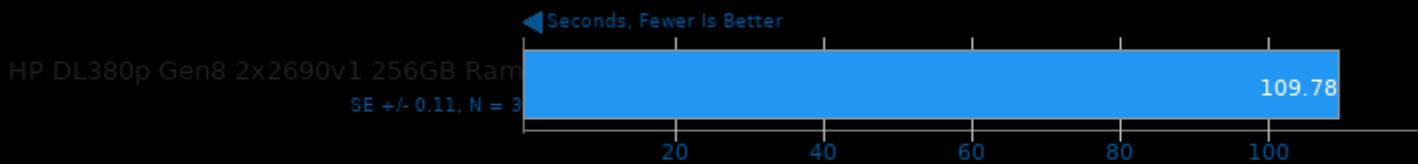
Compression Level: 19, Long Mode - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -lizma

## Hackbench

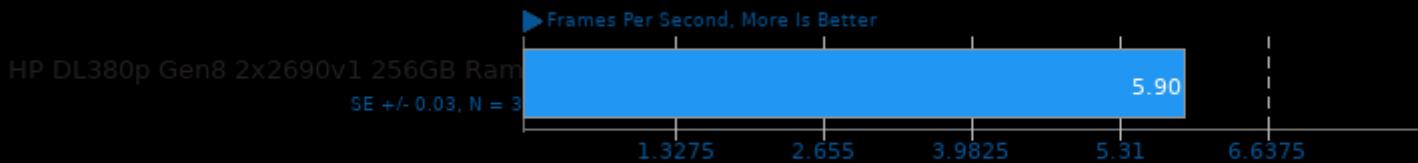
Count: 32 - Type: Process



1. (CC) gcc options: -lpthread

## x265 3.4

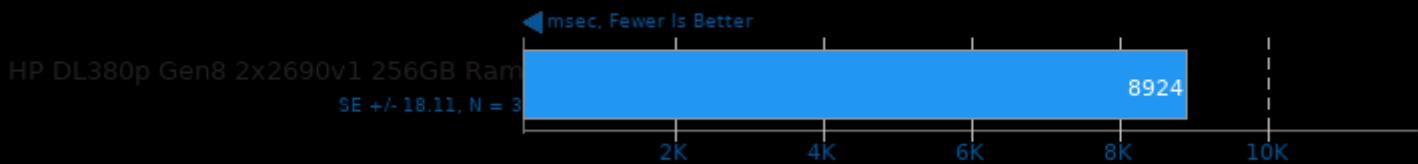
Video Input: Bosphorus 4K



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

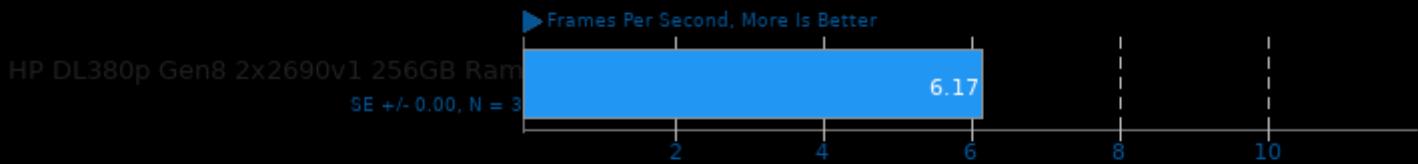
## DaCapo Benchmark 9.12-MR1

Java Test: Tradebeans



## Kvazaar 2.0

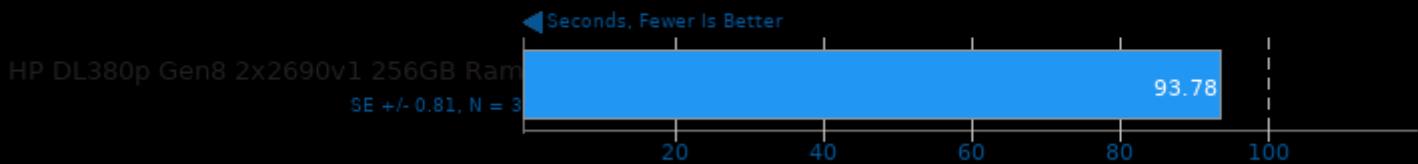
Video Input: Bosphorus 4K - Video Preset: Ultra Fast



1. (CC) gcc options: -pthread -ftree-vectorize -visibility=hidden -O2 -lpthread -lm -lrt

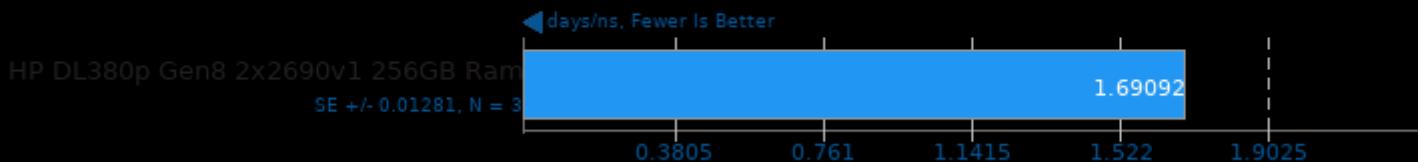
## Timed Linux Kernel Compilation 5.10.20

Time To Compile



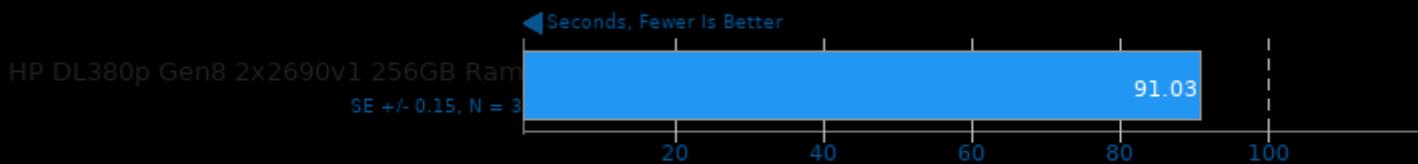
## NAMD 2.14

ATPase Simulation - 327,506 Atoms



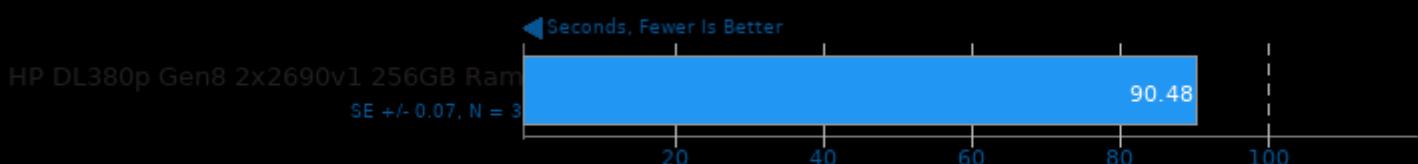
## C-Ray 1.1

Total Time - 4K, 16 Rays Per Pixel



1. (CC) gcc options: -lm -lpthread -O3

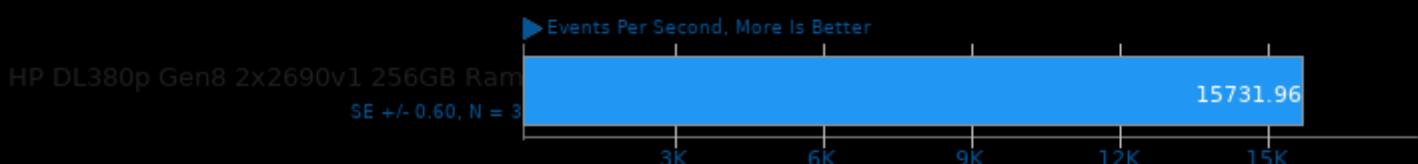
## OpenCV Benchmark 3.3.0



1. (CXX) g++ options: -std=c++11 -rdynamic

## Sysbench 1.0.20

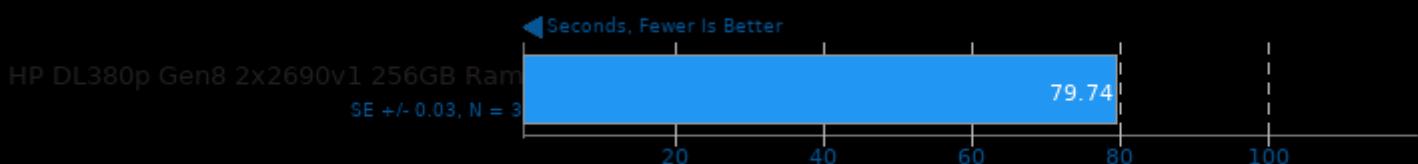
Test: CPU



1. (CC) gcc options: -pthread -O2 -funroll-loops -rdynamic -ldl -laio -lm

## m-queens 1.2

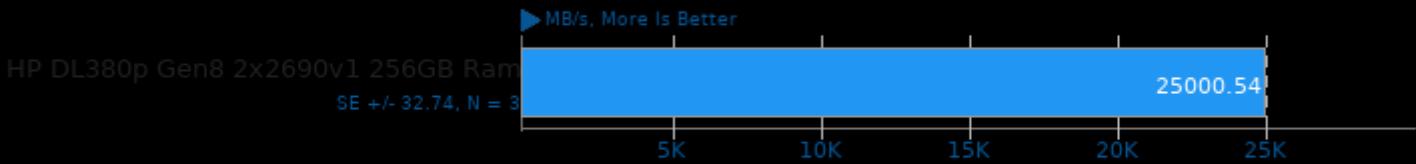
Time To Solve



1. (CXX) g++ options: -fopenmp -O2 -march=native

**RAMspeed SMP 3.5.0**

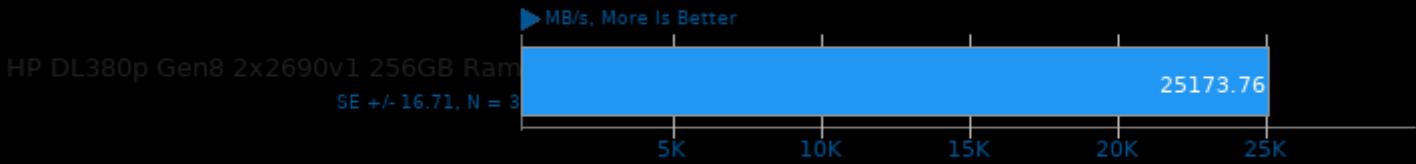
Type: Copy - Benchmark: Floating Point



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

**RAMspeed SMP 3.5.0**

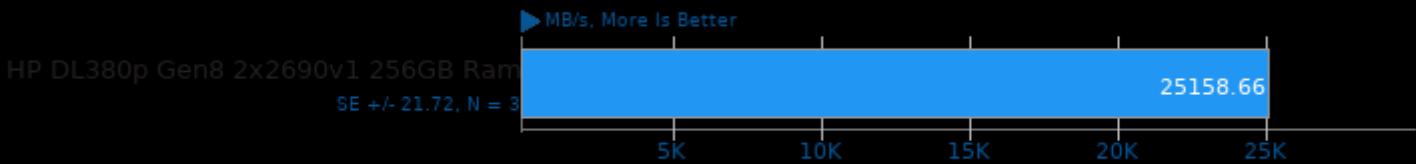
Type: Scale - Benchmark: Floating Point



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

**RAMspeed SMP 3.5.0**

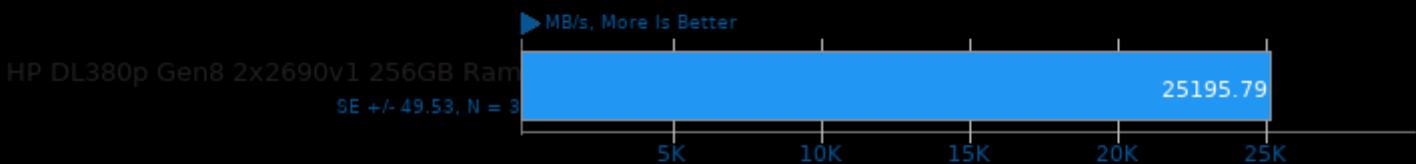
Type: Average - Benchmark: Floating Point



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

**RAMspeed SMP 3.5.0**

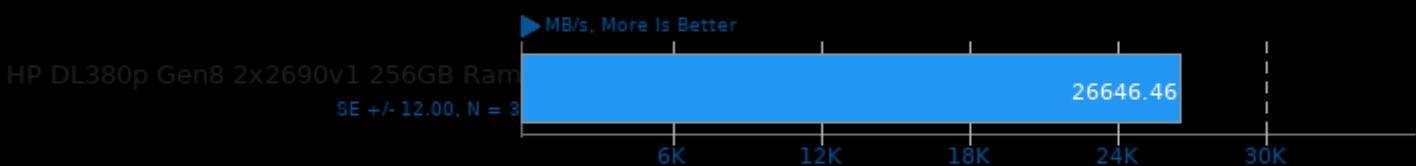
Type: Add - Benchmark: Floating Point



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

**RAMspeed SMP 3.5.0**

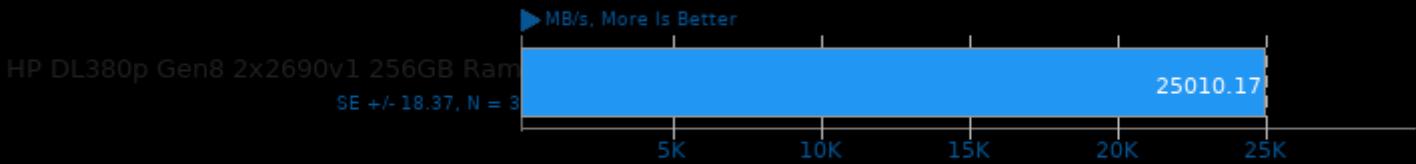
Type: Average - Benchmark: Integer



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

**RAMspeed SMP 3.5.0**

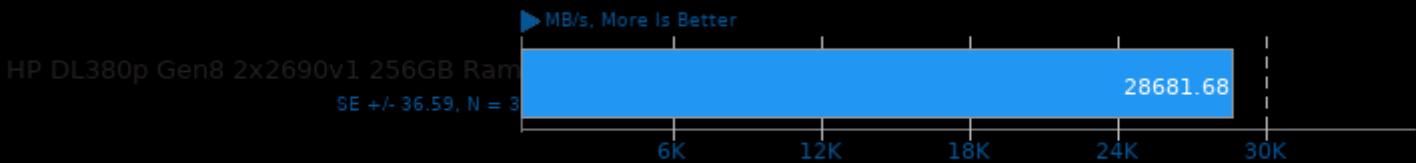
Type: Copy - Benchmark: Integer



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

**RAMspeed SMP 3.5.0**

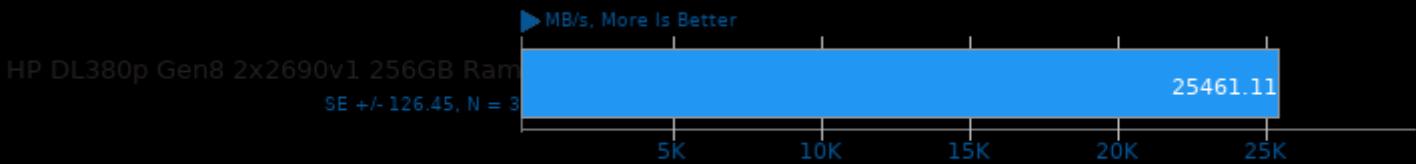
Type: Add - Benchmark: Integer



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

**RAMspeed SMP 3.5.0**

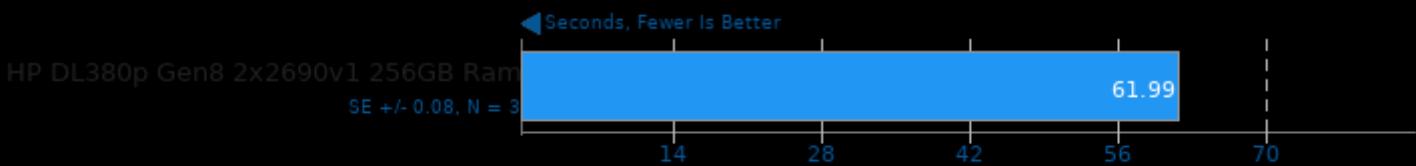
Type: Scale - Benchmark: Integer



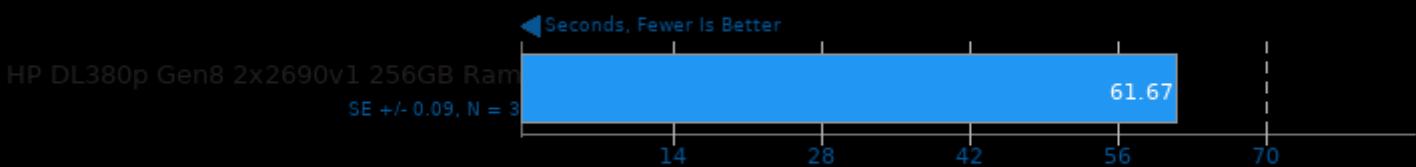
1. (CC) gcc options: -O3 -march=native

**Timed PHP Compilation 7.4.2**

Time To Compile

**Rust Mandelbrot**

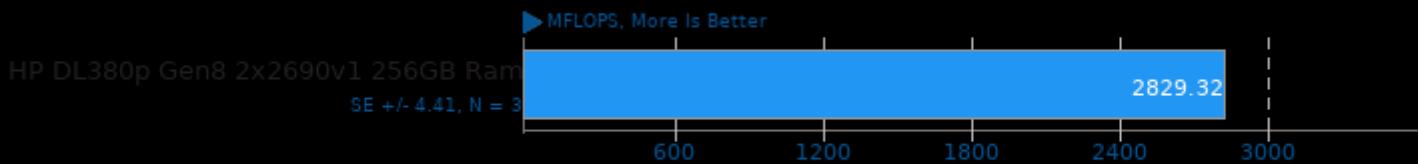
Time To Complete Serial/Parallel Mandelbrot



1. (CC) gcc options: -m64 -pie -nodefaultlibs -ldl -lrt -lpthread -lgcc\_s -lc -lm -lutil

## Himeno Benchmark 3.0

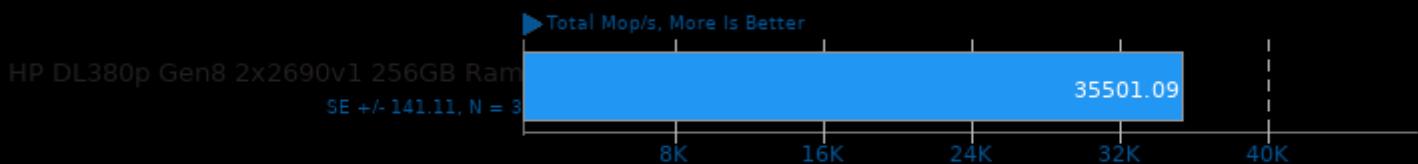
Poisson Pressure Solver



1. (CC) gcc options: -O3

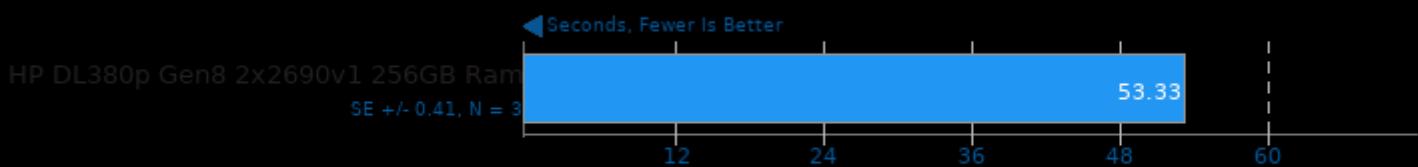
## NAS Parallel Benchmarks 3.4

Test / Class: LU.C

1. (F90) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi  
2. Open MPI 2.1.1

## POV-Ray 3.7.0.7

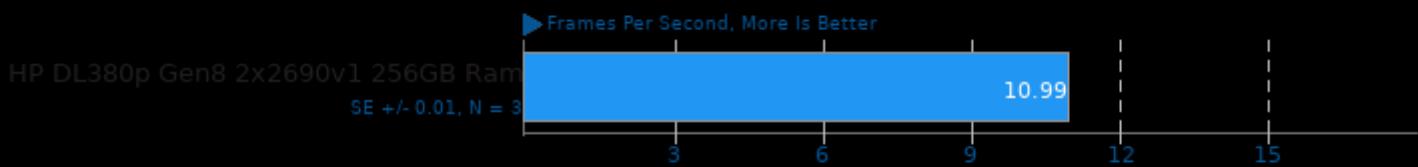
Trace Time



1. (CXX) g++ options: -pipe -O3 -ffast-math -march=native -pthread -lSM -lICE -lX11 -lXm -lXm -lXmath -lHalf -llex -llexMath -lXmThread -lpthread -ltiff -ljpeg

## Kvazaar 2.0

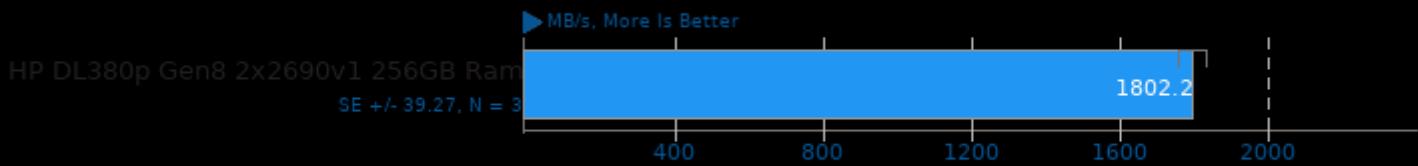
Video Input: Bosphorus 1080p - Video Preset: Very Fast



1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

## Zstd Compression 1.5.0

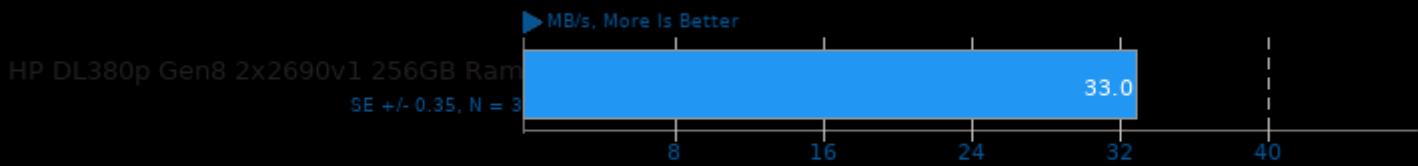
Compression Level: 19 - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma

## Zstd Compression 1.5.0

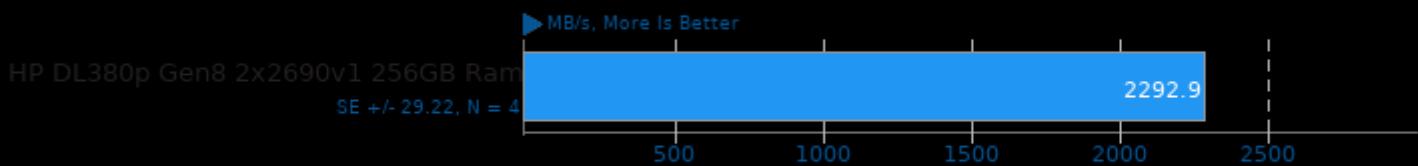
Compression Level: 19 - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma

## Zstd Compression 1.5.0

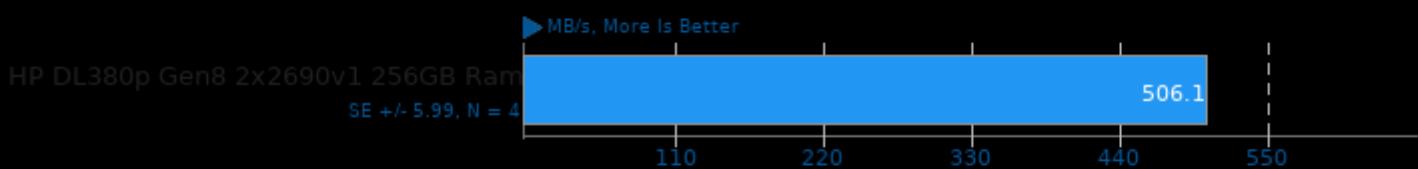
Compression Level: 3, Long Mode - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma

## Zstd Compression 1.5.0

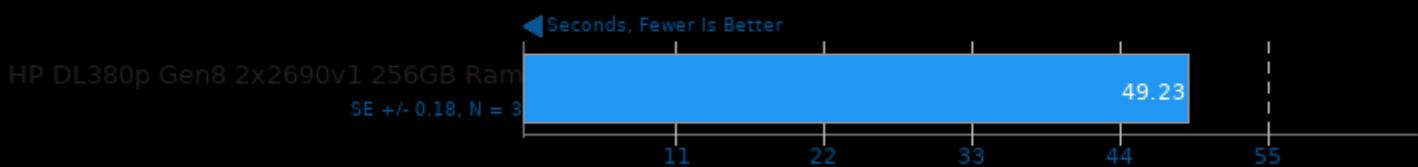
Compression Level: 3, Long Mode - Compression Speed



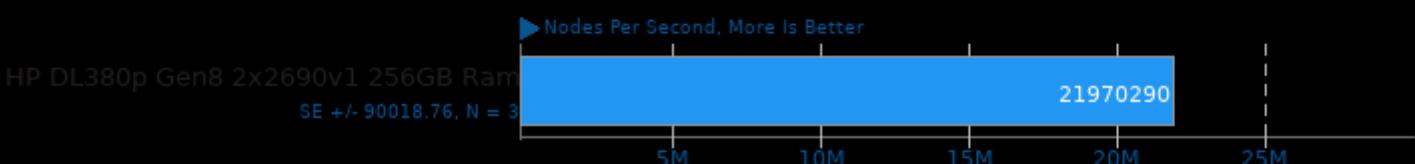
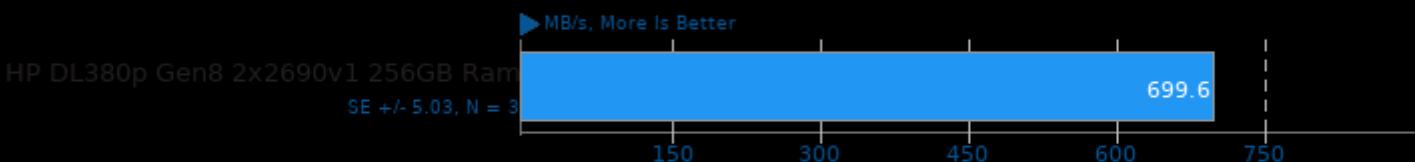
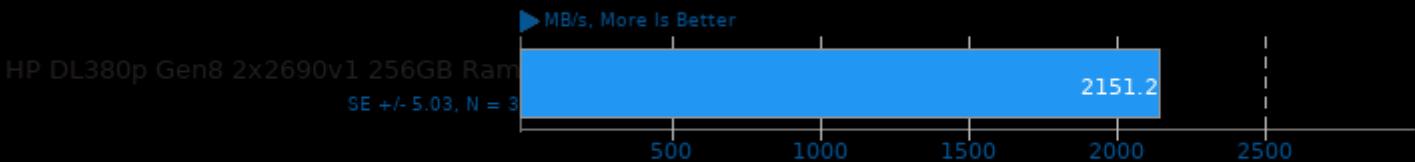
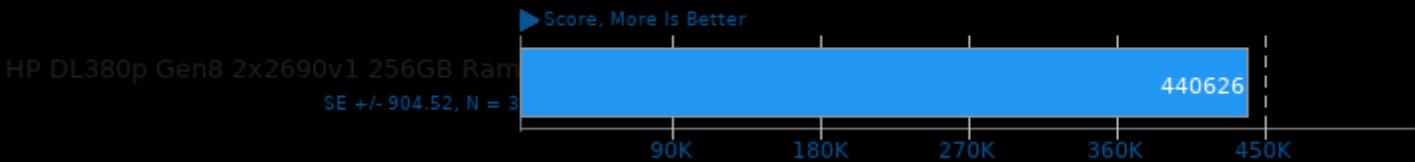
1. (CC) gcc options: -O3 -pthread -lz -lzma

## GIMP 2.8.22

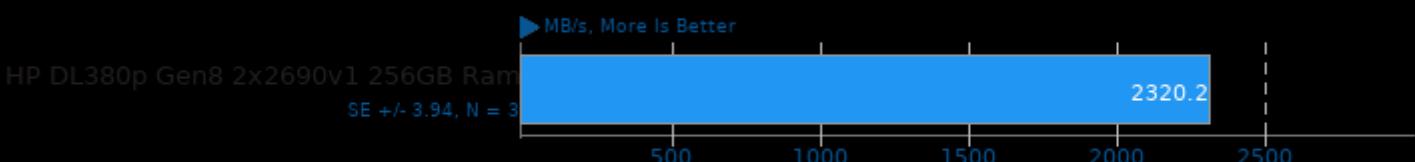
Test: unsharp-mask



PHPBench 0.8.1

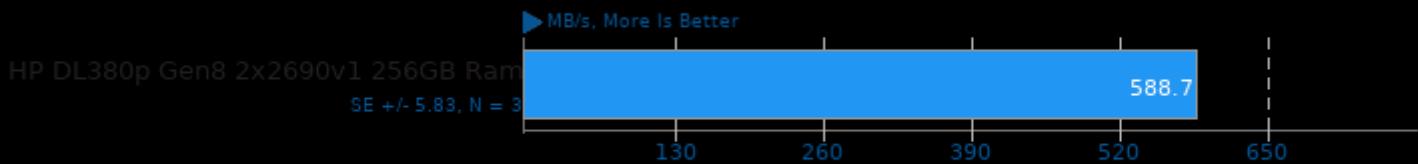


1. (CXX) g++ options: -fno-asm -m64 -fthreadsafe-functions -fno-exceptions -std=c++17 -fprofile-use -fno-need -fno-exceptions -fno-tracer -fpedantic -O3 -msse -msse3 -mpopcnt



## Zstd Compression 1.5.0

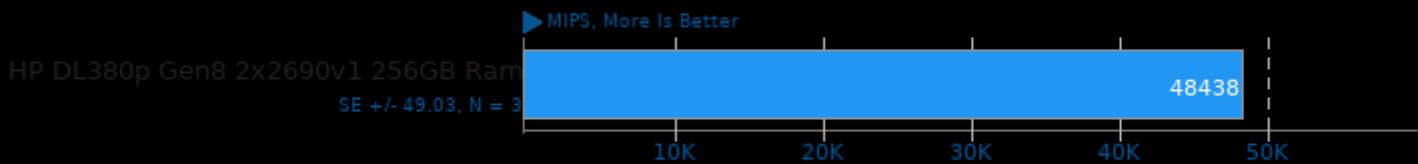
Compression Level: 8, Long Mode - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -lzma

## 7-Zip Compression 16.02

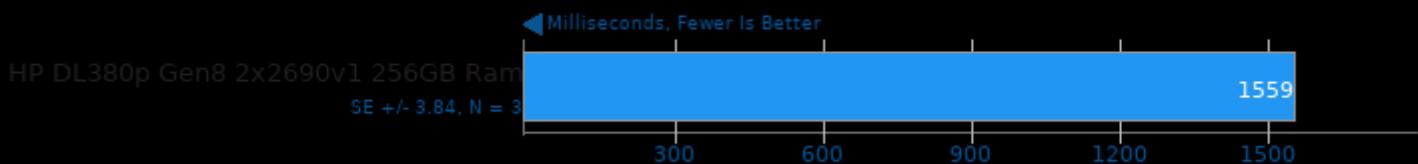
Compress Speed Test



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

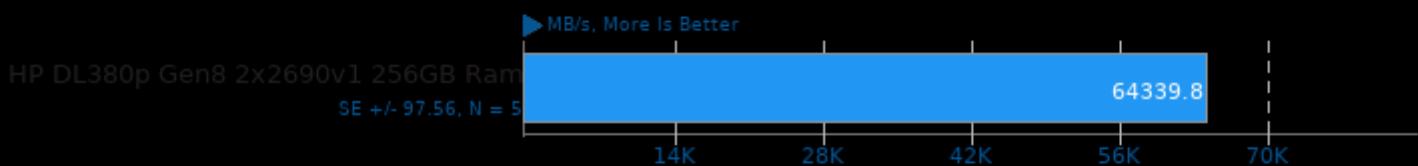
## PyBench 2018-02-16

Total For Average Test Times



## Stream 2013-01-17

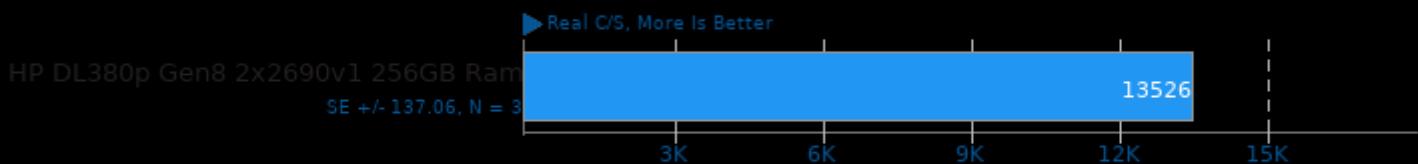
Type: Copy



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

## John The Ripper 1.9.0-jumbo-1

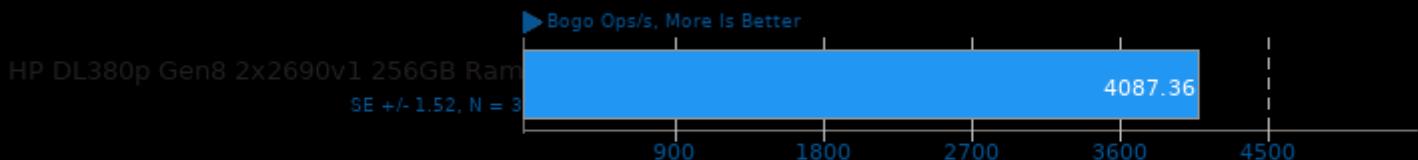
Test: Blowfish



1. (CC) gcc options: -m64 -lssl -lcrypto -fopenmp -lgmp -pthread -lm -lz -ldl -lcrypt -lbz2

## Stress-NG 0.11.07

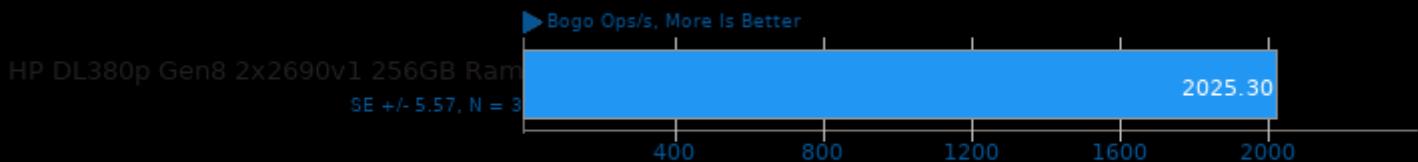
Test: CPU Stress



1. (CC) gcc options: -O2 -std=gnu99 -lm -laiod -lcrypt -lrt -lz -ldl -lpthread -lc

## Stress-NG 0.11.07

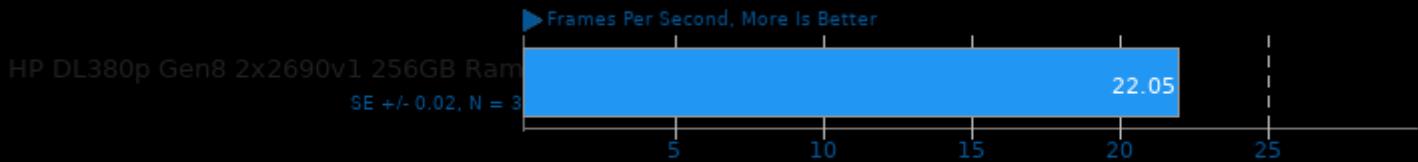
Test: Crypto



1. (CC) gcc options: -O2 -std=gnu99 -lm -laiod -lcrypt -lrt -lz -ldl -lpthread -lc

## Kvazaar 2.0

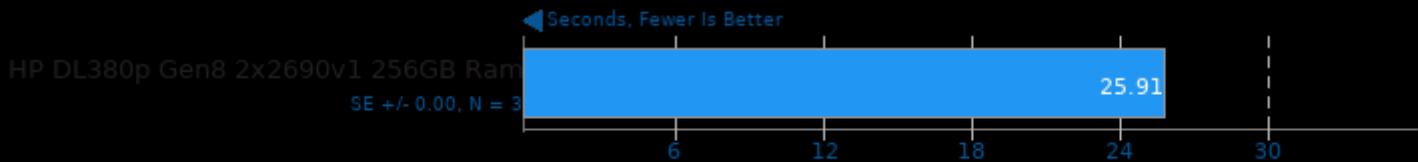
Video Input: Bosphorus 1080p - Video Preset: Ultra Fast



1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

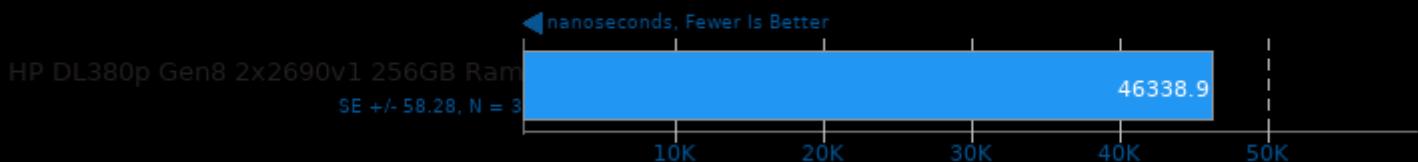
## GIMP 2.8.22

Test: rotate



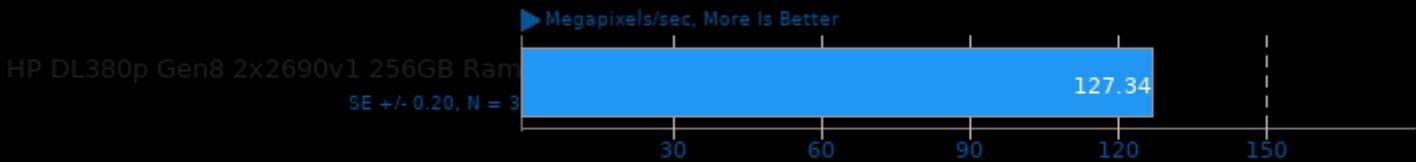
## glibc bench 1.0

Benchmark: sin



**libjpeg-turbo tjbench 2.1.0**

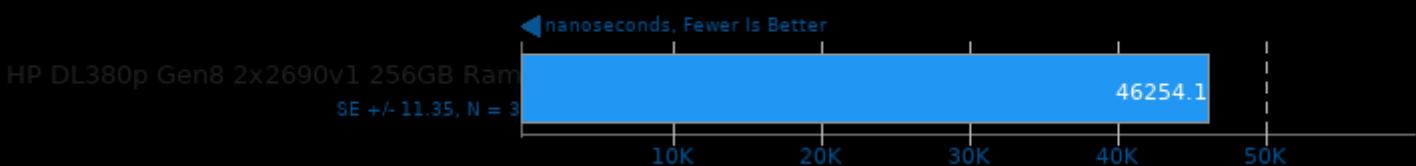
Test: Decompression Throughput



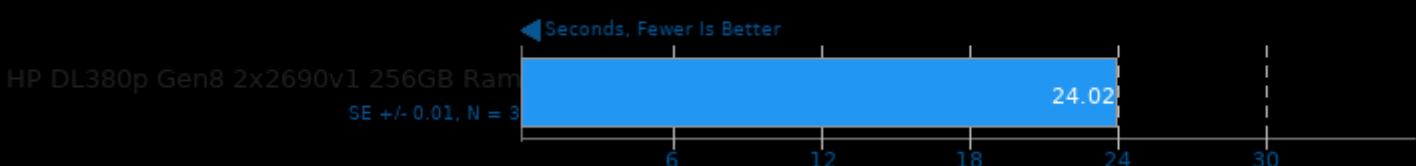
1. (CC) gcc options: -O3 -rdynamic

**glibc bench 1.0**

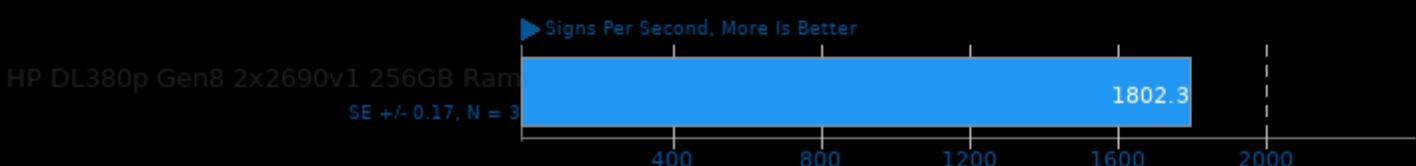
Benchmark: cos

**GIMP 2.8.22**

Test: auto-levels

**OpenSSL 1.1.1**

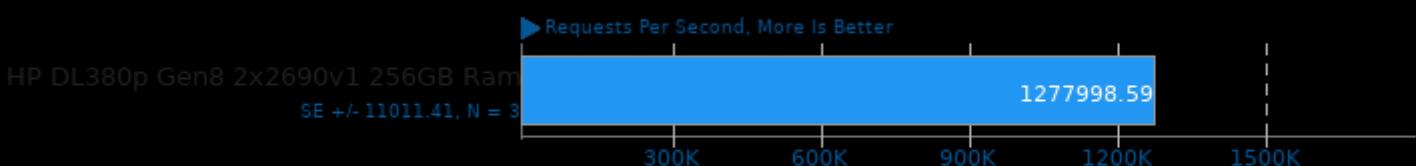
RSA 4096-bit Performance



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

**Redis 6.0.9**

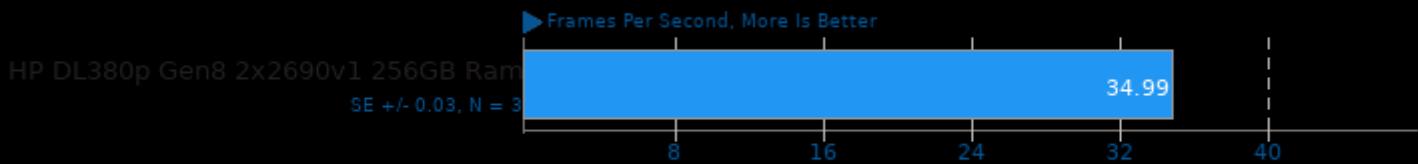
Test: SET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

## x265 3.4

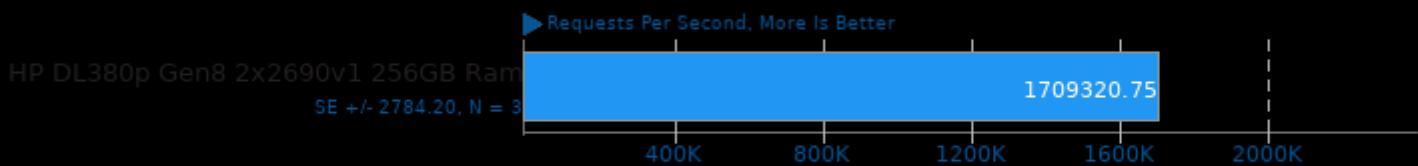
Video Input: Bosphorus 1080p



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

## Redis 6.0.9

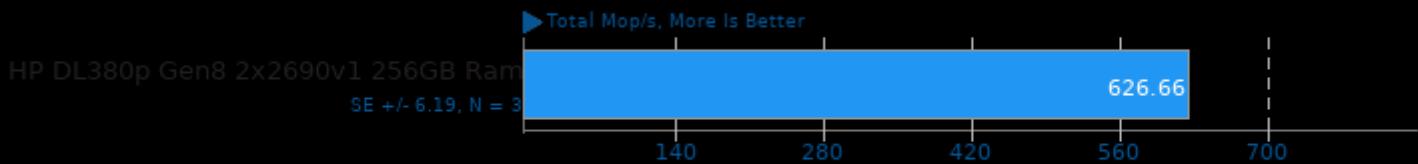
Test: GET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

## NAS Parallel Benchmarks 3.4

Test / Class: EPC

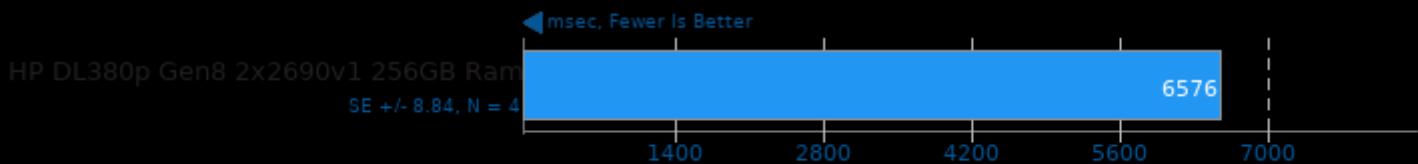


1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi\_usempif08 -lmpi\_mpifh -lmpi

2. Open MPI 2.1.1

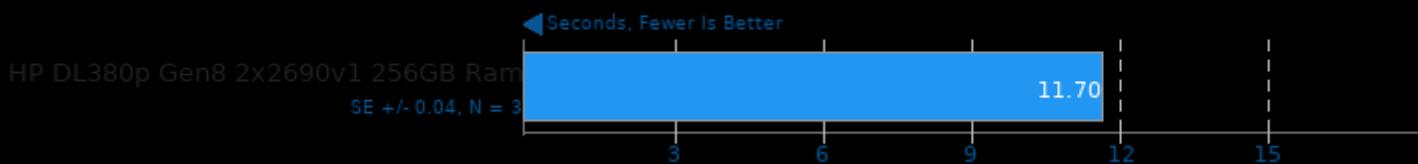
## DaCapo Benchmark 9.12-MR1

Java Test: Jython



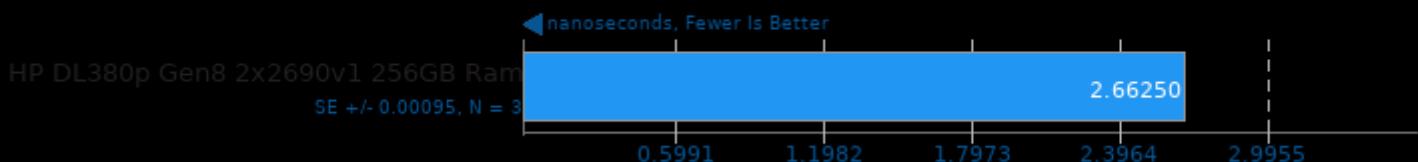
## GIMP 2.8.22

Test: resize



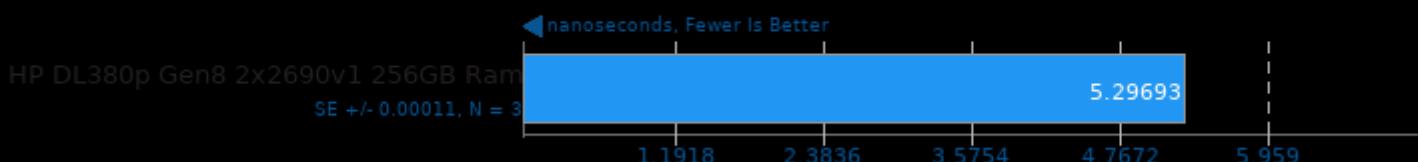
### glibc bench 1.0

Benchmark: pthread\_once



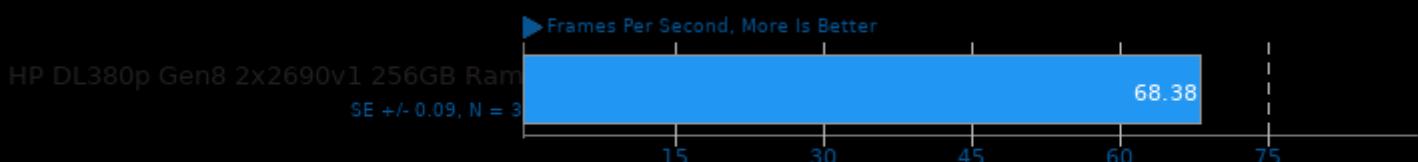
### glibc bench 1.0

Benchmark: sqrt



### x264 2019-12-17

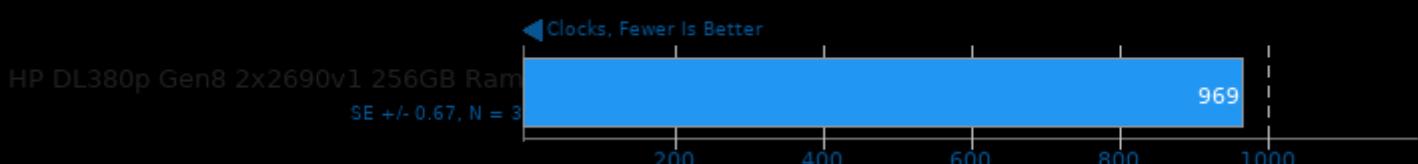
H.264 Video Encoding



1. (CC) gcc options: -Iidl -lavformat -lavcodec -lavutil -lswscale -m64 -lm -lpthread -O3 -ffast-math -std=gnu99 -fPIC -fomit-frame-pointer -fno-tree-vectorize

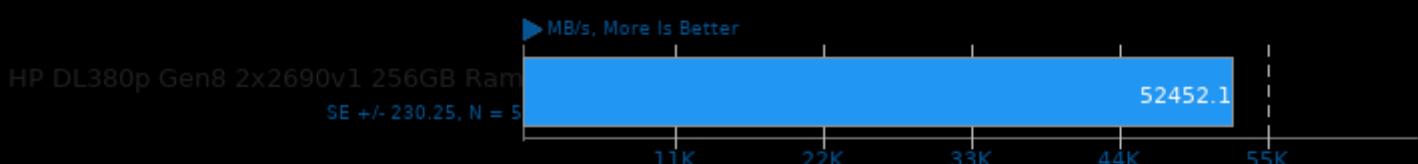
### ctx\_clock

Context Switch Time



### Stream 2013-01-17

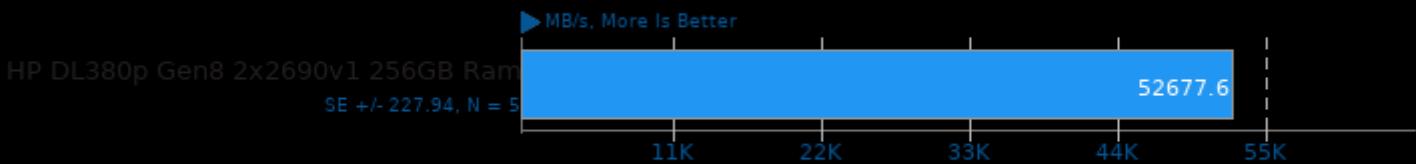
Type: Add



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

**Stream 2013-01-17**

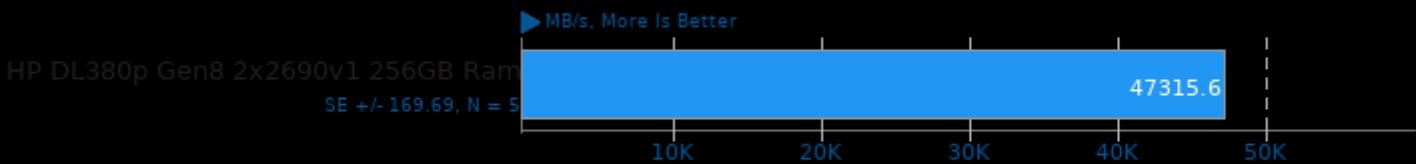
Type: Triad



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

**Stream 2013-01-17**

Type: Scale



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

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 07:35.*