


www.phoronix-test-suite.com

# test7

Intel Core i7-3770S testing with a ASRock Z77 Extreme4 (P2.80 BIOS) and MSI NVIDIA GeForce GTX 1060 6GB on Ubuntu 19.10 via the Phoronix Test Suite.

## Test Systems:

### Intel Core i7-3770S

Processor: Intel Core i7-3770S @ 4.30GHz (4 Cores / 8 Threads), Motherboard: ASRock Z77 Extreme4 (P2.80 BIOS), Chipset: Intel Xeon E3-1200 v2/3rd, Memory: 32768MB, Disk: 2 x 480GB SanDisk SDSSDA48 + 240GB SanDisk SDSSDX24, Graphics: MSI NVIDIA GeForce GTX 1060 6GB (139/405MHz), Audio: Realtek ALC898, Monitor: 43S405, Network: Broadcom NetLink BCM57781 PCIe

OS: Ubuntu 19.10, Kernel: 5.3.0-24-generic (x86_64), Desktop: GNOME Shell 3.34.1, Display Server: X Server 1.20.5, Display Driver: NVIDIA 435.21, Compiler: GCC 9.2.1 20191008, File-System: ext4, Screen Resolution: 3840x2160

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++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-offload-targets=nvptx-none,hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu

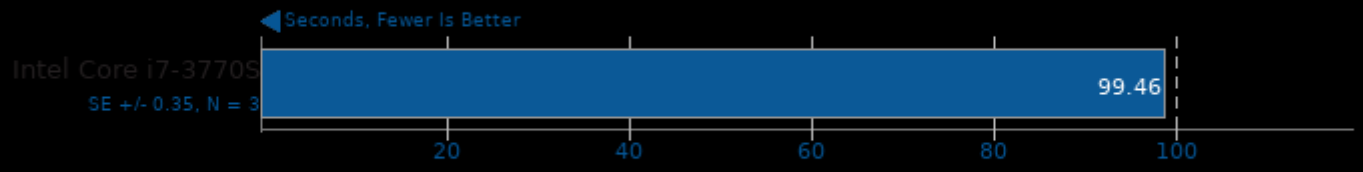
# test7

--program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0x21
OpenCL Notes: GPU Compute Cores: 1280
Security Notes: itlb_multihit: KVM: Mitigation of Split huge pages + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + tsx_async_abort: Not affected

| | Intel Core i7-3770S |
|---|---|
| **Rodinia - OpenMP LavaMD (sec)** | 99.462 |
| **Standard Deviation** | 0.6% |
| **Rodinia - OpenMP CFD Solver (sec)** | 71.741 |
| **Standard Deviation** | 1.7% |
| **NAMD - ATPase Simulation - 327,506 Atoms (days/ns)** | 4.40240 |
| **Standard Deviation** | 1.1% |
| **x264 - H.2.V.E (FPS)** | 32.33 |
| **Standard Deviation** | 0.3% |
| **x265 - H.2.1.V.E (FPS)** | 14.22 |
| **Standard Deviation** | 0.2% |
| **7-Zip Compression - C.S.T (MIPS)** | 22487 |
| **Standard Deviation** | 2.5% |
| **Stockfish - Total Time (Nodes/s)** | 9631345 |
| **Standard Deviation** | 1.9% |
| **asmFish - 1.H.M.2.D (Nodes/s)** | 11044848 |
| **Standard Deviation** | 0.3% |
| **Timed GCC Compilation - Time To Compile (sec)** | 1752 |
| **POV-Ray - Trace Time (sec)** | 150.435 |
| **Standard Deviation** | 0.3% |
| **Radiance Benchmark - Serial (sec)** | 882.38 |
| **Radiance Benchmark - SMP Parallel (sec)** | 284.083 |
| **OpenSSL - R.4.b.P (Signs/sec)** | 646.1 |
| **Standard Deviation** | 0.1% |
| **ctx_clock - C.S.T (Clocks)** | 808 |
| **Sysbench - CPU (Events/sec)** | 7342 |
| **Standard Deviation** | 0.1% |
| **Blender - Barbershop - CPU-Only (sec)** | 2793 |

## Rodinia 2.4

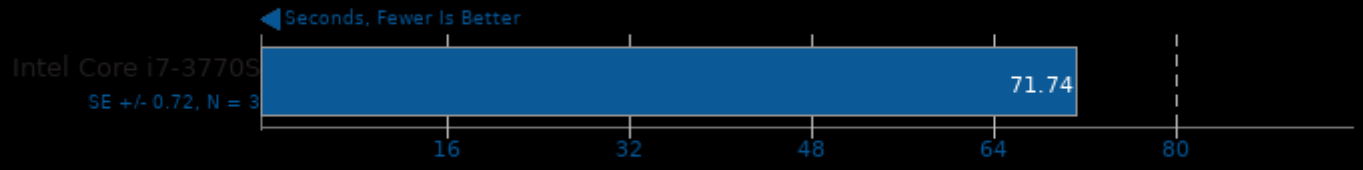
Test: OpenMP LavaMD




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

## Rodinia 2.4

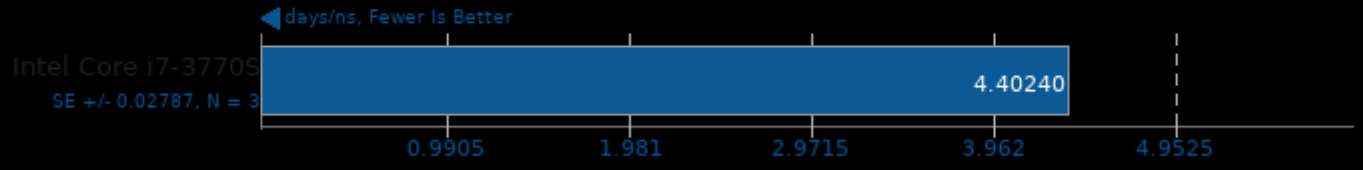
Test: OpenMP CFD Solver




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

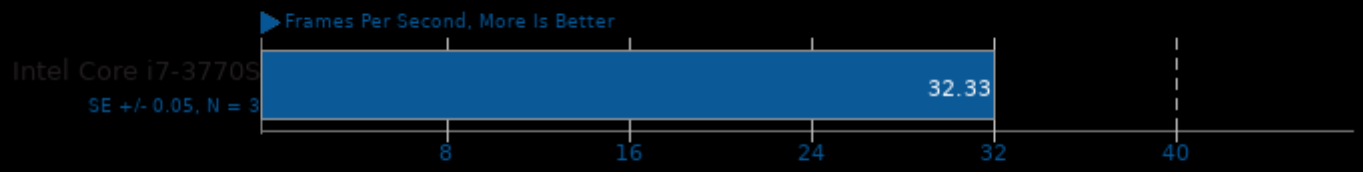
## NAMD 2.13b1

ATPase Simulation - 327,506 Atoms




## x264 2018-09-25

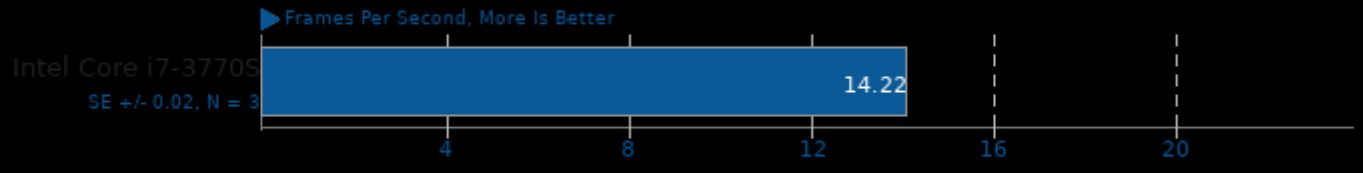
H.264 Video Encoding




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

## x265 3.0

H.265 1080p Video Encoding

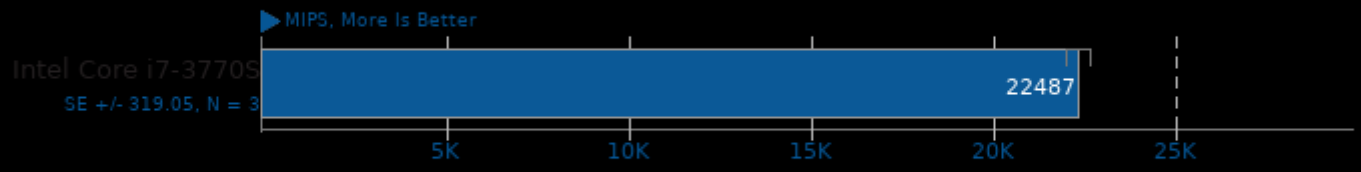



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

# test7

## 7-Zip Compression 16.02

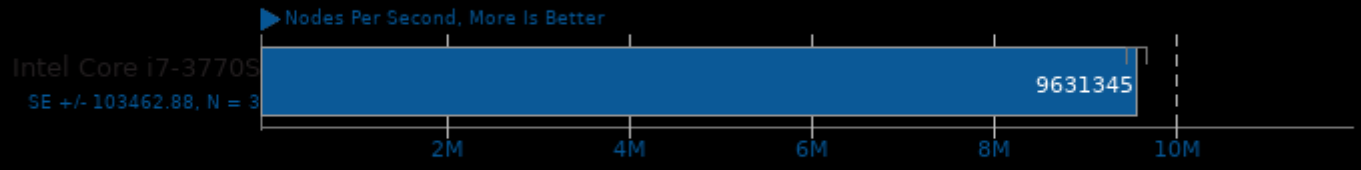
Compress Speed Test




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

## Stockfish 9

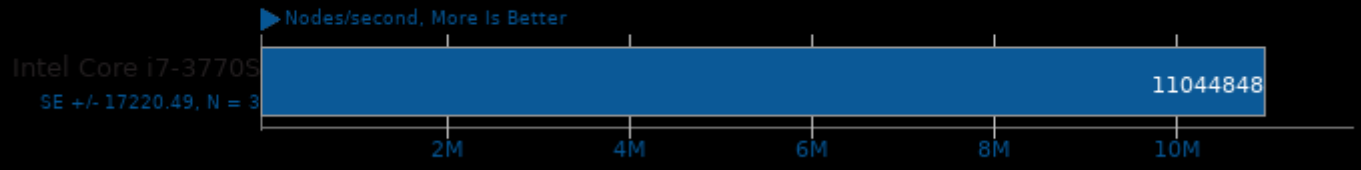
Total Time




1. (CXX) g++ options: -m64 -lpthread -fno-exceptions -std=c++11 -pedantic -O3 -msse -msse3 -mpopcnt -flto

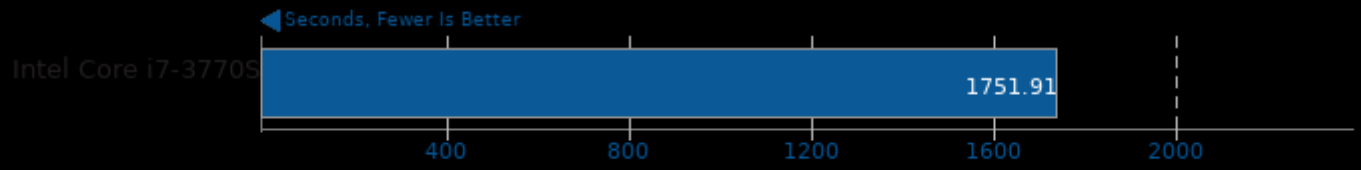
## asmFish 2018-07-23

1024 Hash Memory, 26 Depth



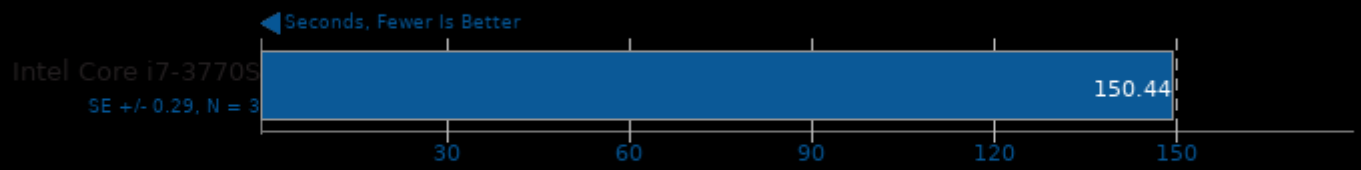

## Timed GCC Compilation 8.2

Time To Compile



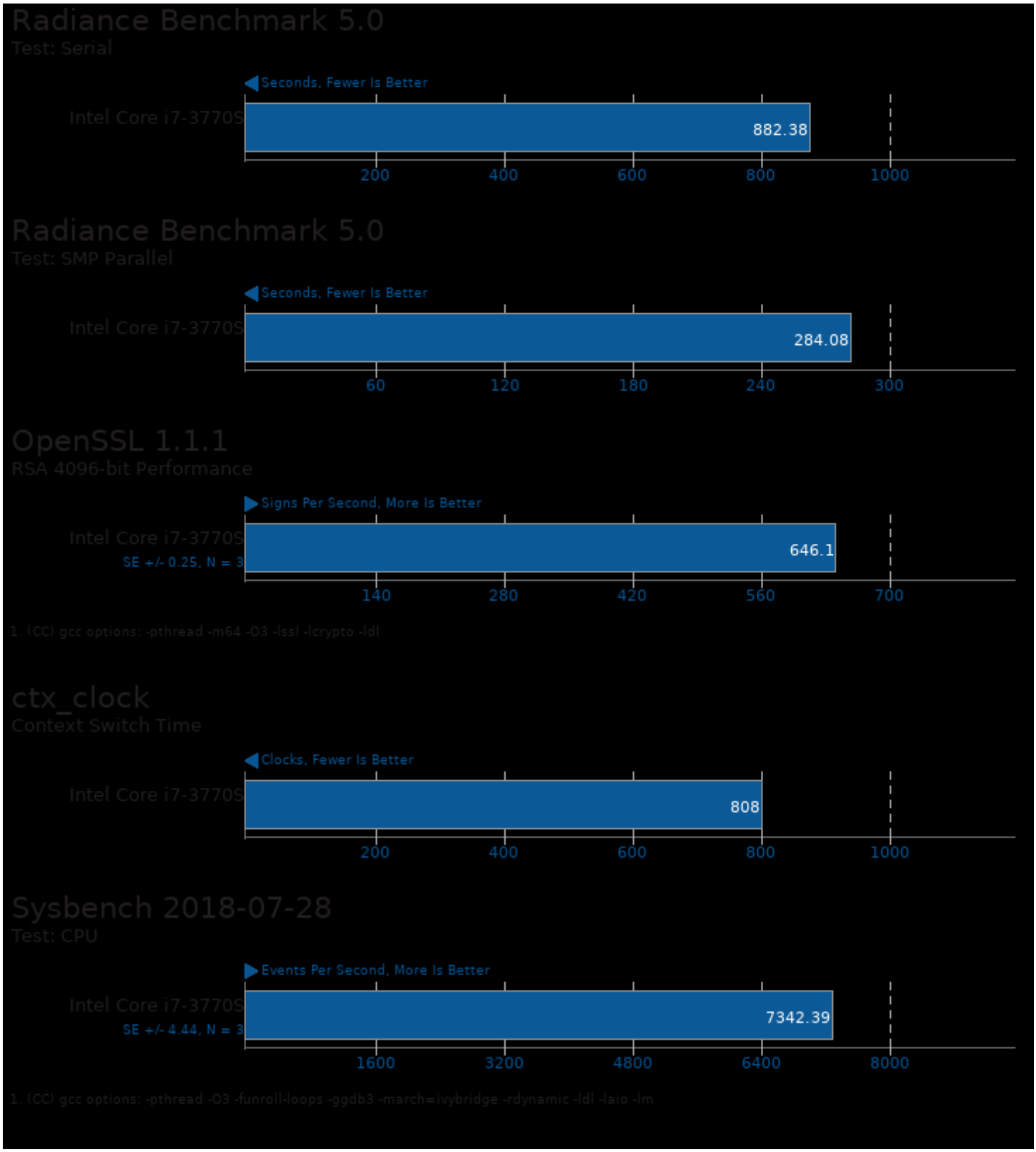

## POV-Ray 3.7.0.7

Trace Time

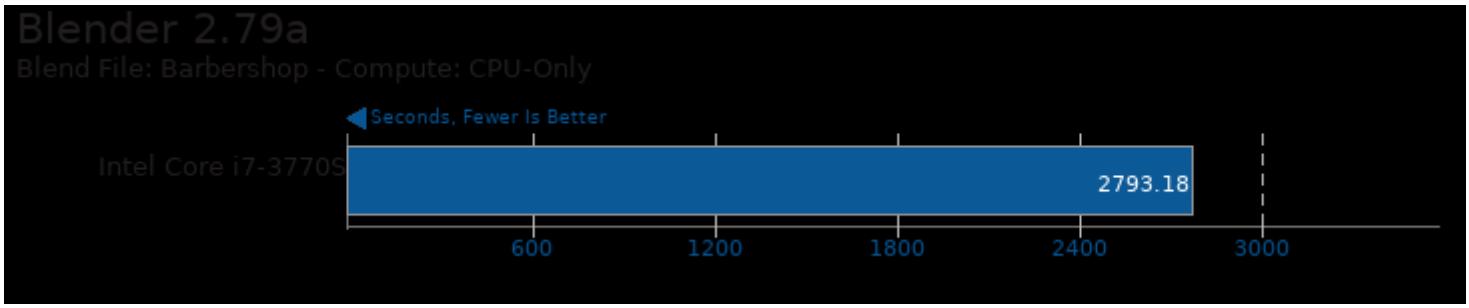



1. (CXX) g++ options: -pipe -O3 -ffast-math -march=native -pthread -lSM -lICE -lX11 -ltiff -ljpeg -lpng -lz -lrt -lm -lboost_thread -lboost_system

# test7


Radiance Benchmark 5.0
Test: Serial
Seconds, Fewer Is Better
Intel Core i7-3770S
882.38
200
400
600
800
1000
Radiance Benchmark 5.0
Test: SMP Parallel
Seconds, Fewer Is Better
Intel Core i7-3770S
284.08
60
120
180
240
300
OpenSSL 1.1.1
RSA 4096-bit Performance
Signs Per Second, More Is Better
Intel Core i7-3770S
SE +/- 0.25, N = 3
646.1
140
280
420
560
700
1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl
ctx_clock
Context Switch Time
Clocks, Fewer Is Better
Intel Core i7-3770S
808
200
400
600
800
1000
Sysbench 2018-07-28
Test: CPU
Events Per Second, More Is Better
Intel Core i7-3770S
SE +/- 4.44, N = 3
7342.39
1600
3200
4800
6400
8000
1. (CC) gcc options: -pthread -O3 -funroll-loops -ggdb3 -march=ivybridge -rdynamic -ldl -laio -lm

# test7




*This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 09:58.*