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FT-S2500-core128

Phytium FT-2000+/64 testing with a Byosoft FT2000+ (1.0.30 BIOS) and llvmpipe on Kylin Linux Advanced Server V10 via the Phoronix Test Suite.

Automated Executive Summary

FT-S2500 had the most wins, coming in first place for 50% of the tests.

Based on the geometric mean of all complete results, the fastest (FT-S2500) was 1.238x the speed of the slowest (FT-2000+/64).

The results with the greatest spread from best to worst included:

OpenSSL (Algorithm: SHA256) at 4.865x
Sysbench (Test: CPU) at 1.908x
OpenSSL (Algorithm: RSA4096) at 1.907x
Coremark (CoreMark Size 666 - Iterations Per Second) at 1.875x
OpenSSL (Algorithm: RSA4096) at 1.866x
C-Ray (Total Time - 4K, 16 Rays Per Pixel) at 1.47x
John The Ripper (Test: Blowfish) at 1.323x
PostMark (Disk Transaction Performance) at 1.242x
Timed MAFFT Alignment (Multiple Sequence Alignment - LSU RNA) at 1.083x

Sample Pi Program at 1.055x.

Test Systems:

FT-S2500

Processor: Phytium S2500/64 C00 (128 Cores), Motherboard: ZD-TECH KL4.26.UEFI.S.024.210617.D, Memory: 16 x 16384 MB DDR4-3200MT/s Micron DDR4-, Disk: 240GB SAMSUNG MZ7LH240, Graphics: llvmpipe, Monitor: BenQ GL2055, Network: 4 x Intel I350

OS: Kylin Linux Advanced Server V10, Kernel: 4.19.90-23.4.v2101.ky10.aarch64 (aarch64) 20210303, Desktop: MATE, Display Server: X Server 1.20.6, OpenGL: 3.3 Mesa 18.3.6 (LLVM 7.0 128 bits), Compiler: GCC 7.3.0, File-System: xfs, Screen Resolution: 1600x900

Kernel Notes: Transparent Huge Pages: madvise
Disk Notes: MQ-DEADLINE / attr2,inode64,noquota,relatime,rw / Block Size: 4096
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Mitigation of PTI + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Not affected + srbds: Not affected + tsx_async_abort: Not affected

FT-2000+/64

Processor: Phytium FT-2000+/64 (64 Cores), Motherboard: Byosoft FT2000+ (1.0.30 BIOS), Memory: 8 x 16 GB DDR4-2666MT/s Micron 9ASF2G72PZ-3G2B1, Disk: 240GB SAMSUNG MZ7LH240, Graphics: llvmpipe, Monitor: BenQ GL2055, Network: 4 x Intel I350

OS: Kylin Linux Advanced Server V10, Kernel: 4.19.90-23.4.v2101.ky10.aarch64 (aarch64) 20210303, Desktop: MATE, Display Server: X Server 1.20.6, OpenGL: 3.3 Mesa 18.3.6 (LLVM 7.0 128 bits), Compiler: GCC 7.3.0, File-System: xfs, Screen Resolution: 1600x900

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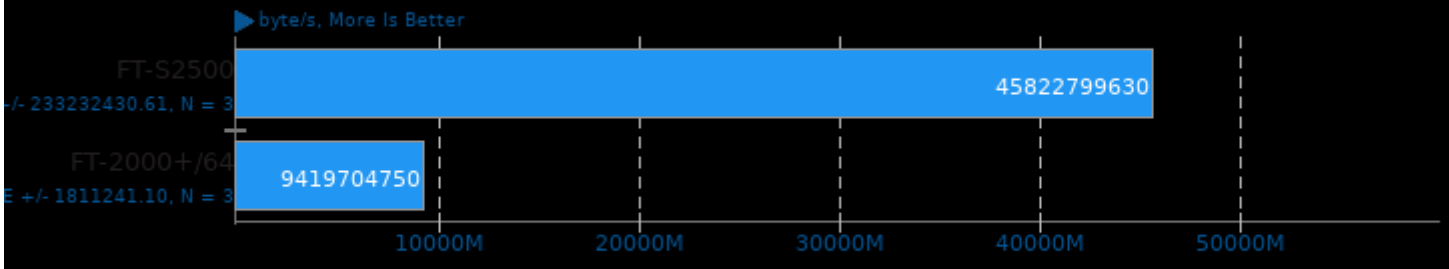
	FT-S2500	FT-2000+/64
OpenSSL - SHA256 (byte/s)	**45822799630**	**9419704750**
Normalized	100%	20.56%
Standard Deviation	0.9%	0%
Sysbench - CPU (Events/sec)	**275325**	**144284**
Normalized	100%	52.4%
Standard Deviation	0.1%	0.3%
Coremark - CoreMark Size 666 - I.P.S (Iterations/Sec)	**1411792**	**753038**
Normalized	100%	53.34%
Standard Deviation	2.5%	4.4%
CacheBench - Read (MB/s)	**4003**	**4195**

FT-S2500-core128

Normalized	95.44%	100%
Standard Deviation	0%	0%
CacheBench - Write (MB/s)	**7830**	**8204**
Normalized	95.43%	100%
Standard Deviation	0%	0%
CacheBench - R.M.W (MB/s)	**15597**	**16342**
Normalized	95.44%	100%
Standard Deviation	0%	0%
Sysbench - RAM / Memory (MiB/sec)	**3317**	**10313**
Normalized	32.16%	100%
Standard Deviation	8.8%	2.5%
John The Ripper - Blowfish (Real C/S)	**35947**	**27163**
Normalized	100%	75.56%
Standard Deviation	2.1%	5%
John The Ripper - MD5 (Real C/S)	**937145**	**695018**
Normalized	100%	74.16%
Standard Deviation	19.1%	2.3%
PHPBench - P.B.S (Score)	**167909**	**176478**
Normalized	95.14%	100%
Standard Deviation	0.7%	0.5%
OpenSSL - RSA4096 (sign/s)	**4203**	**2252**
Normalized	100%	53.58%
Standard Deviation	0.3%	0.3%
PostMark - D.T.P (TPS)	**2435**	**3024**
Normalized	80.52%	100%
Standard Deviation	0.5%	0.7%
OpenSSL - RSA4096 (verify/s)	**293376**	**153847**
Normalized	100%	52.44%
Standard Deviation	0%	0%
Timed MAFFT Alignment - M.S.A - LSU RNA (sec)	**23.689**	**21.871**
Normalized	92.33%	100%
Standard Deviation	2%	1.9%
C-Ray - Total Time - 4.1.R.P.P (sec)	**18.228**	**26.804**
Normalized	100%	68%
Standard Deviation	0.7%	0.5%
Sample Pi Program (sec)	**40.434**	**38.338**
Normalized	94.82%	100%
Standard Deviation	0.4%	0.1%

OpenSSL 3.0

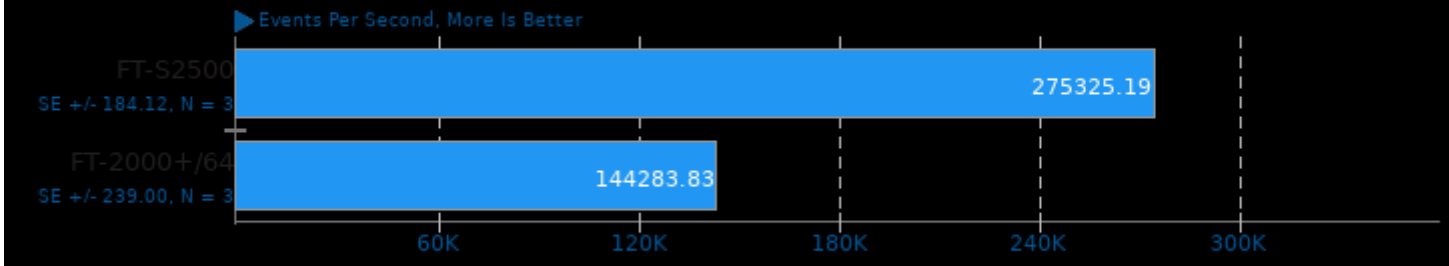
Algorithm: SHA256



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

Sysbench 1.0.20

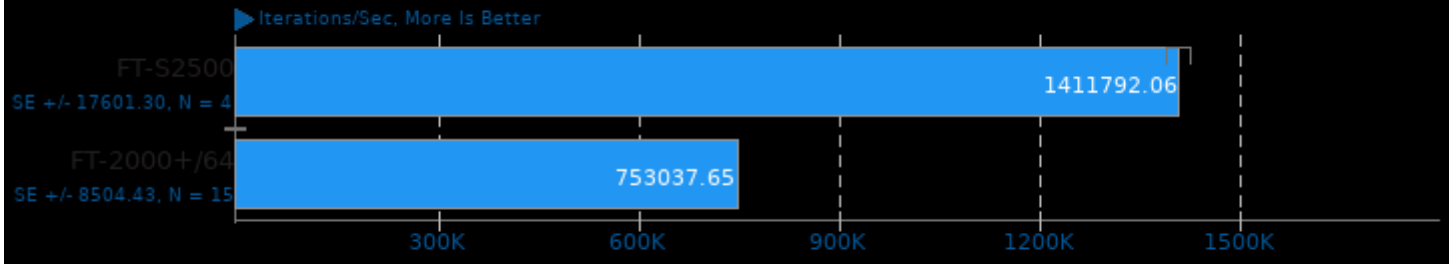
Test: CPU



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

Coremark 1.0

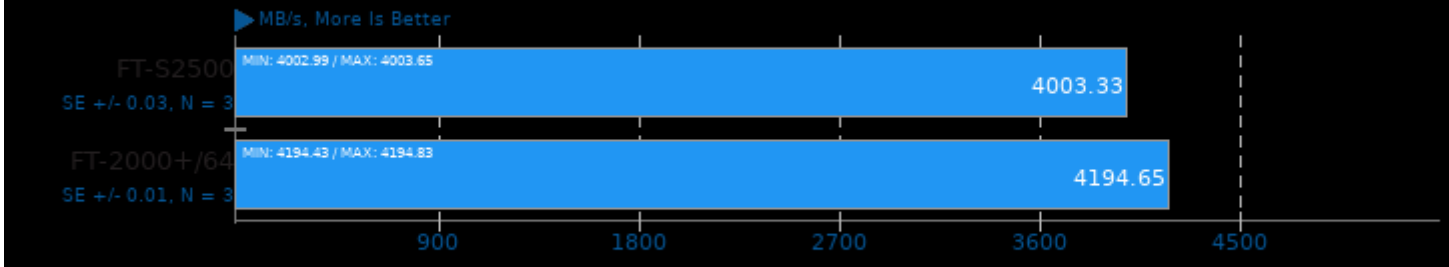
CoreMark Size 666 - Iterations Per Second



1. (CC) gcc options: -O2 -lrt" -lrt

CacheBench

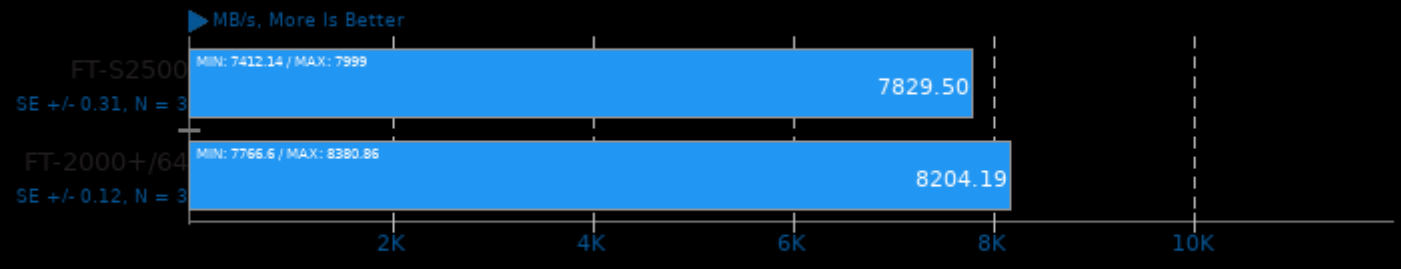
Test: Read



1. (CC) gcc options: -lrt

CacheBench

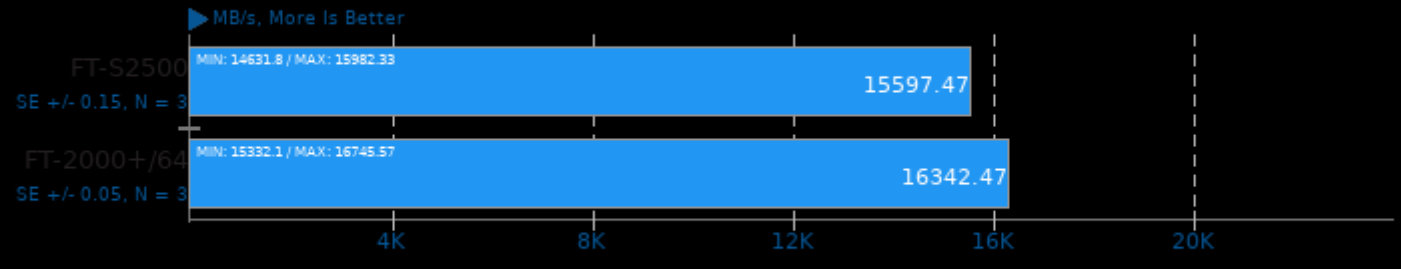
Test: Write



1. (CC) gcc options: -lrt

CacheBench

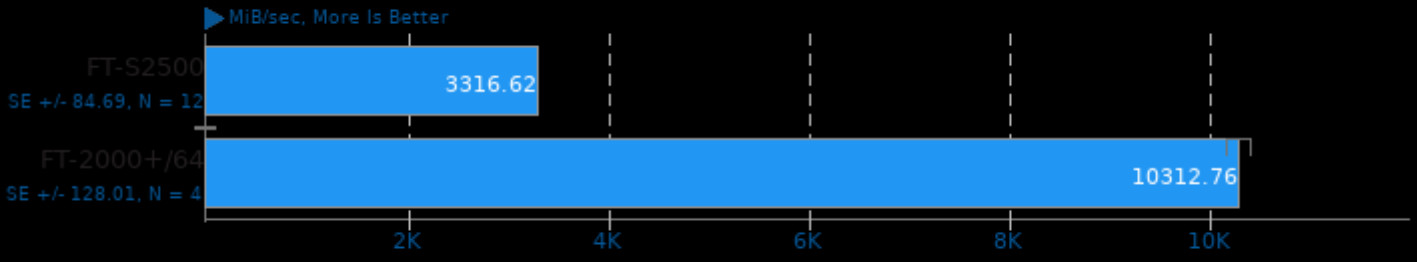
Test: Read / Modify / Write



1. (CC) gcc options: -lrt

Sysbench 1.0.20

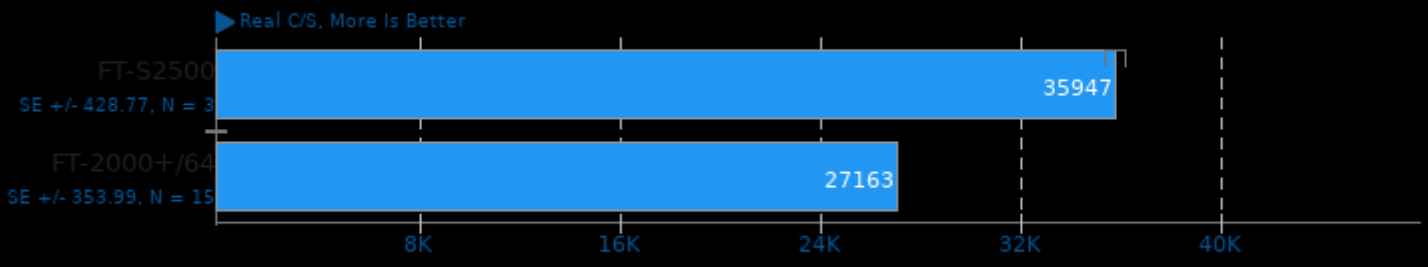
Test: RAM / Memory



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

John The Ripper 1.9.0-jumbo-1

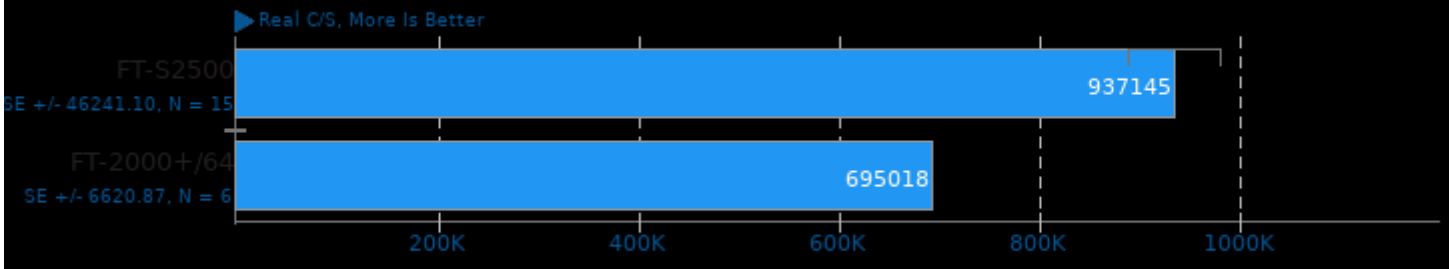
Test: Blowfish



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

John The Ripper 1.9.0-jumbo-1

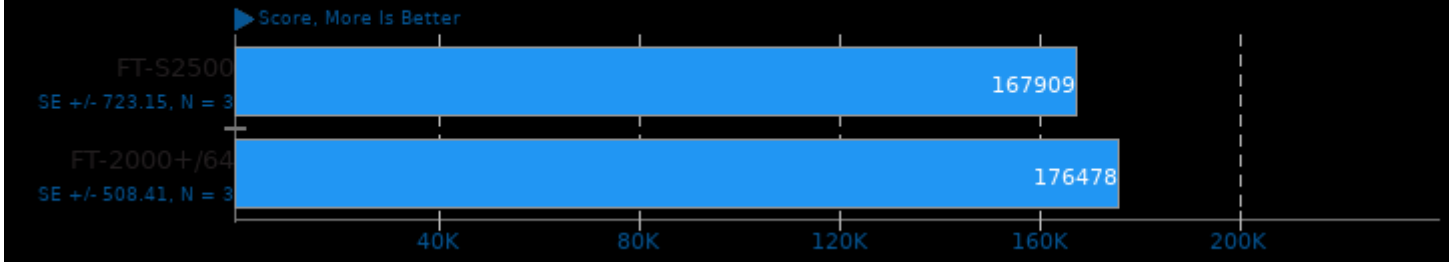
Test: MD5



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

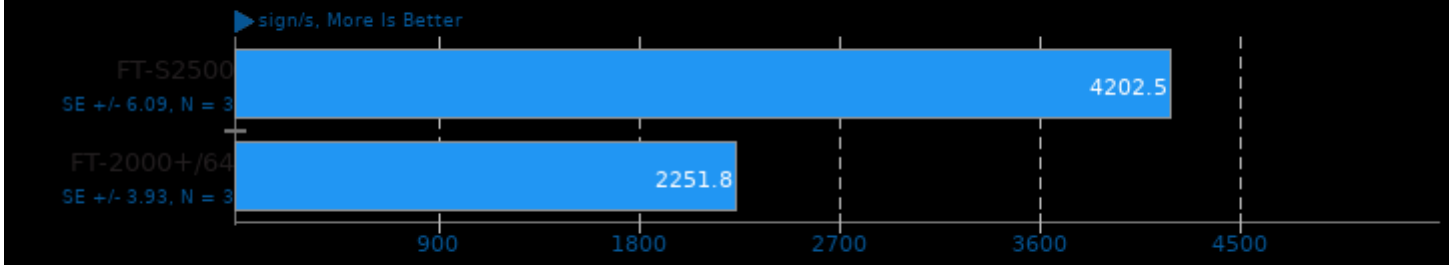
PHPBench 0.8.1

PHP Benchmark Suite



OpenSSL 3.0

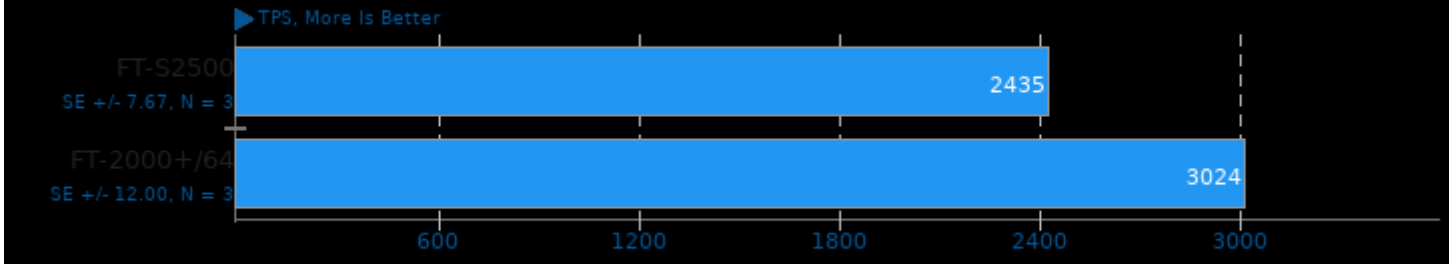
Algorithm: RSA4096



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

PostMark 1.51

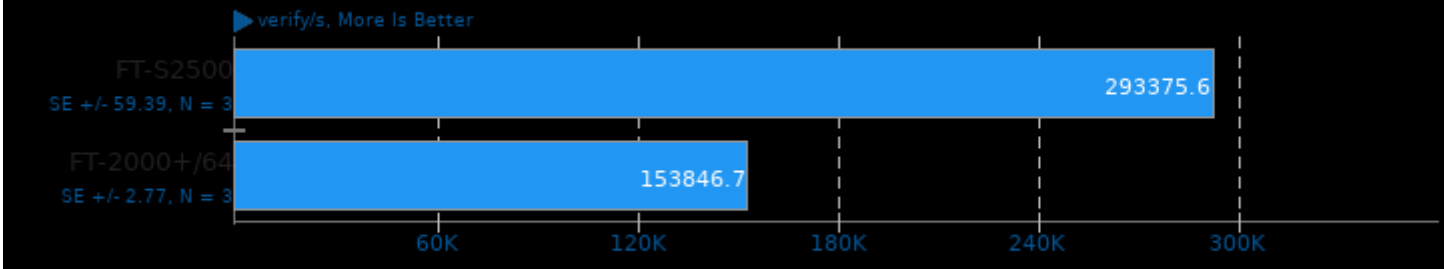
Disk Transaction Performance



1. (CC) gcc options: -O3

OpenSSL 3.0

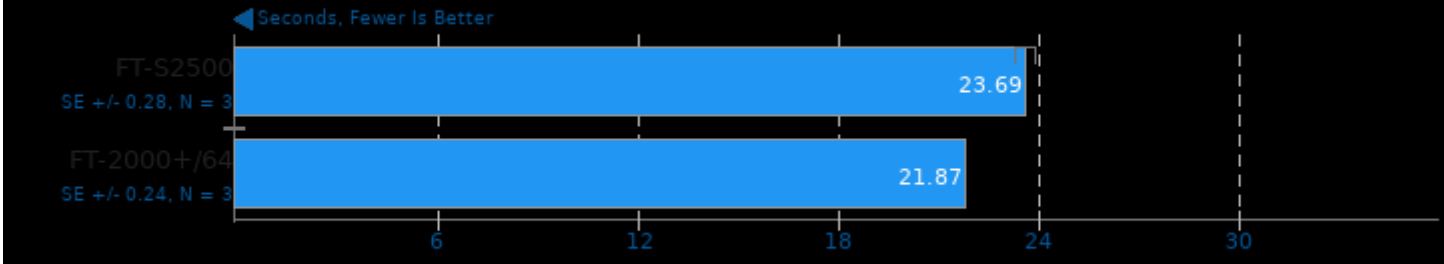
Algorithm: RSA4096



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

Timed MAFFT Alignment 7.471

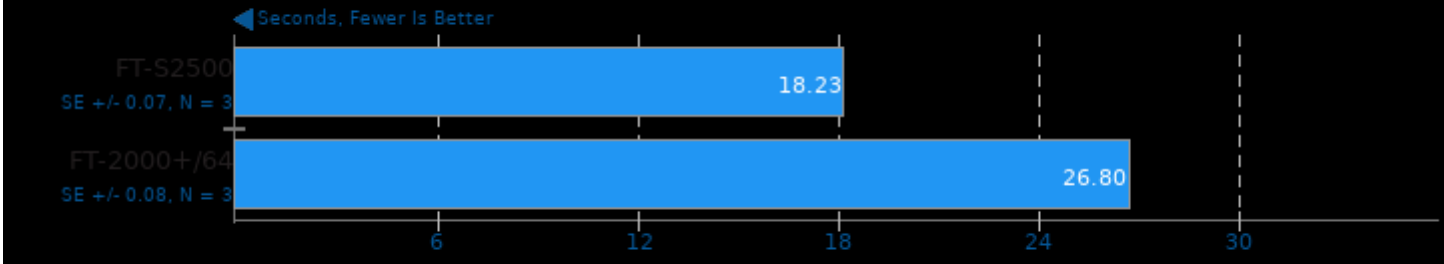
Multiple Sequence Alignment - LSU RNA



1. (CC) gcc options: -std=c99 -O3 -lm -lpthread

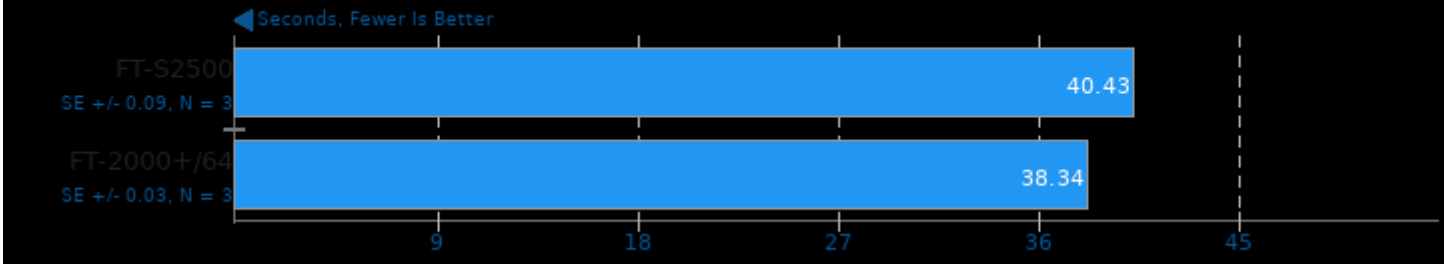
C-Ray 1.1

Total Time - 4K, 16 Rays Per Pixel

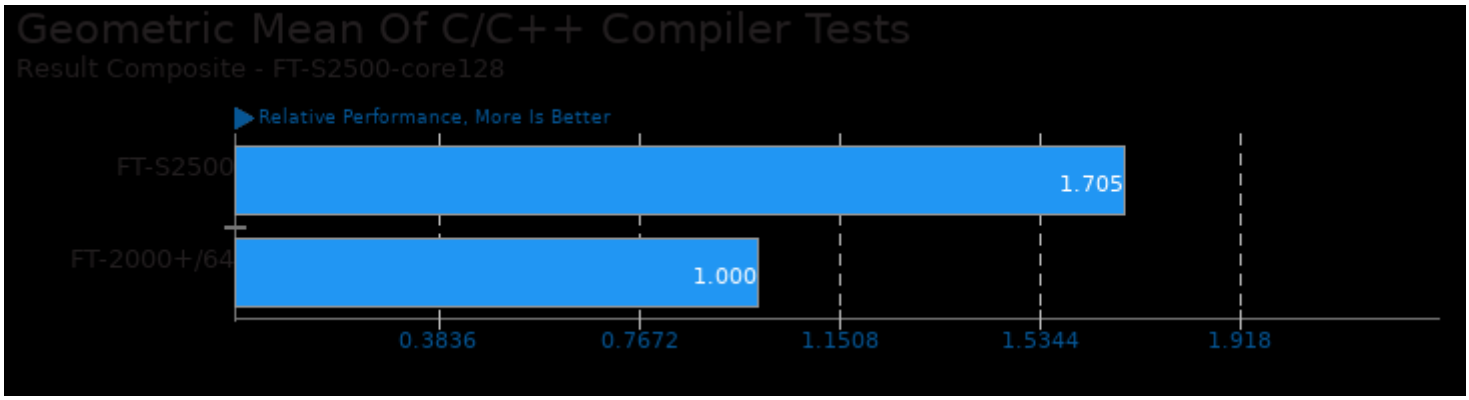


1. (CC) gcc options: -lm -lpthread -O3

Sample Pi Program



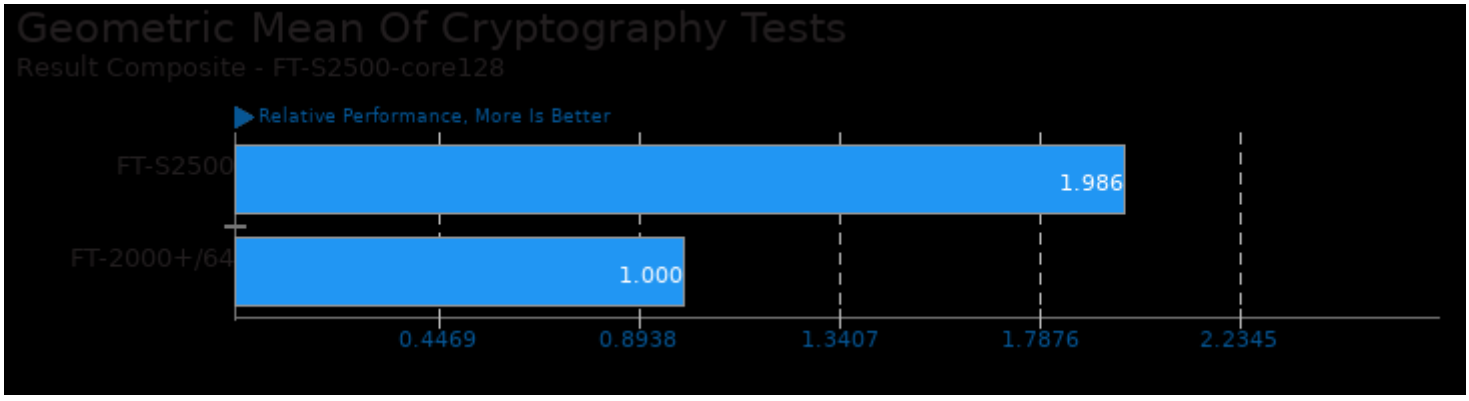
These geometric means are based upon test groupings / test suites for this result file.



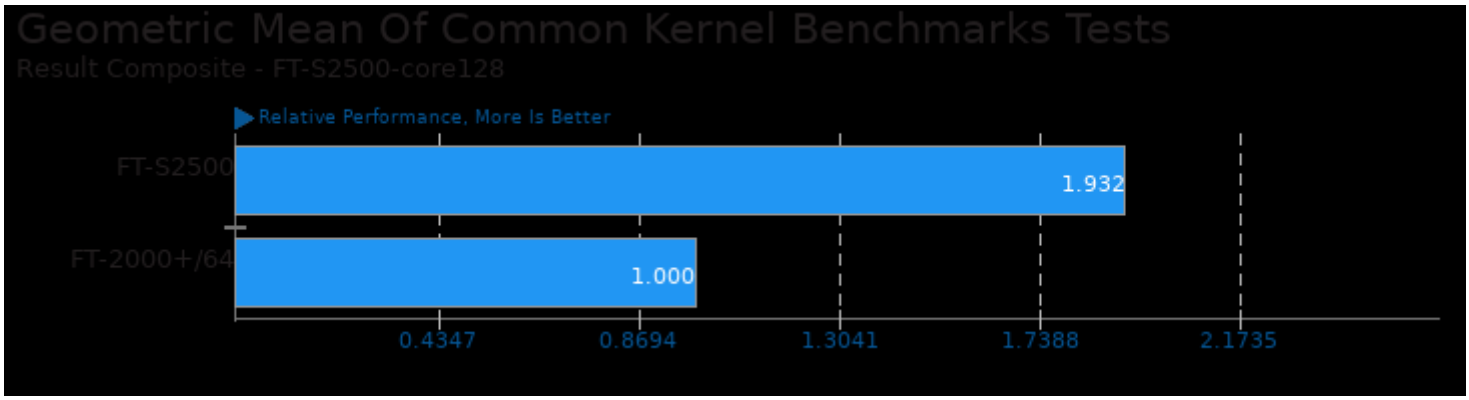
Geometric mean based upon tests: pts/mafft, pts/c-ray, pts/apache, pts/john-the-ripper and pts/openssl



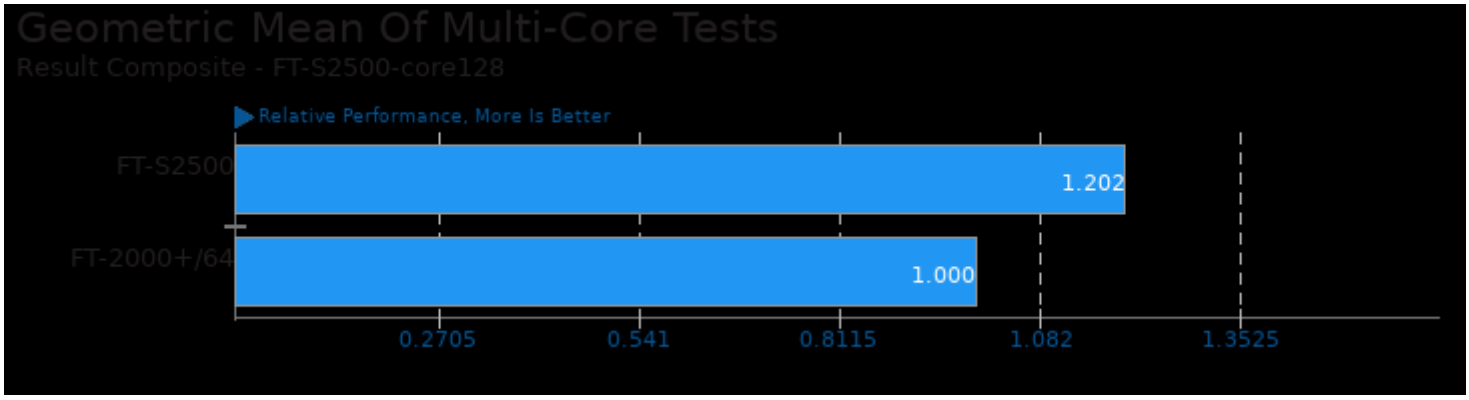
Geometric mean based upon tests: pts/apache, pts/c-ray, pts/cachebench, pts/john-the-ripper, pts/openssl, pts/mafft, pts/phpbench and pts/sysbench



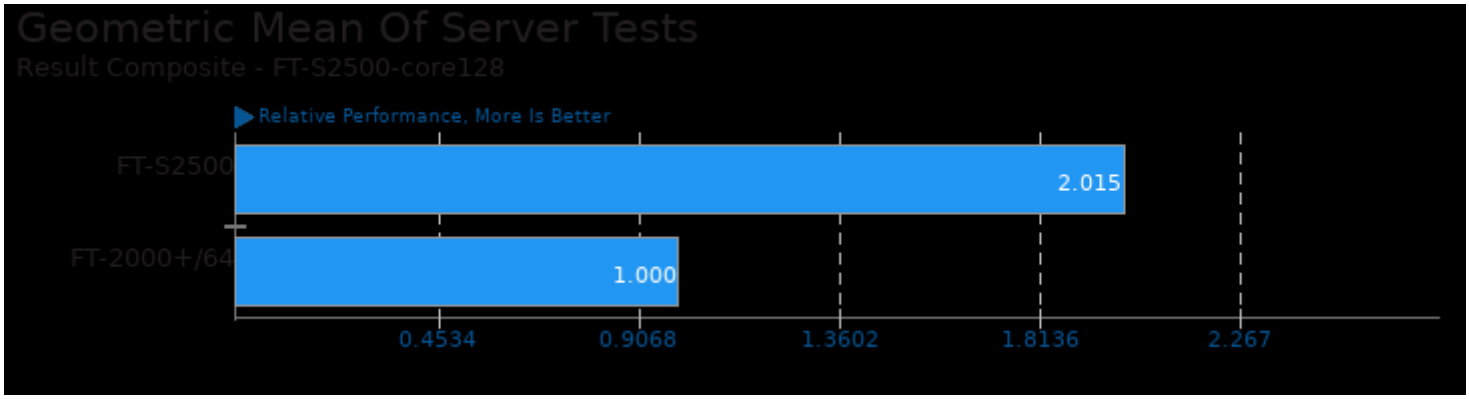
Geometric mean based upon tests: pts/openssl and pts/john-the-ripper



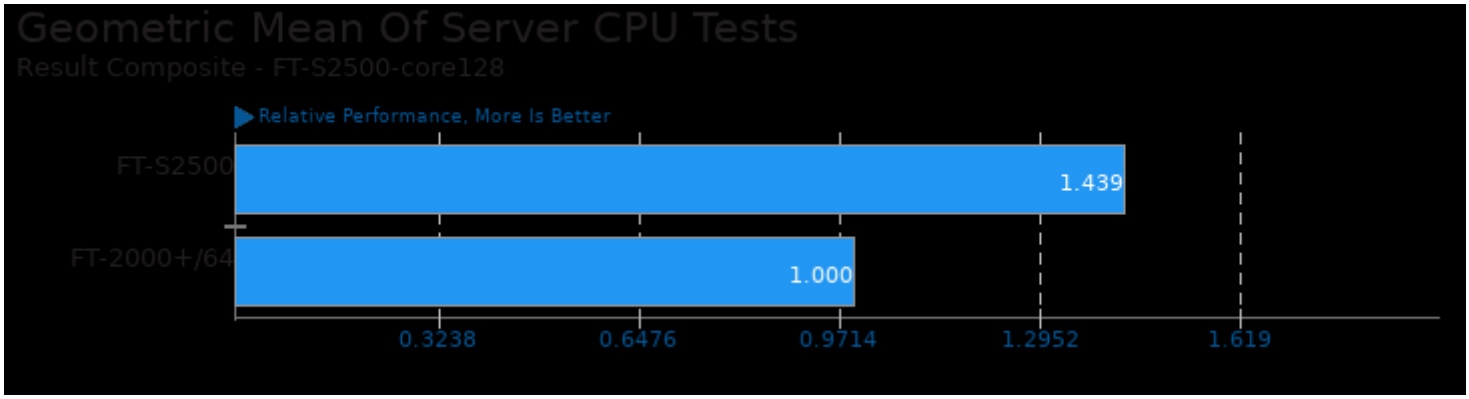
Geometric mean based upon tests: pts/apache, pts/postmark and pts/openssl



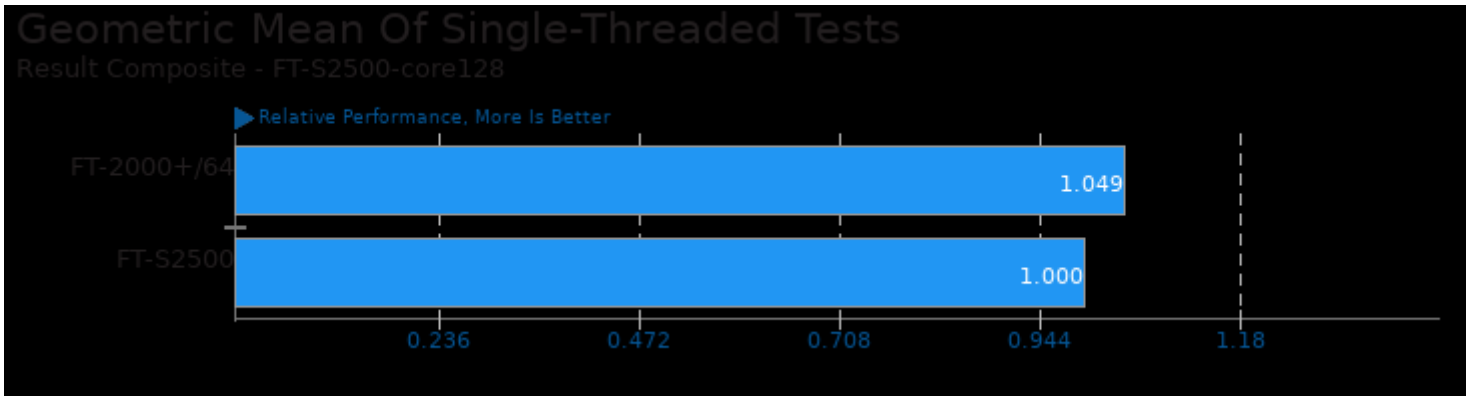
Geometric mean based upon tests: pts/sysbench, pts/c-ray, pts/coremark and pts/john-the-ripper



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



Geometric mean based upon tests: pts/john-the-ripper, pts/c-ray, pts/openssl, pts/sysbench and pts/phpbench



Geometric mean based upon tests: pts/cachebench and pts/phpbench

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 08:49.