



## appraw-7702a

AMD EPYC 7702P 64-Core testing with a Dell 0R4CNN (1.5.3 BIOS) and mgag200drmfb on CentOS Linux 8 via the Phoronix Test Suite.

### Test Systems:

#### AMD EPYC 7702P 64-Core

Processor: AMD EPYC 7702P 64-Core (64 Cores / 128 Threads), Motherboard: Dell 0R4CNN (1.5.3 BIOS), Memory: 8 x 64 GB DDR4-3200MT/s 36ASF8G72PZ-3G2B2, Disk: 480GB PERC H330 Mini, Graphics: mgag200drmfb

OS: CentOS Linux 8, Kernel: 5.9.12-1.el8.elrepo.x86\_64 (x86\_64), Compiler: GCC 8.3.1 20191121, File-System: xfs, Screen Resolution: 1024x768

Compiler Notes: --build=x86\_64-redhat-linux --disable-libmpx --disable-libunwind-exceptions --enable-\_\_cxa\_atexit --enable-bootstrap --enable-cet --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-initfini-array --enable-languages=c,c++,fortran,lto --enable-multilib --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch\_32=x86-64 --with-gcc-major-version-only --with-isl --with-linker-hash-style=gnu --with-tune=generic --without-cuda-driver  
Processor Notes: CPU Microcode: 0x8301038  
Java Notes: OpenJDK Runtime Environment (build 1.8.0\_272-b10)  
Python Notes: Python 3.6.8

Security Notes: itlb\_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + 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 AMD retpoline IBPB: conditional IBRS\_FW STIBP: conditional RSB filling + srbds: Not affected + tsx\_async\_abort: Not affected

AMD EPYC 7702P 64-Core	
IPC_benchmark - TCP Socket - 128 (Messages/sec)	3080415
Standard Deviation	0.9%
IPC_benchmark - TCP Socket - 256 (Messages/sec)	2920290
Standard Deviation	0.4%
IPC_benchmark - TCP Socket - 512 (Messages/sec)	2856841
Standard Deviation	0.1%
IPC_benchmark - TCP Socket - 1024 (Messages/sec)	2559356
Standard Deviation	0.8%
IPC_benchmark - TCP Socket - 2048 (Messages/sec)	2010226
Standard Deviation	0.8%
IPC_benchmark - TCP Socket - 4096 (Messages/sec)	1420816
Standard Deviation	0.2%
IPC_benchmark - Unnamed Pipe - 128 (Messages/sec)	3947076
Standard Deviation	3.9%
IPC_benchmark - Unnamed Pipe - 256 (Messages/sec)	3960387
Standard Deviation	2.5%
IPC_benchmark - Unnamed Pipe - 512 (Messages/sec)	3791947
Standard Deviation	1%
IPC_benchmark - Unnamed Pipe - 1024 (Messages/sec)	3158203
Standard Deviation	20.8%
IPC_benchmark - Unnamed Pipe - 2048 (Messages/sec)	1294147
Standard Deviation	18.9%
IPC_benchmark - Unnamed Pipe - 4096 (Messages/sec)	1621004
Standard Deviation	1.7%
IPC_benchmark - FIFO Named Pipe - 128 (Messages/sec)	4270591
Standard Deviation	1.3%
IPC_benchmark - FIFO Named Pipe - 256 (Messages/sec)	4056008
Standard Deviation	3%
IPC_benchmark - FIFO Named Pipe - 512 (Messages/sec)	3687602
Standard Deviation	11.2%
IPC_benchmark - FIFO Named Pipe - 1024 (Messages/sec)	3141036
Standard Deviation	13.2%
IPC_benchmark - FIFO Named Pipe - 2048 (Messages/sec)	2197142
Standard Deviation	9%
IPC_benchmark - FIFO Named Pipe - 4096 (Messages/sec)	1593136
Standard Deviation	5.2%
IPC_benchmark - U.U.D.S - 128 (Messages/sec)	1776116
Standard Deviation	0.6%
IPC_benchmark - U.U.D.S - 256 (Messages/sec)	1808301
Standard Deviation	0.6%
IPC_benchmark - U.U.D.S - 512 (Messages/sec)	1648804
Standard Deviation	0.3%
IPC_benchmark - U.U.D.S - 1024 (Messages/sec)	1617734
Standard Deviation	0.4%
IPC_benchmark - U.U.D.S - 2048 (Messages/sec)	890628

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	Standard Deviation	14.1%
<b>IPC_benchmark - U.U.D.S - 4096 (Messages/sec)</b>		972153
	Standard Deviation	0.9%
<b>Timed Linux Kernel Compilation - Time To Compile (sec)</b>		25.149
	Standard Deviation	2.9%
<b>Gzip Compression - L.S.T.A.T.g (sec)</b>		44.306
	Standard Deviation	0.1%
<b>GnuPG - 2.F.E (sec)</b>		13.841
	Standard Deviation	0.3%
<b>Perl Benchmarks - Pod2html (sec)</b>		0.14965050
	Standard Deviation	1.4%
<b>Perl Benchmarks - Interpreter (sec)</b>		0.00120222
	Standard Deviation	0.2%
<b>OpenSSL - R.4.b.P (Signs/sec)</b>		12647
	Standard Deviation	0.2%
<b>Memtier_benchmark - Redis (Ops/sec)</b>		1961228
	Standard Deviation	0.6%
<b>Redis - LPOP (Reqs/sec)</b>		1194798
	Standard Deviation	0.8%
<b>Redis - SADD (Reqs/sec)</b>		1697255
	Standard Deviation	9.2%
<b>Redis - LPUSH (Reqs/sec)</b>		1185076
	Standard Deviation	6.3%
<b>Redis - GET (Reqs/sec)</b>		1737244
	Standard Deviation	5.9%
<b>Redis - SET (Reqs/sec)</b>		1428971
	Standard Deviation	7.5%
<b>Apache Cassandra - Reads (Op/s)</b>		152
	Standard Deviation	7.9%
<b>Apache Cassandra - Writes (Op/s)</b>		217756
	Standard Deviation	1%
<b>Apache Cassandra - Mixed 1:1 (Op/s)</b>		226
	Standard Deviation	7.2%
<b>Apache Cassandra - Mixed 1:3 (Op/s)</b>		70
	Standard Deviation	66.5%
<b>NGINX Benchmark - S.W.P.S (Reqs/sec)</b>		35388

### IPC\_benchmark

Type: TCP Socket - Message Bytes: 128



### IPC\_benchmark

Type: TCP Socket - Message Bytes: 256



### IPC\_benchmark

Type: TCP Socket - Message Bytes: 512



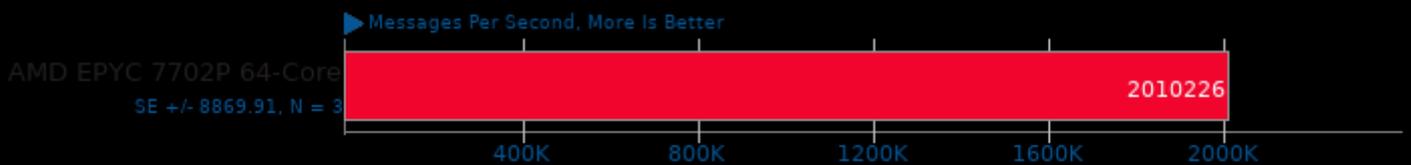
### IPC\_benchmark

Type: TCP Socket - Message Bytes: 1024



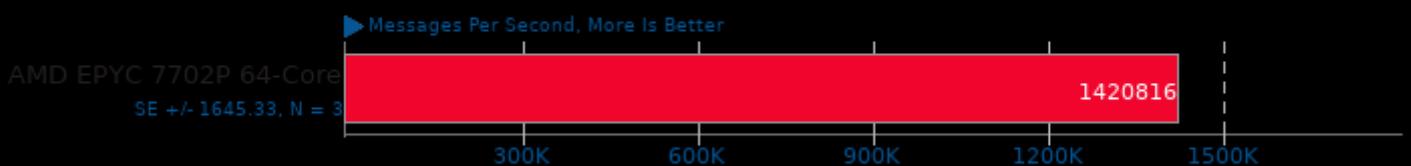
### IPC\_benchmark

Type: TCP Socket - Message Bytes: 2048



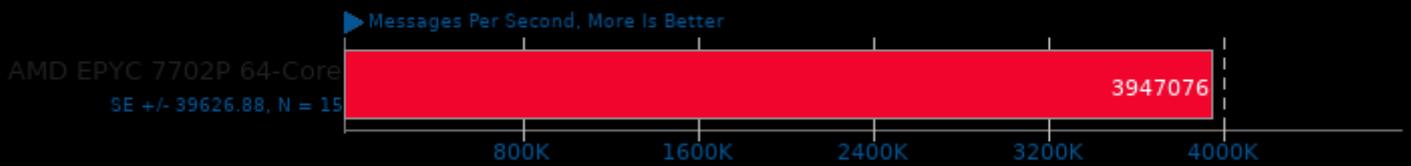
### IPC\_benchmark

Type: TCP Socket - Message Bytes: 4096



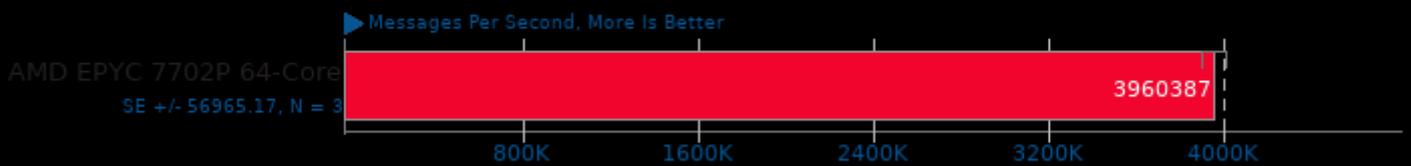
### IPC\_benchmark

Type: Unnamed Pipe - Message Bytes: 128



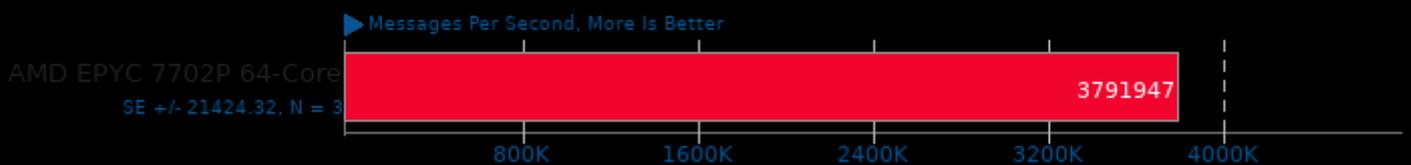
### IPC\_benchmark

Type: Unnamed Pipe - Message Bytes: 256



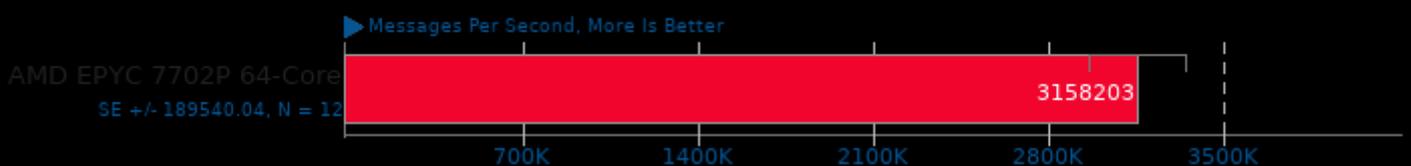
### IPC\_benchmark

Type: Unnamed Pipe - Message Bytes: 512



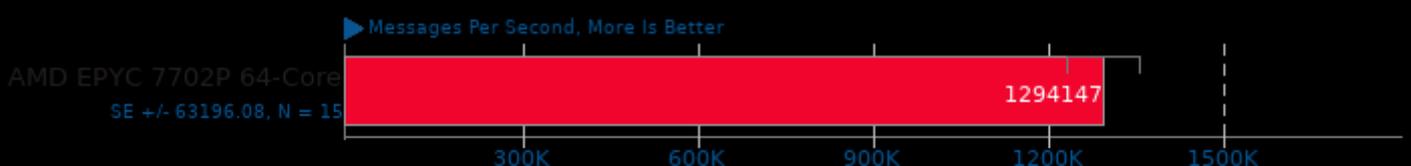
### IPC\_benchmark

Type: Unnamed Pipe - Message Bytes: 1024



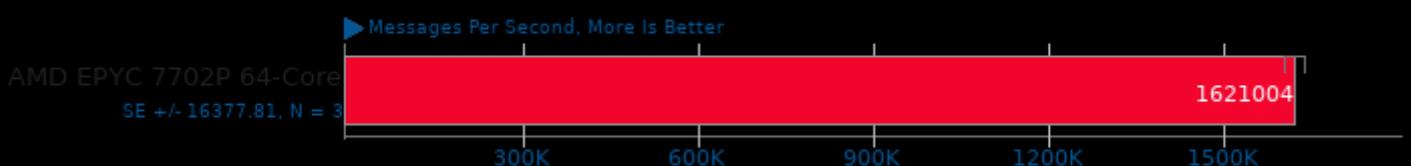
### IPC\_benchmark

Type: Unnamed Pipe - Message Bytes: 2048



### IPC\_benchmark

Type: Unnamed Pipe - Message Bytes: 4096



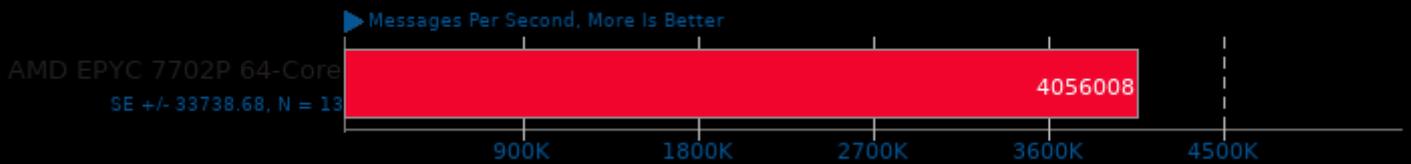
### IPC\_benchmark

Type: FIFO Named Pipe - Message Bytes: 128



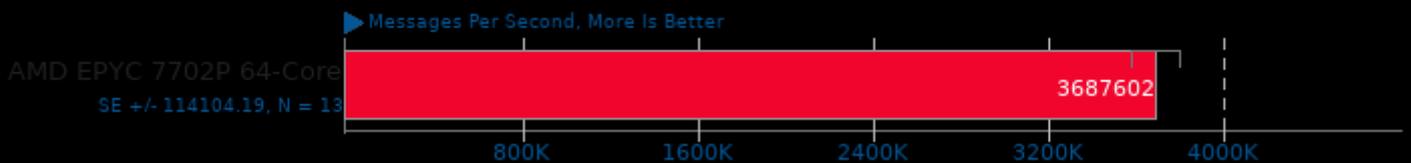
### IPC\_benchmark

Type: FIFO Named Pipe - Message Bytes: 256



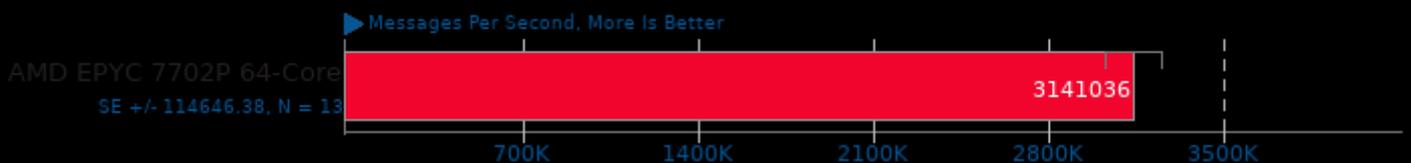
### IPC\_benchmark

Type: FIFO Named Pipe - Message Bytes: 512



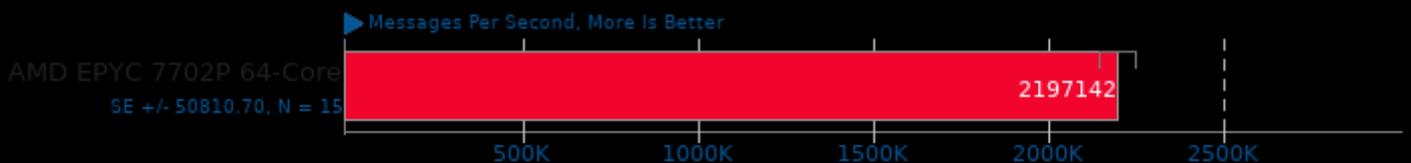
### IPC\_benchmark

Type: FIFO Named Pipe - Message Bytes: 1024



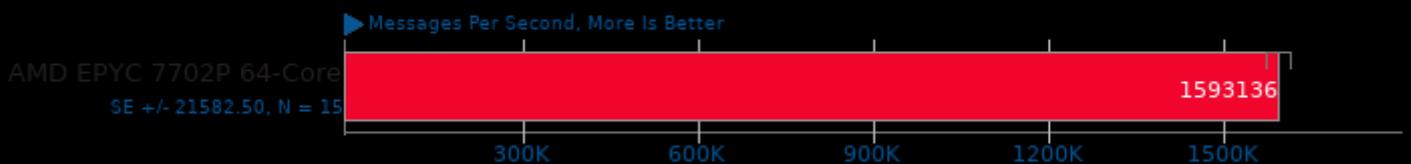
### IPC\_benchmark

Type: FIFO Named Pipe - Message Bytes: 2048



### IPC\_benchmark

Type: FIFO Named Pipe - Message Bytes: 4096



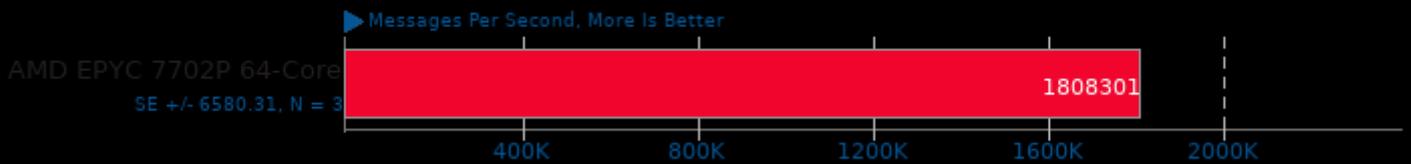
### IPC\_benchmark

Type: Unnamed Unix Domain Socket - Message Bytes: 128



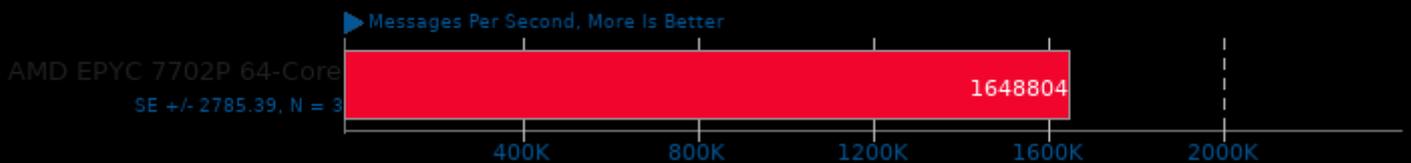
### IPC\_benchmark

Type: Unnamed Unix Domain Socket - Message Bytes: 256



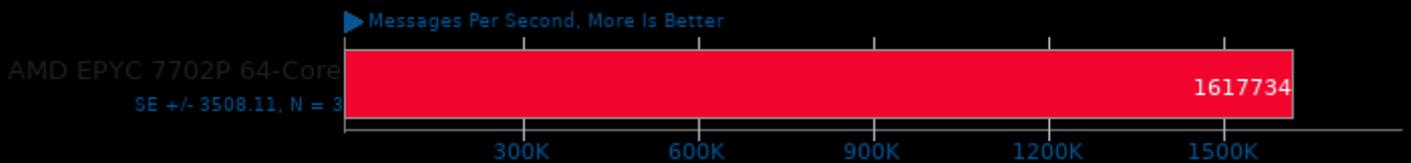
### IPC\_benchmark

Type: Unnamed Unix Domain Socket - Message Bytes: 512



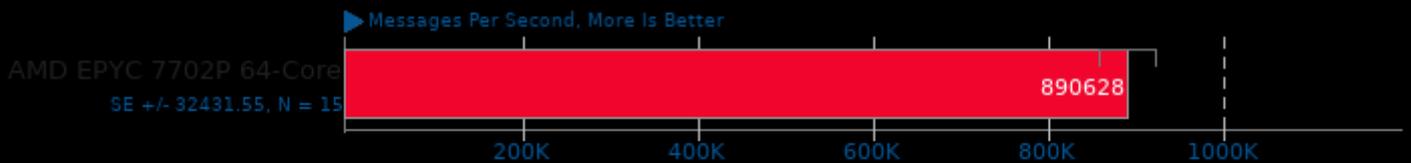
### IPC\_benchmark

Type: Unnamed Unix Domain Socket - Message Bytes: 1024



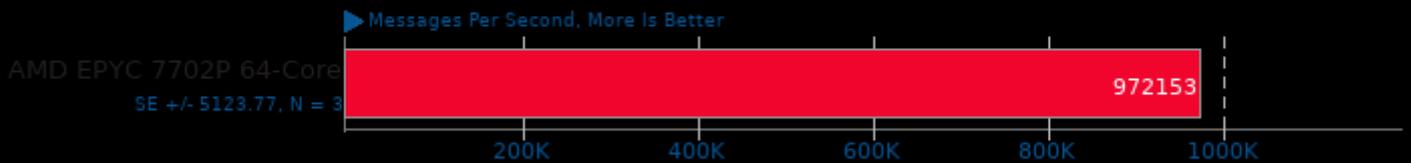
### IPC\_benchmark

Type: Unnamed Unix Domain Socket - Message Bytes: 2048



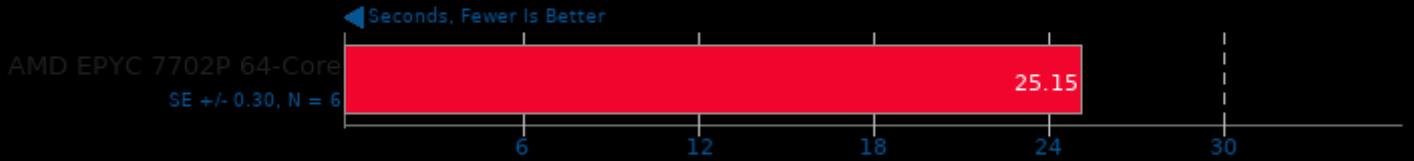
### IPC\_benchmark

Type: Unnamed Unix Domain Socket - Message Bytes: 4096



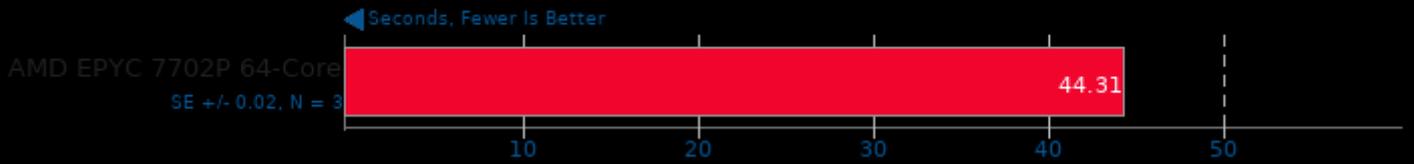
## Timed Linux Kernel Compilation 5.4

Time To Compile



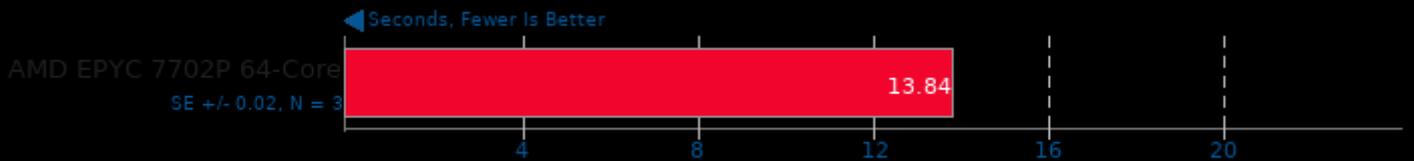
## Gzip Compression

Linux Source Tree Archiving To .tar.gz



## GnuPG 1.4.22

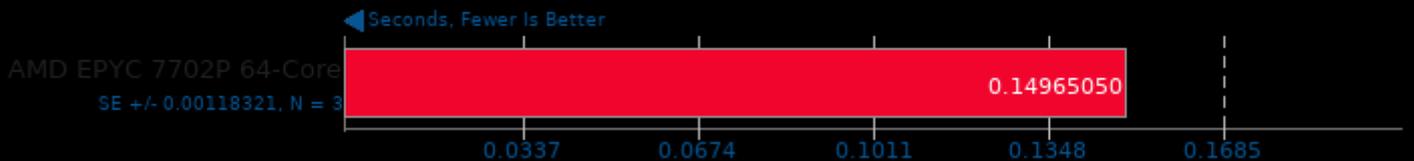
2GB File Encryption



1. (CC) gcc options: -O2 -MT -MD -MP -MF

## Perl Benchmarks

Test: Pod2html

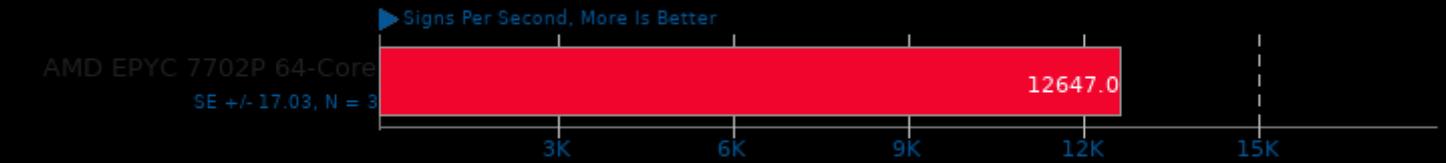


## Perl Benchmarks

Test: Interpreter

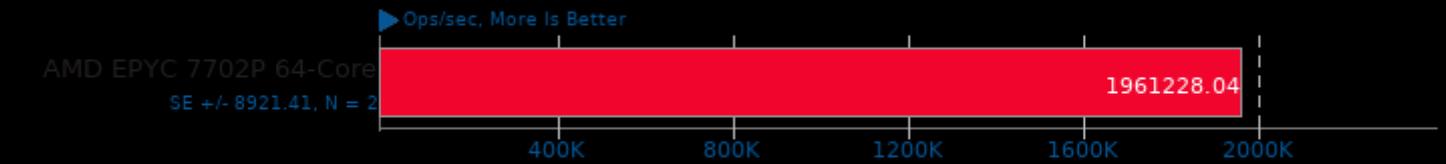


### OpenSSL 1.1.1 RSA 4096-bit Performance



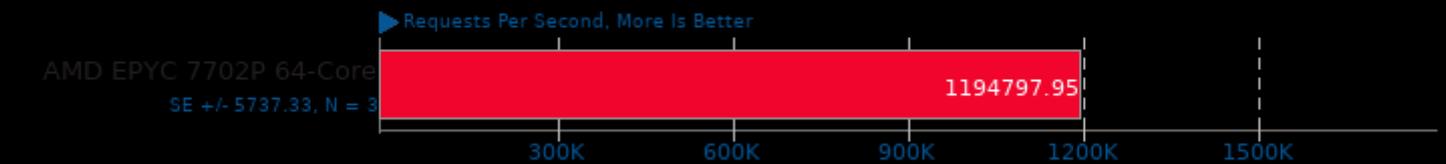
1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ld

### Memtier\_benchmark 1.2.17 Protocol: Redis

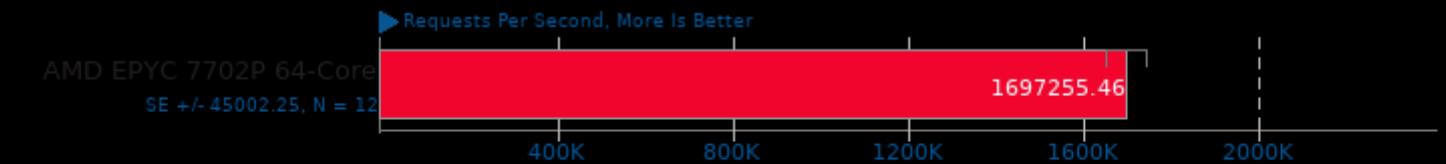


1. (CXX) g++ options: -O2 -fevent -pthread -lz -lpcr

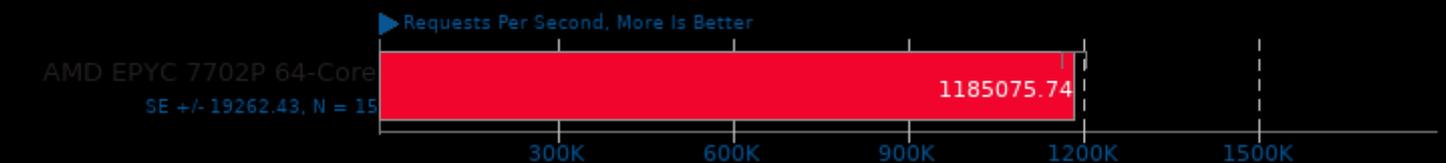
### Redis 5.0.3 Test: LPOP



### Redis 5.0.3 Test: SADD

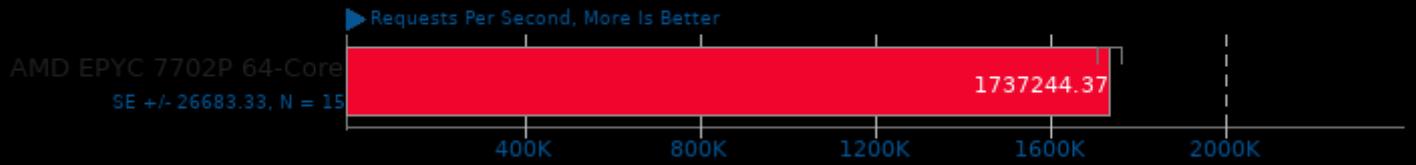


### Redis 5.0.3 Test: LPUSH



### Redis 5.0.3

Test: GET



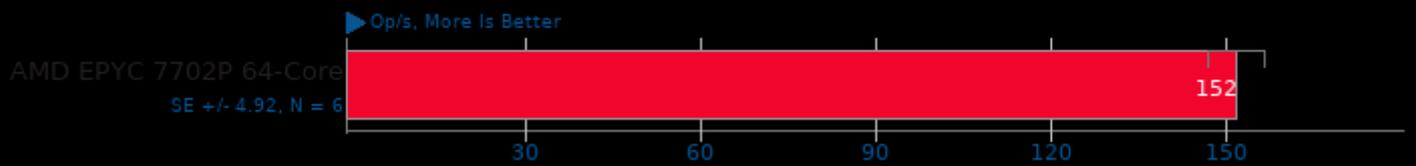
### Redis 5.0.3

Test: SET



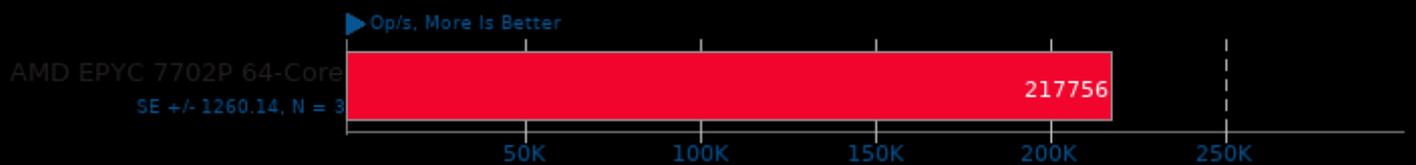
### Apache Cassandra 3.11.4

Test: Reads



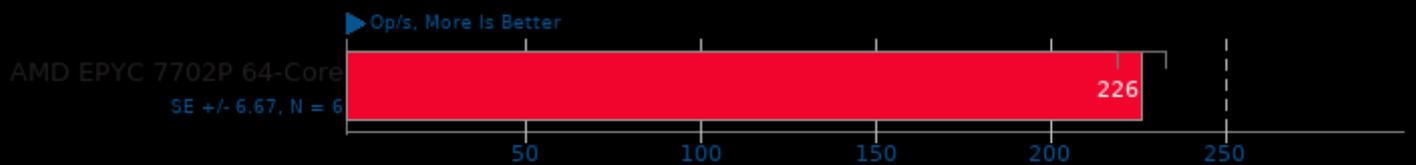
### Apache Cassandra 3.11.4

Test: Writes



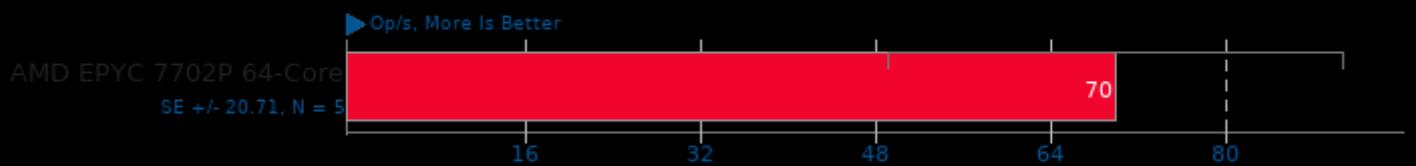
### Apache Cassandra 3.11.4

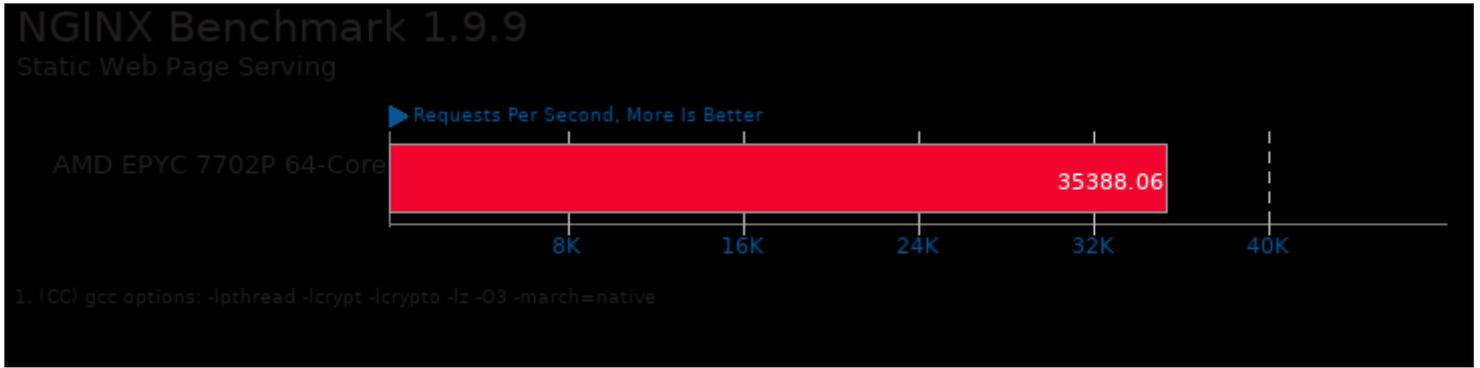
Test: Mixed 1:1



### Apache Cassandra 3.11.4

Test: Mixed 1:3





This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 14:31.