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ARMv8 Cortex-A78E testing with a EDK II r35.0-716592d-dirty and NVIDIA Tegra Orin on Ubuntu 20.04 via the Phoronix Test Suite.

Test Systems:

typec128g1403

Processor: ARMv8 Cortex-A78E @ 1.73GHz (8 Cores), Motherboard: EDK II r35.0-716592d-dirty, Memory: 30GB, Disk: 895GB InnoAGE M.2 (P80) 3TI6 + 128GB DX2 + 64GB G1M15M, Graphics: NVIDIA Tegra Orin, Monitor: ASUS VG289, Network: Intel Device 0d9f

OS: Ubuntu 20.04, Kernel: 5.10.104-tegra (aarch64), Desktop: GNOME Shell 3.36.9, Display Server: X Server 1.20.13, Display Driver: NVIDIA 35.1.0, OpenGL: 4.6.0, Vulkan: 1.3.212, Compiler: GCC 9.4.0 + CUDA 11.4, File-System: fuseblk, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=aarch64-linux-gnu --disable-libquadmath --disable-libquadmath-support --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-fix-cortex-a53-843419 --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug

--enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-objc-gc=auto --enable-plugin --enable-shared --enable-threads=posix --host=aarch64-linux-gnu --program-prefix=aarch64-linux-gnu- --target=aarch64-linux-gnu --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-target-system-zlib=auto -v
Disk Notes: NONE / relatime,rw / Block Size: 4096
Processor Notes: Scaling Governor: tegra194 schedutil
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Not affected + srbds: Not affected + tsx_async_abort: Not affected

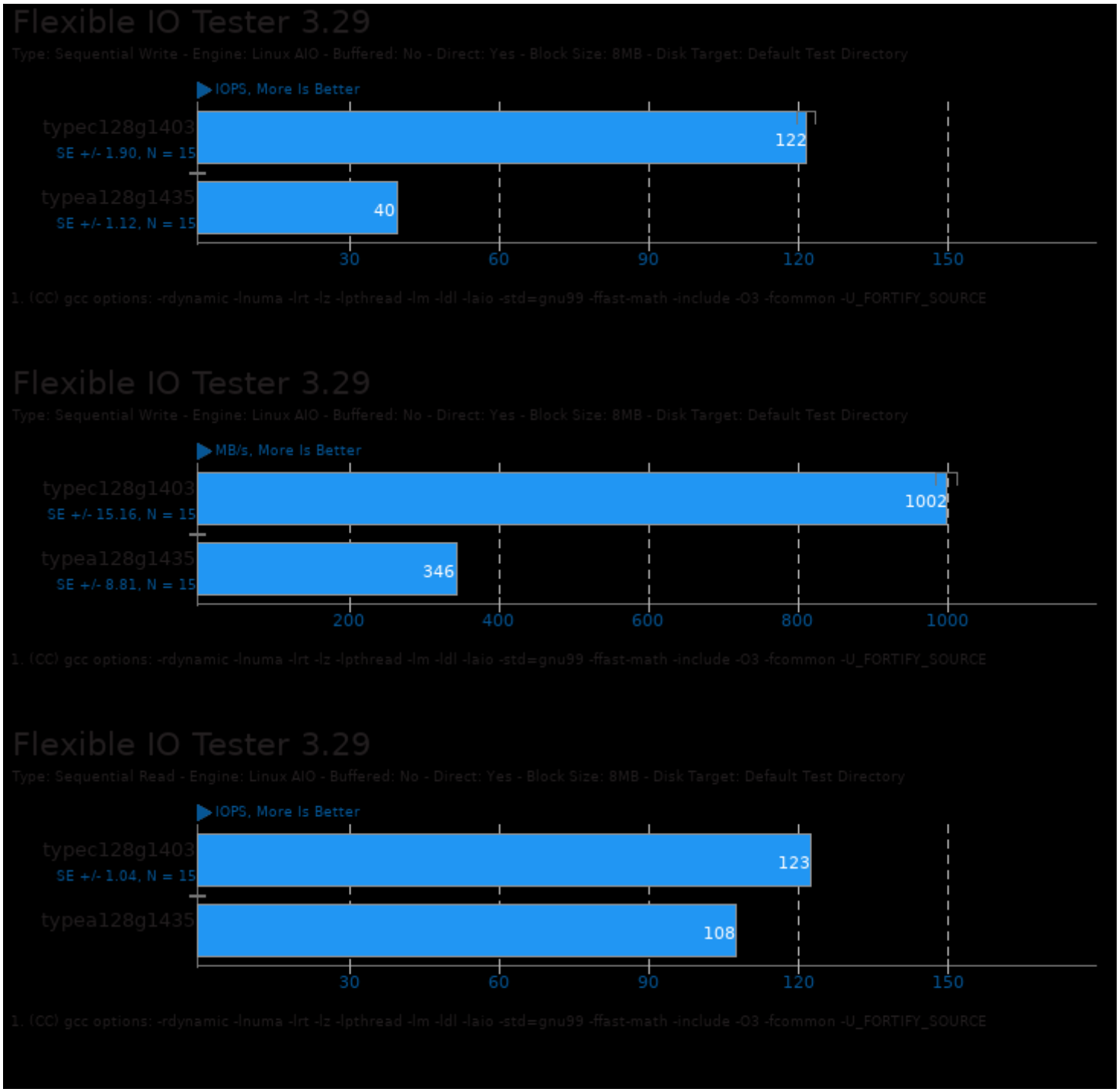
typea128g1435

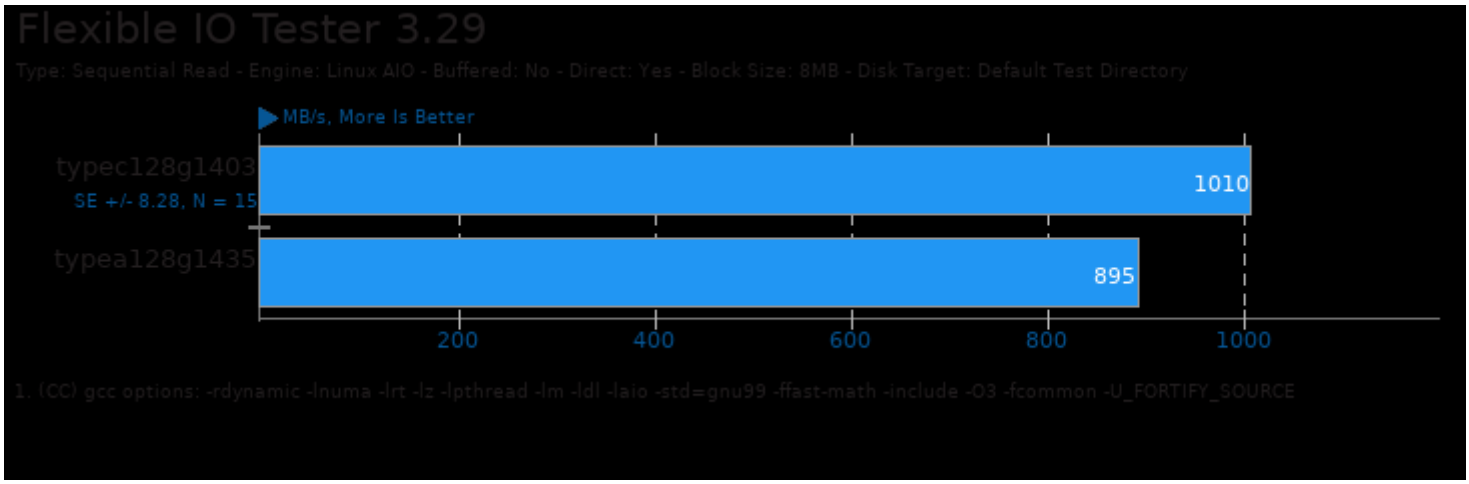
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	typec128g1403	typea128g1435
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (IOPS)	**122**	**40**
Normalized	100%	32.79%
Standard Deviation	6.1%	10.9%
Flexible IO Tester - Seq Write - Linux AIO - No - Yes - 8MB (MB/s)	**1002**	**346**
Normalized	100%	34.53%
Standard Deviation	5.9%	9.9%
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (IOPS)	**123**	**108**
Normalized	100%	87.8%
Standard Deviation	3.3%	
Flexible IO Tester - Seq Read - Linux AIO - No - Yes - 8MB (MB/s)	**1010**	**895**
Normalized	100%	88.61%
Standard Deviation	3.2%	


Flexible IO Tester 3.29
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
typec128g1403
SE +/- 1.90, N = 15
122
typea128g1435
SE +/- 1.12, N = 15
40
30
60
90
120
150
1. (CC) gcc options: -rdynamic -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE
Flexible IO Tester 3.29
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
typec128g1403
SE +/- 15.16, N = 15
1002
typea128g1435
SE +/- 8.81, N = 15
346
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE
Flexible IO Tester 3.29
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
typec128g1403
SE +/- 1.04, N = 15
123
typea128g1435
108
30
60
90
120
150
1. (CC) gcc options: -rdynamic -lnuma -lrt -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 07:50.