

www.phoronix-test-suite.com

TrueNAScore51922

Testlauf decheznas01_2

Automated Executive Summary

CheZ had the most wins, coming in first place for 25% of the tests.

Based on the geometric mean of all complete results, the fastest (Testing TrueNAS Core 13 performace after in-place upgrade) was 6.304x the speed of the slowest (Chez02). Testing TrueNAS Core 12.0 performance was 0.998x the speed of Testing TrueNAS Core 13 performace after in-place upgrade, Testing TrueNAS Core 13 after a ZFS pool feature flag update was 0.989x the speed of Testing TrueNAS Core 12.0 performance, Chez_Log_On_Dedup_on_Atime_off_Sync_Off was 0.8x the speed of Testing TrueNAS Core 13 after a ZFS pool feature flag update, hez_Dedup_off_Atime_off_Log_on_Sync_Off was 0.971x the speed of Chez_Log_On_Dedup_on_Atime_off_Sync_Off, Testing TrueNAS Scale 22.02 after in-place upgrade from Core was 0.845x the speed of hez_Dedup_off_Atime_off_Log_on_Sync_Off, Chez_Dedup_off_Atime_off_Log_on was 0.92x the speed of Testing TrueNAS Scale 22.02 after in-place upgrade from Core, Chez_Dedup_off_Atime_off was 0.309x the speed of Chez_Dedup_off_Atime_off_Log_on, Chez_Dedup_off was 0.953x the speed of Chez_Dedup_off_Atime_off, CheZ was 0.905x the speed of Chez_Dedup_off, Chez02 was 0.998x the speed of CheZ.

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

Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk

Target: Default Test Directory) at 23.647x
Flexible IO Tester (Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory) at 23.398x
Flexible IO Tester (Type: Random Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory) at 22.802x
Flexible IO Tester (Type: Random Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory) at 22.614x
Flexible IO Tester (Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory) at 1.062x
Flexible IO Tester (Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory) at 1.062x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory) at 1.054x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory) at 1.053x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory) at 1.049x
Flexible IO Tester (Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory) at 1.049x.

Test Systems:

Testing TrueNAS Core 12.0 performance

Testing TrueNAS Core 13 performace after in-place upgrade

Testing TrueNAS Core 13 after a ZFS pool feature flag update

Testing TrueNAS Scale 22.02 after in-place upgrade from Core

Processor: AMD Ryzen 5 5600G (8 Cores), Motherboard: Xen HVM domU v4.13, Chipset: Intel 440FX 82441FX PMC, Memory: 836MB, Disk: 29GB, Graphics: bochs-drmdrmfb

OS: Ubuntu 20.04, Kernel: 5.4.0-110-generic (x86_64), Vulkan: 1.1.182, Compiler: GCC 9.4.0, File-System: ext4, Screen Resolution: 1024x768, System Layer: Xen HVM domU 4.13

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --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-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-Av3uEd/gcc-9-9.4.0/debian/tmp-nvptx/usr,hsa --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 --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: CPU Microcode: 0xa50000b
Disk Mount Options Notes: relatime,rw
Disk Details Notes: Block Size: 4096
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/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

CheZ

Chez02

Chez_Dedup_off

Chez_Dedup_off_Atime_off

Chez_Dedup_off_Atime_off_Log_on

Processor: 2 x Intel Xeon Gold 6242R (4 Cores), Motherboard: Intel 440BX (6.00 BIOS), Chipset: Intel 440BX/ZX/DX, Memory: 32GB, Disk: 107GB Virtual disk, Graphics: SVGA3D; build: RELEASE; LLVM;, Network: VMware VMXNET3

OS: Ubuntu 22.10, Kernel: 5.19.0-29-generic (x86_64), Desktop: GNOME Shell 43.1, Display Server: X Server + Wayland, OpenGL: 3.3 Mesa 22.2.1, Vulkan: 1.3.224, Compiler: GCC 12.2.0, File-System: ext4, Screen Resolution: 1623x970, System Layer: VMware

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-cet --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-defaulted --enable-offload-targets=nvptx-none=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-gcn/usr --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 --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Disk Notes: MQ-DEADLINE / errors=remount-ro,relatime,rw / Block Size: 4096
Processor Notes: CPU Microcode: 0x5003103
Security Notes: itlb_multihit: KVM: Mitigation of VMX unsupported + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Vulnerable: Clear buffers attempted no microcode; SMT Host state unknown + retbleed: Mitigation of Enhanced IBRS + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Enhanced IBRS IBPB: conditional RSB filling PBRSB-eIBRS: SW sequence + srbds: Not affected + tsx_async_abort: Not affected

hez_Dedup_off_Atime_off_Log_on_Sync_Off

Chez_Log_On_Dedup_on_Atime_off_Sync_Off

Processor: 2 x Intel Xeon Gold 6242R (4 Cores), Motherboard: Intel 440BX (6.00 BIOS), Chipset: Intel 440BX/ZX/DX, Memory: 32GB, Disk: 107GB Virtual disk, Graphics: SVGA3D; build: RELEASE; LLVM;, Network: VMware VMXNET3

OS: Ubuntu 22.10, Kernel: 5.19.0-29-generic (x86_64), Desktop: GNOME Shell 43.1, Display Server: X Server + Wayland, OpenGL: 3.3 Mesa 22.2.1, Vulkan: 1.3.224, Compiler: GCC 12.2.0, File-System: ext4, Screen Resolution: 1623x971, System Layer: VMware

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-cet --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-defaulted --enable-offload-targets=nvptx-none=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-gcn/usr --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 --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Disk Notes: MQ-DEADLINE / errors=remount-ro,relatime,rw / Block Size: 4096
Processor Notes: CPU Microcode: 0x5003103
Security Notes: itlb_multihit: KVM: Mitigation of VMX unsupported + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Vulnerable: Clear buffers attempted no microcode; SMT Host state unknown + retbleed: Mitigation of Enhanced IBRS + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Enhanced IBRS IBPB: conditional RSB filling PBRSB-eIBRS: SW sequence + srbds: Not affected + tsx_async_abort: Not affected

Phoronix Test Suite

TrueNAScore51922

	Testing TrueNAS Core 12.0 performance	Testing TrueNAS Core 13 performace after in-place upgrade	Testing TrueNAS Core 13 after a ZFS pool feature flag update	Testing TrueNAS Scale 22.02 after in-place upgrade from Core	CheZ	Chez02	Chez_Dedup_off	Chez_Dedup_off_Atime_off	Chez_Dedup_off_Atime_off_Log_on	hez_Dedup_off_Atime_off_Log_on_Sync_Off	Chez_Log_On_Dedup_on_Atime_off_Sync_Off
Flexible IO Tester - Rand Read - Linux AIO - No - No - 1MB (MB/s)	1083	**1054**	1078	1093	**1119**	1117	1118	1116	1115	1117	1117
Normalized	96.78%	94.19%	96.34%	97.68%	100%	99.82%	99.91%	99.73%	99.64%	99.82%	99.82%
Standard Deviation	1.3%		2.2%	0.3%	0.1%	0.1%	0%	0.1%	0.1%	0.1%	0.1%
Flexible IO Tester - Rand Read - Linux AIO - No - No - 1MB (IOPS)	1080	**1050**	1074	1089	**1115**	1114	1114	1113	1111	1113	1113
Normalized	96.86%	94.17%	96.32%	97.67%	100%	99.91%	99.91%	99.82%	99.64%	99.82%	99.82%
Standard Deviation	1.3%		2.3%	0.3%	0%	0.1%	0%	0.1%	0.1%	0.1%	0.1%
Flexible IO Tester - Rand Read - Linux AIO - No - No - 4KB (MB/s)	**373**	347	342	**144**	178	167	171	172	174	165	173
Normalized	100%	93.03%	91.69%	38.61%	47.72%	44.77%	45.84%	46.11%	46.65%	44.24%	46.38%
Standard Deviation	0.5%	13%	12.7%	0.4%	4.7%	5.8%	8.6%	9.2%	7.6%	6.2%	5.2%
Flexible IO Tester - Rand Read - Linux AIO - No - No - 4KB (IOPS)	**95400**	88767	87667	**36800**	45658	42850	43633	43887	44473	42287	44192
Normalized	100%	93.05%	91.89%	38.57%	47.86%	44.92%	45.74%	46%	46.62%	44.33%	46.32%
Standard Deviation	0.5%	13%	12.6%	0.3%	4.7%	5.8%	8.6%	9.2%	7.7%	6.2%	5.2%
Flexible IO Tester - Rand Write - Linux AIO - No - No - 1MB (MB/s)	804	757	757	708	**116**	122	137	139	444	863	**995**
Normalized	80.8%	76.08%	76.08%	71.16%	11.66%	12.26%	13.77%	13.97%	44.62%	86.73%	100%
Standard Deviation	22.1%	15.4%	20.2%	16%	7.3%	8.6%	1.5%	0.7%	0.5%	1.4%	1.5%
Flexible IO Tester - Rand Write - Linux AIO - No - No - 1MB (IOPS)	801	753	753	705	**112**	119	133	135	441	859	**991**
Normalized	80.83%	75.98%	75.98%	71.14%	11.3%	12.01%	13.42%	13.62%	44.5%	86.68%	100%
Standard Deviation	22.2%	15.5%	20.3%	16.1%	7.5%	8.9%	1.5%	0.9%	0.3%	1.4%	1.4%

TrueNAScore51922

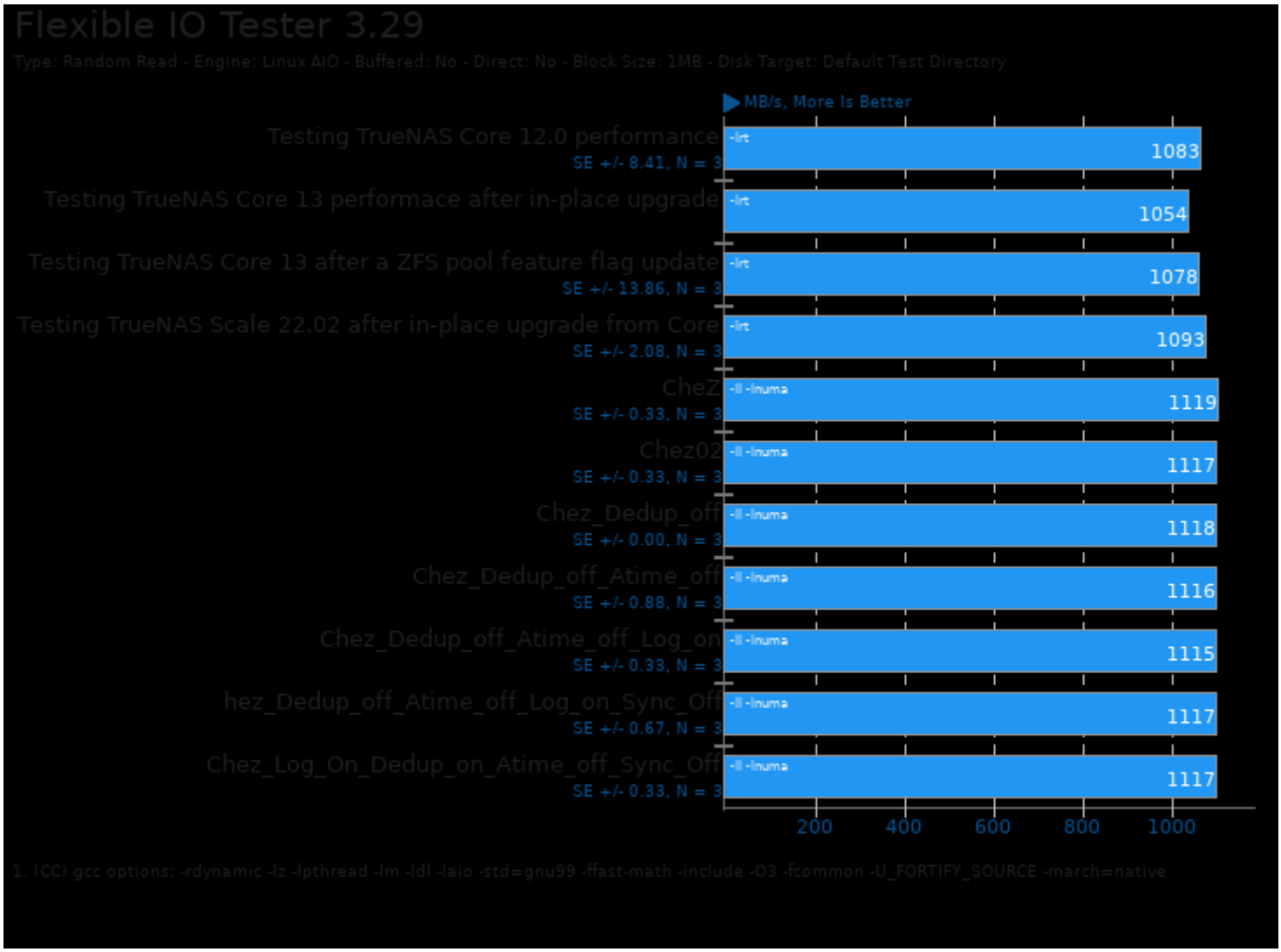
Flexible IO Tester - Rand Write - Linux AIO - No - No - 4KB (MB/s)	261.6	276	**288**	36.563	1.446	**1.283**	1.295	1.898	132	192	199
Normalized	90.83%	95.83%	100%	12.7%	0.5%	0.45%	0.45%	0.66%	45.83%	66.67%	69.1%
Standard Deviation	21.2%	8.5%	1.8%	37.1%	17.7%	15.7%	22.6%	1.9%	2%	3.4%	2.9%
Flexible IO Tester - Rand Write - Linux AIO - No - No - 4KB (IOPS)	66964	70740	**73667**	9361	358	**317**	320	471	33767	49260	50987
Normalized	90.9%	96.03%	100%	12.71%	0.49%	0.43%	0.43%	0.64%	45.84%	66.87%	69.21%
Standard Deviation	21.2%	8.4%	1.7%	37.2%	17.9%	15.8%	22.8%	1.9%	2%	3.4%	3%
Flexible IO Tester - Rand Read - Linux AIO - No - No - 128KB (MB/s)	1102	**1095**	1104	**1095**	**1118**	1116	**1118**	**1118**	**1118**	**1118**	1112
Normalized	98.57%	97.94%	98.75%	97.94%	100%	99.82%	100%	100%	100%	100%	99.46%
Standard Deviation	0.6%	1.2%	0.5%	0.5%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Flexible IO Tester - Rand Read - Linux AIO - No - No - 128KB (IOPS)	8816	8757	8831	**8753**	**8938**	8928	**8938**	8936	8937	8936	8895
Normalized	98.64%	97.97%	98.8%	97.93%	100%	99.89%	100%	99.98%	99.99%	99.98%	99.52%
Standard Deviation	0.6%	1.2%	0.5%	0.5%	0%	0.1%	0%	0%	0%	0%	0.1%
Flexible IO Tester - Rand Write - Linux AIO - No - No - 128KB (MB/s)	963	**995**	990	485	48.0	**44.0**	65.8	66.0	472	803	796
Normalized	96.78%	100%	99.5%	48.74%	4.82%	4.42%	6.61%	6.63%	47.44%	80.7%	80%
Standard Deviation	5.6%	4.5%	1.5%	30.2%	6%	9%	0.5%	1.8%	1.1%	2.8%	1.7%
Flexible IO Tester - Rand Write - Linux AIO - No - No - 128KB (IOPS)	7698	**7958**	7913	3878	380	**349**	522	524	3773	6423	6364
Normalized	96.73%	100%	99.43%	48.73%	4.78%	4.39%	6.56%	6.58%	47.41%	80.71%	79.97%
Standard Deviation	5.6%	4.5%	1.5%	30.2%	6.1%	9.1%	0.6%	1.8%	1.1%	2.8%	1.7%
Flexible IO Tester - Seq Read - Linux AIO - No - No - 1MB (MB/s)	1077	1068	**1067**	1096	**1119**	1115	**1119**	**1119**	1117	1117	1114
Normalized	96.25%	95.44%	95.35%	97.94%	100%	99.64%	100%	100%	99.82%	99.82%	99.55%
Standard Deviation	1.1%	1.9%	2.3%	1%	0%	0%	0.1%	0%	0%	0.1%	0.4%
Flexible IO Tester - Seq Read - Linux AIO - No - No - 1MB (IOPS)	1073	1064	**1063**	1093	**1115**	1111	**1115**	**1115**	1114	1114	1111
Normalized	96.23%	95.43%	95.34%	98.03%	100%	99.64%	100%	100%	99.91%	99.91%	99.64%
Standard Deviation	1.2%	2%	2.3%	0.9%	0%	0.1%	0.1%	0%	0.1%	0.1%	0.5%

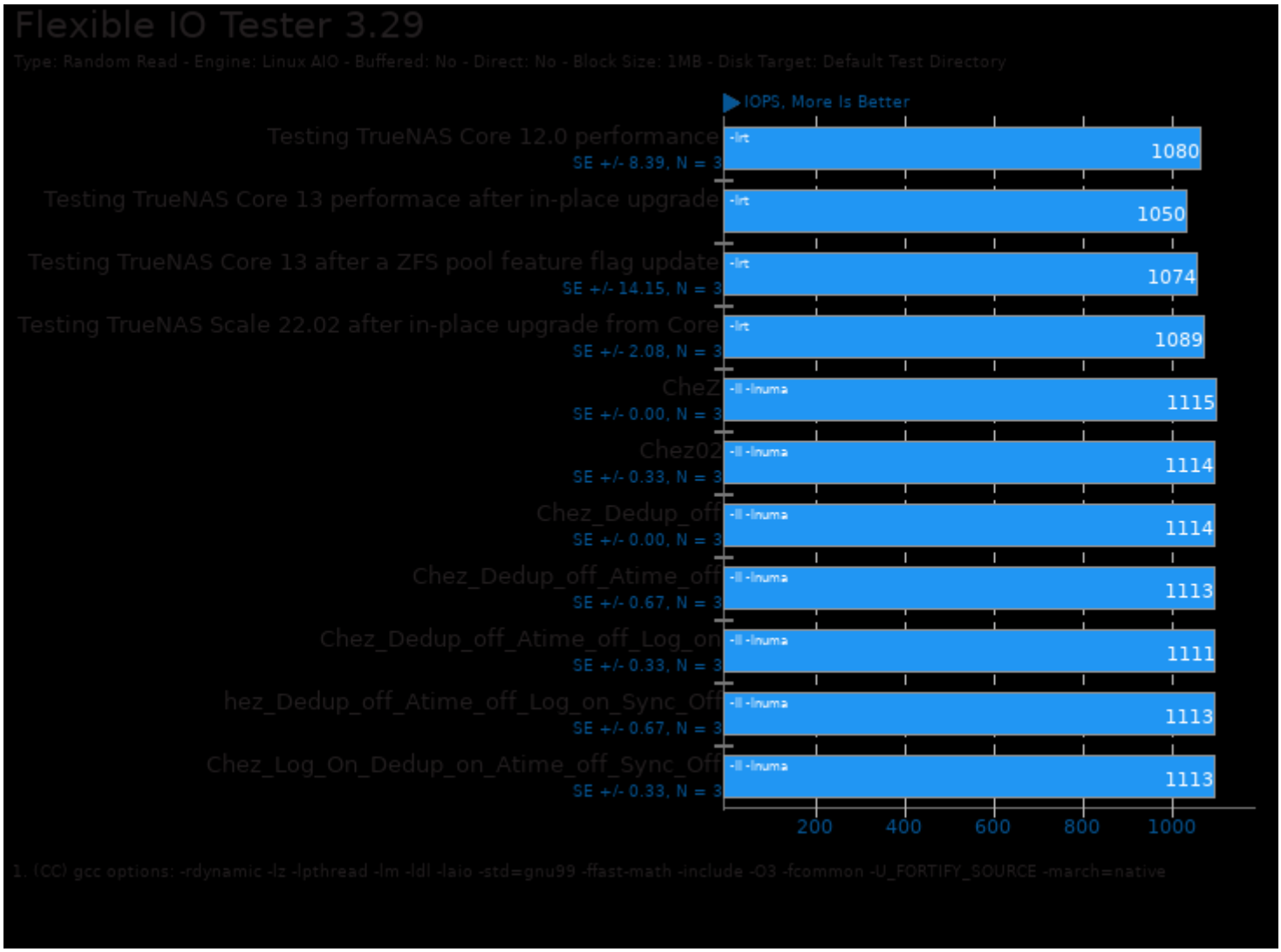
TrueNAScore51922

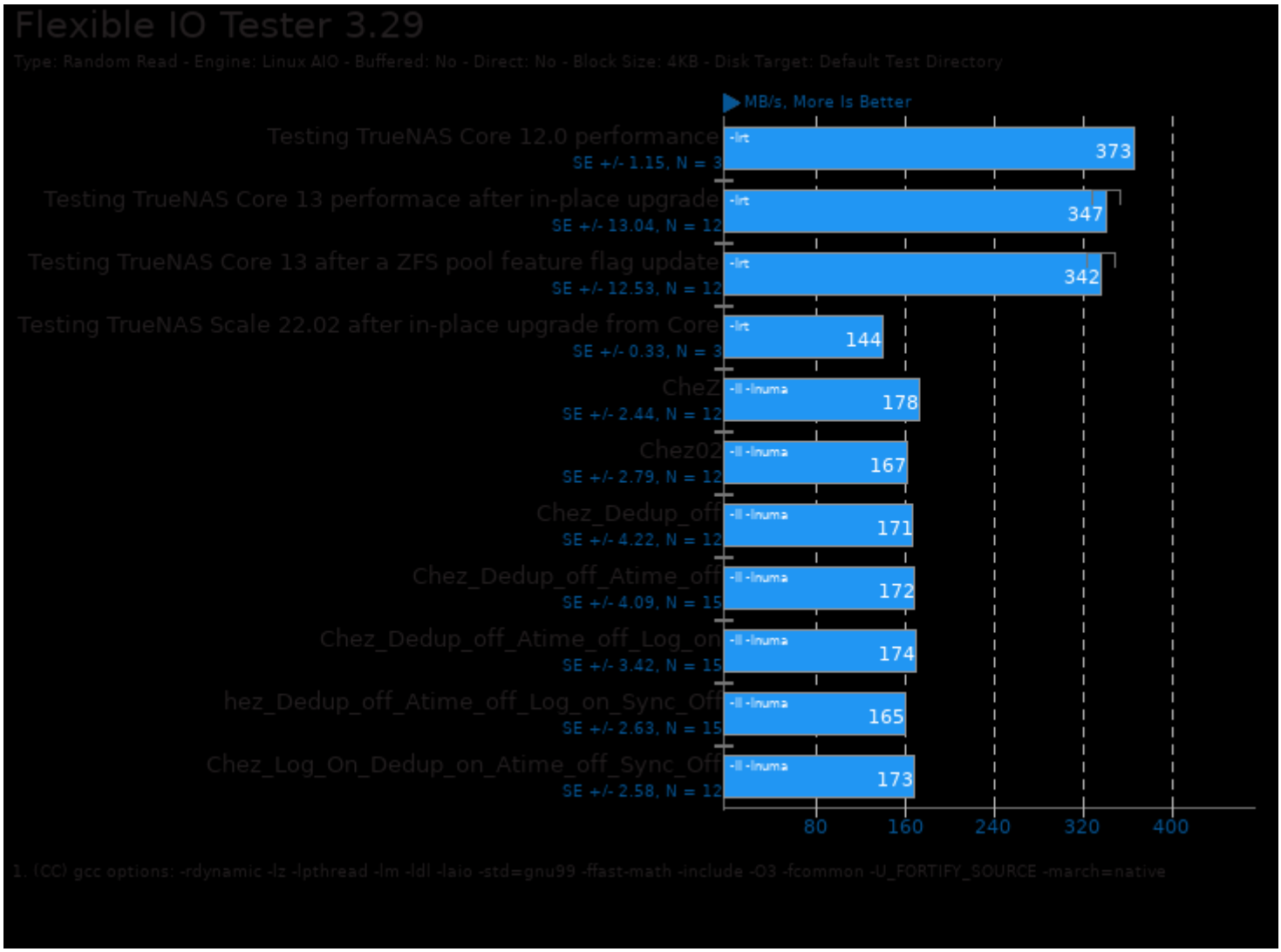
Flexible IO Tester - Seq Read - Linux AIO - No - No - 4KB (MB/s)	641	**647**	638	440	180	170	154	**150**	178	171	177
Normalized	99.07%	100%	98.61%	68.01%	27.82%	26.28%	23.8%	23.18%	27.51%	26.43%	27.36%
Standard Deviation	0.9%	1.8%	0.6%	1.5%	9.4%	5.5%	2.2%	1.7%	7.2%	9.3%	7.6%
Flexible IO Tester - Seq Read - Linux AIO - No - No - 4KB (IOPS)	164333	**165667**	163000	112333	46092	43520	39275	**38600**	45520	43808	45293
Normalized	99.19%	100%	98.39%	67.81%	27.82%	26.27%	23.71%	23.3%	27.48%	26.44%	27.34%
Standard Deviation	0.7%	1.8%	0.6%	1.4%	9.4%	5.6%	2%	1.7%	7.2%	9.3%	7.6%
Flexible IO Tester - Seq Write - Linux AIO - No - No - 1MB (MB/s)	738	817	697	637	**87.7**	110.1	144	145	396	844	**958**
Normalized	77.04%	85.28%	72.76%	66.49%	9.15%	11.49%	15.03%	15.14%	41.34%	88.1%	100%
Standard Deviation	16.2%	5.9%	17.1%	24.9%	3.7%	10.9%	1.1%	2.3%	1.7%	2.4%	2.2%
Flexible IO Tester - Seq Write - Linux AIO - No - No - 1MB (IOPS)	735	814	693	634	**84**	106	141	142	393	841	**955**
Normalized	76.96%	85.24%	72.57%	66.39%	8.8%	11.1%	14.76%	14.87%	41.15%	88.06%	100%
Standard Deviation	16.3%	5.9%	17.2%	25.1%	3.8%	11.1%	1.1%	2%	1.8%	2.5%	2.2%
Flexible IO Tester - Seq Write - Linux AIO - No - No - 4KB (MB/s)	518	**541**	536	227	4.192	**4.164**	4.441	5.111	208	218	186
Normalized	95.75%	100%	99.08%	41.96%	0.77%	0.77%	0.82%	0.94%	38.45%	40.3%	34.38%
Standard Deviation	6.9%	1.5%	6.5%	20.7%	7.6%	7.3%	6.6%	1.4%	1%	5.3%	23.8%
Flexible IO Tester - Seq Write - Linux AIO - No - No - 4KB (IOPS)	132600	**138333**	137000	58067	1044	**1037**	1107	1274	53267	55767	47692
Normalized	95.86%	100%	99.04%	41.98%	0.75%	0.75%	0.8%	0.92%	38.51%	40.31%	34.48%
Standard Deviation	7%	1.5%	6.5%	20.7%	7.7%	7.3%	6.7%	1.4%	0.8%	5.3%	23.7%
Flexible IO Tester - Seq Read - Linux AIO - No - No - 128KB (MB/s)	1090	**1061**	1066	1064	1117	1117	1116	**1118**	1117	**1118**	**1118**
Normalized	97.5%	94.9%	95.35%	95.17%	99.91%	99.91%	99.82%	100%	99.91%	100%	100%
Standard Deviation	1.3%	2.5%	2.1%	8.5%	0.1%	0.1%	0.1%	0%	0.1%	0.1%	0.1%
Flexible IO Tester - Seq Read - Linux AIO - No - No - 128KB (IOPS)	8721	**8488**	8526	8509	8932	8936	8929	**8940**	8936	8937	8937
Normalized	97.55%	94.94%	95.37%	95.18%	99.91%	99.96%	99.88%	100%	99.96%	99.97%	99.97%
Standard Deviation	1.3%	2.5%	2.1%	8.5%	0.1%	0%	0%	0%	0%	0%	0%

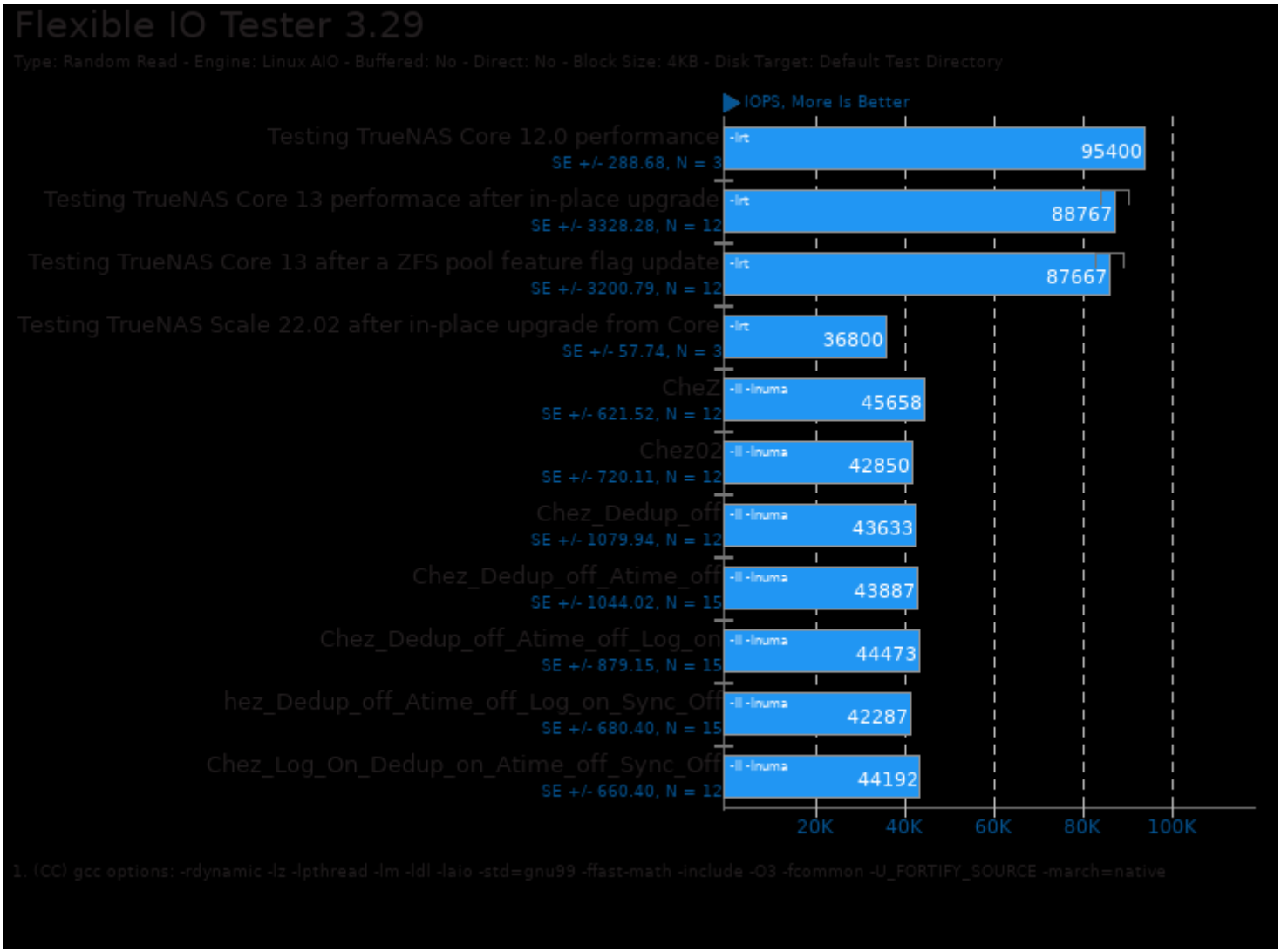
TrueNAScore51922

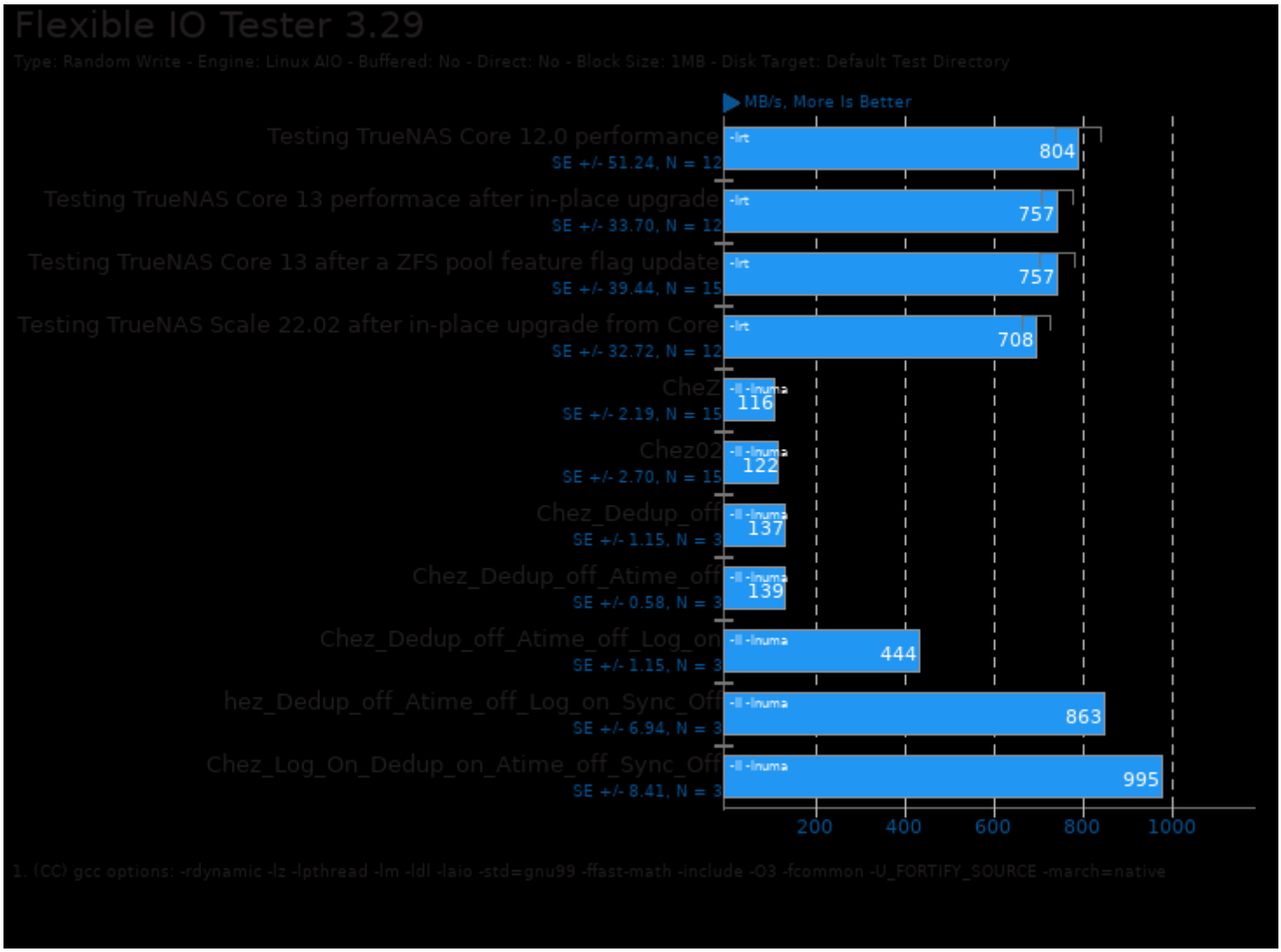
Flexible IO Tester - Seq Write - Linux AIO - No - No - 128KB (MB/s)	821	810	788	746	**41.2**	42.5	65.1	67.7	399	835	**964**
Normalized	85.17%	84.02%	81.74%	77.39%	4.27%	4.41%	6.75%	7.02%	41.39%	86.62%	100%
Standard Deviation	4.3%	1.7%	9%	13.4%	6.1%	5.3%	0.5%	2.4%	1.2%	0.9%	0.5%
Flexible IO Tester - Seq Write - Linux AIO - No - No - 128KB (IOPS)	6562	6478	6303	5962	**326**	337	517	538	3192	6677	**7709**
Normalized	85.12%	84.03%	81.76%	77.34%	4.23%	4.37%	6.71%	6.98%	41.41%	86.61%	100%
Standard Deviation	4.3%	1.7%	9%	13.4%	6.2%	5.3%	0.5%	2.4%	1.1%	0.9%	0.5%

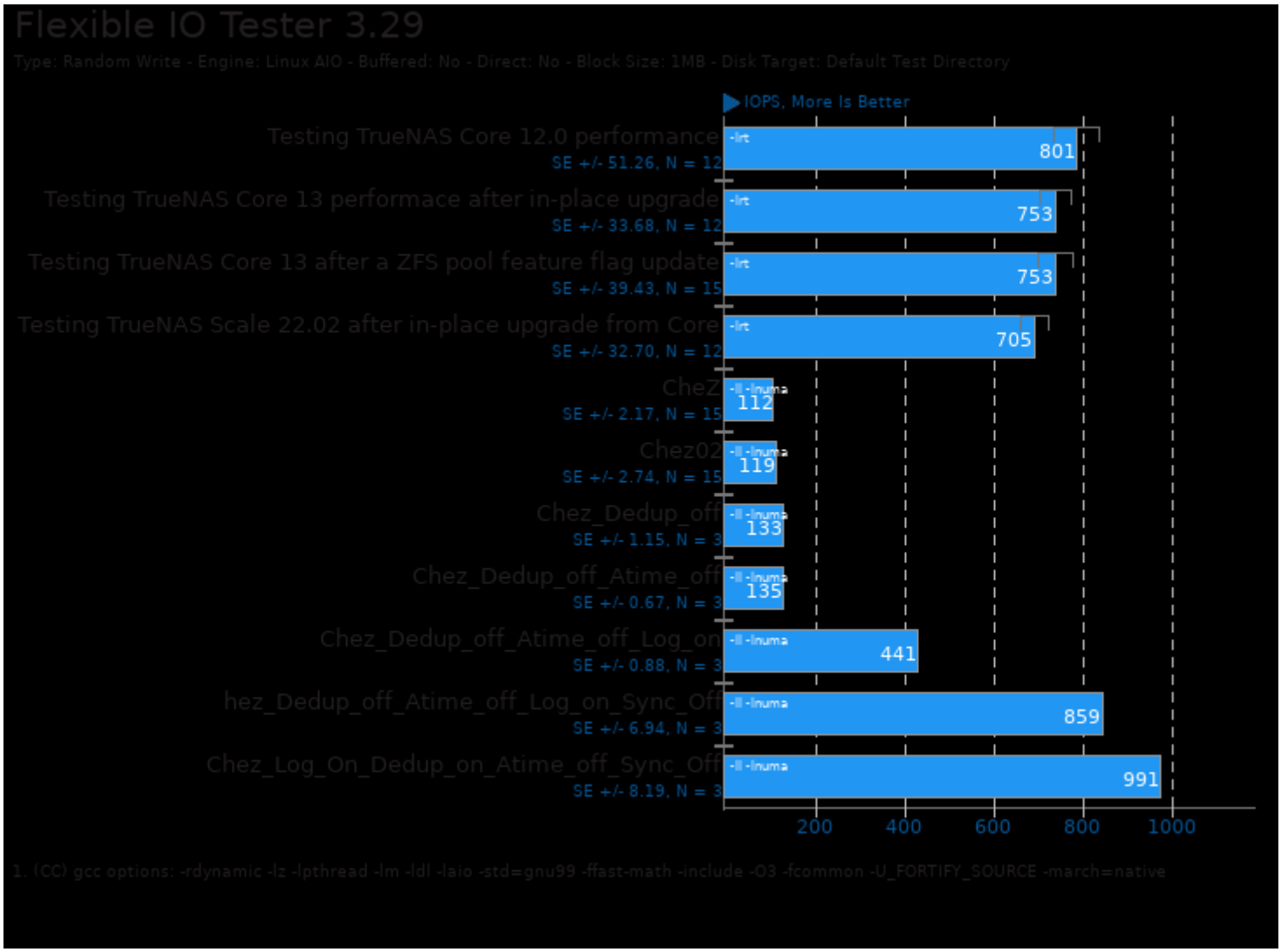

Flexible IO Tester 3.29
Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 8.41, N = 3
-lrt
1083
Testing TrueNAS Core 13 performace after in-place upgrade
-lrt
1054
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 13.86, N = 3
-lrt
1078
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 2.08, N = 3
-lrt
1093
CheZ
SE +/- 0.33, N = 3
-ll -lnuma
1119
Chez02
SE +/- 0.33, N = 3
-ll -lnuma
1117
Chez_Dedup_off
SE +/- 0.00, N = 3
-ll -lnuma
1118
Chez_Dedup_off_Atime_off
SE +/- 0.88, N = 3
-ll -lnuma
1116
Chez_Dedup_off_Atime_off_Log_on
SE +/- 0.33, N = 3
-ll -lnuma
1115
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 0.67, N = 3
-ll -lnuma
1117
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 0.33, N = 3
-ll -lnuma
1117
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native


Flexible IO Tester 3.29
Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 8.39, N = 3
-lrt
1080
Testing TrueNAS Core 13 performace after in-place upgrade
-lrt
1050
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 14.15, N = 3
-lrt
1074
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 2.08, N = 3
-lrt
1089
CheZ
SE +/- 0.00, N = 3
-ll -lnuma
1115
Chez02
SE +/- 0.33, N = 3
-ll -lnuma
1114
Chez_Dedup_off
SE +/- 0.00, N = 3
-ll -lnuma
1114
Chez_Dedup_off_Atime_off
SE +/- 0.67, N = 3
-ll -lnuma
1113
Chez_Dedup_off_Atime_off_Log_on
SE +/- 0.33, N = 3
-ll -lnuma
1111
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 0.67, N = 3
-ll -lnuma
1113
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 0.33, N = 3
-ll -lnuma
1113
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

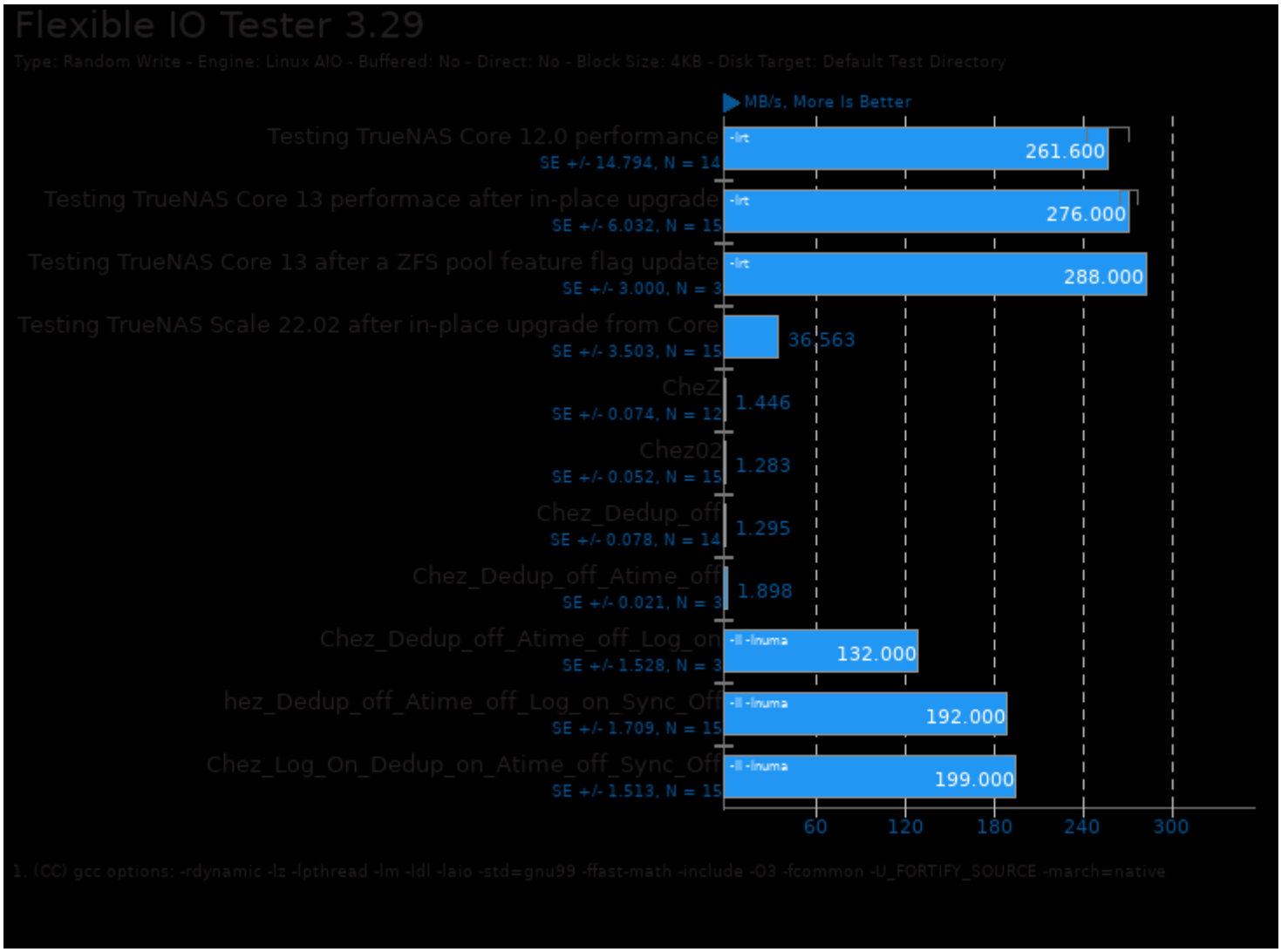

Flexible IO Tester 3.29
Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 1.15, N = 3
-irt
373
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 13.04, N = 12
-irt
347
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 12.53, N = 12
-irt
342
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 0.33, N = 3
-irt
144
CheZ
SE +/- 2.44, N = 12
-ll -lnuma
178
Chez02
SE +/- 2.79, N = 12
-ll -lnuma
167
Chez_Dedup_off
SE +/- 4.22, N = 12
-ll -lnuma
171
Chez_Dedup_off_Atime_off
SE +/- 4.09, N = 15
-ll -lnuma
172
Chez_Dedup_off_Atime_off_Log_on
SE +/- 3.42, N = 15
-ll -lnuma
174
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 2.63, N = 15
-ll -lnuma
165
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 2.58, N = 12
-ll -lnuma
173
80
160
240
320
400
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

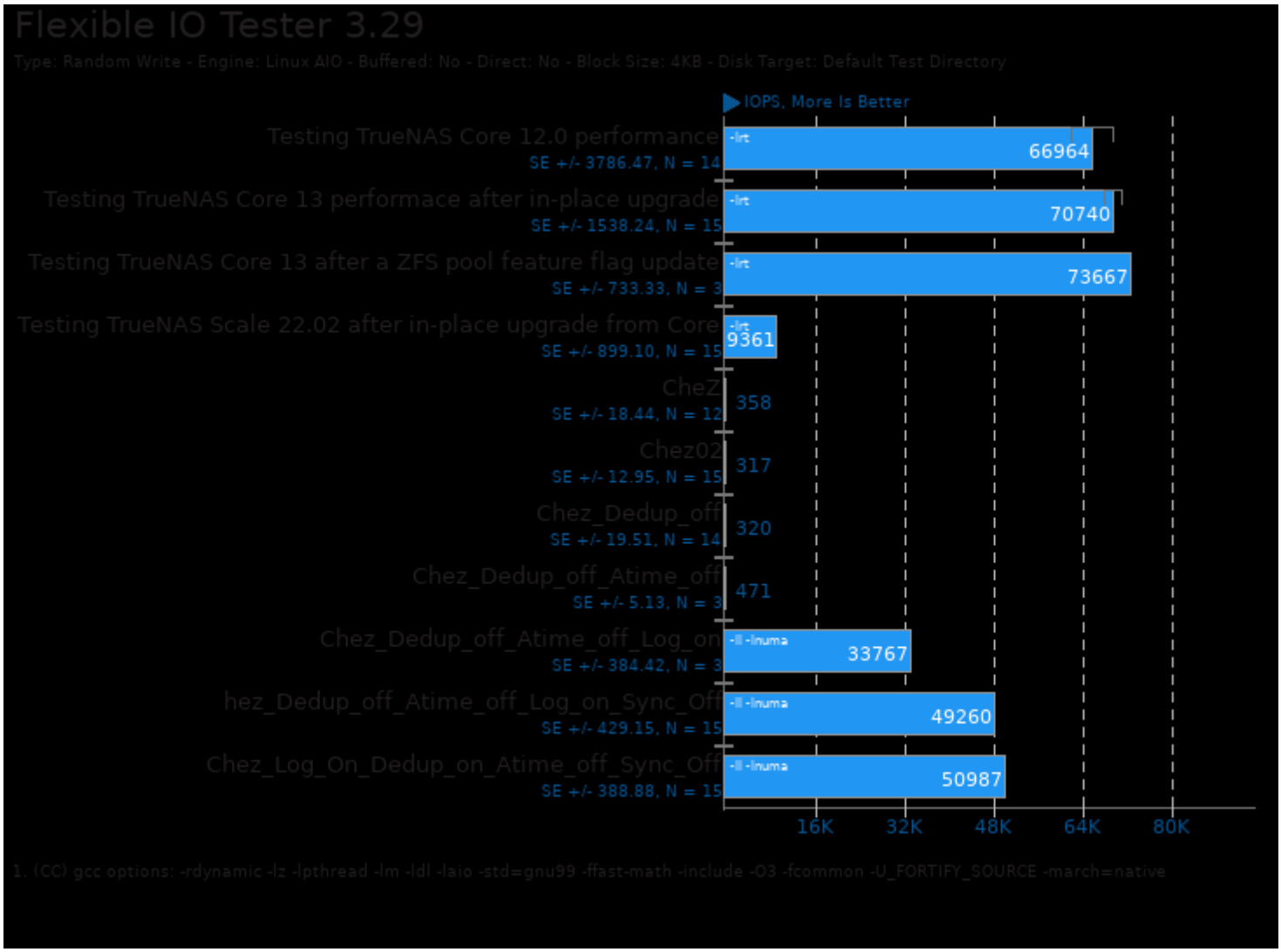

Flexible IO Tester 3.29
Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 288.68, N = 3
-lrt
95400
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 3328.28, N = 12
-lrt
88767
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 3200.79, N = 12
-lrt
87667
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 57.74, N = 3
-lrt
36800
SE +/- 621.52, N = 12
-ll -lnuma
45658
SE +/- 720.11, N = 12
-ll -lnuma
42850
SE +/- 1079.94, N = 12
-ll -lnuma
43633
SE +/- 1044.02, N = 15
-ll -lnuma
43887
SE +/- 879.15, N = 15
-ll -lnuma
44473
SE +/- 680.40, N = 15
-ll -lnuma
42287
SE +/- 660.40, N = 12
-ll -lnuma
44192
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

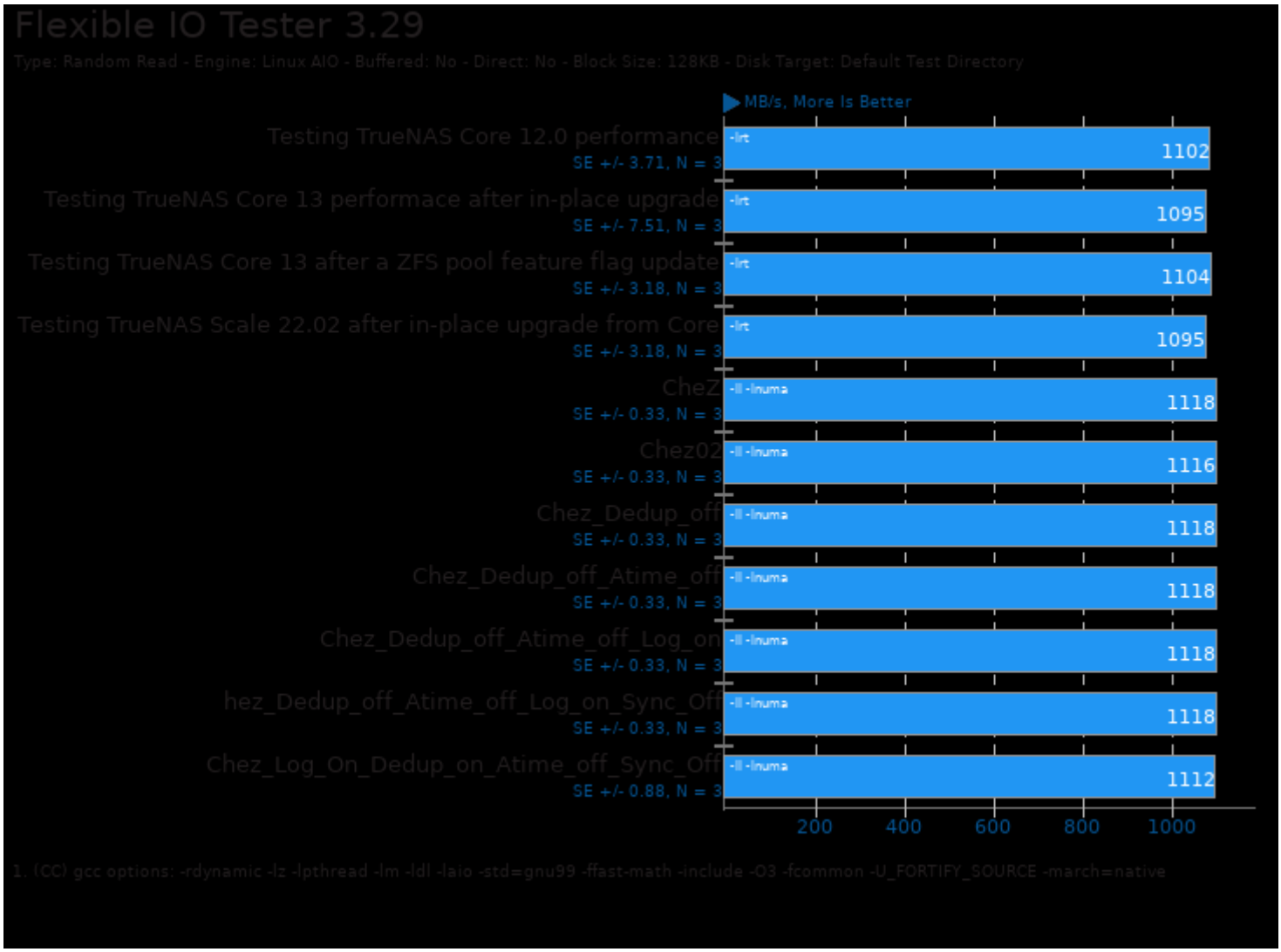

Flexible IO Tester 3.29
Type: Random Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 51.24, N = 12
804
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 33.70, N = 12
757
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 39.44, N = 15
757
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 32.72, N = 12
708
SE +/- 2.19, N = 15
116
SE +/- 2.70, N = 15
122
Chez_Dedup_off
SE +/- 1.15, N = 3
137
Chez_Dedup_off_Atime_off
SE +/- 0.58, N = 3
139
Chez_Dedup_off_Atime_off_Log_on
SE +/- 1.15, N = 3
444
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 6.94, N = 3
863
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 8.41, N = 3
995
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

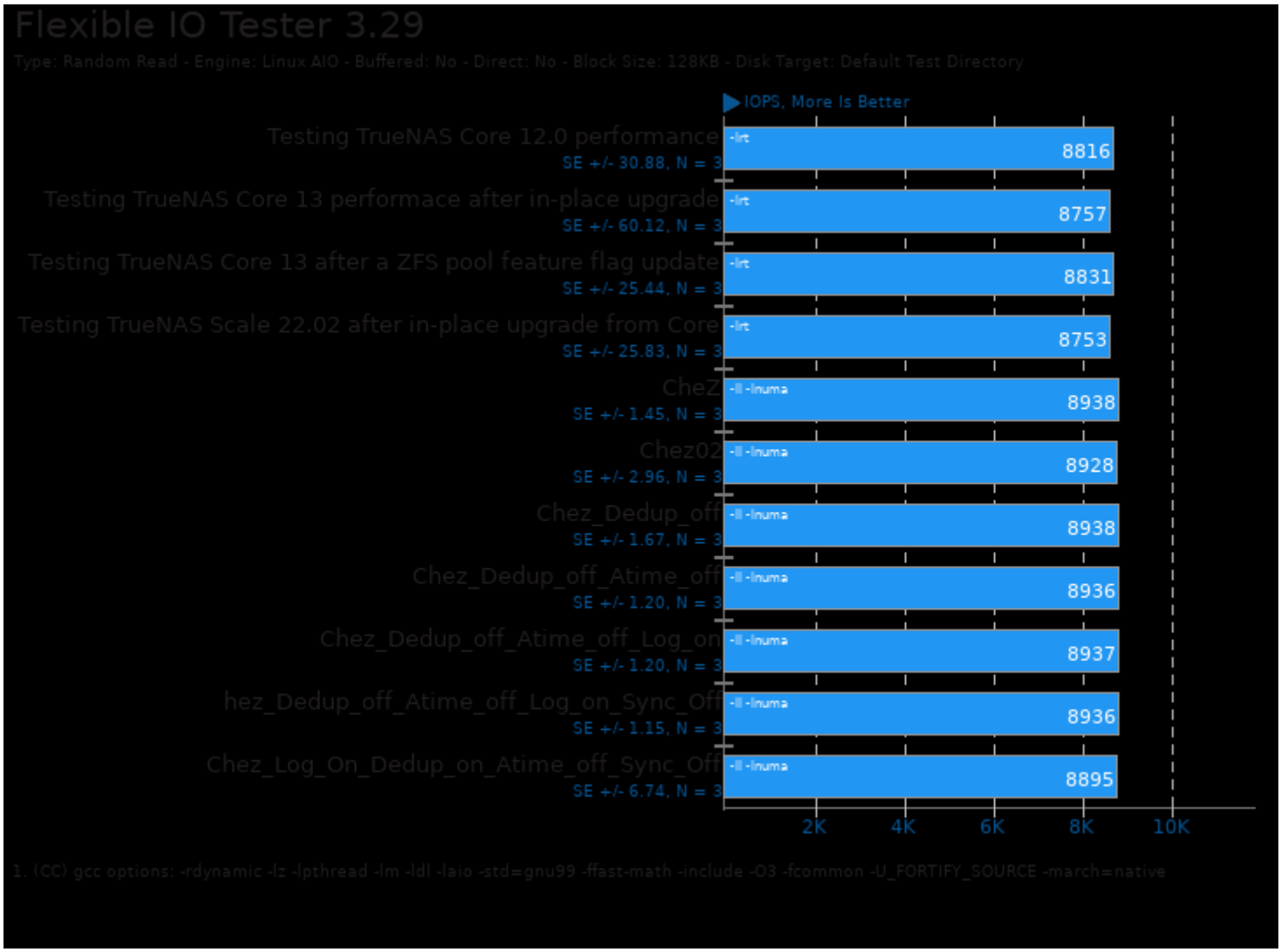

Flexible IO Tester 3.29
Type: Random Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 51.26, N = 12
801
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 33.68, N = 12
753
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 39.43, N = 15
753
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 32.70, N = 12
705
SE +/- 2.17, N = 15
112
SE +/- 2.74, N = 15
119
Chez_Dedup_off
SE +/- 1.15, N = 3
133
Chez_Dedup_off_Atime_off
SE +/- 0.67, N = 3
135
Chez_Dedup_off_Atime_off_Log_on
SE +/- 0.88, N = 3
441
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 6.94, N = 3
859
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 8.19, N = 3
991
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

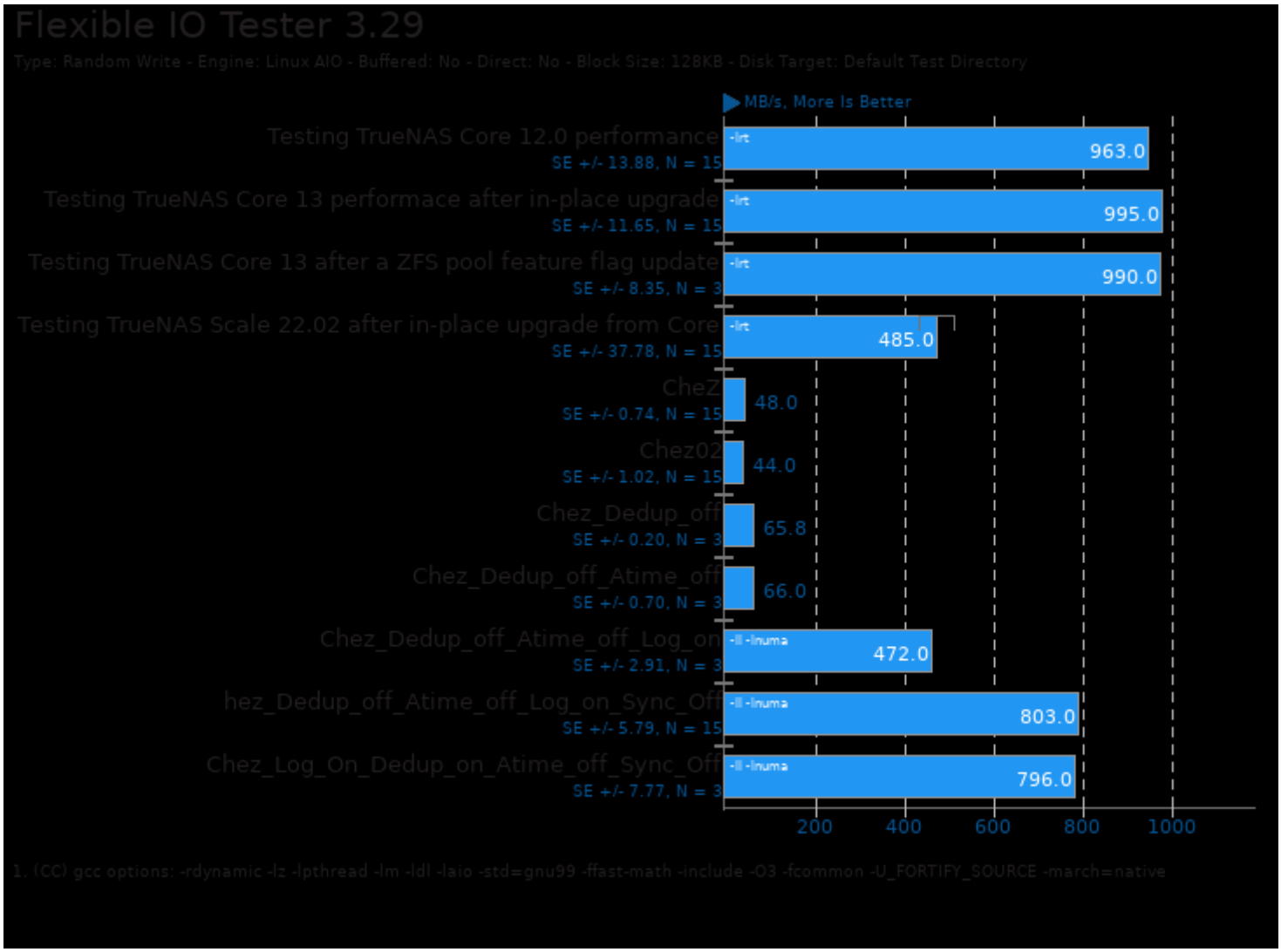
TrueNAScore51922

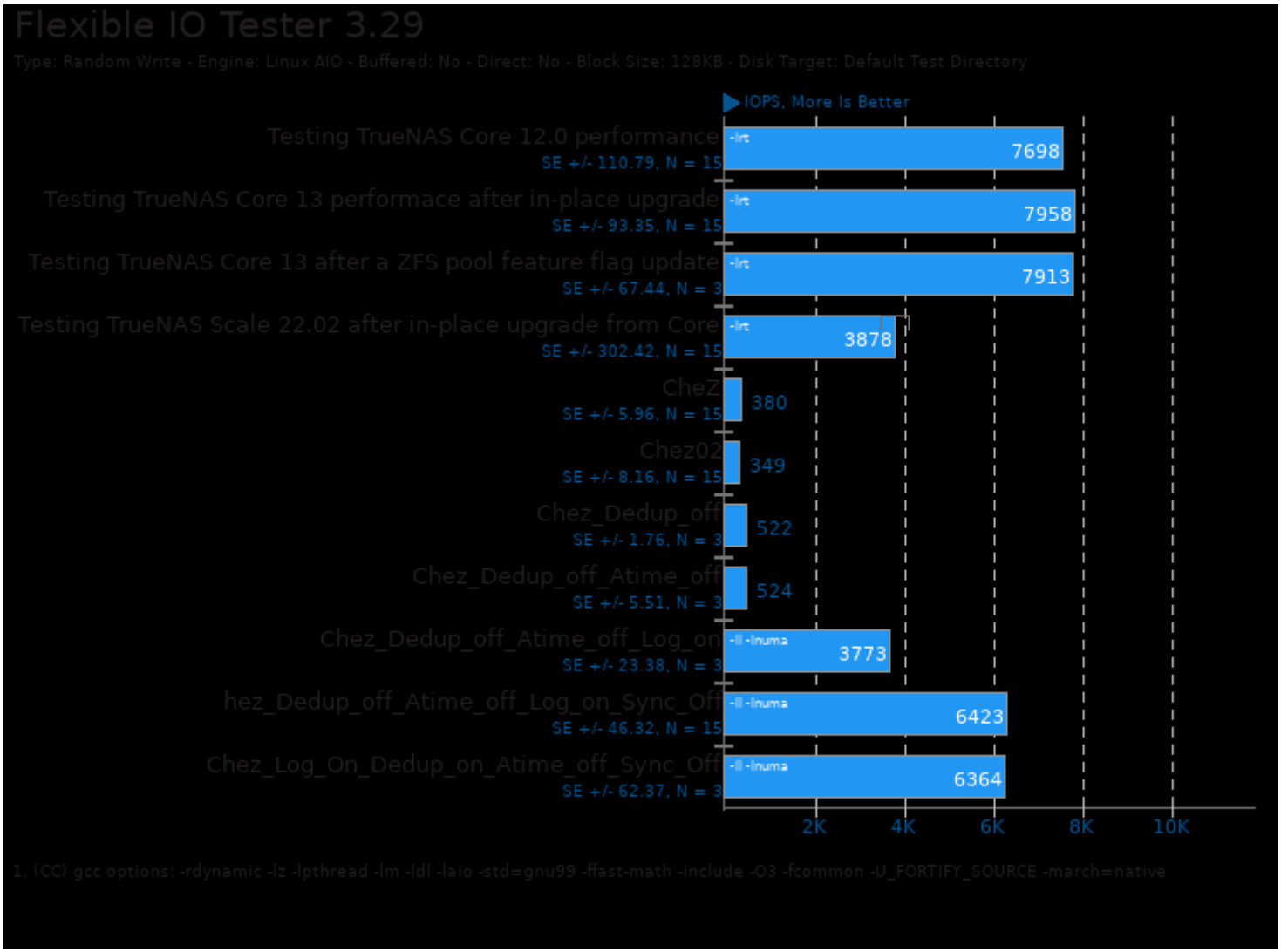


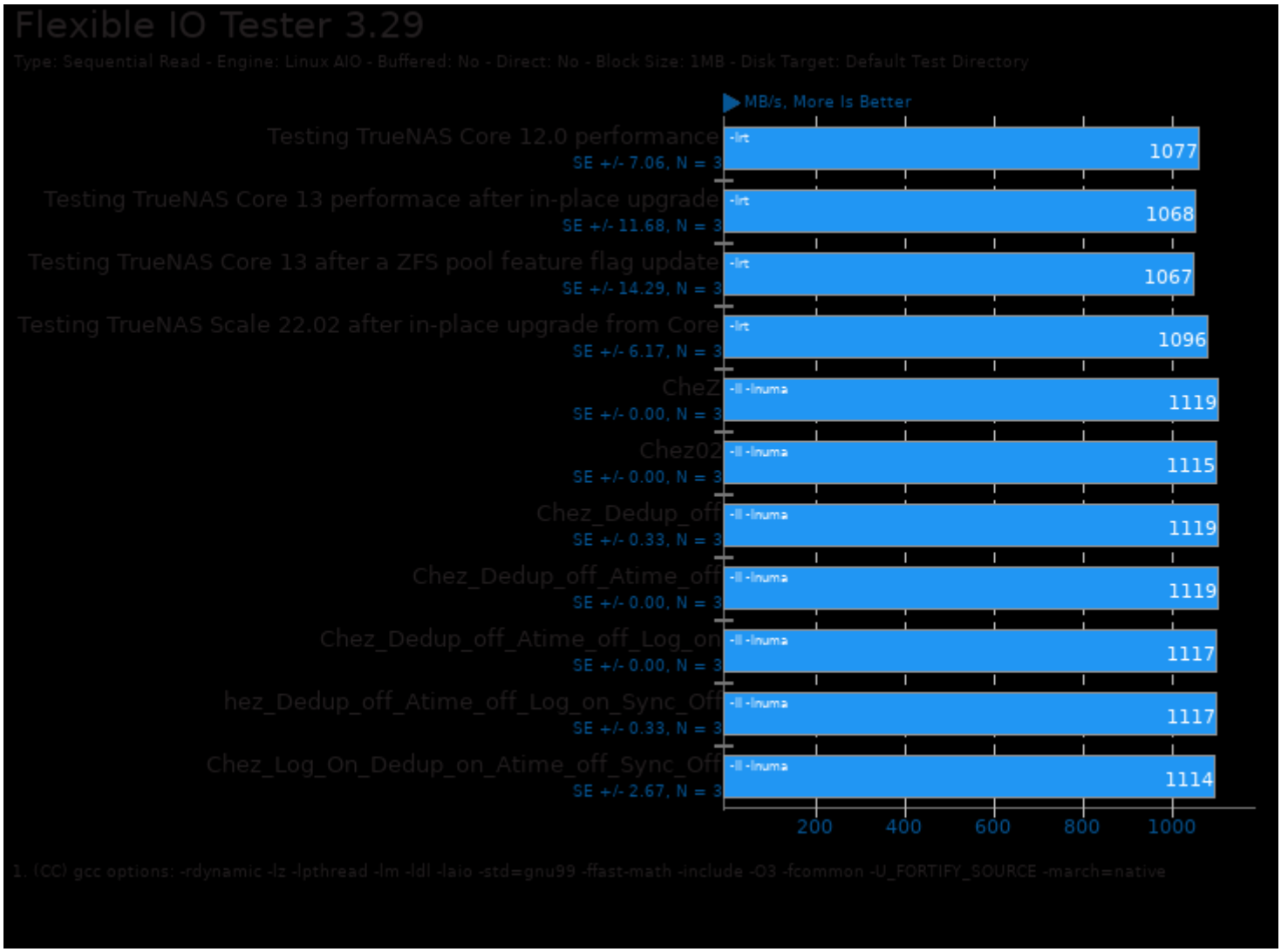

Flexible IO Tester 3.29
Type: Random Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 3786.47, N = 14
-lrt
66964
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 1538.24, N = 15
-lrt
70740
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 733.33, N = 3
-lrt
73667
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 899.10, N = 15
-lrt
9361
ChezT
SE +/- 18.44, N = 12
358
Chez02
SE +/- 12.95, N = 15
317
Chez_Dedup_off
SE +/- 19.51, N = 14
320
Chez_Dedup_off_Atime_off
SE +/- 5.13, N = 3
471
Chez_Dedup_off_Atime_off_Log_on
SE +/- 384.42, N = 3
-ll -lnuma
33767
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 429.15, N = 15
-ll -lnuma
49260
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 388.88, N = 15
-ll -lnuma
50987
16K
32K
48K
64K
80K
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

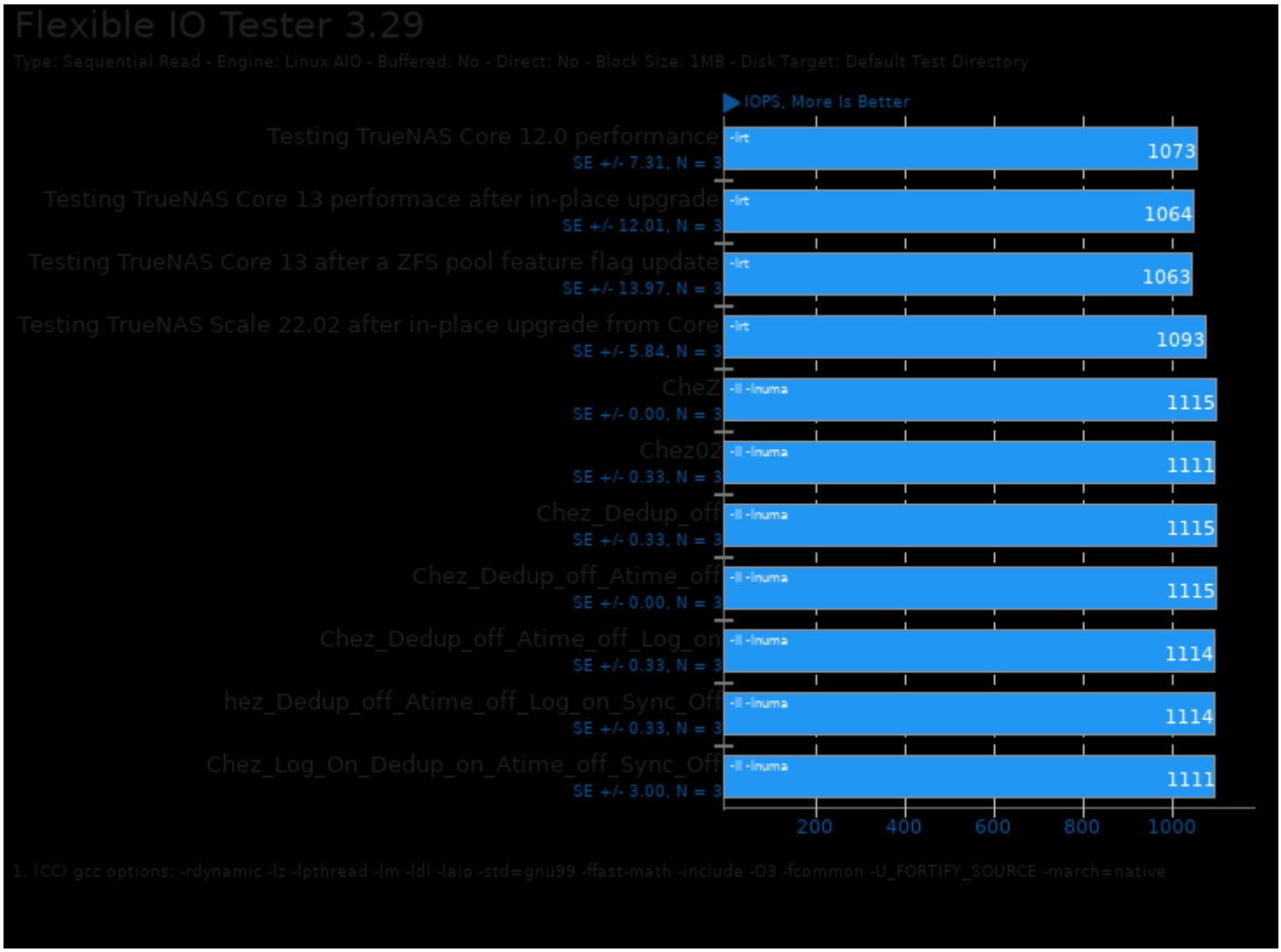

Flexible IO Tester 3.29
Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 3.71, N = 3
-lrt
1102
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 7.51, N = 3
-lrt
1095
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 3.18, N = 3
-lrt
1104
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 3.18, N = 3
-lrt
1095
CheZ
SE +/- 0.33, N = 3
-ll -lnuma
1118
Chez02
SE +/- 0.33, N = 3
-ll -lnuma
1116
Chez_Dedup_off
SE +/- 0.33, N = 3
-ll -lnuma
1118
Chez_Dedup_off_Atime_off
SE +/- 0.33, N = 3
-ll -lnuma
1118
Chez_Dedup_off_Atime_off_Log_on
SE +/- 0.33, N = 3
-ll -lnuma
1118
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 0.33, N = 3
-ll -lnuma
1118
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 0.88, N = 3
-ll -lnuma
1112
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native


Flexible IO Tester 3.29
Type: Random Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 30.88, N = 3
-lrt
8816
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 60.12, N = 3
-lrt
8757
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 25.44, N = 3
-lrt
8831
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 25.83, N = 3
-lrt
8753
CheZ
SE +/- 1.45, N = 3
-ll -lnuma
8938
Chez02
SE +/- 2.96, N = 3
-ll -lnuma
8928
Chez_Dedup_off
SE +/- 1.67, N = 3
-ll -lnuma
8938
Chez_Dedup_off_Atime_off
SE +/- 1.20, N = 3
-ll -lnuma
8936
Chez_Dedup_off_Atime_off_Log_on
SE +/- 1.20, N = 3
-ll -lnuma
8937
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 1.15, N = 3
-ll -lnuma
8936
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 6.74, N = 3
-ll -lnuma
8895
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

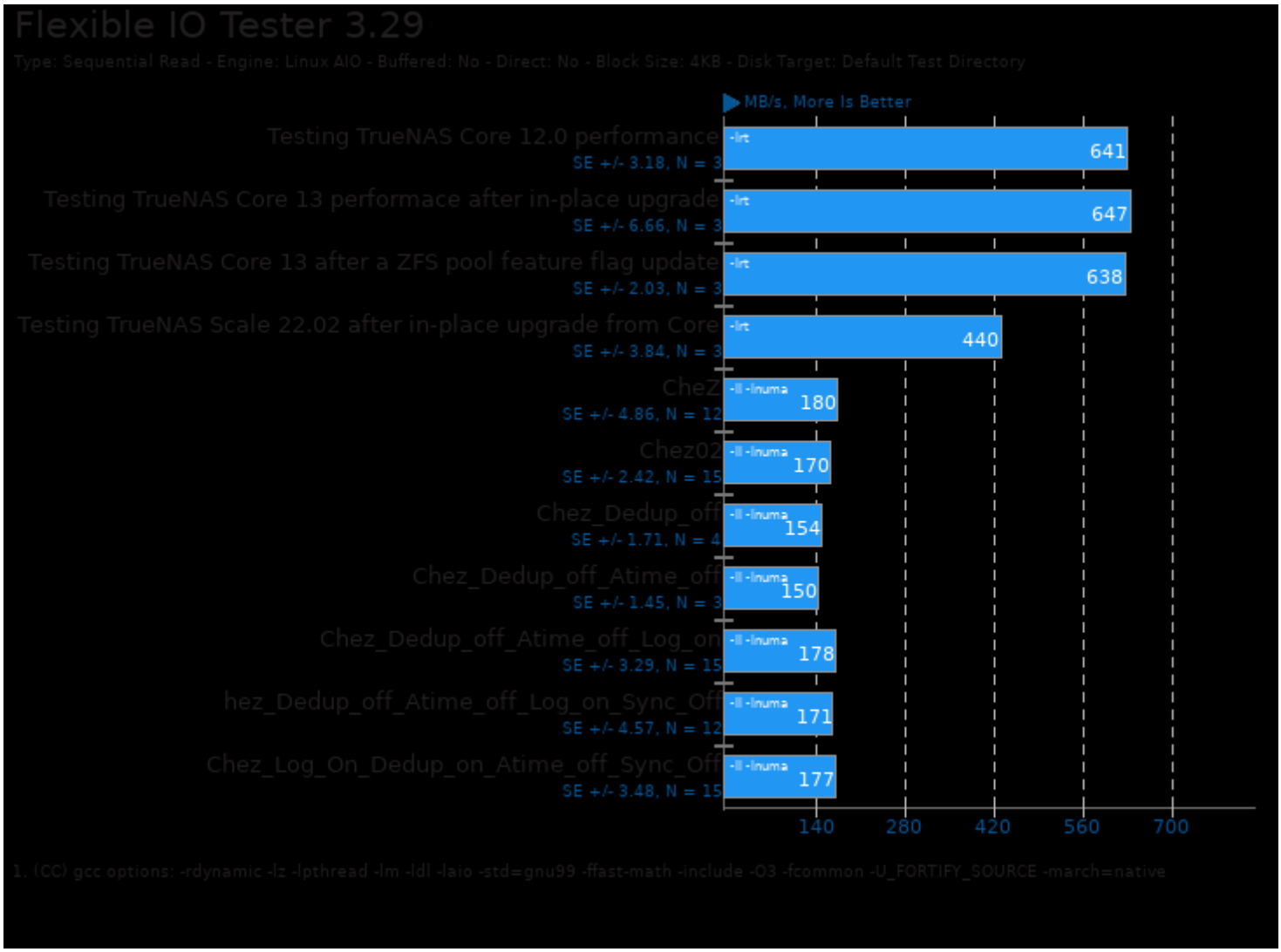

Flexible IO Tester 3.29
Type: Random Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 13.88, N = 15
-lrt
963.0
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 11.65, N = 15
-lrt
995.0
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 8.35, N = 3
-lrt
990.0
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 37.78, N = 15
-lrt
485.0
ChezT
SE +/- 0.74, N = 15
48.0
Chez02
SE +/- 1.02, N = 15
44.0
Chez_Dedup_off
SE +/- 0.20, N = 3
65.8
Chez_Dedup_off_Atime_off
SE +/- 0.70, N = 3
66.0
Chez_Dedup_off_Atime_off_Log_on
SE +/- 2.91, N = 3
-ll -lnuma
472.0
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 5.79, N = 15
-ll -lnuma
803.0
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 7.77, N = 3
-ll -lnuma
796.0
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

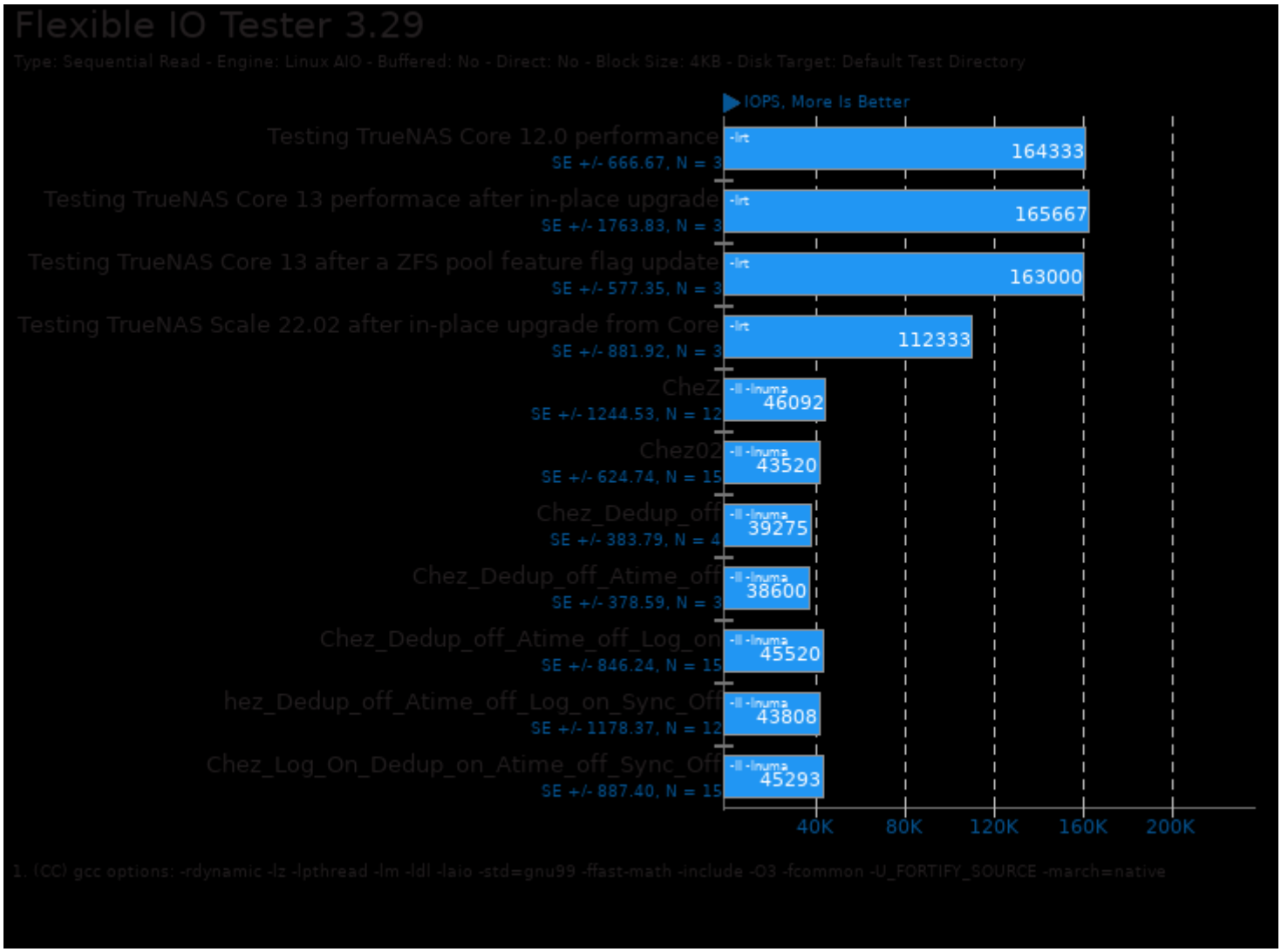

Flexible IO Tester 3.29
Type: Random Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 110.79, N = 15
-lrt
7698
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 93.35, N = 15
-lrt
7958
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 67.44, N = 3
-lrt
7913
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 302.42, N = 15
-lrt
3878
SE +/- 5.96, N = 15
380
SE +/- 8.16, N = 15
349
SE +/- 1.76, N = 3
522
SE +/- 5.51, N = 3
524
SE +/- 23.38, N = 3
-ll -lnuma
3773
SE +/- 46.32, N = 15
-ll -lnuma
6423
SE +/- 62.37, N = 3
-ll -lnuma
6364
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

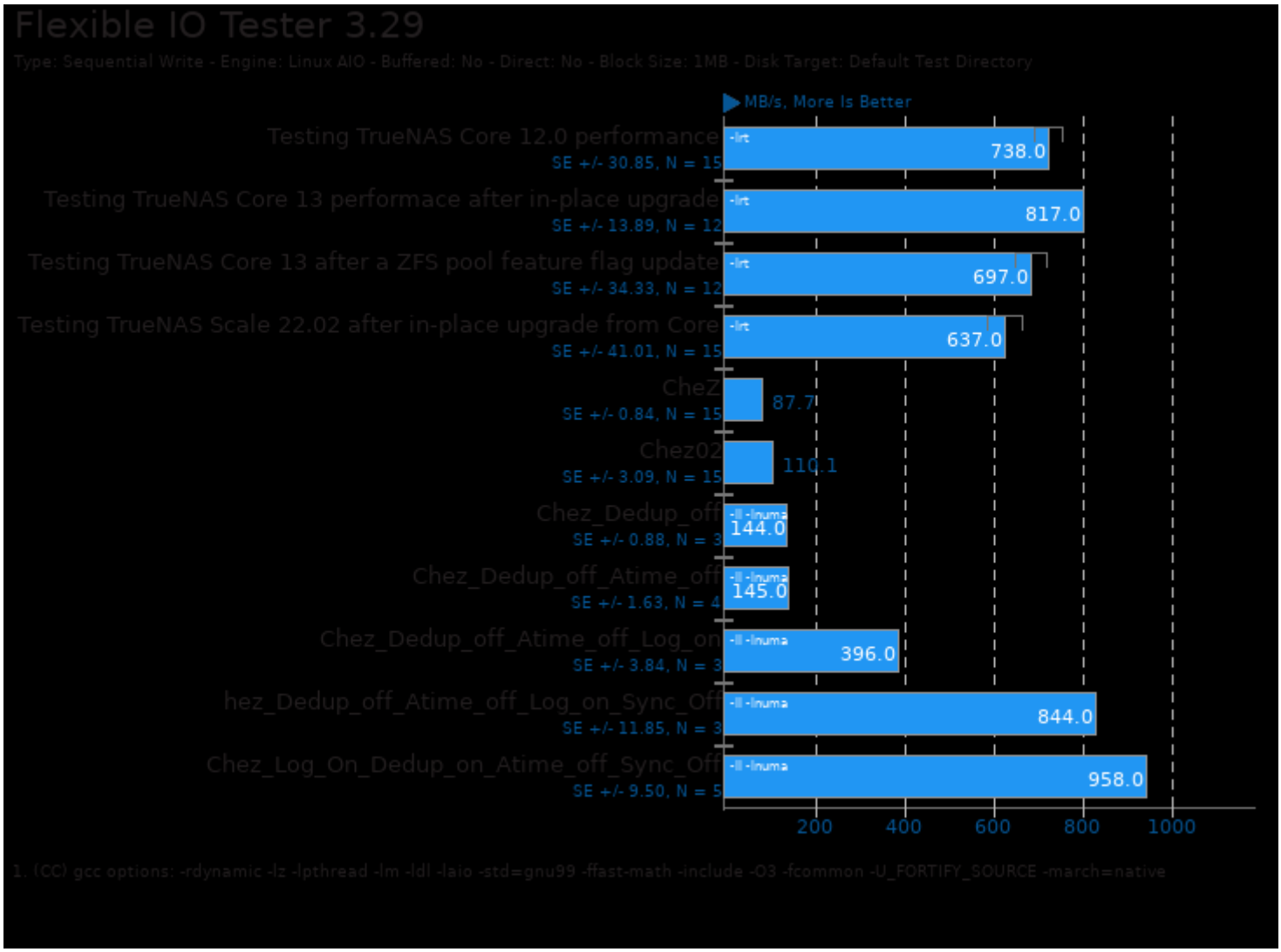

Flexible IO Tester 3.29
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 7.06, N = 3
-lrt
1077
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 11.68, N = 3
-lrt
1068
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 14.29, N = 3
-lrt
1067
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 6.17, N = 3
-lrt
1096
CheZ
SE +/- 0.00, N = 3
-ll -lnuma
1119
Chez02
SE +/- 0.00, N = 3
-ll -lnuma
1115
Chez_Dedup_off
SE +/- 0.33, N = 3
-ll -lnuma
1119
Chez_Dedup_off_Atime_off
SE +/- 0.00, N = 3
-ll -lnuma
1119
Chez_Dedup_off_Atime_off_Log_on
SE +/- 0.00, N = 3
-ll -lnuma
1117
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 0.33, N = 3
-ll -lnuma
1117
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 2.67, N = 3
-ll -lnuma
1114
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

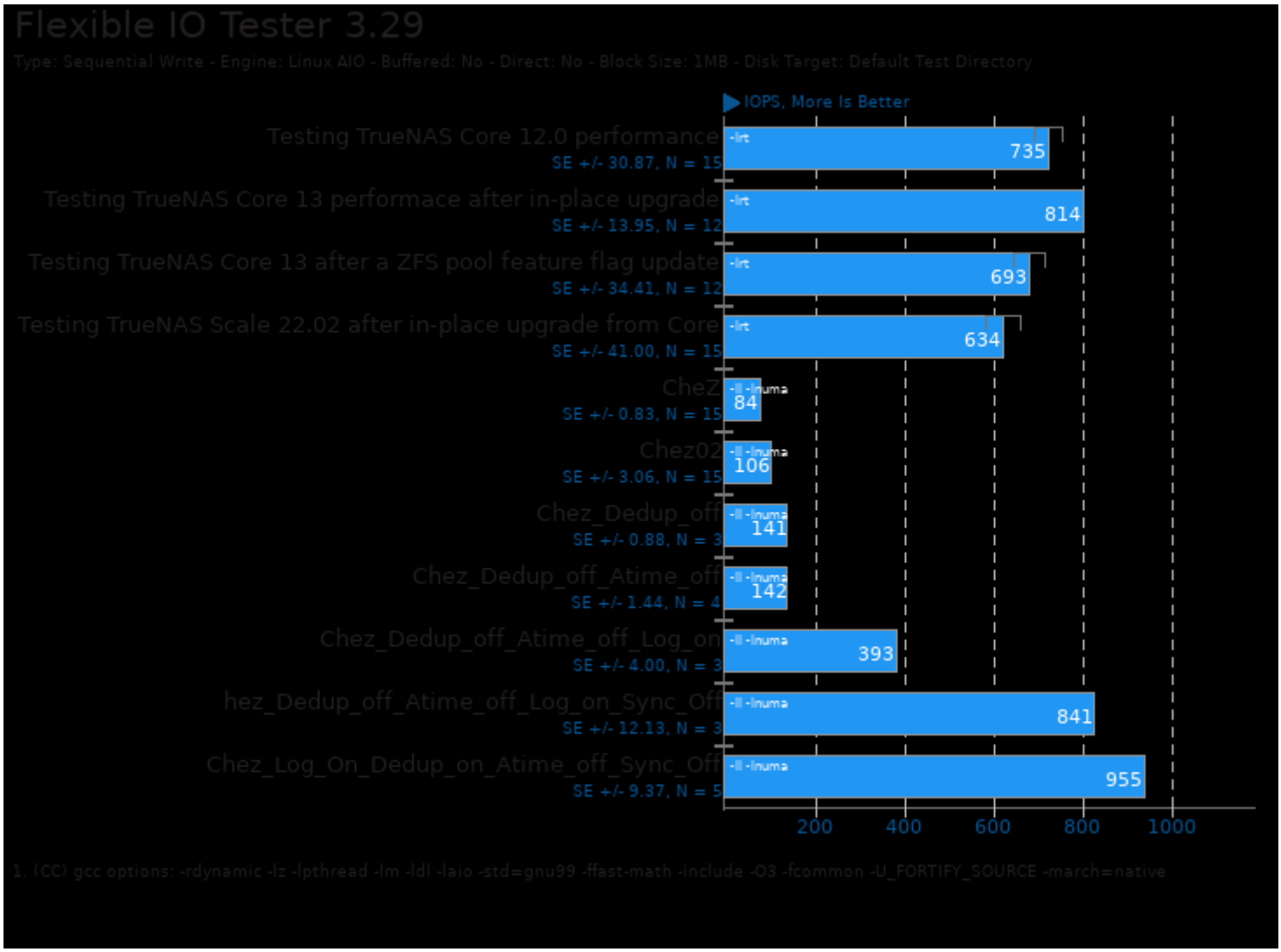

Flexible IO Tester 3.29
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 7.31, N = 3
-lrt
1073
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 12.01, N = 3
-lrt
1064
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 13.97, N = 3
-lrt
1063
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 5.84, N = 3
-lrt
1093
CheZ
SE +/- 0.00, N = 3
-ll -lnuma
1115
Chez02
SE +/- 0.33, N = 3
-ll -lnuma
1111
Chez_Dedup_off
SE +/- 0.33, N = 3
-ll -lnuma
1115
Chez_Dedup_off_Atime_off
SE +/- 0.00, N = 3
-ll -lnuma
1115
Chez_Dedup_off_Atime_off_Log_on
SE +/- 0.33, N = 3
-ll -lnuma
1114
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 0.33, N = 3
-ll -lnuma
1114
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 3.00, N = 3
-ll -lnuma
1111
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

TrueNAScore51922

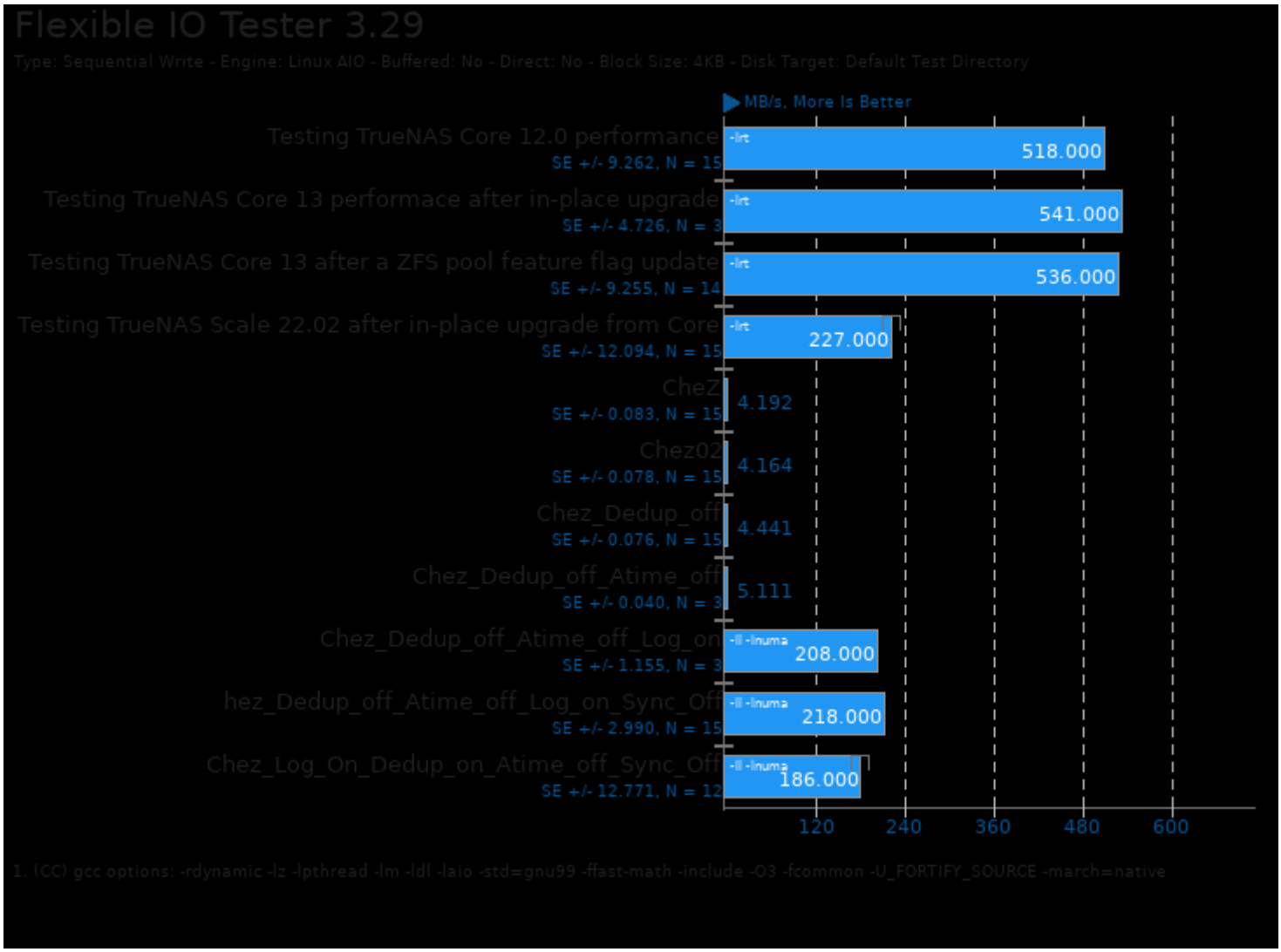


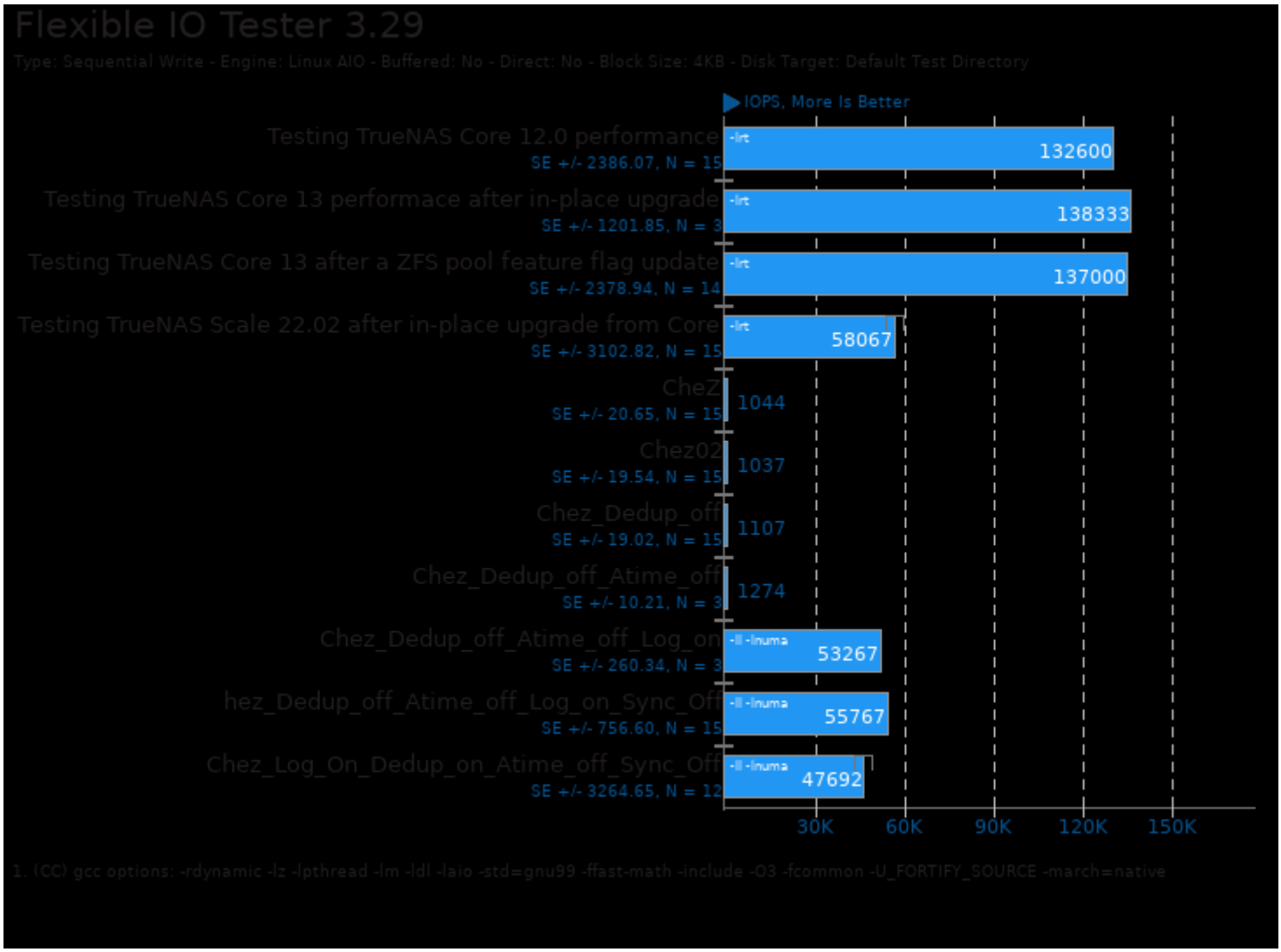

Flexible IO Tester 3.29
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 666.67, N = 3
-lrt
164333
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 1763.83, N = 3
-lrt
165667
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 577.35, N = 3
-lrt
163000
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 881.92, N = 3
-lrt
112333
CheZ
SE +/- 1244.53, N = 12
-ll -lnuma
46092
Chez02
SE +/- 624.74, N = 15
-ll -lnuma
43520
Chez_Dedup_off
SE +/- 383.79, N = 4
-ll -lnuma
39275
Chez_Dedup_off_Atime_off
SE +/- 378.59, N = 3
-ll -lnuma
38600
Chez_Dedup_off_Atime_off_Log_on
SE +/- 846.24, N = 15
-ll -lnuma
45520
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 1178.37, N = 12
-ll -lnuma
43808
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 887.40, N = 15
-ll -lnuma
45293
40K
80K
120K
160K
200K
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

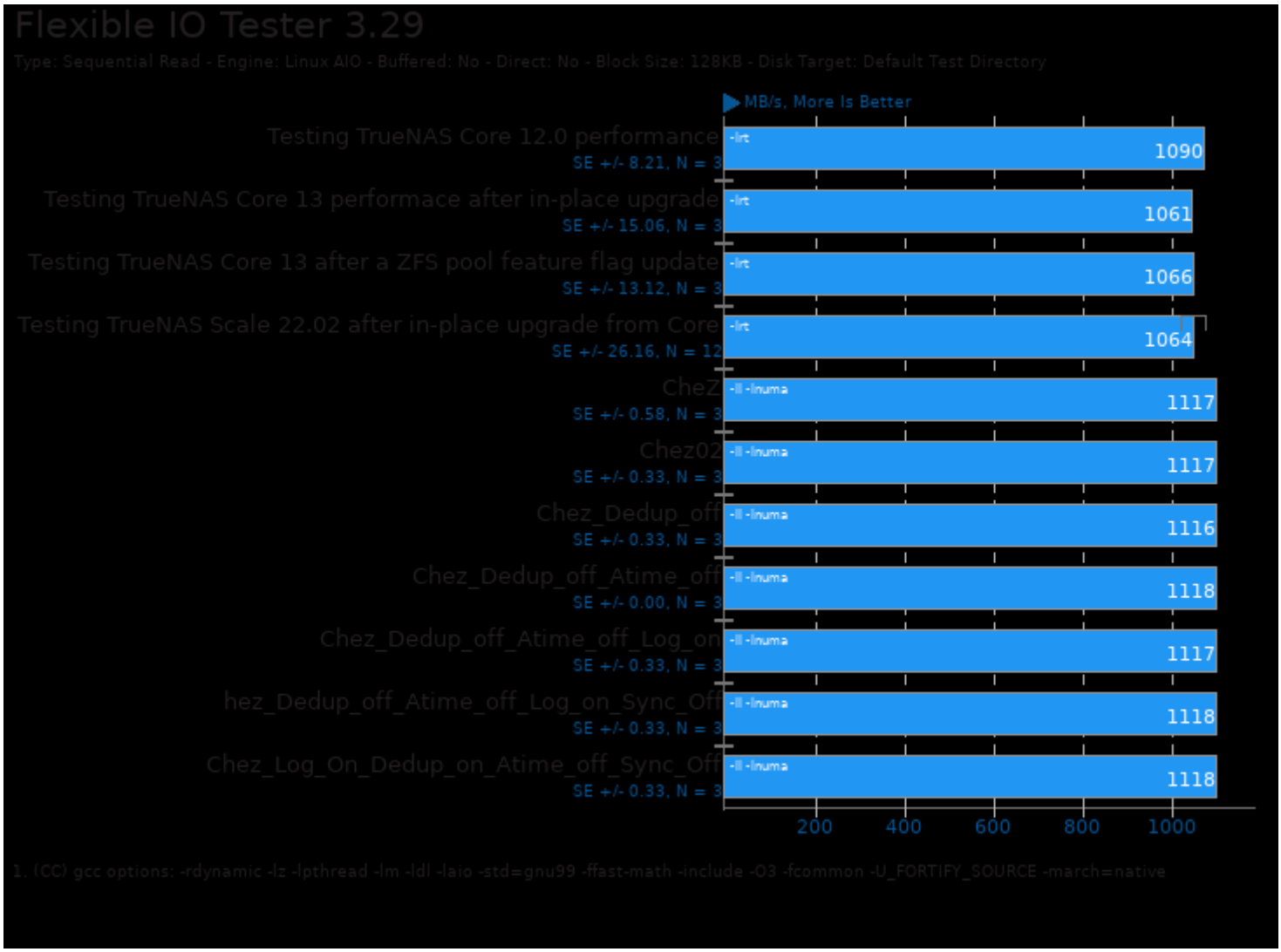

Flexible IO Tester 3.29
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 30.85, N = 15
738.0
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 13.89, N = 12
817.0
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 34.33, N = 12
697.0
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 41.01, N = 15
637.0
SE +/- 0.84, N = 15
87.7
SE +/- 3.09, N = 15
110.1
SE +/- 0.88, N = 3
144.0
SE +/- 1.63, N = 4
145.0
SE +/- 3.84, N = 3
396.0
SE +/- 11.85, N = 3
844.0
SE +/- 9.50, N = 5
958.0
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

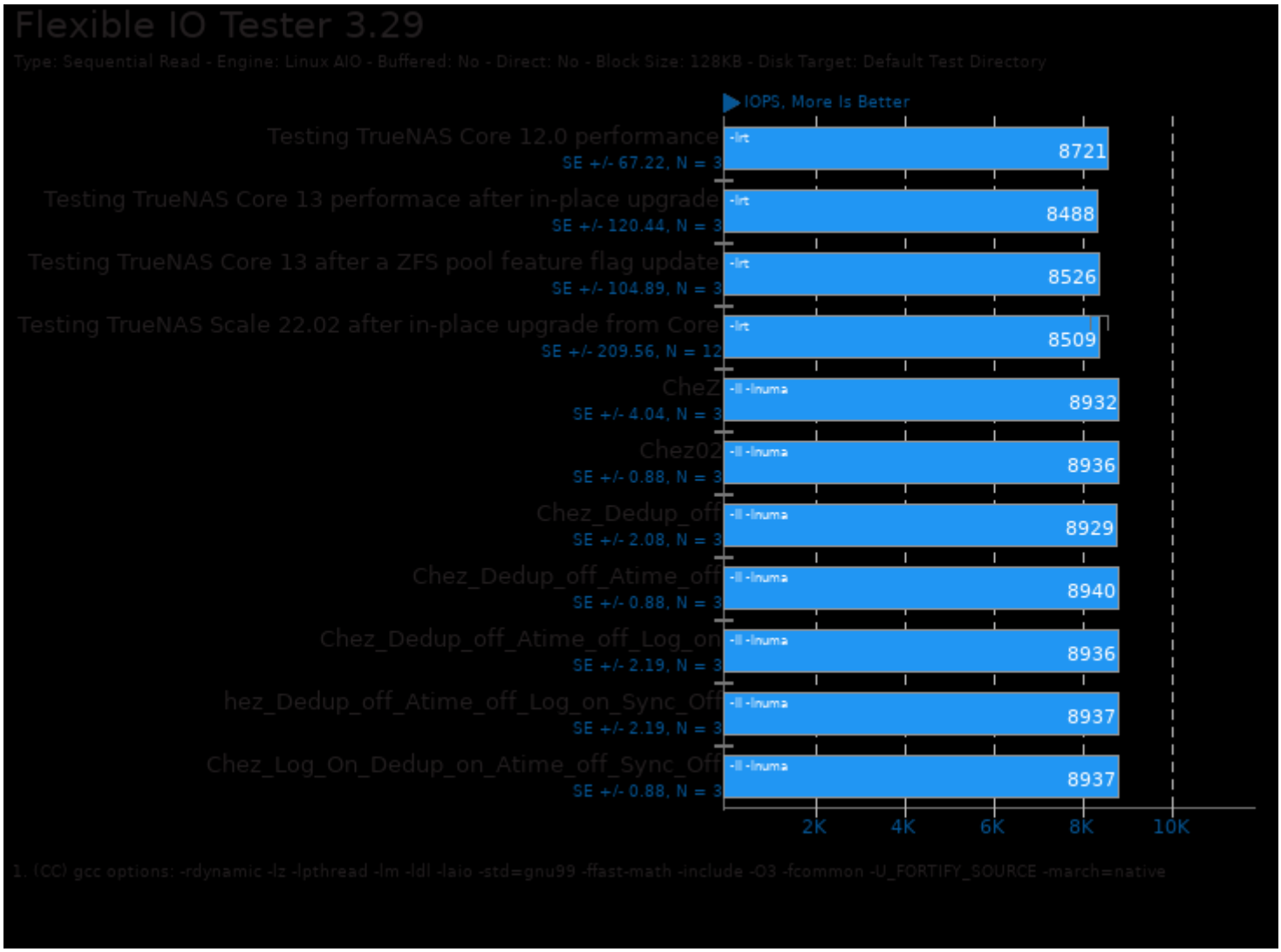

Flexible IO Tester 3.29
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 1MB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 30.87, N = 15
735
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 13.95, N = 12
814
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 34.41, N = 12
693
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 41.00, N = 15
634
SE +/- 0.83, N = 15
84
SE +/- 3.06, N = 15
106
SE +/- 0.88, N = 3
141
SE +/- 1.44, N = 4
142
SE +/- 4.00, N = 3
393
SE +/- 12.13, N = 3
841
SE +/- 9.37, N = 5
955
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native

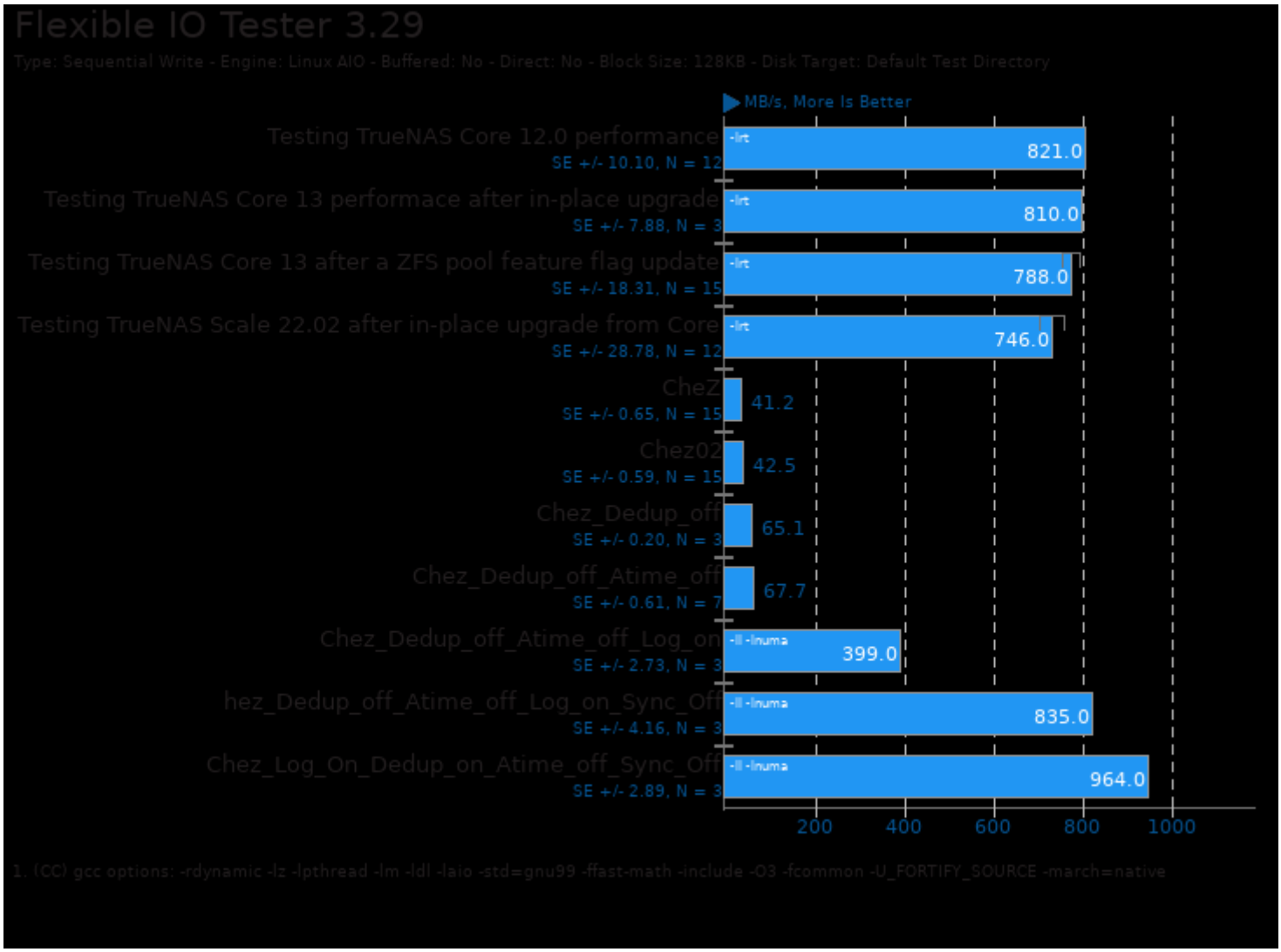
TrueNAScore51922

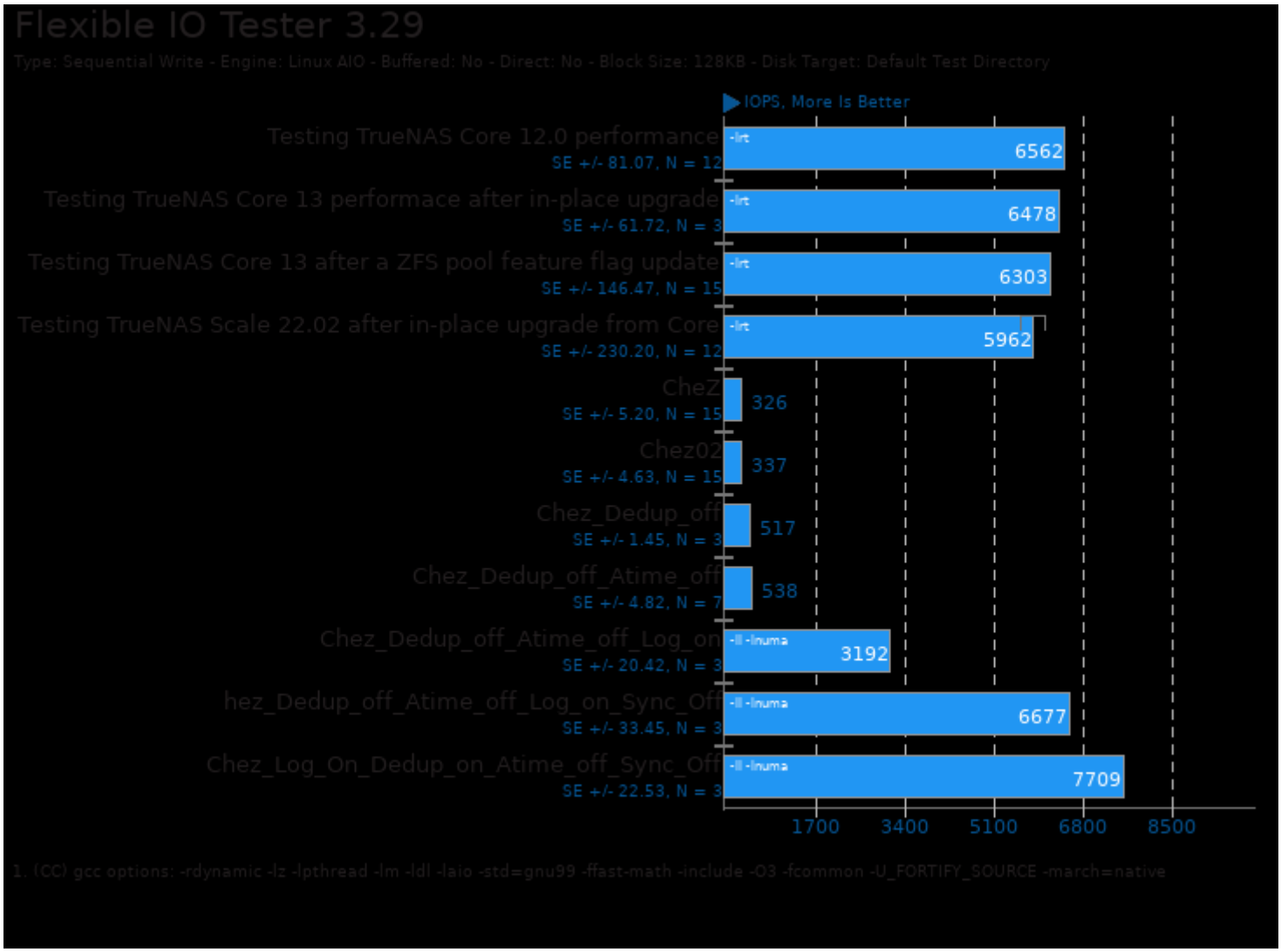



Flexible IO Tester 3.29
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 2386.07, N = 15
-lrt
132600
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 1201.85, N = 3
-lrt
138333
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 2378.94, N = 14
-lrt
137000
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 3102.82, N = 15
-lrt
58067
ChezZ
SE +/- 20.65, N = 15
1044
Chez02
SE +/- 19.54, N = 15
1037
Chez_Dedup_off
SE +/- 19.02, N = 15
1107
Chez_Dedup_off_Atime_off
SE +/- 10.21, N = 3
1274
Chez_Dedup_off_Atime_off_Log_on
SE +/- 260.34, N = 3
-ll -lnuma
53267
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 756.60, N = 15
-ll -lnuma
55767
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 3264.65, N = 12
-ll -lnuma
47692
30K
60K
90K
120K
150K
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native


Flexible IO Tester 3.29
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 8.21, N = 3
-lrt
1090
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 15.06, N = 3
-lrt
1061
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 13.12, N = 3
-lrt
1066
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 26.16, N = 12
-lrt
1064
CheZ
SE +/- 0.58, N = 3
-ll -lnuma
1117
Chez02
SE +/- 0.33, N = 3
-ll -lnuma
1117
Chez_Dedup_off
SE +/- 0.33, N = 3
-ll -lnuma
1116
Chez_Dedup_off_Atime_off
SE +/- 0.00, N = 3
-ll -lnuma
1118
Chez_Dedup_off_Atime_off_Log_on
SE +/- 0.33, N = 3
-ll -lnuma
1117
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 0.33, N = 3
-ll -lnuma
1118
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 0.33, N = 3
-ll -lnuma
1118
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native


Flexible IO Tester 3.29
Type: Sequential Read - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory
IOPS, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 67.22, N = 3
-irt
8721
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 120.44, N = 3
-irt
8488
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 104.89, N = 3
-irt
8526
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 209.56, N = 12
-irt
8509
CheZ
SE +/- 4.04, N = 3
-ll -lnuma
8932
Chez02
SE +/- 0.88, N = 3
-ll -lnuma
8936
Chez_Dedup_off
SE +/- 2.08, N = 3
-ll -lnuma
8929
Chez_Dedup_off_Atime_off
SE +/- 0.88, N = 3
-ll -lnuma
8940
Chez_Dedup_off_Atime_off_Log_on
SE +/- 2.19, N = 3
-ll -lnuma
8936
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 2.19, N = 3
-ll -lnuma
8937
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 0.88, N = 3
-ll -lnuma
8937
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native


Flexible IO Tester 3.29
Type: Sequential Write - Engine: Linux AIO - Buffered: No - Direct: No - Block Size: 128KB - Disk Target: Default Test Directory
MB/s, More Is Better
Testing TrueNAS Core 12.0 performance
SE +/- 10.10, N = 12
-lrt
821.0
Testing TrueNAS Core 13 performace after in-place upgrade
SE +/- 7.88, N = 3
-lrt
810.0
Testing TrueNAS Core 13 after a ZFS pool feature flag update
SE +/- 18.31, N = 15
-lrt
788.0
Testing TrueNAS Scale 22.02 after in-place upgrade from Core
SE +/- 28.78, N = 12
-lrt
746.0
SE +/- 0.65, N = 15
41.2
SE +/- 0.59, N = 15
42.5
Chez_Dedup_off
SE +/- 0.20, N = 3
65.1
Chez_Dedup_off_Atime_off
SE +/- 0.61, N = 7
67.7
Chez_Dedup_off_Atime_off_Log_on
SE +/- 2.73, N = 3
-ll -lnuma
399.0
hez_Dedup_off_Atime_off_Log_on_Sync_Off
SE +/- 4.16, N = 3
-ll -lnuma
835.0
Chez_Log_On_Dedup_on_Atime_off_Sync_Off
SE +/- 2.89, N = 3
-ll -lnuma
964.0
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -lz -lpthread -lm -ldl -laio -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 05:29.