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Xen HVM domU 4.13 testing on Debian 10 via the Phoronix Test Suite.

Automated Executive Summary

S110_AHCI_ZFS had the most wins, coming in first place for 86% of the tests.

Based on the geometric mean of all complete results, the fastest (S110_AHCI_ZFS) was 4.627x the speed of the slowest (Hardware). S110_AHCI_mdadm was 0.425x the speed of S110_AHCI_ZFS and Hardware was 0.508x the speed of S110_AHCI_mdadm.

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

Flexible IO Tester (Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory) at 28x
Flexible IO Tester (Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 28x
Flexible IO Tester (Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory) at 27.5x
Flexible IO Tester (Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory) at 27.5x
Flexible IO Tester (Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target:

Default Test Directory) at 17.097x
Flexible IO Tester (Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory) at 17.097x
Flexible IO Tester (Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory) at 17.064x
Flexible IO Tester (Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory) at 17.064x
Flexible IO Tester (Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory) at 16.915x
Flexible IO Tester (Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory) at 16.676x.

Test Systems:

Hardware

S110_AHCI_mdadm

S110_AHCI_ZFS

Processor: 8 x Intel Xeon E5-2630L v2 (15 Cores), Motherboard: Xen HVM domU v4.13, Chipset: Intel 440FX 82441FX PMC, Memory: 1 x 8184 MB RAM, Disk: 24GB, Graphics: bochsdrmfb

OS: Debian 10, Kernel: 4.19.0-9-amd64 (x86_64), Compiler: GCC 8.3.0, File-System: ext4, Screen Resolution: 1024x768, System Layer: Xen HVM domU 4.13

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v
Disk Notes: MQ-DEADLINE / errors=remount-ro,relatime,rw
Processor Notes: CPU Microcode: 0x42e
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion + mds: Mitigation of Clear buffers; SMT Host state unknown + 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: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	Hardware	S110_AHCI_mdadm	S110_AHCI_ZFS
Flexible IO Tester - Rand Read - Sync - No - No - 4KB (MB/s)	**12.299**	18.9	**27.1**
Normalized	45.38%	69.74%	100%
Standard Deviation	19.1%	1.1%	3.7%

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Flexible IO Tester - Rand Read - Sync - No - No - 4KB (IOPS)	**3186**	4830	**6931**
Normalized	45.97%	69.69%	100%
Standard Deviation	18.5%	1%	3.7%
Flexible IO Tester - Rand Read - Sync - No - No - 8MB (MB/s)	**1114**	**580**	766
Normalized	100%	52.06%	68.76%
Standard Deviation	2.8%		2.5%
Flexible IO Tester - Rand Read - Sync - No - No - 8MB (IOPS)	**139**	**72**	95
Normalized	100%	51.8%	68.35%
Standard Deviation	2.9%		2.6%
Flexible IO Tester - Rand Read - Sync - No - No - 16KB (MB/s)	**18.9**	44.2	**104**
Normalized	18.17%	42.5%	100%
Standard Deviation	15.8%	1.5%	
Flexible IO Tester - Rand Read - Sync - No - No - 16KB (IOPS)	**1213**	2827	**6657**
Normalized	18.22%	42.47%	100%
Standard Deviation	16.5%	1.7%	0.5%
Flexible IO Tester - Rand Read - Sync - No - Yes - 4KB (MB/s)	**11.421**	17.7	**27.3**
Normalized	41.84%	64.84%	100%
Standard Deviation	16.2%	0.6%	1%
Flexible IO Tester - Rand Read - Sync - No - Yes - 4KB (IOPS)	**2929**	4530	**6986**
Normalized	41.93%	64.84%	100%
Standard Deviation	18.1%	0.4%	0.9%
Flexible IO Tester - Rand Read - Sync - No - Yes - 8MB (MB/s)	**1074**	**588**	766
Normalized	100%	54.75%	71.32%
Standard Deviation	2.8%	1%	2.8%
Flexible IO Tester - Rand Read - Sync - No - Yes - 8MB (IOPS)	**134**	**73**	95
Normalized	100%	54.48%	70.9%
Standard Deviation	2.8%		3.2%
Flexible IO Tester - Rand Read - Sync - Yes - No - 4KB (MB/s)	**11.609**	17.5	**26.5**
Normalized	43.81%	66.04%	100%
Standard Deviation	12.4%	0.3%	0.6%
Flexible IO Tester - Rand Read - Sync - Yes - No - 4KB (IOPS)	**2969**	4498	**6795**
Normalized	43.69%	66.2%	100%
Standard Deviation	12.7%	0.3%	0.7%
Flexible IO Tester - Rand Read - Sync - Yes - No - 8MB (MB/s)	270	**164**	**375**
Normalized	72%	43.73%	100%
Standard Deviation	4.6%		
Flexible IO Tester - Rand Read - Sync - Yes - No - 8MB (IOPS)	33	**20**	**46**
Normalized	71.74%	43.48%	100%
Standard Deviation	5.1%		

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Flexible IO Tester - Rand Write - Sync - No - No - 4KB (MB/s)	**1.216**	9.832	**21.4**
Normalized	5.68%	45.94%	100%
Standard Deviation	6.1%	1.3%	1.2%
Flexible IO Tester - Rand Write - Sync - No - No - 4KB (IOPS)	**303**	2458	**5477**
Normalized	5.53%	44.88%	100%
Standard Deviation	6%	1.3%	1.1%
Flexible IO Tester - Rand Write - Sync - No - No - 8MB (MB/s)	**47.8**	241	**645**
Normalized	7.41%	37.36%	100%
Standard Deviation	0.8%	1.6%	
Flexible IO Tester - Rand Write - Sync - No - No - 8MB (IOPS)	**5**	29	**80**
Normalized	6.25%	36.25%	100%
Flexible IO Tester - Rand Read - Sync - No - No - 512KB (MB/s)	463	**228**	**726**
Normalized	63.77%	31.4%	100%
Standard Deviation	6.2%		2.9%
Flexible IO Tester - Rand Read - Sync - No - No - 512KB (IOPS)	926	**457**	**1451**
Normalized	63.82%	31.5%	100%
Standard Deviation	6.2%	0.7%	2.8%
Flexible IO Tester - Rand Read - Sync - No - Yes - 16KB (MB/s)	**17.9**	48.7	**102**
Normalized	17.55%	47.75%	100%
Standard Deviation	21.4%	0.3%	2%
Flexible IO Tester - Rand Read - Sync - No - Yes - 16KB (IOPS)	**1146**	3117	**6551**
Normalized	17.49%	47.58%	100%
Standard Deviation	21.5%	0.4%	1.8%
Flexible IO Tester - Rand Read - Sync - Yes - No - 16KB (MB/s)	**15.7**	46.5	**95.3**
Normalized	16.47%	48.79%	100%
Standard Deviation	15%	2.5%	1.3%
Flexible IO Tester - Rand Read - Sync - Yes - No - 16KB (IOPS)	**1010**	2976	**6100**
Normalized	16.56%	48.79%	100%
Standard Deviation	14.6%	2.5%	1.2%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 4KB (MB/s)	**11.058**	17.9	**27.0**
Normalized	40.96%	66.3%	100%
Standard Deviation	12.5%	2.8%	1.1%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 4KB (IOPS)	**2837**	4572	**6904**
Normalized	41.09%	66.22%	100%
Standard Deviation	12.8%	2.8%	1.1%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 8MB (MB/s)	265	**164**	**375**
Normalized	70.67%	43.73%	100%
Standard Deviation	4.9%	1.6%	

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Flexible IO Tester - Rand Read - Sync - Yes - Yes - 8MB (IOPS)	32	**20**	**46**
Normalized	69.57%	43.48%	100%
Standard Deviation	5.7%		
Flexible IO Tester - Rand Write - Sync - No - No - 16KB (MB/s)	**7.663**	25.4	**87.9**
Normalized	8.72%	28.9%	100%
Standard Deviation	1.5%	1.1%	1.8%
Flexible IO Tester - Rand Write - Sync - No - No - 16KB (IOPS)	**478**	1627	**5623**
Normalized	8.5%	28.93%	100%
Standard Deviation	1.5%	1%	1.8%
Flexible IO Tester - Rand Write - Sync - No - Yes - 4KB (MB/s)	**1.492**	9.849	**21.5**
Normalized	6.94%	45.81%	100%
Standard Deviation	17.2%	0.6%	2.5%
Flexible IO Tester - Rand Write - Sync - No - Yes - 4KB (IOPS)	**373**	2501	**5505**
Normalized	6.78%	45.43%	100%
Standard Deviation	17.2%	2%	2.4%
Flexible IO Tester - Rand Write - Sync - No - Yes - 8MB (MB/s)	**48.2**	237	**649**
Normalized	7.43%	36.52%	100%
Standard Deviation	0.6%	1.1%	0.6%
Flexible IO Tester - Rand Write - Sync - No - Yes - 8MB (IOPS)	**6**	29	**81**
Normalized	7.41%	35.8%	100%
Flexible IO Tester - Rand Write - Sync - Yes - No - 4KB (MB/s)	**39.0**	128	**247**
Normalized	15.79%	51.82%	100%
Standard Deviation	1.2%	0.8%	1.5%
Flexible IO Tester - Rand Write - Sync - Yes - No - 4KB (IOPS)	**9987**	32725	**63333**
Normalized	15.77%	51.67%	100%
Standard Deviation	1.2%	0.6%	1.5%
Flexible IO Tester - Rand Write - Sync - Yes - No - 8MB (MB/s)	**41.7**	170	**427**
Normalized	9.77%	39.81%	100%
Standard Deviation	0.4%		0.1%
Flexible IO Tester - Rand Write - Sync - Yes - No - 8MB (IOPS)	**5**	21	**53**
Normalized	9.43%	39.62%	100%
Flexible IO Tester - Rand Read - Sync - No - Yes - 512KB (MB/s)	500	**228**	**716**
Normalized	69.83%	31.84%	100%
Standard Deviation	2.2%	1.2%	0.7%
Flexible IO Tester - Rand Read - Sync - No - Yes - 512KB (IOPS)	999	**455**	**1432**
Normalized	69.76%	31.77%	100%
Standard Deviation	2.2%	1%	0.6%

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Flexible IO Tester - Rand Read - Sync - Yes - No - 512KB (MB/s)	223	**157**	**385**
Normalized	57.92%	40.78%	100%
Standard Deviation	1%	1%	0.4%
Flexible IO Tester - Rand Read - Sync - Yes - No - 512KB (IOPS)	445	**314**	**769**
Normalized	57.87%	40.83%	100%
Standard Deviation	1%	1%	0.3%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 16KB (MB/s)	**18.6**	46.6	**96.6**
Normalized	19.25%	48.24%	100%
Standard Deviation	18.7%	3%	1.2%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 16KB (IOPS)	**1188**	2996	**6180**
Normalized	19.22%	48.48%	100%
Standard Deviation	18.7%	2.3%	1.2%
Flexible IO Tester - Rand Write - Sync - No - No - 512KB (MB/s)	**34.8**	85.3	**573**
Normalized	6.07%	14.89%	100%
Standard Deviation	0.2%	1.2%	0.6%
Flexible IO Tester - Rand Write - Sync - No - No - 512KB (IOPS)	**69**	170	**1145**
Normalized	6.03%	14.85%	100%
Standard Deviation		1.2%	0.6%
Flexible IO Tester - Rand Write - Sync - No - Yes - 16KB (MB/s)	**7.527**	25.6	**87.7**
Normalized	8.58%	29.19%	100%
Standard Deviation	1.2%	1%	1.7%
Flexible IO Tester - Rand Write - Sync - No - Yes - 16KB (IOPS)	**470**	1638	**5631**
Normalized	8.35%	29.09%	100%
Standard Deviation	1.2%	0.9%	1%
Flexible IO Tester - Rand Write - Sync - Yes - No - 16KB (MB/s)	**41.1**	146	**371**
Normalized	11.08%	39.35%	100%
Standard Deviation	1.5%		4.7%
Flexible IO Tester - Rand Write - Sync - Yes - No - 16KB (IOPS)	**2630**	9325	**23733**
Normalized	11.08%	39.29%	100%
Standard Deviation	1.5%	0.1%	4.7%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 4KB (MB/s)	**39.0**	129	**244**
Normalized	15.98%	52.87%	100%
Standard Deviation	0.4%	0.8%	0.5%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 4KB (IOPS)	**9978**	32925	**62500**
Normalized	15.96%	52.68%	100%
Standard Deviation	0.4%	0.9%	0.6%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 8MB (MB/s)	**41.6**	173	**426**
Normalized	9.77%	40.61%	100%
Standard Deviation	1.3%	1%	1.3%

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Flexible IO Tester - Rand Write - Sync - Yes - Yes - 8MB (IOPS)	**5**	21	**53**
Normalized	9.43%	39.62%	100%
Standard Deviation			2.2%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 512KB (MB/s)	224	**158**	**381**
Normalized	58.79%	41.47%	100%
Standard Deviation			0.6%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 512KB (IOPS)	447	**315**	**762**
Normalized	58.66%	41.34%	100%
Standard Deviation	0.3%		0.6%
Flexible IO Tester - Rand Write - Sync - No - Yes - 512KB (MB/s)	**34.6**	85.9	**569**
Normalized	6.08%	15.1%	100%
Standard Deviation	0.7%	0.6%	0.6%
Flexible IO Tester - Rand Write - Sync - No - Yes - 512KB (IOPS)	**69**	171	**1137**
Normalized	6.07%	15.04%	100%
Standard Deviation		0.6%	0.6%
Flexible IO Tester - Rand Write - Sync - Yes - No - 512KB (MB/s)	**41.8**	166	**423**
Normalized	9.88%	39.24%	100%
Standard Deviation	0.6%	1.3%	0.4%
Flexible IO Tester - Rand Write - Sync - Yes - No - 512KB (IOPS)	**83**	331	**846**
Normalized	9.81%	39.13%	100%
Standard Deviation	0.7%	1.1%	0.4%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 16KB (MB/s)	**40.7**	147	**384**
Normalized	10.6%	38.28%	100%
Standard Deviation	1.6%		1.6%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 16KB (IOPS)	**2626**	9410	**24533**
Normalized	10.7%	38.36%	100%
Standard Deviation	0.3%	0.3%	1.6%
Flexible IO Tester - Seq Read - Sync - No - No - 4KB (MB/s)	**17.8**	27.7	**40.5**
Normalized	43.95%	68.4%	100%
Standard Deviation	16.9%	0.8%	1.6%
Flexible IO Tester - Seq Read - Sync - No - No - 4KB (IOPS)	**4566**	7084	**10367**
Normalized	44.04%	68.33%	100%
Standard Deviation	16.9%	1%	1.5%
Flexible IO Tester - Seq Read - Sync - No - No - 8MB (MB/s)	**1103**	**595**	766
Normalized	100%	53.94%	69.45%
Standard Deviation	2.4%	0.9%	1.9%
Flexible IO Tester - Seq Read - Sync - No - No - 8MB (IOPS)	**137**	**74**	95
Normalized	100%	54.01%	69.34%
Standard Deviation	2.3%		1.8%

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Flexible IO Tester - Rand Read - POSIX AIO - No - No - 4KB (MB/s)	**12.5**	19.3	**27.9**
Normalized	44.8%	69.18%	100%
Standard Deviation	11.7%	0.8%	1.2%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 4KB (IOPS)	**3204**	4927	**7140**
Normalized	44.87%	69.01%	100%
Standard Deviation	11.8%	0.9%	1.1%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 8MB (MB/s)	**935**	**569**	805
Normalized	100%	60.86%	86.1%
Standard Deviation	0.7%	1%	0.3%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 8MB (IOPS)	**113**	**67**	97
Normalized	100%	59.29%	85.84%
Standard Deviation	0.9%		
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 512KB (MB/s)	**40.9**	167	**422**
Normalized	9.69%	39.57%	100%
Standard Deviation	2.2%	0.9%	1.2%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 512KB (IOPS)	**82**	333	**844**
Normalized	9.72%	39.45%	100%
Standard Deviation	1.4%	0.8%	1.2%
Flexible IO Tester - Seq Read - Sync - No - No - 16KB (MB/s)	**40.4**	77.7	**143**
Normalized	28.25%	54.34%	100%
Standard Deviation	15.4%	0.3%	0.8%
Flexible IO Tester - Seq Read - Sync - No - No - 16KB (IOPS)	**2584**	4973	**9136**
Normalized	28.28%	54.43%	100%
Standard Deviation	15.5%	0.4%	0.7%
Flexible IO Tester - Seq Read - Sync - No - Yes - 4KB (MB/s)	**16.2**	28.6	**40.2**
Normalized	40.3%	71.14%	100%
Standard Deviation	9.4%	2.1%	0.7%
Flexible IO Tester - Seq Read - Sync - No - Yes - 4KB (IOPS)	**4175**	7403	**10300**
Normalized	40.53%	71.87%	100%
Standard Deviation	10.1%	1.1%	1%
Flexible IO Tester - Seq Read - Sync - No - Yes - 8MB (MB/s)	**1156**	**587**	768
Normalized	100%	50.78%	66.44%
Standard Deviation	2.6%	0.2%	1.7%
Flexible IO Tester - Seq Read - Sync - No - Yes - 8MB (IOPS)	**144**	**73**	96
Normalized	100%	50.69%	66.67%
Standard Deviation	2.6%		1.6%
Flexible IO Tester - Seq Read - Sync - Yes - No - 4KB (MB/s)	523	**289**	**586**
Normalized	89.25%	49.32%	100%
Standard Deviation	0.8%		2.2%

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Flexible IO Tester - Seq Read - Sync - Yes - No - 4KB (IOPS)	133667	**73933**	**149667**
Normalized	89.31%	49.4%	100%
Standard Deviation	0.9%	0.1%	2.3%
Flexible IO Tester - Seq Read - Sync - Yes - No - 8MB (MB/s)	696	**331**	**699**
Normalized	99.57%	47.35%	100%
Standard Deviation	1.4%		1%
Flexible IO Tester - Seq Read - Sync - Yes - No - 8MB (IOPS)	86	**41**	**87**
Normalized	98.85%	47.13%	100%
Standard Deviation	1.8%		1.1%
Flexible IO Tester - Seq Write - Sync - No - No - 4KB (MB/s)	**1.444**	14.7	**35.4**
Normalized	4.08%	41.53%	100%
Standard Deviation	20.8%	1.4%	0.8%
Flexible IO Tester - Seq Write - Sync - No - No - 4KB (IOPS)	**361**	3754	**9069**
Normalized	3.98%	41.39%	100%
Standard Deviation	20.8%	1.7%	0.8%
Flexible IO Tester - Seq Write - Sync - No - No - 8MB (MB/s)	**48.6**	239	**646**
Normalized	7.52%	37%	100%
Standard Deviation	0.1%	0.5%	
Flexible IO Tester - Seq Write - Sync - No - No - 8MB (IOPS)	**6**	29	**80**
Normalized	7.5%	36.25%	100%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 16KB (MB/s)	**18.3**	49.3	**101**
Normalized	18.12%	48.81%	100%
Standard Deviation	14.8%	2.4%	2.3%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 16KB (IOPS)	**1167**	3148	**6494**
Normalized	17.97%	48.48%	100%
Standard Deviation	14.9%	2.5%	2.3%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 4KB (MB/s)	**12.596**	19.3	**28.1**
Normalized	44.83%	68.68%	100%
Standard Deviation	18.3%	4.2%	1.4%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 4KB (IOPS)	**3239**	4953	**7190**
Normalized	45.05%	68.89%	100%
Standard Deviation	18.8%	3.7%	1.5%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 8MB (MB/s)	**958**	**565**	806
Normalized	100%	58.98%	84.13%
Standard Deviation	2.7%		2.1%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 8MB (IOPS)	**116**	**67**	97
Normalized	100%	57.76%	83.62%
Standard Deviation	2.8%		2.1%

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Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 4KB (MB/s)	**12.294**	18.6	**26.7**
Normalized	46.04%	69.66%	100%
Standard Deviation	15.3%	0.6%	0.2%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 4KB (IOPS)	**3136**	4772	**6839**
Normalized	45.85%	69.78%	100%
Standard Deviation	15.7%	0.6%	0.3%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 8MB (MB/s)	320	**194**	**408**
Normalized	78.43%	47.55%	100%
Standard Deviation	0.8%	0.5%	
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 8MB (IOPS)	37	**21**	**48**
Normalized	77.08%	43.75%	100%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 4KB (MB/s)	**1.464**	10.11	**21.6**
Normalized	6.78%	46.81%	100%
Standard Deviation	11.8%	2.5%	0.3%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 4KB (IOPS)	**362**	2582	**5533**
Normalized	6.54%	46.67%	100%
Standard Deviation	11.9%	2.3%	0.2%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 8MB (MB/s)	**68.2**	258	**673**
Normalized	10.13%	38.34%	100%
Standard Deviation	0.6%	0.8%	0.4%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 8MB (IOPS)	**5**	29	**81**
Normalized	6.17%	35.8%	100%
Flexible IO Tester - Seq Read - Sync - No - No - 512KB (MB/s)	633	**229**	**757**
Normalized	83.62%	30.25%	100%
Standard Deviation		0.4%	0.5%
Flexible IO Tester - Seq Read - Sync - No - No - 512KB (IOPS)	1266	**458**	**1514**
Normalized	83.62%	30.25%	100%
Standard Deviation		0.3%	0.5%
Flexible IO Tester - Seq Read - Sync - No - Yes - 16KB (MB/s)	**43.1**	77.2	**142**
Normalized	30.35%	54.37%	100%
Standard Deviation	14.4%	0.3%	2.7%
Flexible IO Tester - Seq Read - Sync - No - Yes - 16KB (IOPS)	**2757**	4941	**9056**
Normalized	30.44%	54.56%	100%
Standard Deviation	14.4%	0.3%	2.6%
Flexible IO Tester - Seq Read - Sync - Yes - No - 16KB (MB/s)	**696**	**328**	**696**
Normalized	100%	47.13%	100%
Standard Deviation	0.4%		1.2%

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Flexible IO Tester - Seq Read - Sync - Yes - No - 16KB (IOPS)	**44533**	**20300**	43933
Normalized	100%	45.58%	98.65%
Standard Deviation	0.3%	2.6%	2.1%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 4KB (MB/s)	513	**288**	**594**
Normalized	86.36%	48.48%	100%
Standard Deviation			1.9%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 4KB (IOPS)	131400	**73667**	**152000**
Normalized	86.45%	48.47%	100%
Standard Deviation	4.3%	0.2%	1.7%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 8MB (MB/s)	703	**332**	**704**
Normalized	99.86%	47.16%	100%
Standard Deviation	1%	0.3%	2.8%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 8MB (IOPS)	87	**41**	**88**
Normalized	98.86%	46.59%	100%
Standard Deviation			2.9%
Flexible IO Tester - Seq Write - Sync - No - No - 16KB (MB/s)	**6.076**	43.2	**129**
Normalized	4.71%	33.49%	100%
Standard Deviation	13%	0.9%	
Flexible IO Tester - Seq Write - Sync - No - No - 16KB (IOPS)	**379**	2768	**8251**
Normalized	4.59%	33.55%	100%
Standard Deviation	13.1%	0.9%	0.8%
Flexible IO Tester - Seq Write - Sync - No - Yes - 4KB (MB/s)	**1.413**	14.3	**36.6**
Normalized	3.86%	39.07%	100%
Standard Deviation	18.9%	2.7%	0.7%
Flexible IO Tester - Seq Write - Sync - No - Yes - 4KB (IOPS)	**353**	3733	**9365**
Normalized	3.77%	39.86%	100%
Standard Deviation	18.9%	3%	0.6%
Flexible IO Tester - Seq Write - Sync - No - Yes - 8MB (MB/s)	**48.3**	240	**650**
Normalized	7.43%	36.92%	100%
Standard Deviation	0.4%	1.2%	0.4%
Flexible IO Tester - Seq Write - Sync - No - Yes - 8MB (IOPS)	**6**	30	**81**
Normalized	7.41%	37.04%	100%
Standard Deviation			0.7%
Flexible IO Tester - Seq Write - Sync - Yes - No - 4KB (MB/s)	**40.0**	138	**314**
Normalized	12.74%	43.95%	100%
Standard Deviation	2.3%		0.8%
Flexible IO Tester - Seq Write - Sync - Yes - No - 4KB (IOPS)	**10300**	34967	**80467**
Normalized	12.8%	43.46%	100%
Standard Deviation	1%	2.4%	0.8%

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Flexible IO Tester - Seq Write - Sync - Yes - No - 8MB (MB/s)	**41.2**	171	**426**
Normalized	9.67%	40.14%	100%
Standard Deviation	1%	1%	1.2%
Flexible IO Tester - Seq Write - Sync - Yes - No - 8MB (IOPS)	**5**	21	**53**
Normalized	9.43%	39.62%	100%
Standard Deviation			2.2%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 512KB (MB/s)	384	**222**	**642**
Normalized	59.81%	34.58%	100%
Standard Deviation	3.9%	0.9%	1.4%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 512KB (IOPS)	765	**440**	**1280**
Normalized	59.77%	34.38%	100%
Standard Deviation	4%	0.7%	1.4%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 16KB (MB/s)	**16.9**	49.6	**102**
Normalized	16.57%	48.63%	100%
Standard Deviation	13.5%	0.3%	1.5%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 16KB (IOPS)	**1083**	3171	**6547**
Normalized	16.54%	48.43%	100%
Standard Deviation	13.2%	0.3%	1.4%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 16KB (MB/s)	**17.4**	48.4	**95.1**
Normalized	18.3%	50.89%	100%
Standard Deviation	17%	0.6%	2.8%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 16KB (IOPS)	**1113**	3091	**6124**
Normalized	18.17%	50.47%	100%
Standard Deviation	16.8%	0.7%	2.7%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 4KB (MB/s)	**11.349**	19.4	**27.1**
Normalized	41.88%	71.59%	100%
Standard Deviation	11.7%	1.7%	1.8%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 4KB (IOPS)	**2894**	4961	**6942**
Normalized	41.69%	71.46%	100%
Standard Deviation	12%	1.6%	2%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 8MB (MB/s)	316	**196**	**408**
Normalized	77.45%	48.04%	100%
Standard Deviation	1.6%		
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 8MB (IOPS)	36	**21**	**48**
Normalized	75%	43.75%	100%
Standard Deviation	2.8%		
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 16KB (MB/s)	**7.646**	25.8	**81.8**
Normalized	9.35%	31.54%	100%
Standard Deviation	0.5%	0.8%	1%

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Flexible IO Tester - Rand Write - POSIX AIO - No - No - 16KB (IOPS)	474	1649	5231
Normalized	9.06%	31.52%	100%
Standard Deviation	0.6%	0.8%	1%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 4KB (MB/s)	1.477	10.08	21.8
Normalized	6.78%	46.24%	100%
Standard Deviation	17%	2.9%	0.3%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 4KB (IOPS)	366	2575	5568
Normalized	6.57%	46.25%	100%
Standard Deviation	17.1%	2.7%	0.4%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 8MB (MB/s)	67.7	258	677
Normalized	10%	38.11%	100%
Standard Deviation	1.2%	1.1%	0.3%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 8MB (IOPS)	5	29	81
Normalized	6.17%	35.8%	100%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 4KB (MB/s)	40.3	142	295
Normalized	13.66%	48.14%	100%
Standard Deviation	0.7%	2.5%	1.9%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 4KB (IOPS)	10333	36333	75500
Normalized	13.69%	48.12%	100%
Standard Deviation	0.6%	2.4%	1.7%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 8MB (MB/s)	43.5	174	477
Normalized	9.12%	36.48%	100%
Standard Deviation	0.7%		2.4%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 8MB (IOPS)	2	19	56
Normalized	3.57%	33.93%	100%
Standard Deviation			2.7%
Flexible IO Tester - Seq Read - Sync - No - Yes - 512KB (MB/s)	626	231	774
Normalized	80.88%	29.84%	100%
Standard Deviation	1.5%	0.7%	1.3%
Flexible IO Tester - Seq Read - Sync - No - Yes - 512KB (IOPS)	1251	461	1548
Normalized	80.81%	29.78%	100%
Standard Deviation	1.5%	0.7%	1.3%
Flexible IO Tester - Seq Read - Sync - Yes - No - 512KB (MB/s)	735	338	711
Normalized	100%	45.99%	96.73%
Standard Deviation	0.6%	0.3%	0.7%
Flexible IO Tester - Seq Read - Sync - Yes - No - 512KB (IOPS)	1469	675	1421
Normalized	100%	45.95%	96.73%
Standard Deviation	0.5%	0.3%	0.7%

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Flexible IO Tester - Seq Read - Sync - Yes - Yes - 16KB (MB/s)	673	**328**	**696**
Normalized	96.7%	47.13%	100%
Standard Deviation	0.8%		0.2%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 16KB (IOPS)	43033	**20667**	**44567**
Normalized	96.56%	46.37%	100%
Standard Deviation	0.7%	2.8%	0.1%
Flexible IO Tester - Seq Write - Sync - No - No - 512KB (MB/s)	**36.1**	117	**616**
Normalized	5.86%	18.99%	100%
Standard Deviation	0.6%	0.5%	2.7%
Flexible IO Tester - Seq Write - Sync - No - No - 512KB (IOPS)	**72**	234	**1231**
Normalized	5.85%	19.01%	100%
Standard Deviation	0.8%	0.5%	2.7%
Flexible IO Tester - Seq Write - Sync - No - Yes - 16KB (MB/s)	**6.216**	43.7	**129**
Normalized	4.82%	33.88%	100%
Standard Deviation	9.2%	0.1%	
Flexible IO Tester - Seq Write - Sync - No - Yes - 16KB (IOPS)	**388**	2794	**8248**
Normalized	4.7%	33.87%	100%
Standard Deviation	9.3%	0.1%	1%
Flexible IO Tester - Seq Write - Sync - Yes - No - 16KB (MB/s)	**41.1**	174	**426**
Normalized	9.65%	40.85%	100%
Standard Deviation	0.6%	11.4%	1.8%
Flexible IO Tester - Seq Write - Sync - Yes - No - 16KB (IOPS)	**2629**	11130	**27233**
Normalized	9.65%	40.87%	100%
Standard Deviation	0.6%	11.5%	1.7%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 4KB (MB/s)	**40.5**	138	**314**
Normalized	12.9%	43.95%	100%
Standard Deviation	0.2%		1%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 4KB (IOPS)	**10367**	35300	**80267**
Normalized	12.92%	43.98%	100%
Standard Deviation	0.6%	0.7%	1.1%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 8MB (MB/s)	**41.2**	174	**428**
Normalized	9.63%	40.65%	100%
Standard Deviation	1.1%		0.5%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 8MB (IOPS)	**5**	21	**53**
Normalized	9.43%	39.62%	100%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 512KB (MB/s)	380	**221**	**643**
Normalized	59.1%	34.37%	100%
Standard Deviation	4.7%	1.4%	2.8%

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Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 512KB (IOPS)	755	**439**	**1284**
Normalized	58.8%	34.19%	100%
Standard Deviation	4.7%	1.4%	2.8%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 512KB (MB/s)	216	**156**	**359**
Normalized	60.17%	43.45%	100%
Standard Deviation	0.8%		0.6%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 512KB (IOPS)	429	**309**	**715**
Normalized	60%	43.22%	100%
Standard Deviation	0.7%	0.2%	0.7%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 16KB (MB/s)	**18.2**	47.6	**96.4**
Normalized	18.88%	49.38%	100%
Standard Deviation	10.6%	1.1%	1.5%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 16KB (IOPS)	**1165**	3041	**6166**
Normalized	18.89%	49.32%	100%
Standard Deviation	10.5%	1.1%	1.6%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 512KB (MB/s)	**35.7**	86.5	**539**
Normalized	6.62%	16.05%	100%
Standard Deviation	1.8%	0.9%	10.7%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 512KB (IOPS)	**68**	169	**1074**
Normalized	6.33%	15.74%	100%
Standard Deviation		0.9%	10.7%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 16KB (MB/s)	**7.778**	25.9	**82.7**
Normalized	9.41%	31.32%	100%
Standard Deviation	2.4%	2.3%	0.5%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 16KB (IOPS)	**483**	1653	**5288**
Normalized	9.13%	31.26%	100%
Standard Deviation	2.4%	2.2%	0.5%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 16KB (MB/s)	**40.7**	162	**384**
Normalized	10.6%	42.19%	100%
Standard Deviation	1.6%	0.7%	0.5%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 16KB (IOPS)	**2625**	10400	**24600**
Normalized	10.67%	42.28%	100%
Standard Deviation	0.2%		0.7%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 4KB (MB/s)	**40.5**	140	**288**
Normalized	14.06%	48.61%	100%
Standard Deviation	0.4%	1.4%	2.9%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 4KB (IOPS)	**10367**	35867	**73700**
Normalized	14.07%	48.67%	100%
Standard Deviation	0.6%	1.4%	3%

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Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 8MB (MB/s)	**45.0**	176	**475**
Normalized	9.47%	37.05%	100%
Standard Deviation	1.2%	0.7%	2.8%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 8MB (IOPS)	**2**	19	**56**
Normalized	3.57%	33.93%	100%
Standard Deviation			2.9%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 512KB (MB/s)	**724**	**344**	699
Normalized	100%	47.51%	96.55%
Standard Deviation	2.5%	0.8%	0.5%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 512KB (IOPS)	**1447**	**688**	1398
Normalized	100%	47.55%	96.61%
Standard Deviation	2.5%	0.9%	0.5%
Flexible IO Tester - Seq Write - Sync - No - Yes - 512KB (MB/s)	**36.1**	117	**616**
Normalized	5.86%	18.99%	100%
Standard Deviation	0.4%	1.5%	0.3%
Flexible IO Tester - Seq Write - Sync - No - Yes - 512KB (IOPS)	**72**	234	**1231**
Normalized	5.85%	19.01%	100%
Standard Deviation		1.6%	0.4%
Flexible IO Tester - Seq Write - Sync - Yes - No - 512KB (MB/s)	**41.0**	167	**428**
Normalized	9.58%	39.02%	100%
Standard Deviation	1%	0.7%	0.6%
Flexible IO Tester - Seq Write - Sync - Yes - No - 512KB (IOPS)	**82**	332	**855**
Normalized	9.59%	38.83%	100%
Standard Deviation	0.7%	0.7%	0.6%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 16KB (MB/s)	**41.1**	184	**438**
Normalized	9.38%	42.01%	100%
Standard Deviation	0.8%	11%	0.9%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 16KB (IOPS)	**2634**	11761	**28033**
Normalized	9.4%	41.95%	100%
Standard Deviation	0.8%	11%	0.9%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 512KB (MB/s)	216	**160**	**360**
Normalized	60%	44.44%	100%
Standard Deviation	1.2%	0.7%	0.7%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 512KB (IOPS)	429	**315**	**716**
Normalized	59.92%	43.99%	100%
Standard Deviation	0.9%	0.7%	0.6%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 512KB (MB/s)	**35.9**	86.3	**554**
Normalized	6.48%	15.58%	100%
Standard Deviation	0.6%	1.6%	

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Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 512KB (IOPS)	**68**	169	**1104**
Normalized	6.16%	15.31%	100%
Standard Deviation	0.8%	1.6%	
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 512KB (MB/s)	**42.5**	168	**424**
Normalized	10.02%	39.62%	100%
Standard Deviation	0.9%	1.2%	
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 512KB (IOPS)	**82**	332	**843**
Normalized	9.73%	39.38%	100%
Standard Deviation	1.2%	1%	1.3%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 16KB (MB/s)	**41.2**	161	**382**
Normalized	10.79%	42.15%	100%
Standard Deviation	1%		0.5%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 16KB (IOPS)	**2636**	10300	**24400**
Normalized	10.8%	42.21%	100%
Standard Deviation	1%		0.4%
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 4KB (MB/s)	**17.4**	29.5	**41.8**
Normalized	41.63%	70.57%	100%
Standard Deviation	18.9%	0.9%	3%
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 4KB (IOPS)	**4493**	7553	**10700**
Normalized	41.99%	70.59%	100%
Standard Deviation	18.6%	1%	
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 8MB (MB/s)	**951**	**579**	802
Normalized	100%	60.88%	84.33%
Standard Deviation	1%	0.6%	0.7%
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 8MB (IOPS)	**115**	**69**	97
Normalized	100%	60%	84.35%
Standard Deviation	1%	0.8%	0.6%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 512KB (MB/s)	**42.3**	166	**430**
Normalized	9.84%	38.6%	100%
Standard Deviation	0.6%	0.9%	1.8%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 512KB (IOPS)	**84**	331	**859**
Normalized	9.78%	38.53%	100%
Standard Deviation		0.9%	1.8%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 512KB (MB/s)	**41.2**	165	**421**
Normalized	9.79%	39.19%	100%
Standard Deviation	0.7%	1.6%	0.4%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 512KB (IOPS)	**79**	327	**837**
Normalized	9.44%	39.07%	100%
Standard Deviation		1.6%	0.4%

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Flexible IO Tester - Seq Read - POSIX AIO - No - No - 16KB (MB/s)	**43.5**	82.4	**145**
Normalized	30%	56.83%	100%
Standard Deviation	19.4%	1.9%	2.9%
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 16KB (IOPS)	**2779**	5267	**9310**
Normalized	29.85%	56.57%	100%
Standard Deviation	19.4%	2%	2.9%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 4KB (MB/s)	**18.3**	29.6	**42.3**
Normalized	43.26%	69.98%	100%
Standard Deviation	10.5%	3.9%	5.8%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 4KB (IOPS)	**4674**	7580	**10813**
Normalized	43.23%	70.1%	100%
Standard Deviation	10.4%	3.7%	5.7%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 8MB (MB/s)	**973**	**585**	796
Normalized	100%	60.12%	81.81%
Standard Deviation	2.7%	0.4%	1%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 8MB (IOPS)	**118**	**70**	96
Normalized	100%	59.32%	81.36%
Standard Deviation	2.9%		1%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 4KB (MB/s)	594	**315**	**702**
Normalized	84.62%	44.87%	100%
Standard Deviation	2.9%	0.9%	0.6%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 4KB (IOPS)	152000	**80567**	**179667**
Normalized	84.6%	44.84%	100%
Standard Deviation		1%	0.6%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 8MB (MB/s)	**775**	**369**	754
Normalized	100%	47.61%	97.29%
Standard Deviation	1.4%		0.5%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 8MB (IOPS)	**93**	**43**	91
Normalized	100%	46.24%	97.85%
Standard Deviation	1.2%		0.6%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 4KB (MB/s)	**1.359**	15.3	**37.6**
Normalized	3.61%	40.69%	100%
Standard Deviation	13.2%	2.7%	0.7%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 4KB (IOPS)	**336**	3908	**9629**
Normalized	3.49%	40.59%	100%
Standard Deviation	13.3%	2.5%	0.6%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 8MB (MB/s)	**68.6**	263	**684**
Normalized	10.03%	38.45%	100%
Standard Deviation	0.5%	0.2%	0.8%

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Flexible IO Tester - Seq Write - POSIX AIO - No - No - 8MB (IOPS)	**5**	29	**82**
Normalized	6.1%	35.37%	100%
Standard Deviation		2%	
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 512KB (MB/s)	574	**230**	**661**
Normalized	86.84%	34.8%	100%
Standard Deviation	2%	1.7%	1.9%
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 512KB (IOPS)	1144	**457**	**1319**
Normalized	86.73%	34.65%	100%
Standard Deviation	2%	1.9%	1.9%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 16KB (MB/s)	**38.4**	82.7	**146**
Normalized	26.3%	56.64%	100%
Standard Deviation	18.6%	1.5%	3.4%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 16KB (IOPS)	**2454**	5288	**9345**
Normalized	26.26%	56.59%	100%
Standard Deviation	18.6%	1.5%	3.5%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 16KB (MB/s)	**704**	**336**	703
Normalized	100%	47.73%	99.86%
Standard Deviation	2.6%	0.6%	1.3%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 16KB (IOPS)	**45067**	**21533**	45000
Normalized	100%	47.78%	99.85%
Standard Deviation	2.6%	0.5%	1.2%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 4KB (MB/s)	583	**316**	**703**
Normalized	82.93%	44.95%	100%
Standard Deviation	3.4%	0.7%	1.6%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 4KB (IOPS)	149133	**80800**	**180000**
Normalized	82.85%	44.89%	100%
Standard Deviation	3.4%	0.7%	1.5%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 8MB (MB/s)	**750**	**370**	**750**
Normalized	100%	49.33%	100%
Standard Deviation	0.7%	0.7%	1.3%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 8MB (IOPS)	**90**	**43**	**90**
Normalized	100%	47.78%	100%
Standard Deviation	1.1%	1.4%	
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 16KB (MB/s)	**5.847**	44.6	**128**
Normalized	4.57%	34.84%	100%
Standard Deviation	10.7%	2%	0.4%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 16KB (IOPS)	**362**	2854	**8219**
Normalized	4.4%	34.72%	100%
Standard Deviation	10.8%	2.1%	0.4%

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Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 4KB (MB/s)	**1.390**	15.2	**36.9**
Normalized	3.77%	41.19%	100%
Standard Deviation	20.7%	1.1%	0.9%
Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 4KB (IOPS)	**344**	3893	**9455**
Normalized	3.64%	41.17%	100%
Standard Deviation	20.9%	1.2%	0.9%
Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 8MB (MB/s)	**68.3**	263	**681**
Normalized	10.03%	38.62%	100%
Standard Deviation	0.1%	0.8%	0.8%
Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 8MB (IOPS)	**5**	29	**82**
Normalized	6.1%	35.37%	100%
Standard Deviation		2%	
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 4KB (MB/s)	**41.4**	148	**388**
Normalized	10.67%	38.14%	100%
Standard Deviation	0.4%	1.8%	2.3%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 4KB (IOPS)	**10567**	37867	**99200**
Normalized	10.65%	38.17%	100%
Standard Deviation	0.5%	1.5%	2.2%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 8MB (MB/s)	**43.8**	175	**470**
Normalized	9.32%	37.23%	100%
Standard Deviation	1.5%		2.2%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 8MB (IOPS)	**2**	19	**55**
Normalized	3.64%	34.55%	100%
Standard Deviation			2.1%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 512KB (MB/s)	573	**230**	**662**
Normalized	86.56%	34.74%	100%
Standard Deviation	3%	1.8%	1.9%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 512KB (IOPS)	1142	**456**	**1321**
Normalized	86.45%	34.52%	100%
Standard Deviation	3%	1.9%	1.9%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 512KB (MB/s)	**721**	**339**	707
Normalized	100%	47.02%	98.06%
Standard Deviation	0.9%	0.5%	1.1%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 512KB (IOPS)	**1437**	**674**	1410
Normalized	100%	46.9%	98.12%
Standard Deviation	0.9%	0.4%	1%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 16KB (MB/s)	**722**	**335**	694
Normalized	100%	46.4%	96.12%
Standard Deviation	0.3%	0.3%	1.5%

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Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 16KB (IOPS)	**45833**	**21433**	44467
Normalized	100%	46.76%	97.02%
Standard Deviation	1.6%	0.3%	1.5%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 512KB (MB/s)	**37.5**	117	**594**
Normalized	6.31%	19.7%	100%
Standard Deviation	0.8%	1.8%	0.7%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 512KB (IOPS)	**71**	231	**1184**
Normalized	6%	19.51%	100%
Standard Deviation		1.8%	0.7%
Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 16KB (MB/s)	**5.930**	45.3	**130**
Normalized	4.56%	34.85%	100%
Standard Deviation	10.2%	2.8%	
Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 16KB (IOPS)	**367**	2909	**8333**
Normalized	4.4%	34.91%	100%
Standard Deviation	10.3%	2.3%	0.2%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 16KB (MB/s)	**41.7**	165	**431**
Normalized	9.68%	38.28%	100%
Standard Deviation	0.7%		2.9%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 16KB (IOPS)	**2666**	10500	**27408**
Normalized	9.73%	38.31%	100%
Standard Deviation	0.7%		3.7%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 4KB (MB/s)	**41.5**	148	**385**
Normalized	10.78%	38.44%	100%
Standard Deviation	1.6%	2.4%	2.6%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 4KB (IOPS)	**10600**	37900	**98425**
Normalized	10.77%	38.51%	100%
Standard Deviation	1.6%	2.2%	2.5%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 8MB (MB/s)	**44.1**	174	**470**
Normalized	9.38%	37.02%	100%
Standard Deviation	1.1%	0.6%	2.1%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 8MB (IOPS)	**2**	19	**55**
Normalized	3.64%	34.55%	100%
Standard Deviation			2.1%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 512KB (MB/s)	**704**	**340**	698
Normalized	100%	48.3%	99.15%
Standard Deviation	2.6%	0.6%	2.1%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 512KB (IOPS)	**1404**	**676**	1393
Normalized	100%	48.15%	99.22%
Standard Deviation	2.6%	0.6%	2%

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Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 512KB (MB/s)	**37.3**	117	**602**
Normalized	6.2%	19.44%	100%
Standard Deviation	0.8%	0.9%	1.2%
Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 512KB (IOPS)	**71**	231	**1201**
Normalized	5.91%	19.23%	100%
Standard Deviation		0.9%	1.2%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 512KB (MB/s)	**42.1**	167	**431**
Normalized	9.77%	38.75%	100%
Standard Deviation	2.4%	1.6%	1.1%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 512KB (IOPS)	**81**	331	**858**
Normalized	9.44%	38.58%	100%
Standard Deviation	2.5%	1.4%	1%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 16KB (MB/s)	**41.7**	165	**451**
Normalized	9.25%	36.59%	100%
Standard Deviation	0.4%	1.4%	0.5%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 16KB (IOPS)	**2664**	10533	**28867**
Normalized	9.23%	36.49%	100%
Standard Deviation	0.4%	1.1%	0.4%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 512KB (MB/s)	**41.9**	168	**430**
Normalized	9.74%	39.07%	100%
Standard Deviation	1.9%	1.2%	0.2%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 512KB (IOPS)	**80**	332	**856**
Normalized	9.35%	38.79%	100%
Standard Deviation		1.3%	0.2%
Flexible IO Tester - Rand Read - Sync - No - No - 64KB (MB/s)			269
Flexible IO Tester - Rand Read - Sync - No - No - 64KB (IOPS)			4306
Standard Deviation			0.6%
Flexible IO Tester - Rand Read - Sync - No - Yes - 64KB (MB/s)			272
Standard Deviation			0.4%
Flexible IO Tester - Rand Read - Sync - No - Yes - 64KB (IOPS)			4350
Standard Deviation			0.4%
Flexible IO Tester - Rand Read - Sync - Yes - No - 64KB (MB/s)			233
Standard Deviation			1.5%
Flexible IO Tester - Rand Read - Sync - Yes - No - 64KB (IOPS)			3729
Standard Deviation			1.6%
Flexible IO Tester - Rand Write - Sync - No - No - 64KB (MB/s)			224
Standard Deviation			0.4%

Flexible IO Tester - Rand Write - Sync - No - No - 64KB (IOPS)	3584
Standard Deviation	0.4%
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 64KB (MB/s)	234
Flexible IO Tester - Rand Read - Sync - Yes - Yes - 64KB (IOPS)	3748
Flexible IO Tester - Rand Write - Sync - No - Yes - 64KB (MB/s)	224
Standard Deviation	0.7%
Flexible IO Tester - Rand Write - Sync - No - Yes - 64KB (IOPS)	3577
Standard Deviation	0.8%
Flexible IO Tester - Rand Write - Sync - Yes - No - 64KB (MB/s)	412
Standard Deviation	2.3%
Flexible IO Tester - Rand Write - Sync - Yes - No - 64KB (IOPS)	6596
Standard Deviation	2.2%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 64KB (MB/s)	420
Standard Deviation	1.4%
Flexible IO Tester - Rand Write - Sync - Yes - Yes - 64KB (IOPS)	6728
Standard Deviation	1.4%
Flexible IO Tester - Seq Read - Sync - No - No - 64KB (MB/s)	328
Flexible IO Tester - Seq Read - Sync - No - No - 64KB (IOPS)	5242
Standard Deviation	0.5%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 64KB (MB/s)	262
Standard Deviation	1.2%
Flexible IO Tester - Rand Read - POSIX AIO - No - No - 64KB (IOPS)	4194
Standard Deviation	1.2%
Flexible IO Tester - Seq Read - Sync - No - Yes - 64KB (MB/s)	323
Standard Deviation	0.8%
Flexible IO Tester - Seq Read - Sync - No - Yes - 64KB (IOPS)	5164
Standard Deviation	0.7%
Flexible IO Tester - Seq Read - Sync - Yes - No - 64KB (MB/s)	701
Standard Deviation	0.2%
Flexible IO Tester - Seq Read - Sync - Yes - No - 64KB (IOPS)	11200
Flexible IO Tester - Seq Write - Sync - No - No - 64KB (MB/s)	291
Standard Deviation	0.7%

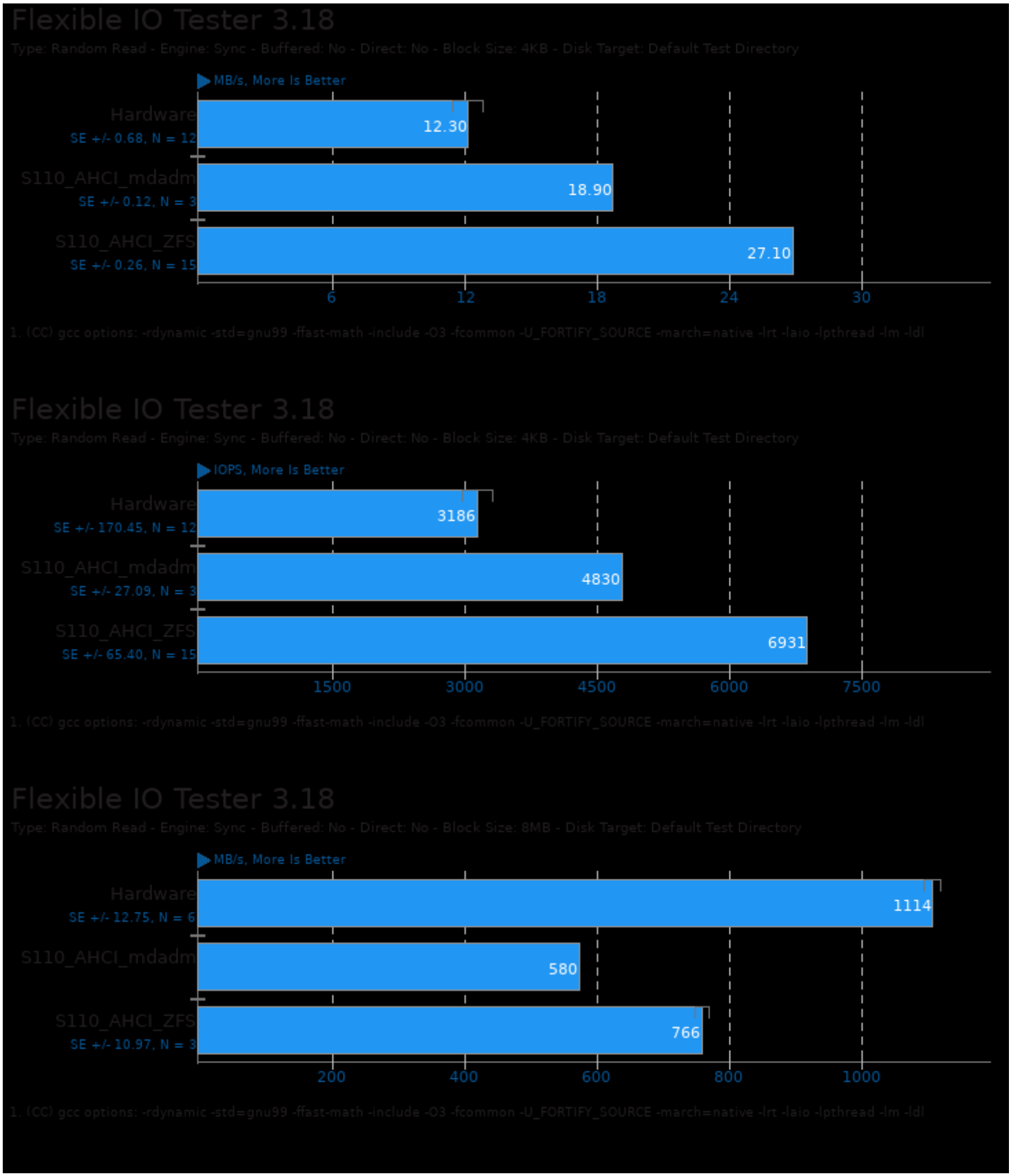
Flexible IO Tester - Seq Write - Sync - No - No - 64KB (IOPS)	4659
Standard Deviation	0.7%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 64KB (MB/s)	262
Standard Deviation	2.9%
Flexible IO Tester - Rand Read - POSIX AIO - No - Yes - 64KB (IOPS)	4184
Standard Deviation	2.8%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 64KB (MB/s)	228
Standard Deviation	0.9%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 64KB (IOPS)	3651
Standard Deviation	1%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 64KB (MB/s)	225
Standard Deviation	0.3%
Flexible IO Tester - Rand Write - POSIX AIO - No - No - 64KB (IOPS)	3589
Standard Deviation	0.3%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 64KB (MB/s)	700
Standard Deviation	0.7%
Flexible IO Tester - Seq Read - Sync - Yes - Yes - 64KB (IOPS)	11167
Standard Deviation	0.5%
Flexible IO Tester - Seq Write - Sync - No - Yes - 64KB (MB/s)	292
Standard Deviation	0.9%
Flexible IO Tester - Seq Write - Sync - No - Yes - 64KB (IOPS)	4672
Standard Deviation	0.9%
Flexible IO Tester - Seq Write - Sync - Yes - No - 64KB (MB/s)	420
Standard Deviation	1%
Flexible IO Tester - Seq Write - Sync - Yes - No - 64KB (IOPS)	6726
Standard Deviation	0.9%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 64KB (MB/s)	229
Standard Deviation	0.9%
Flexible IO Tester - Rand Read - POSIX AIO - Yes - Yes - 64KB (IOPS)	3669
Standard Deviation	0.9%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 64KB (MB/s)	226
Standard Deviation	0.4%
Flexible IO Tester - Rand Write - POSIX AIO - No - Yes - 64KB (IOPS)	3609
Standard Deviation	0.3%

Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 64KB (MB/s)	440
Standard Deviation	1.8%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 64KB (IOPS)	7037
Standard Deviation	1.8%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 64KB (MB/s)	428
Standard Deviation	1.8%
Flexible IO Tester - Seq Write - Sync - Yes - Yes - 64KB (IOPS)	6845
Standard Deviation	1.9%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 64KB (MB/s)	435
Standard Deviation	2.3%
Flexible IO Tester - Rand Write - POSIX AIO - Yes - Yes - 64KB (IOPS)	6956
Standard Deviation	2.3%
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 64KB (MB/s)	319
Standard Deviation	1.4%
Flexible IO Tester - Seq Read - POSIX AIO - No - No - 64KB (IOPS)	5105
Standard Deviation	1.4%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 64KB (MB/s)	317
Standard Deviation	0.5%
Flexible IO Tester - Seq Read - POSIX AIO - No - Yes - 64KB (IOPS)	5070
Standard Deviation	0.5%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 64KB (MB/s)	693
Standard Deviation	0.9%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - No - 64KB (IOPS)	11067
Standard Deviation	1%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 64KB (MB/s)	294
Standard Deviation	0.5%
Flexible IO Tester - Seq Write - POSIX AIO - No - No - 64KB (IOPS)	4705
Standard Deviation	0.5%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 64KB (MB/s)	703
Standard Deviation	0.9%
Flexible IO Tester - Seq Read - POSIX AIO - Yes - Yes - 64KB (IOPS)	11267
Standard Deviation	1%
Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 64KB (MB/s)	294

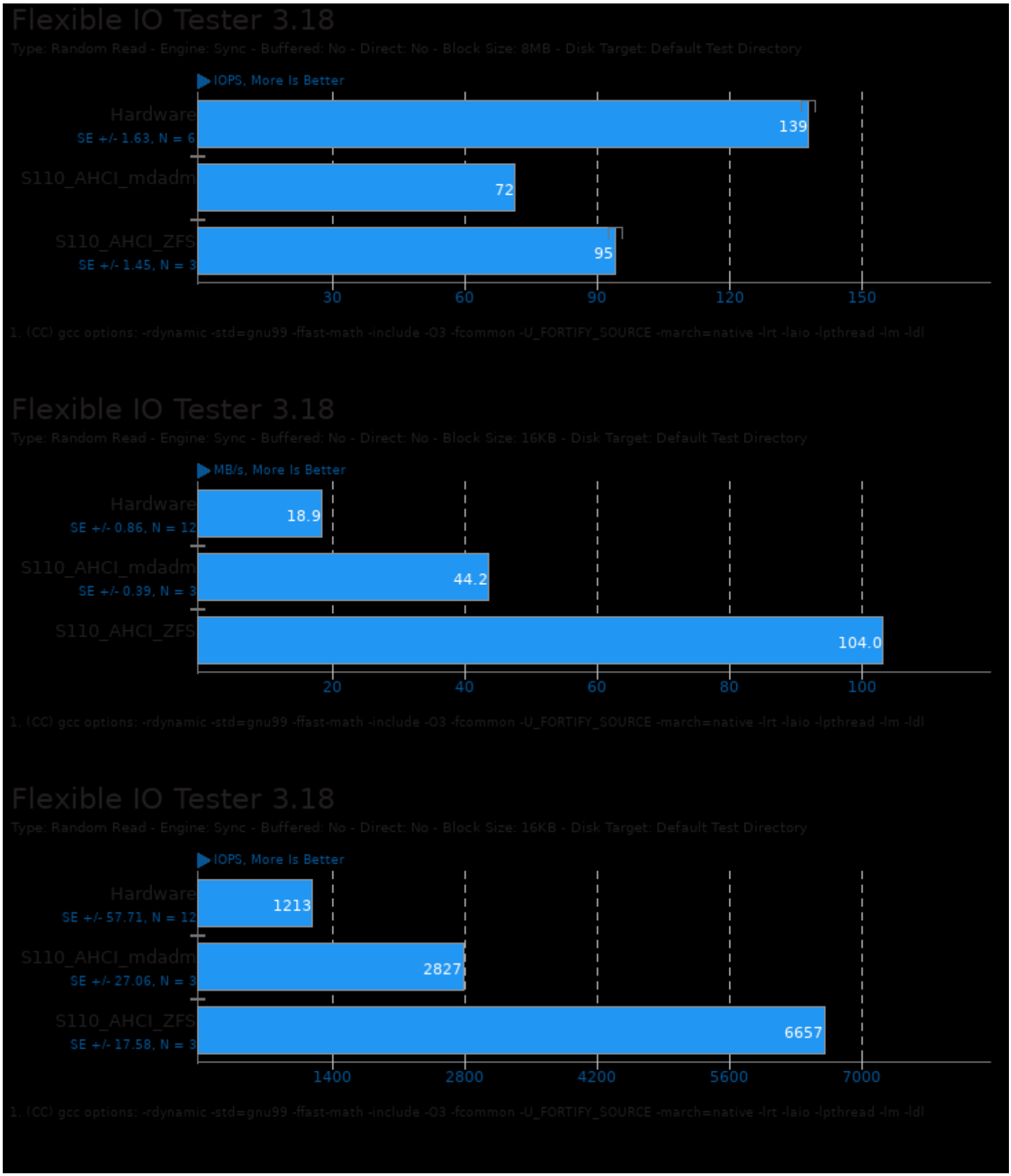
probaraid5

Flexible IO Tester - Seq Write - POSIX AIO - No - Yes - 64KB (IOPS)	4703
Standard Deviation	1%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 64KB (MB/s)	425
Standard Deviation	0.1%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - No - 64KB (IOPS)	6799
Standard Deviation	0.1%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 64KB (MB/s)	428
Standard Deviation	0.7%
Flexible IO Tester - Seq Write - POSIX AIO - Yes - Yes - 64KB (IOPS)	6835
Standard Deviation	0.7%

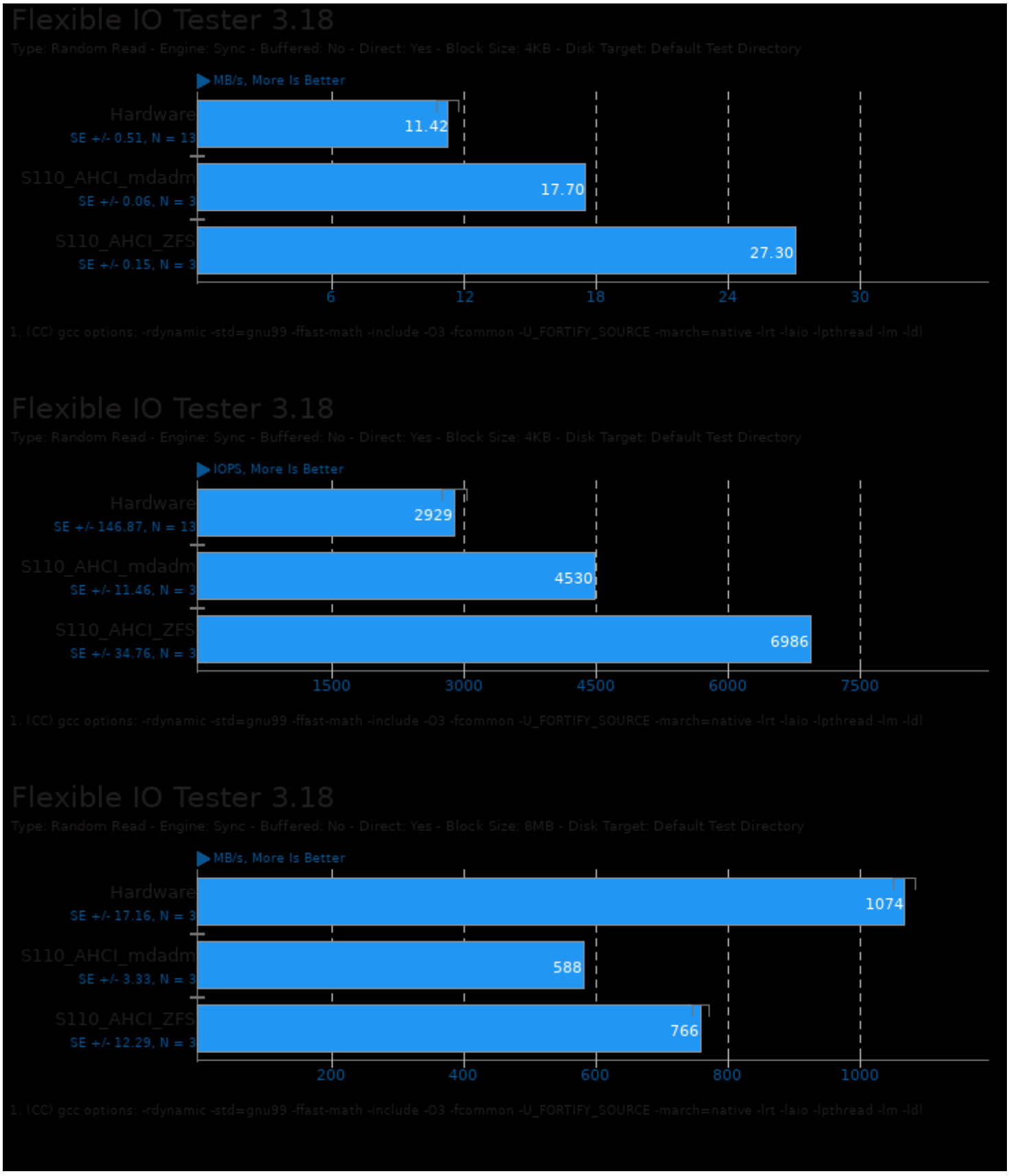
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.68, N = 12
12.30
S110_AHCI_mdadm
SE +/- 0.12, N = 3
18.90
S110_AHCI_ZFS
SE +/- 0.26, N = 15
27.10
6
12
18
24
30
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 170.45, N = 12
3186
S110_AHCI_mdadm
SE +/- 27.09, N = 3
4830
S110_AHCI_ZFS
SE +/- 65.40, N = 15
6931
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 12.75, N = 6
1114
S110_AHCI_mdadm
580
S110_AHCI_ZFS
SE +/- 10.97, N = 3
766
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

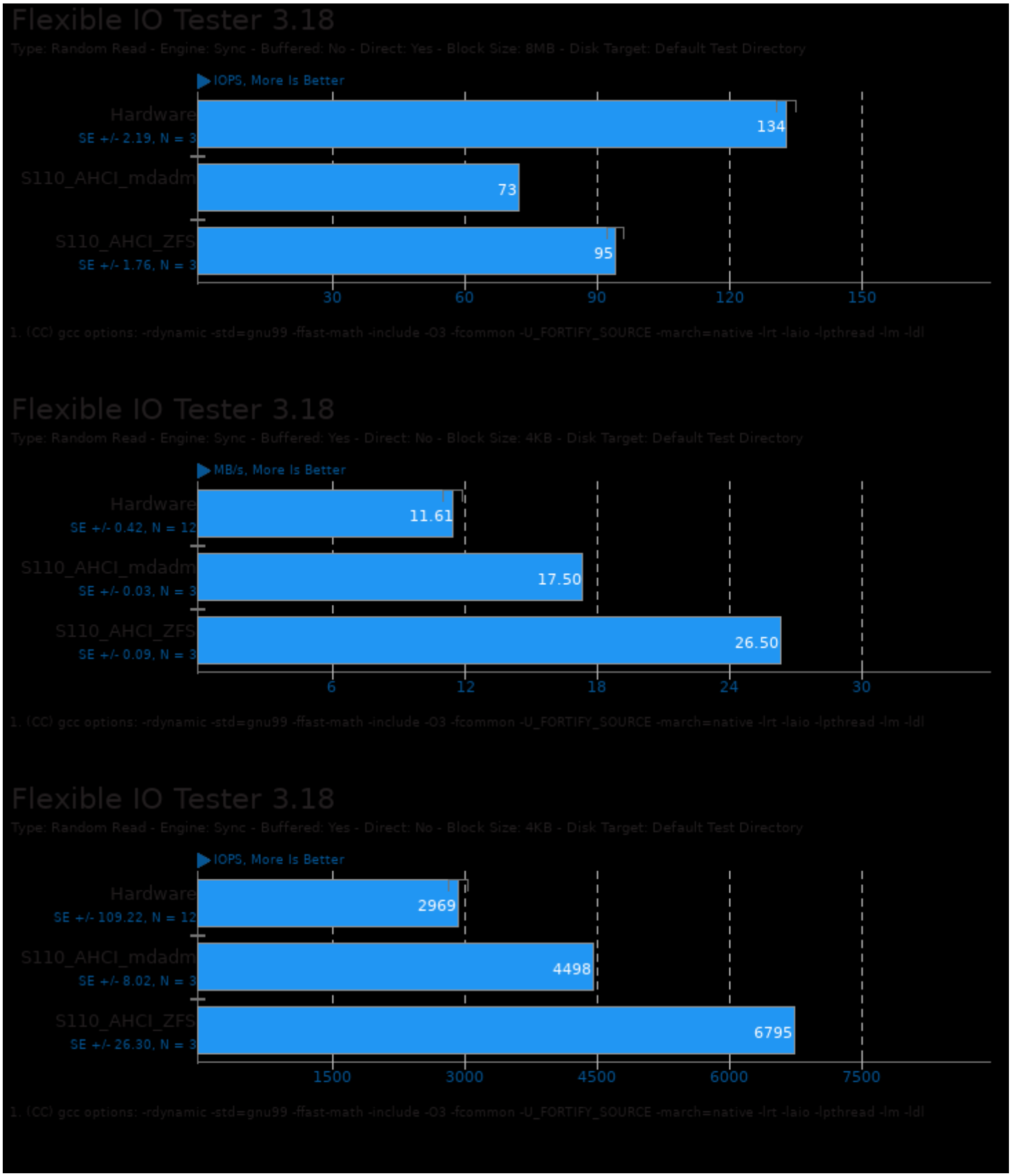
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1.63, N = 6
139
S110_AHCI_mdadm
72
S110_AHCI_ZFS
SE +/- 1.45, N = 3
95
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.86, N = 12
18.9
S110_AHCI_mdadm
SE +/- 0.39, N = 3
44.2
S110_AHCI_ZFS
104.0
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 57.71, N = 12
1213
S110_AHCI_mdadm
SE +/- 27.06, N = 3
2827
S110_AHCI_ZFS
SE +/- 17.58, N = 3
6657
1400
2800
4200
5600
7000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

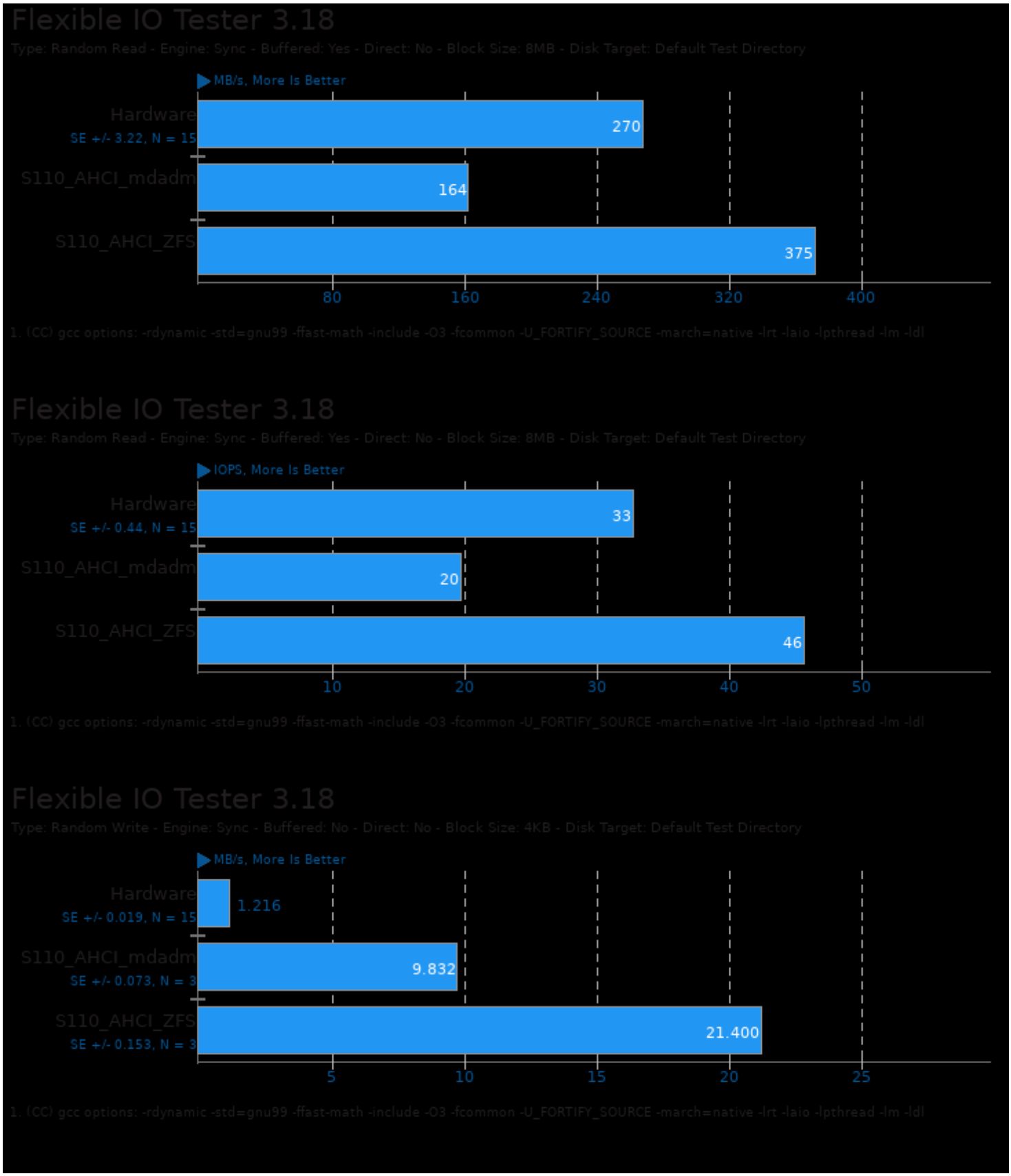
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.51, N = 13
11.42
S110_AHCI_mdadm
SE +/- 0.06, N = 3
17.70
S110_AHCI_ZFS
SE +/- 0.15, N = 3
27.30
6
12
18
24
30
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 146.87, N = 13
2929
S110_AHCI_mdadm
SE +/- 11.46, N = 3
4530
S110_AHCI_ZFS
SE +/- 34.76, N = 3
6986
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 17.16, N = 3
1074
S110_AHCI_mdadm
SE +/- 3.33, N = 3
588
S110_AHCI_ZFS
SE +/- 12.29, N = 3
766
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

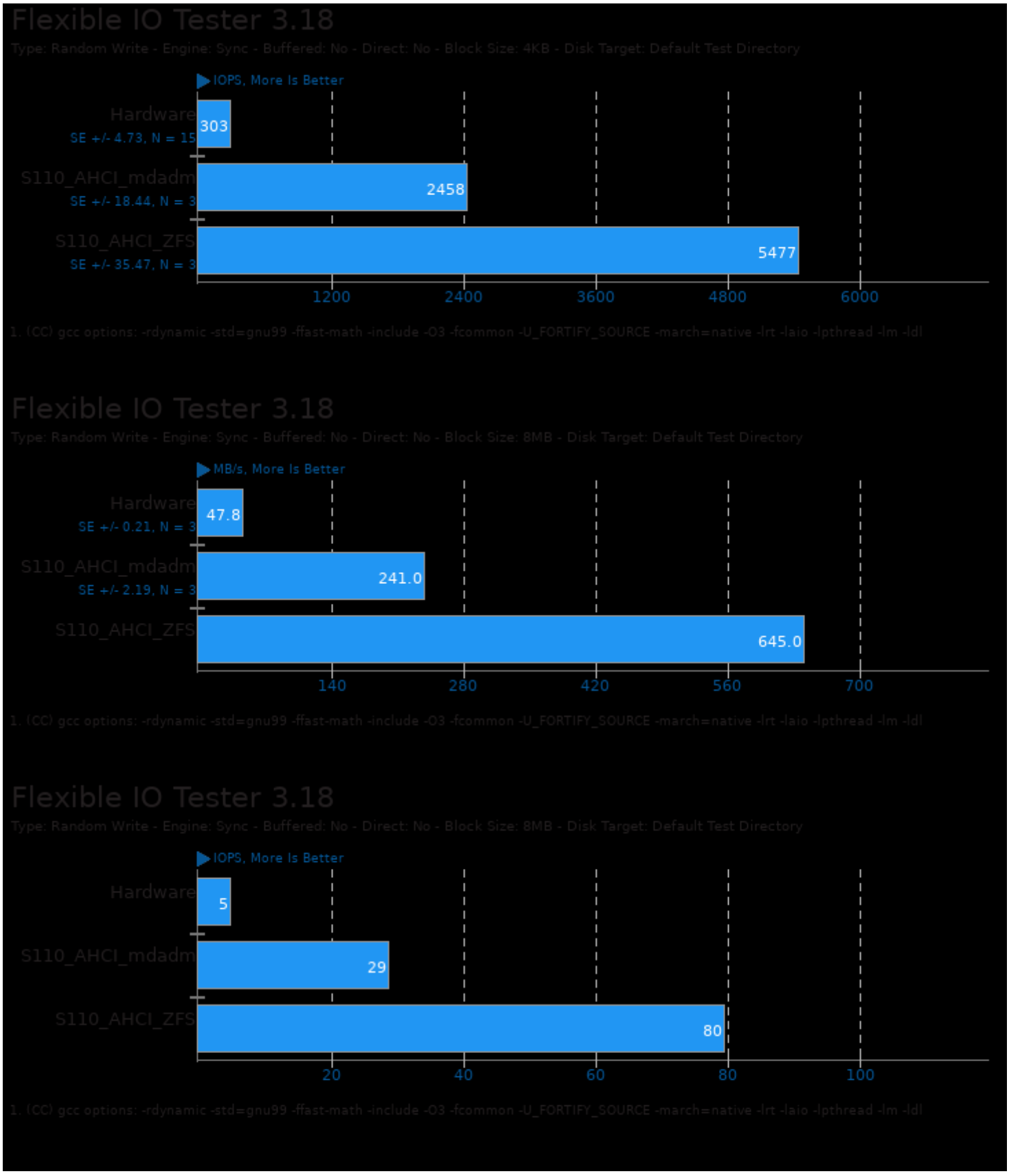
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 2.19, N = 3
134
S110_AHCI_mdadm
73
S110_AHCI_ZFS
SE +/- 1.76, N = 3
95
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.42, N = 12
11.61
S110_AHCI_mdadm
SE +/- 0.03, N = 3
17.50
S110_AHCI_ZFS
SE +/- 0.09, N = 3
26.50
6
12
18
24
30
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 109.22, N = 12
2969
S110_AHCI_mdadm
SE +/- 8.02, N = 3
4498
S110_AHCI_ZFS
SE +/- 26.30, N = 3
6795
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

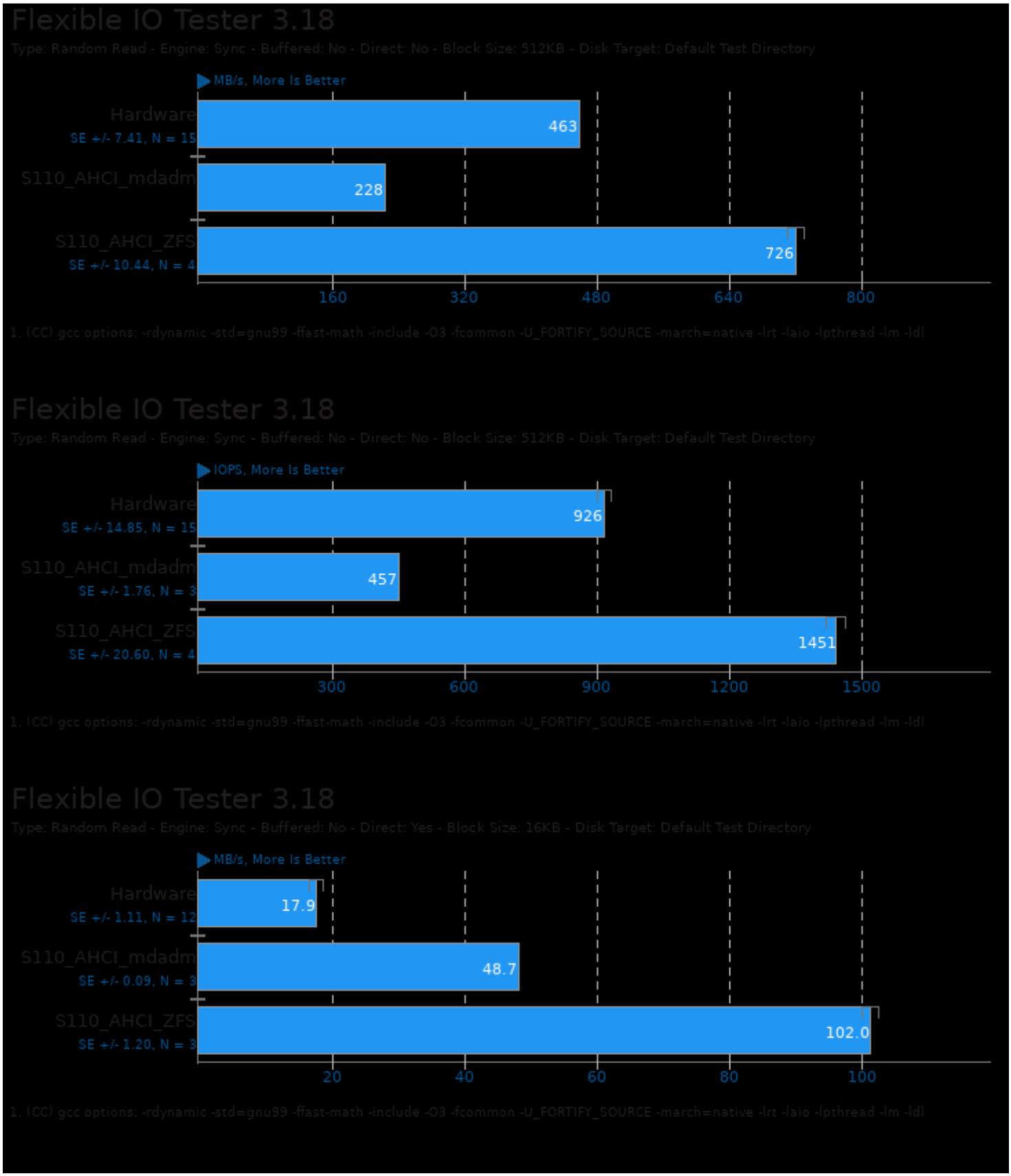
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 3.22, N = 15
270
S110_AHCI_mdadm
164
S110_AHCI_ZFS
375
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.44, N = 15
33
S110_AHCI_mdadm
20
S110_AHCI_ZFS
46
10
20
30
40
50
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.019, N = 15
1.216
S110_AHCI_mdadm
SE +/- 0.073, N = 3
9.832
S110_AHCI_ZFS
SE +/- 0.153, N = 3
21.400
5
10
15
20
25
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

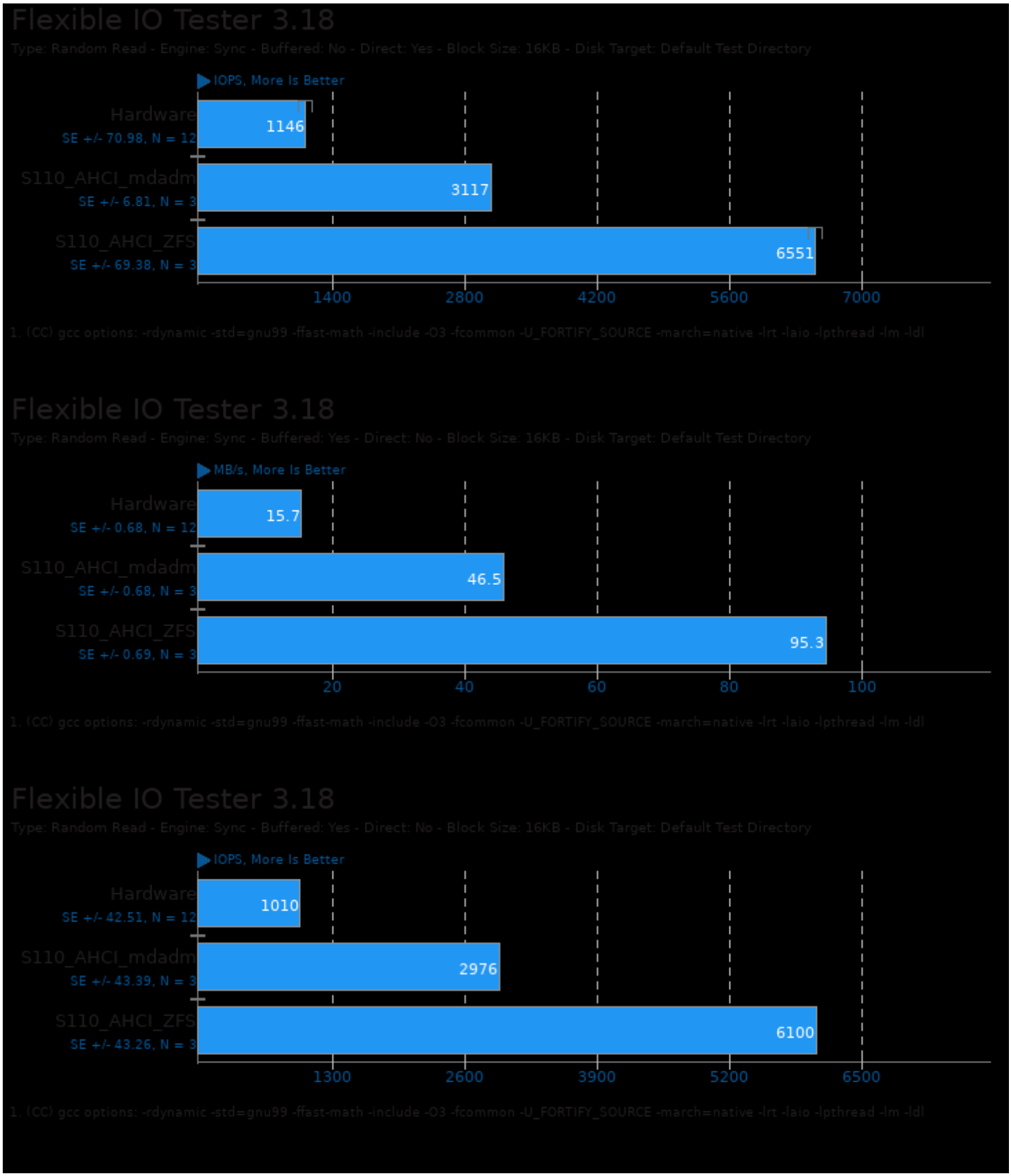
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 4.73, N = 15
303
S110_AHCI_mdadm
SE +/- 18.44, N = 3
2458
S110_AHCI_ZFS
SE +/- 35.47, N = 3
5477
1200
2400
3600
4800
6000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.21, N = 3
47.8
S110_AHCI_mdadm
SE +/- 2.19, N = 3
241.0
S110_AHCI_ZFS
645.0
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
29
S110_AHCI_ZFS
80
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

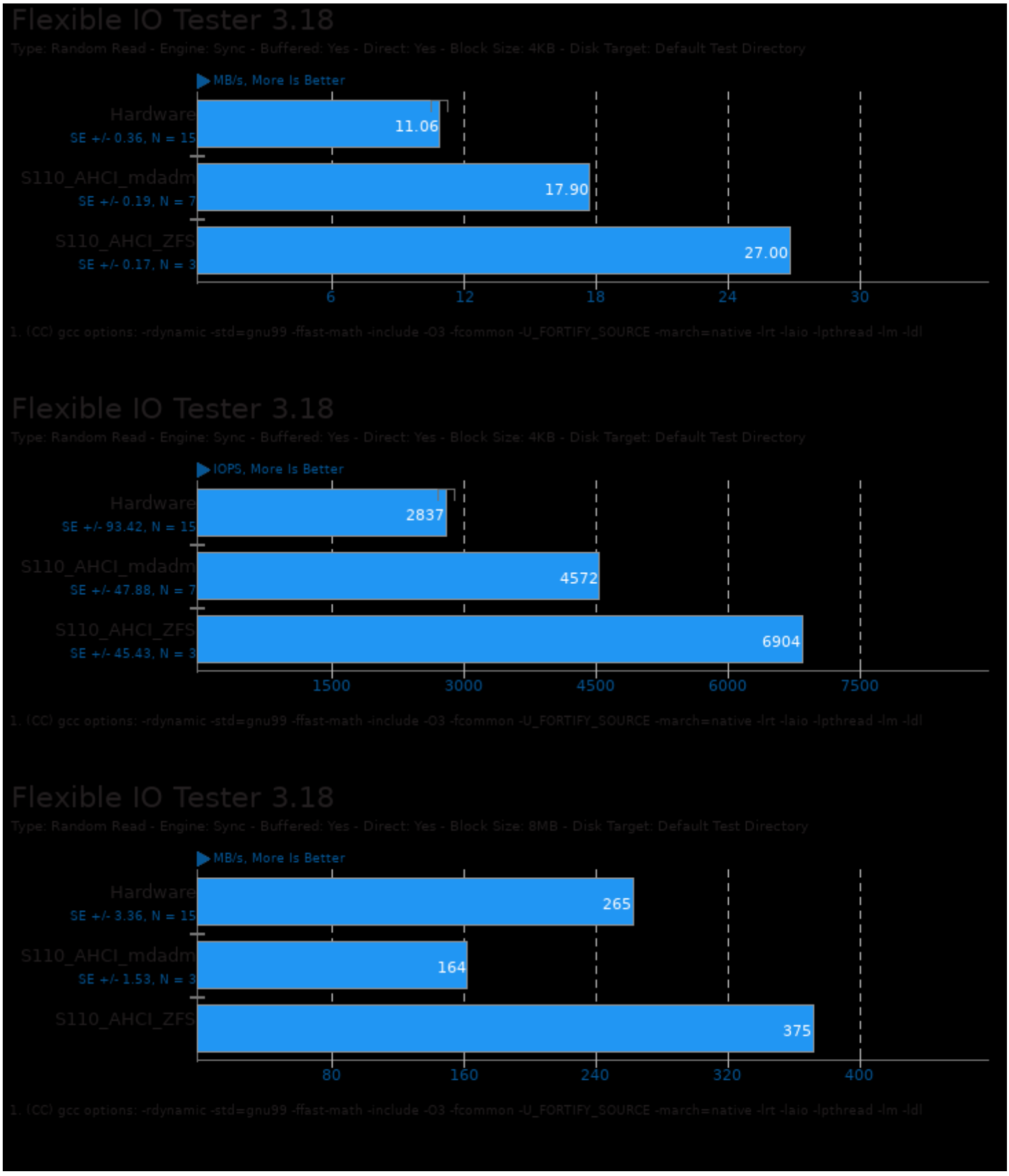
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 7.41, N = 15
463
S110_AHCI_mdadm
228
S110_AHCI_ZFS
SE +/- 10.44, N = 4
726
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 14.85, N = 15
926
S110_AHCI_mdadm
SE +/- 1.76, N = 3
457
S110_AHCI_ZFS
SE +/- 20.60, N = 4
1451
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.11, N = 12
17.9
S110_AHCI_mdadm
SE +/- 0.09, N = 3
48.7
S110_AHCI_ZFS
SE +/- 1.20, N = 3
102.0
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

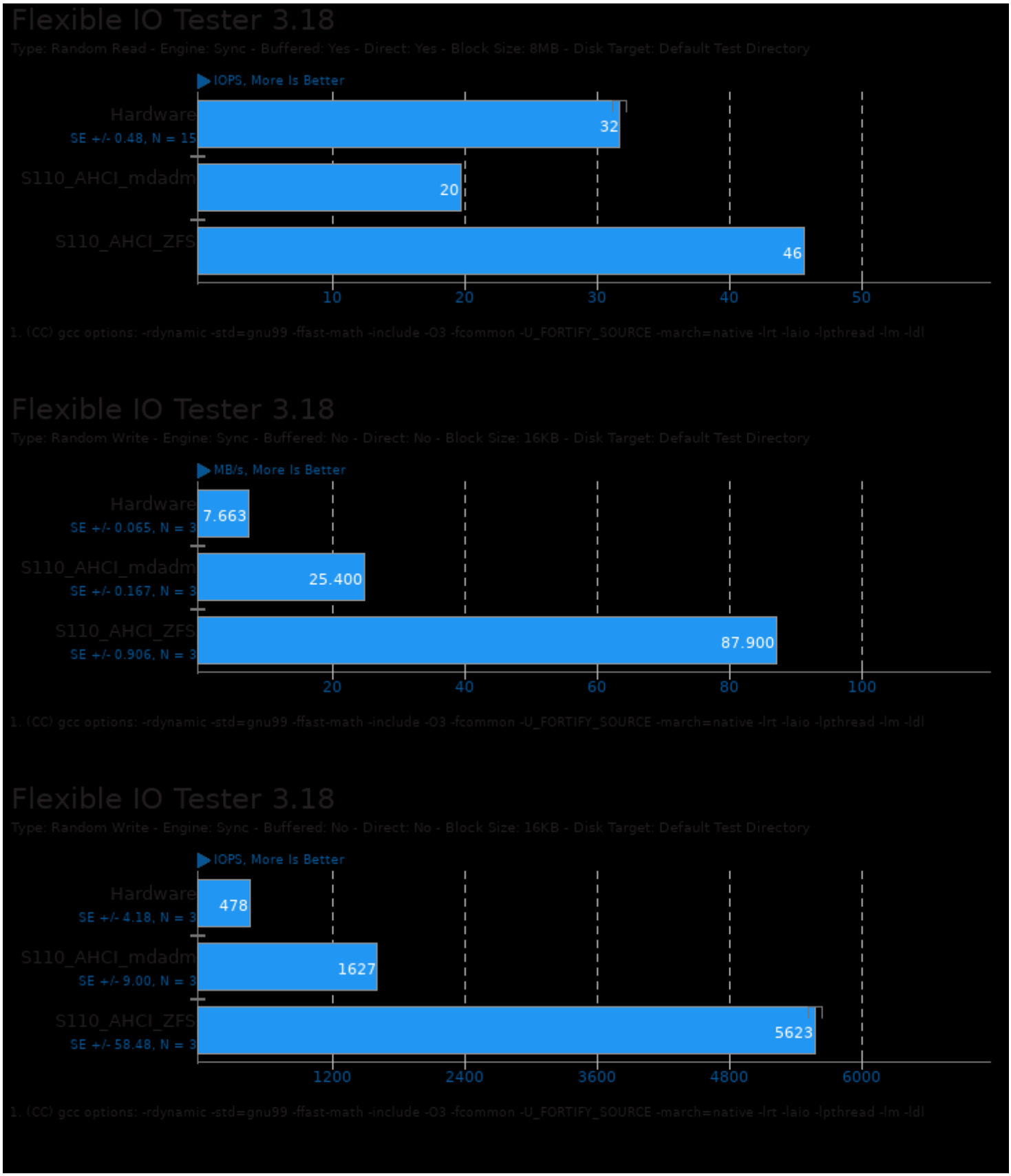
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 70.98, N = 12
1146
S110_AHCI_mdadm
SE +/- 6.81, N = 3
3117
S110_AHCI_ZFS
SE +/- 69.38, N = 3
6551
1400
2800
4200
5600
7000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.68, N = 12
15.7
S110_AHCI_mdadm
SE +/- 0.68, N = 3
46.5
S110_AHCI_ZFS
SE +/- 0.69, N = 3
95.3
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 42.51, N = 12
1010
S110_AHCI_mdadm
SE +/- 43.39, N = 3
2976
S110_AHCI_ZFS
SE +/- 43.26, N = 3
6100
1300
2600
3900
5200
6500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

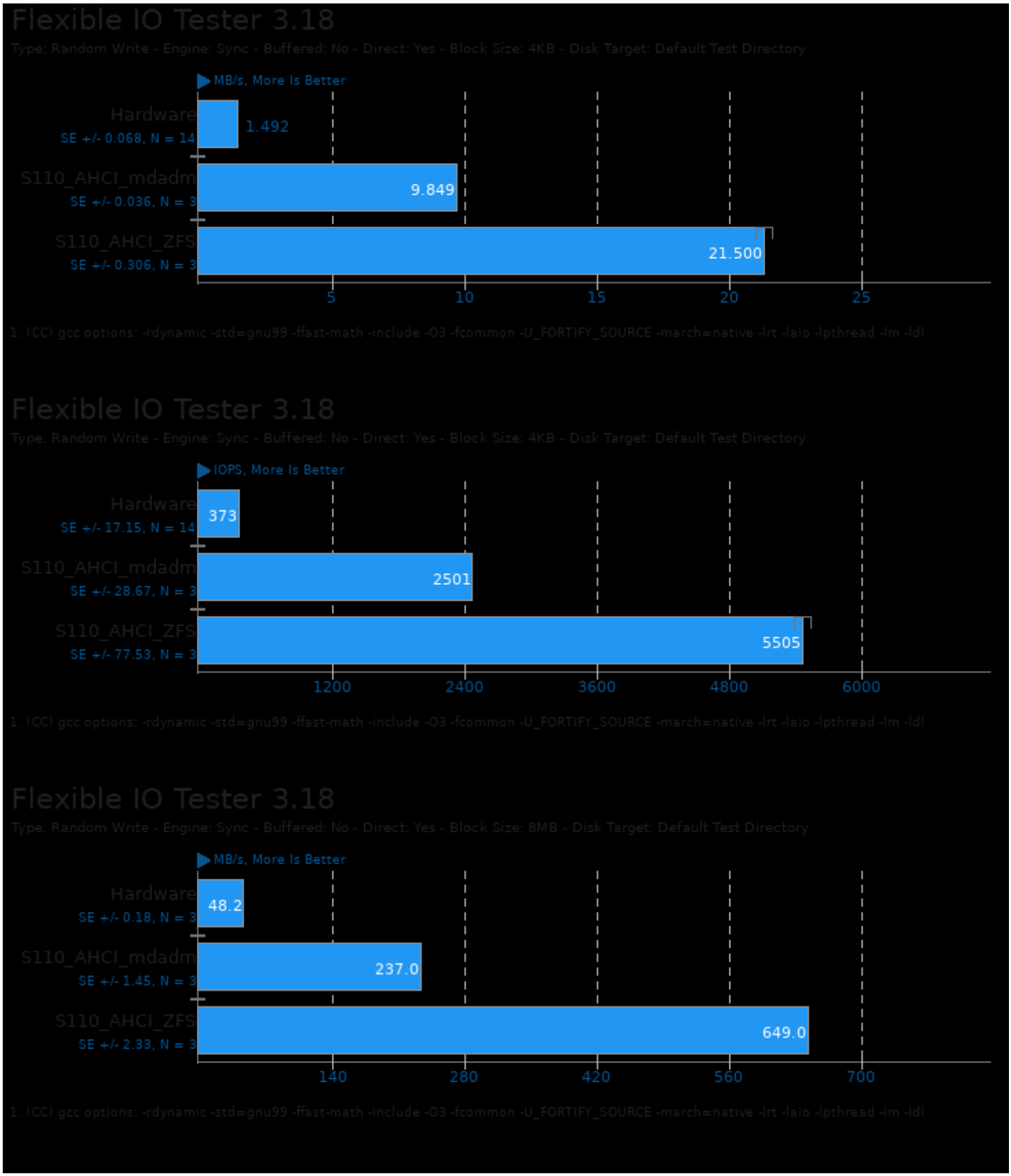
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.36, N = 15
11.06
S110_AHCI_mdadm
SE +/- 0.19, N = 7
17.90
S110_AHCI_ZFS
SE +/- 0.17, N = 3
27.00
6
12
18
24
30
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 93.42, N = 15
2837
S110_AHCI_mdadm
SE +/- 47.88, N = 7
4572
S110_AHCI_ZFS
SE +/- 45.43, N = 3
6904
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 3.36, N = 15
265
S110_AHCI_mdadm
SE +/- 1.53, N = 3
164
S110_AHCI_ZFS
375
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

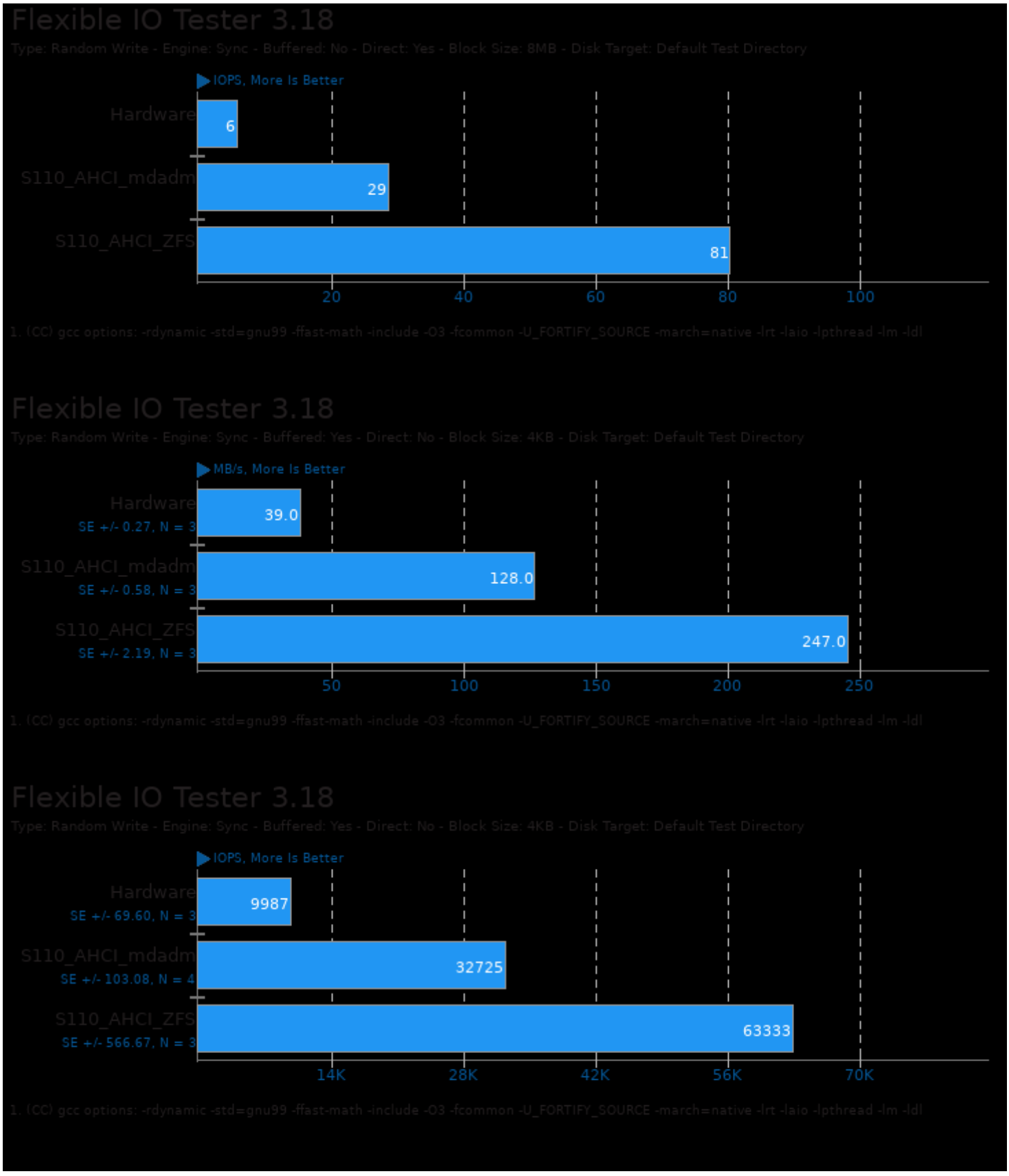
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.48, N = 15
32
S110_AHCI_mdadm
20
S110_AHCI_ZFS
46
10
20
30
40
50
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.065, N = 3
7.663
S110_AHCI_mdadm
SE +/- 0.167, N = 3
25.400
S110_AHCI_ZFS
SE +/- 0.906, N = 3
87.900
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 4.18, N = 3
478
S110_AHCI_mdadm
SE +/- 9.00, N = 3
1627
S110_AHCI_ZFS
SE +/- 58.48, N = 3
5623
1200
2400
3600
4800
6000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

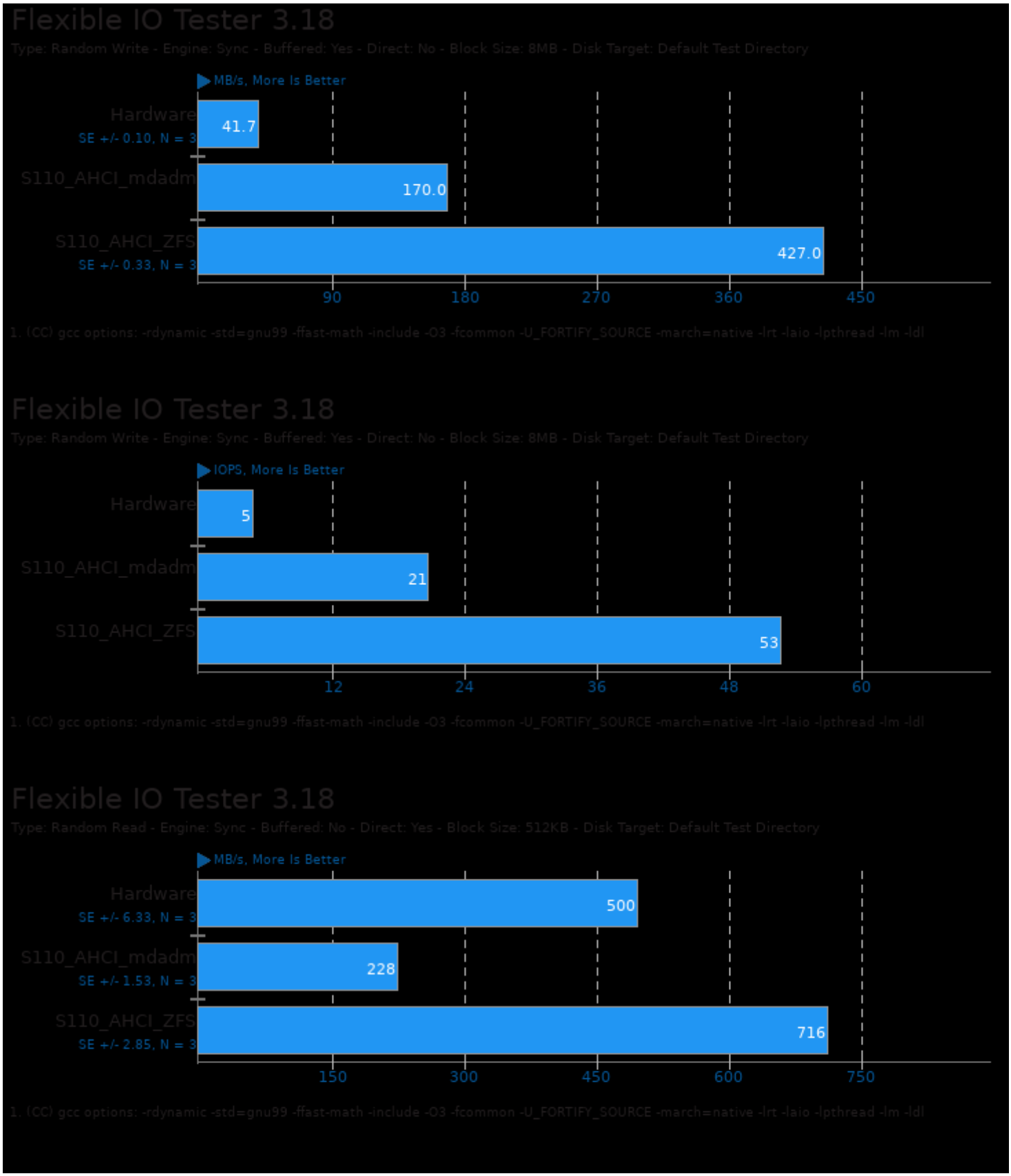
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.068, N = 14
1.492
S110_AHCI_mdadm
SE +/- 0.036, N = 3
9.849
S110_AHCI_ZFS
SE +/- 0.306, N = 3
21.500
5
10
15
20
25
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 17.15, N = 14
373
S110_AHCI_mdadm
SE +/- 28.67, N = 3
2501
S110_AHCI_ZFS
SE +/- 77.53, N = 3
5505
1200
2400
3600
4800
6000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.18, N = 3
48.2
S110_AHCI_mdadm
SE +/- 1.45, N = 3
237.0
S110_AHCI_ZFS
SE +/- 2.33, N = 3
649.0
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

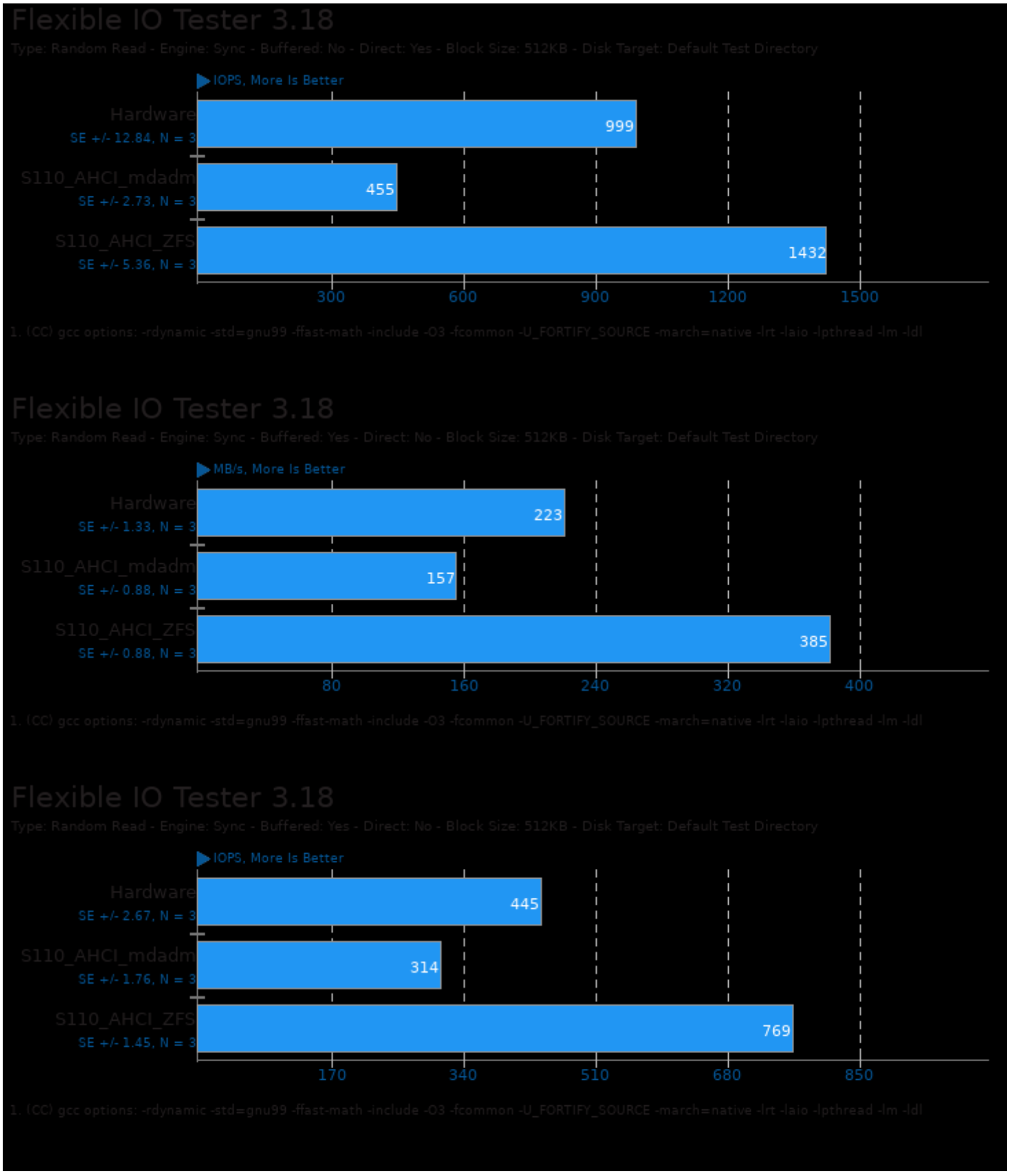
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
6
S110_AHCI_mdadm
29
S110_AHCI_ZFS
81
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.27, N = 3
39.0
S110_AHCI_mdadm
SE +/- 0.58, N = 3
128.0
S110_AHCI_ZFS
SE +/- 2.19, N = 3
247.0
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 69.60, N = 3
9987
S110_AHCI_mdadm
SE +/- 103.08, N = 4
32725
S110_AHCI_ZFS
SE +/- 566.67, N = 3
63333
14K
28K
42K
56K
70K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

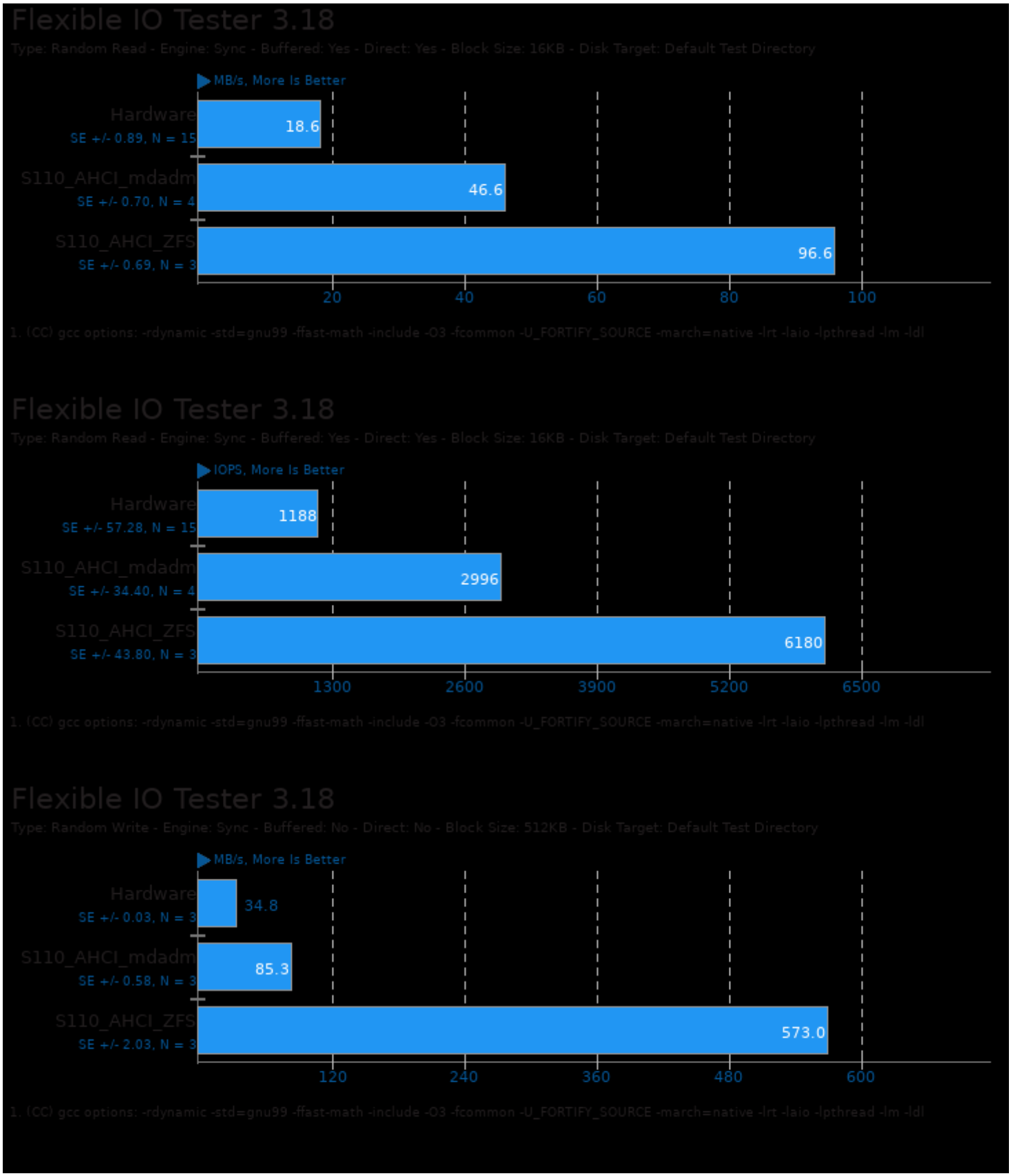
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.10, N = 3
41.7
S110_AHCI_mdadm
170.0
S110_AHCI_ZFS
SE +/- 0.33, N = 3
427.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
21
S110_AHCI_ZFS
53
12
24
36
48
60
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 6.33, N = 3
500
S110_AHCI_mdadm
SE +/- 1.53, N = 3
228
S110_AHCI_ZFS
SE +/- 2.85, N = 3
716
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

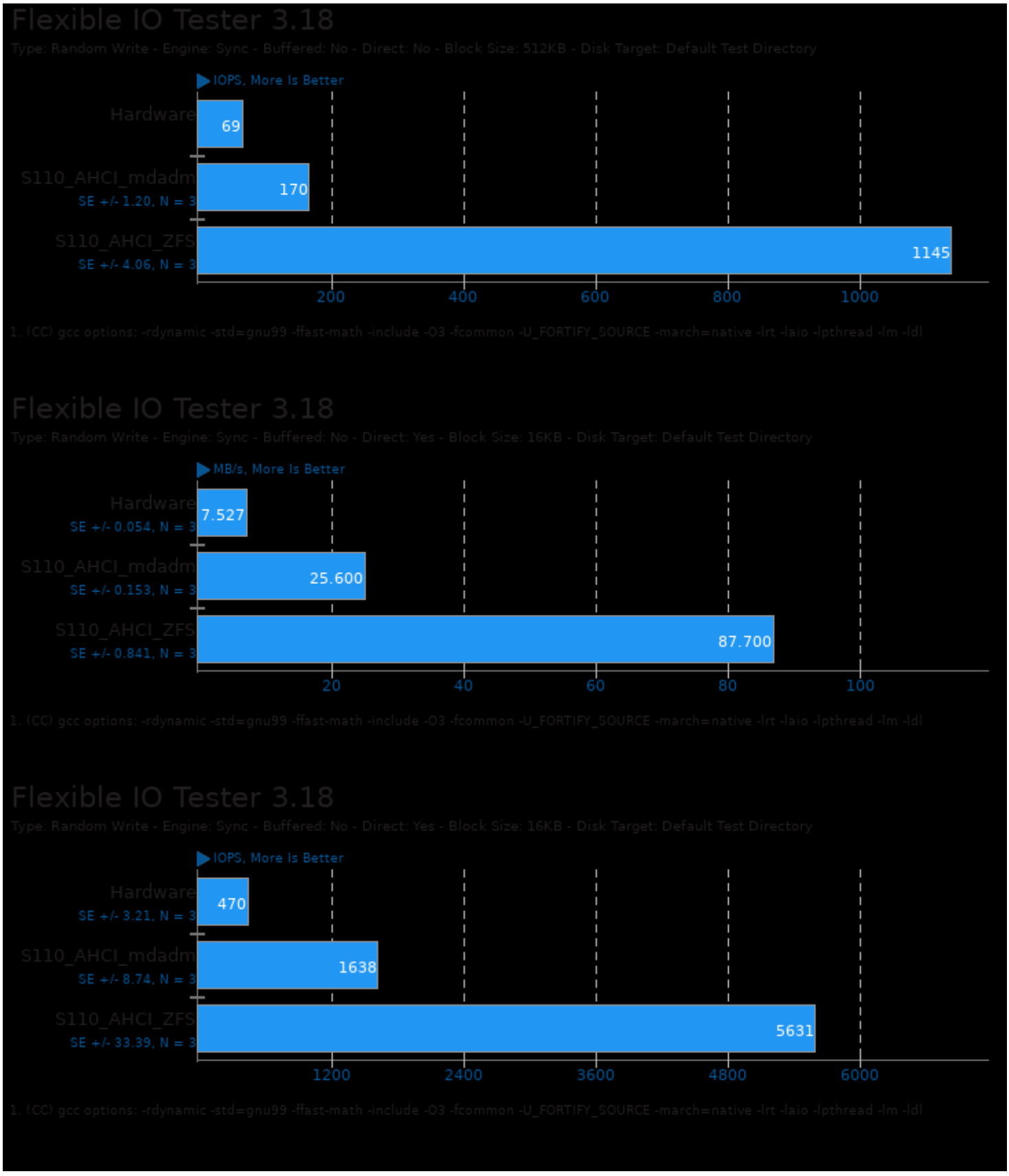
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 12.84, N = 3
999
S110_AHCI_mdadm
SE +/- 2.73, N = 3
455
S110_AHCI_ZFS
SE +/- 5.36, N = 3
1432
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.33, N = 3
223
S110_AHCI_mdadm
SE +/- 0.88, N = 3
157
S110_AHCI_ZFS
SE +/- 0.88, N = 3
385
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 2.67, N = 3
445
S110_AHCI_mdadm
SE +/- 1.76, N = 3
314
S110_AHCI_ZFS
SE +/- 1.45, N = 3
769
170
340
510
680
850
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

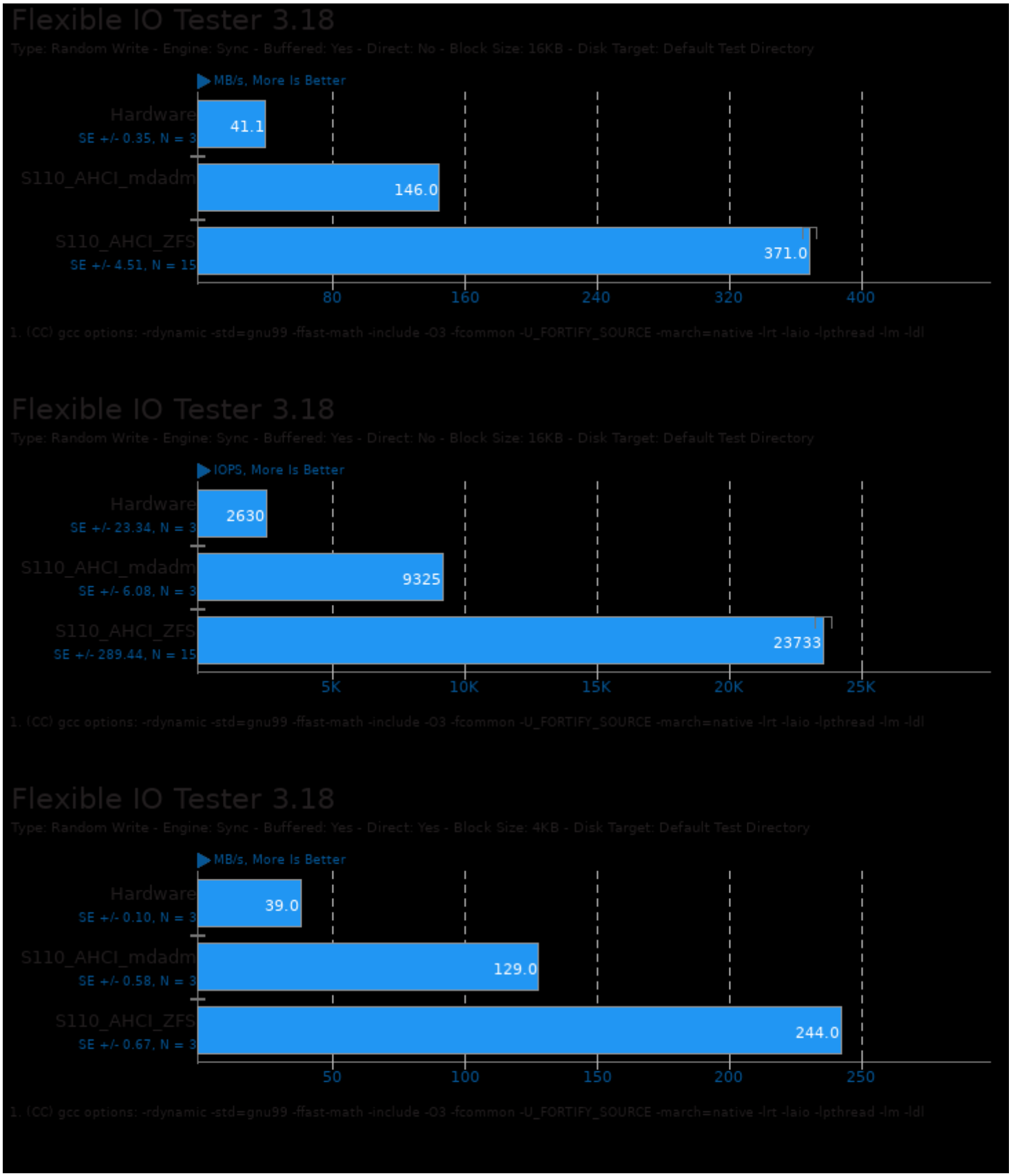
probaraid5

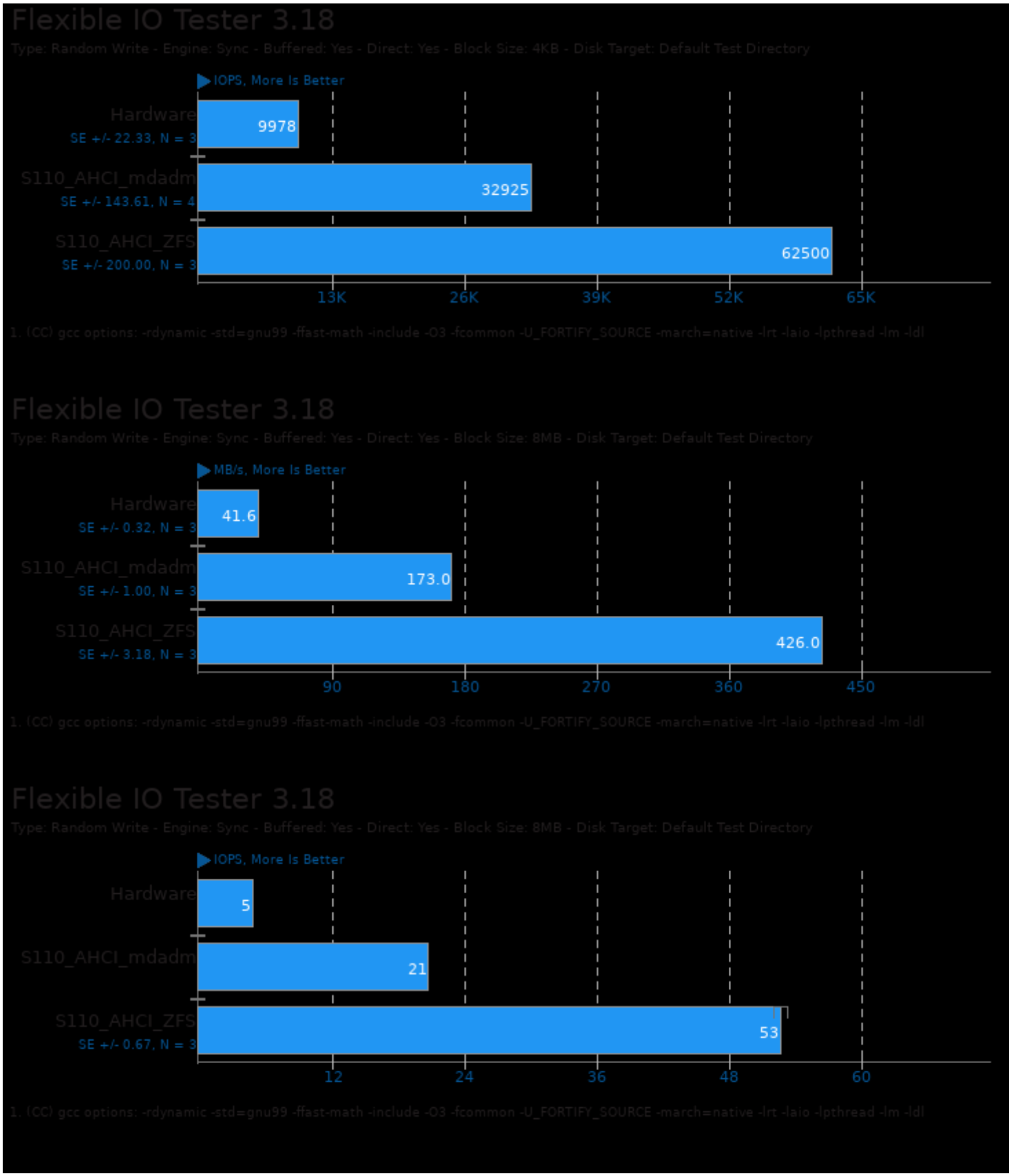

Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.89, N = 15
18.6
S110_AHCI_mdadm
SE +/- 0.70, N = 4
46.6
S110_AHCI_ZFS
SE +/- 0.69, N = 3
96.6
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 57.28, N = 15
1188
S110_AHCI_mdadm
SE +/- 34.40, N = 4
2996
S110_AHCI_ZFS
SE +/- 43.80, N = 3
6180
1300
2600
3900
5200
6500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.03, N = 3
34.8
S110_AHCI_mdadm
SE +/- 0.58, N = 3
85.3
S110_AHCI_ZFS
SE +/- 2.03, N = 3
573.0
120
240
360
480
600
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

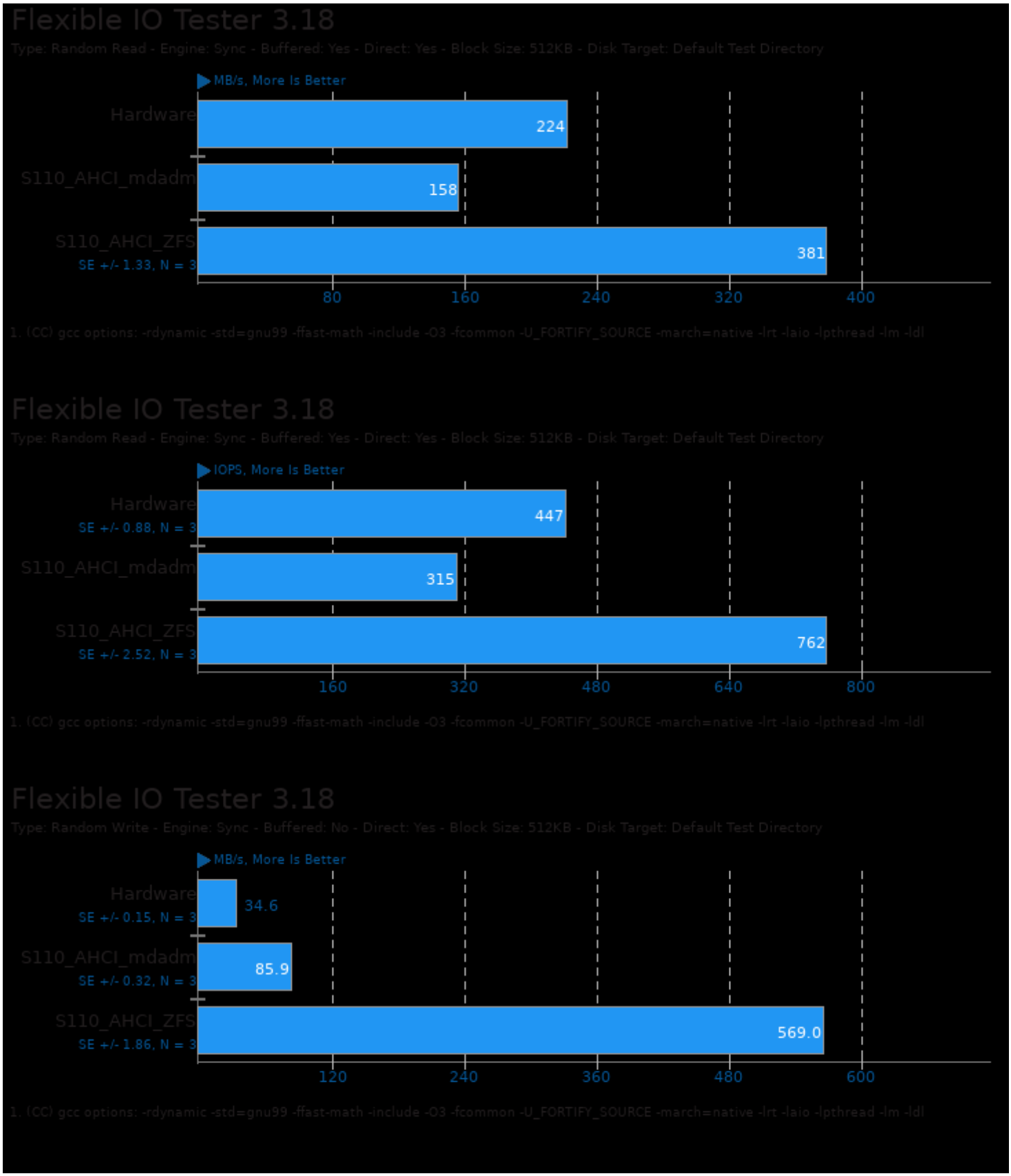

Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
69
S110_AHCI_mdadm
SE +/- 1.20, N = 3
170
S110_AHCI_ZFS
SE +/- 4.06, N = 3
1145
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.054, N = 3
7.527
S110_AHCI_mdadm
SE +/- 0.153, N = 3
25.600
S110_AHCI_ZFS
SE +/- 0.841, N = 3
87.700
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 3.21, N = 3
470
S110_AHCI_mdadm
SE +/- 8.74, N = 3
1638
S110_AHCI_ZFS
SE +/- 33.39, N = 3
5631
1200
2400
3600
4800
6000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

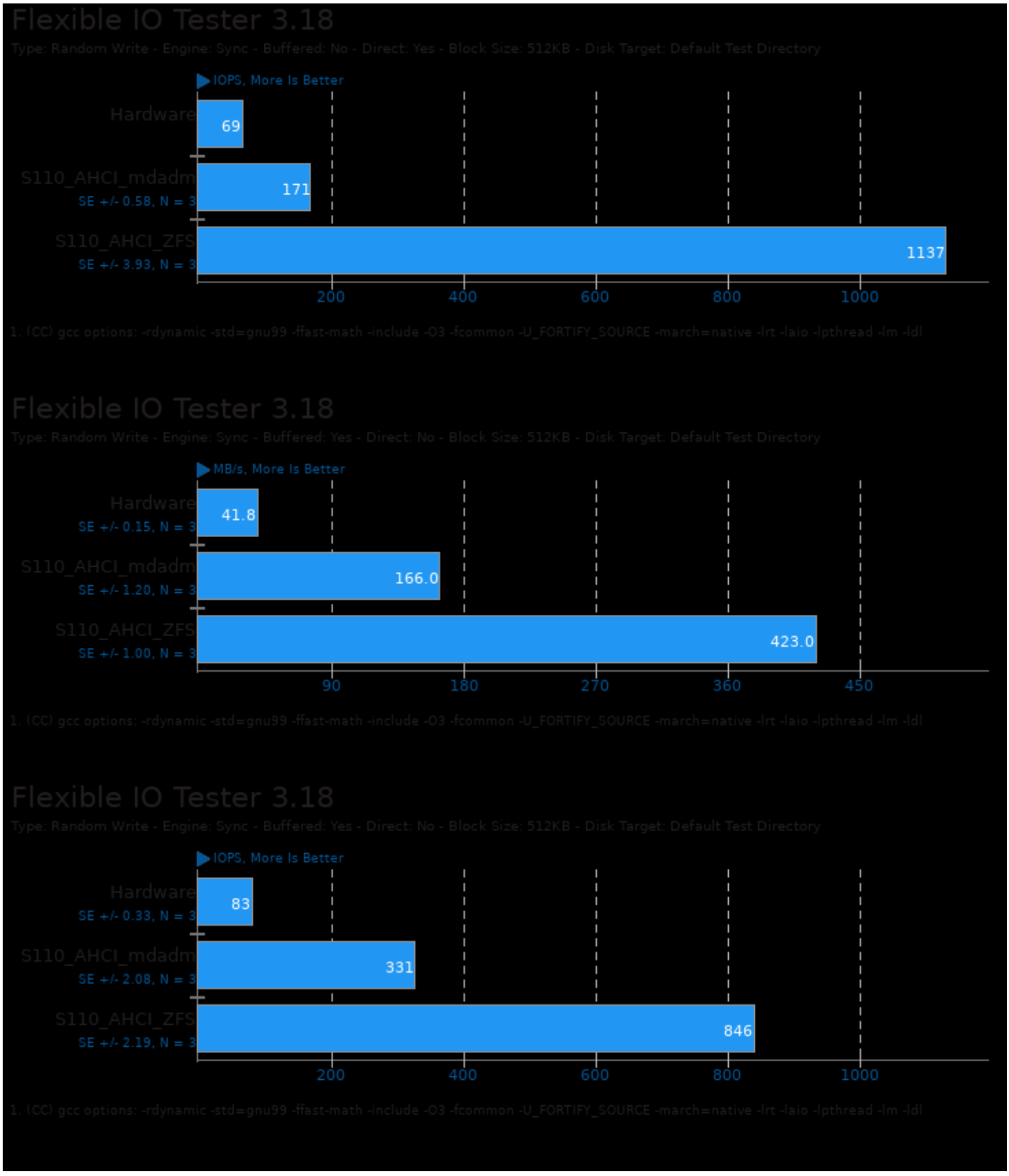

Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.35, N = 3
41.1
S110_AHCI_mdadm
146.0
S110_AHCI_ZFS
SE +/- 4.51, N = 15
371.0
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 23.34, N = 3
2630
S110_AHCI_mdadm
SE +/- 6.08, N = 3
9325
S110_AHCI_ZFS
SE +/- 289.44, N = 15
23733
5K
10K
15K
20K
25K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.10, N = 3
39.0
S110_AHCI_mdadm
SE +/- 0.58, N = 3
129.0
S110_AHCI_ZFS
SE +/- 0.67, N = 3
244.0
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 22.33, N = 3
9978
S110_AHCI_mdadm
SE +/- 143.61, N = 4
32925
S110_AHCI_ZFS
SE +/- 200.00, N = 3
62500
13K
26K
39K
52K
65K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.32, N = 3
41.6
S110_AHCI_mdadm
SE +/- 1.00, N = 3
173.0
S110_AHCI_ZFS
SE +/- 3.18, N = 3
426.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
21
S110_AHCI_ZFS
SE +/- 0.67, N = 3
53
12
24
36
48
60
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

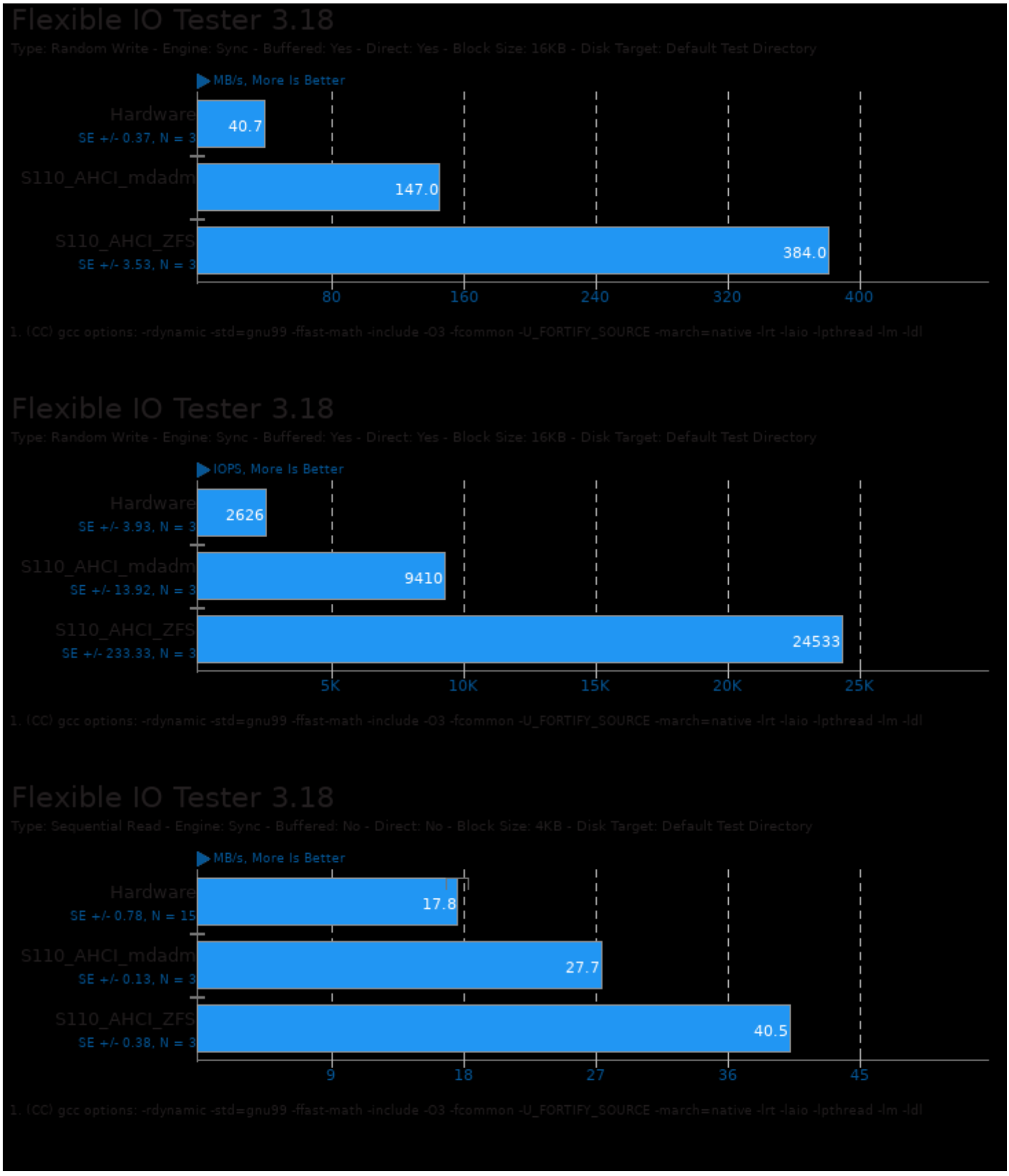
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
224
S110_AHCI_mdadm
158
S110_AHCI_ZFS
381
SE +/- 1.33, N = 3
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
447
SE +/- 0.88, N = 3
S110_AHCI_mdadm
315
S110_AHCI_ZFS
762
SE +/- 2.52, N = 3
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
34.6
SE +/- 0.15, N = 3
S110_AHCI_mdadm
85.9
SE +/- 0.32, N = 3
S110_AHCI_ZFS
569.0
SE +/- 1.86, N = 3
120
240
360
480
600
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

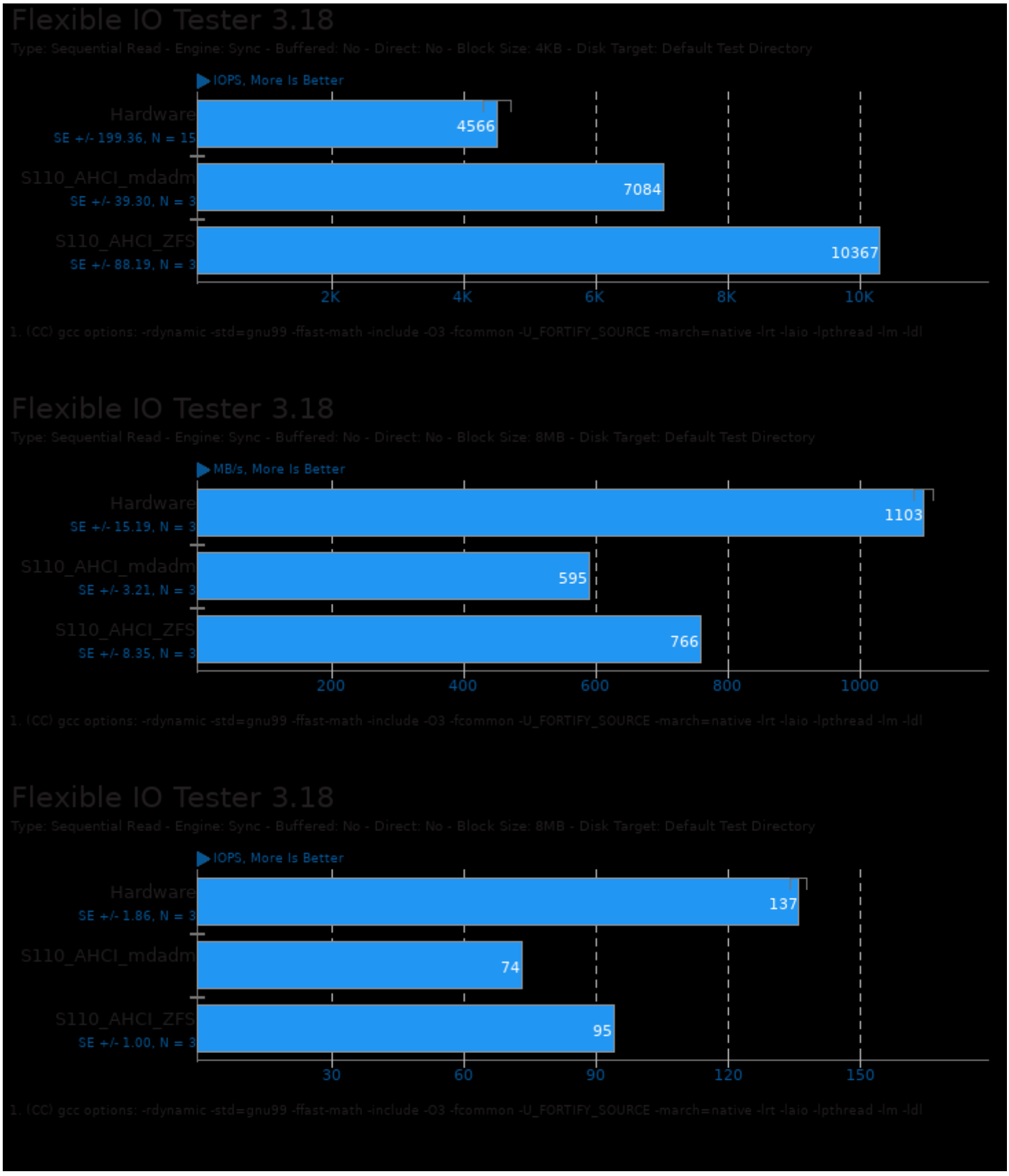
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
69
S110_AHCI_mdadm
SE +/- 0.58, N = 3
171
S110_AHCI_ZFS
SE +/- 3.93, N = 3
1137
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.15, N = 3
41.8
S110_AHCI_mdadm
SE +/- 1.20, N = 3
166.0
S110_AHCI_ZFS
SE +/- 1.00, N = 3
423.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.33, N = 3
83
S110_AHCI_mdadm
SE +/- 2.08, N = 3
331
S110_AHCI_ZFS
SE +/- 2.19, N = 3
846
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

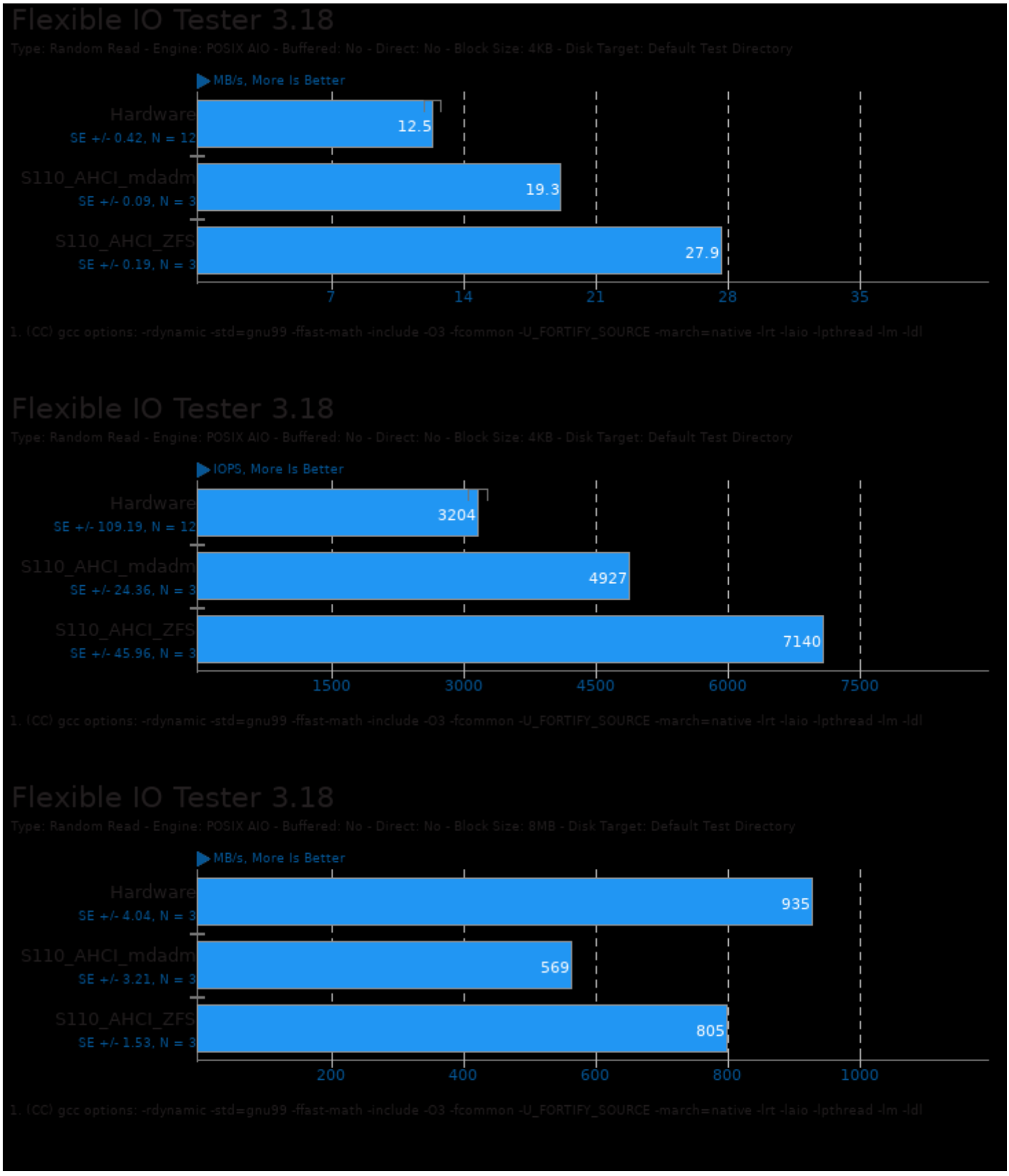
probaraid5

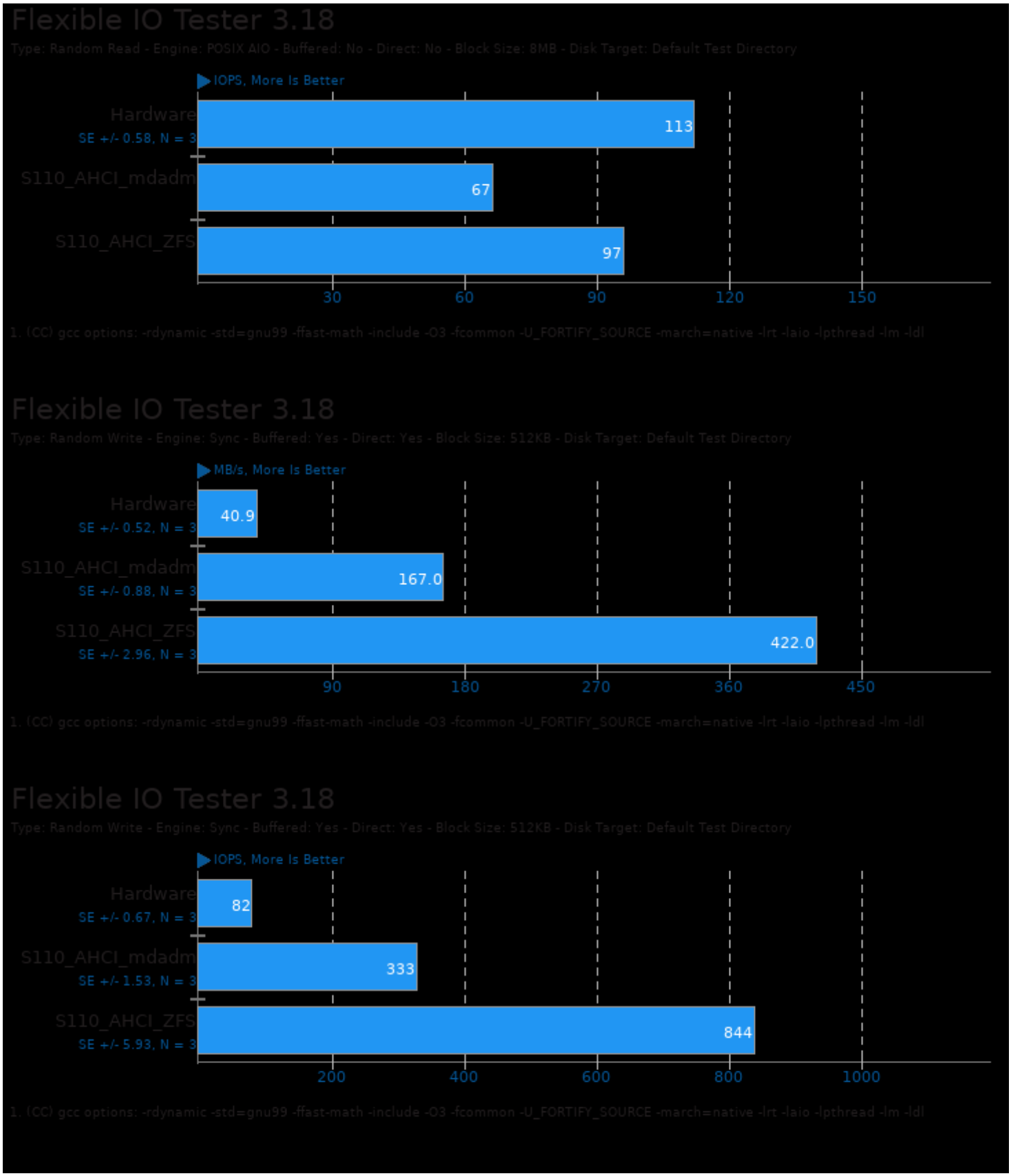

Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.37, N = 3
40.7
S110_AHCI_mdadm
147.0
S110_AHCI_ZFS
SE +/- 3.53, N = 3
384.0
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 3.93, N = 3
2626
S110_AHCI_mdadm
SE +/- 13.92, N = 3
9410
S110_AHCI_ZFS
SE +/- 233.33, N = 3
24533
5K
10K
15K
20K
25K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.78, N = 15
17.8
S110_AHCI_mdadm
SE +/- 0.13, N = 3
27.7
S110_AHCI_ZFS
SE +/- 0.38, N = 3
40.5
9
18
27
36
45
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

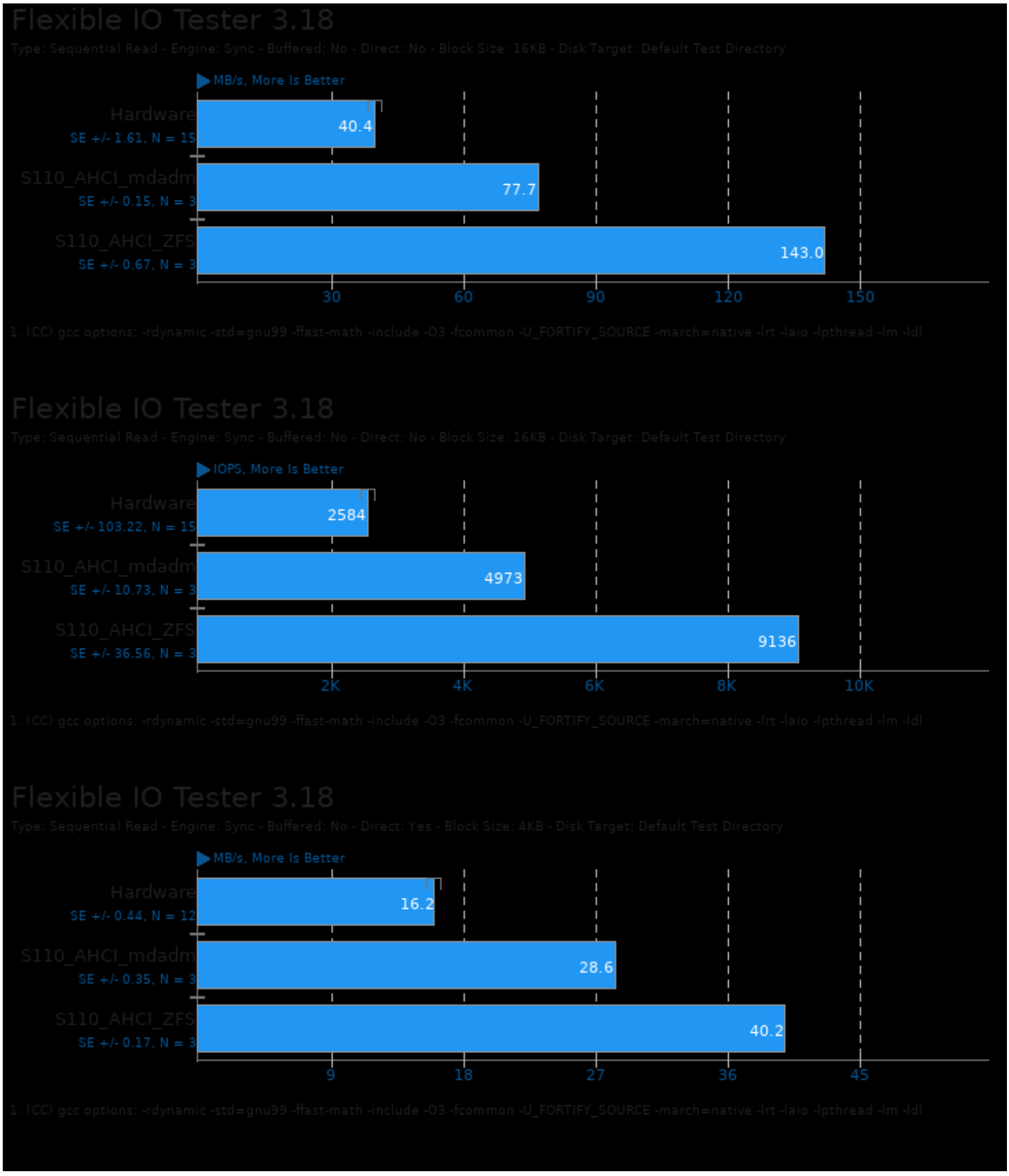

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 199.36, N = 15
4566
S110_AHCI_mdadm
SE +/- 39.30, N = 3
7084
S110_AHCI_ZFS
SE +/- 88.19, N = 3
10367
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 15.19, N = 3
1103
S110_AHCI_mdadm
SE +/- 3.21, N = 3
595
S110_AHCI_ZFS
SE +/- 8.35, N = 3
766
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1.86, N = 3
137
S110_AHCI_mdadm
74
S110_AHCI_ZFS
SE +/- 1.00, N = 3
95
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

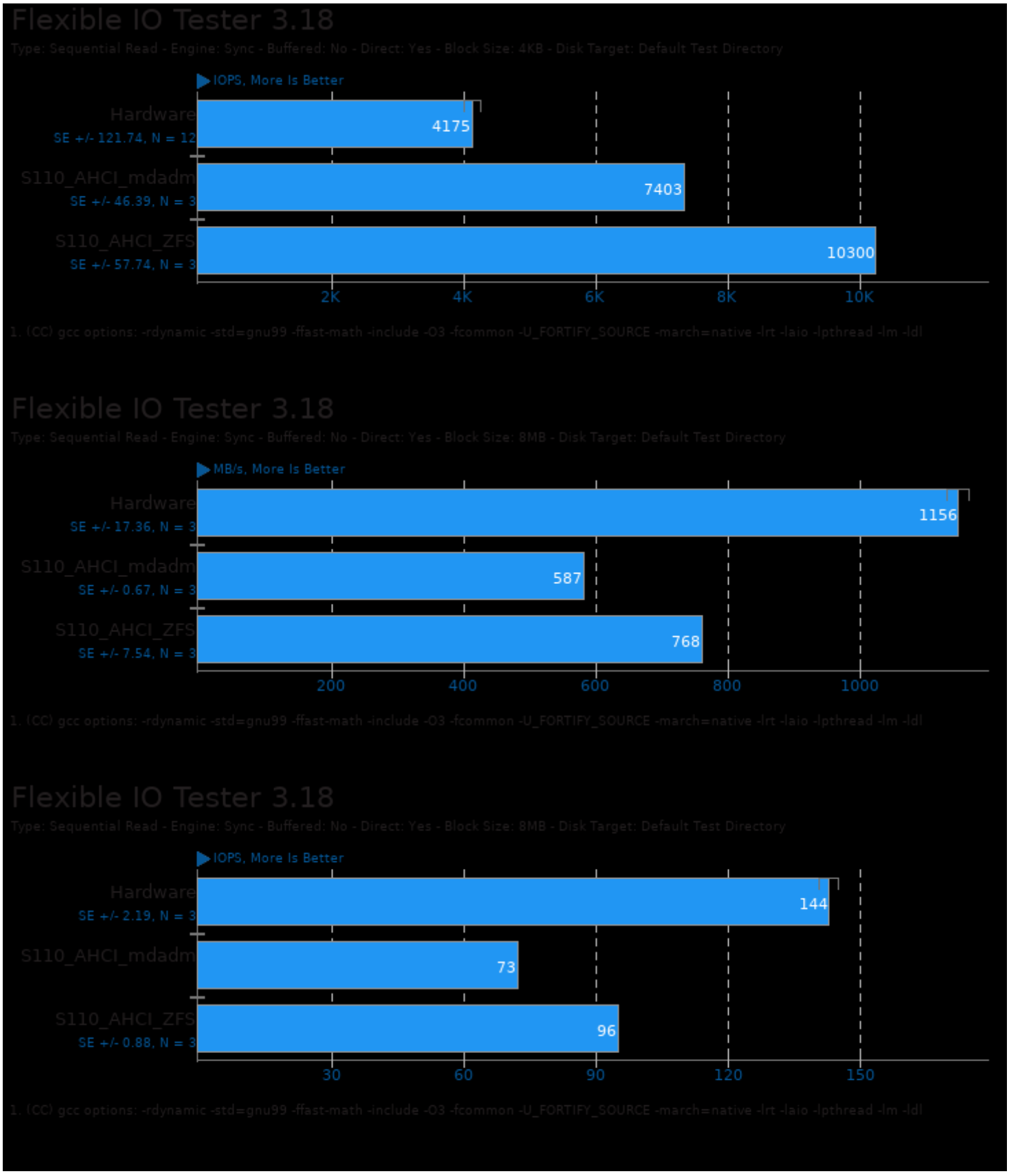

Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.42, N = 12
12.5
S110_AHCI_mdadm
SE +/- 0.09, N = 3
19.3
S110_AHCI_ZFS
SE +/- 0.19, N = 3
27.9
7
14
21
28
35
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 109.19, N = 12
3204
S110_AHCI_mdadm
SE +/- 24.36, N = 3
4927
S110_AHCI_ZFS
SE +/- 45.96, N = 3
7140
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 4.04, N = 3
935
S110_AHCI_mdadm
SE +/- 3.21, N = 3
569
S110_AHCI_ZFS
SE +/- 1.53, N = 3
805
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.58, N = 3
113
S110_AHCI_mdadm
67
S110_AHCI_ZFS
97
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.52, N = 3
40.9
S110_AHCI_mdadm
SE +/- 0.88, N = 3
167.0
S110_AHCI_ZFS
SE +/- 2.96, N = 3
422.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.67, N = 3
82
S110_AHCI_mdadm
SE +/- 1.53, N = 3
333
S110_AHCI_ZFS
SE +/- 5.93, N = 3
844
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

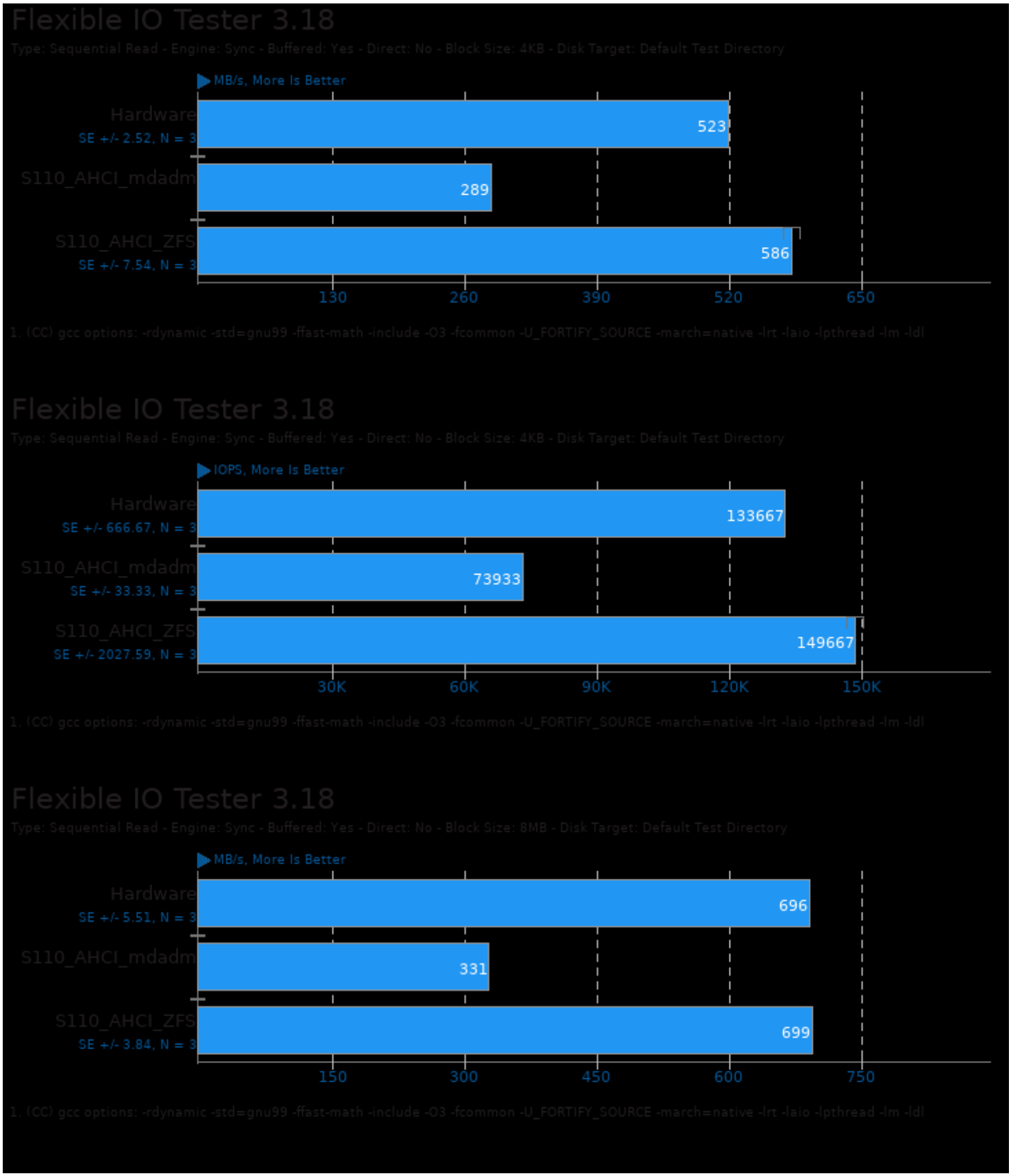
probaraid5

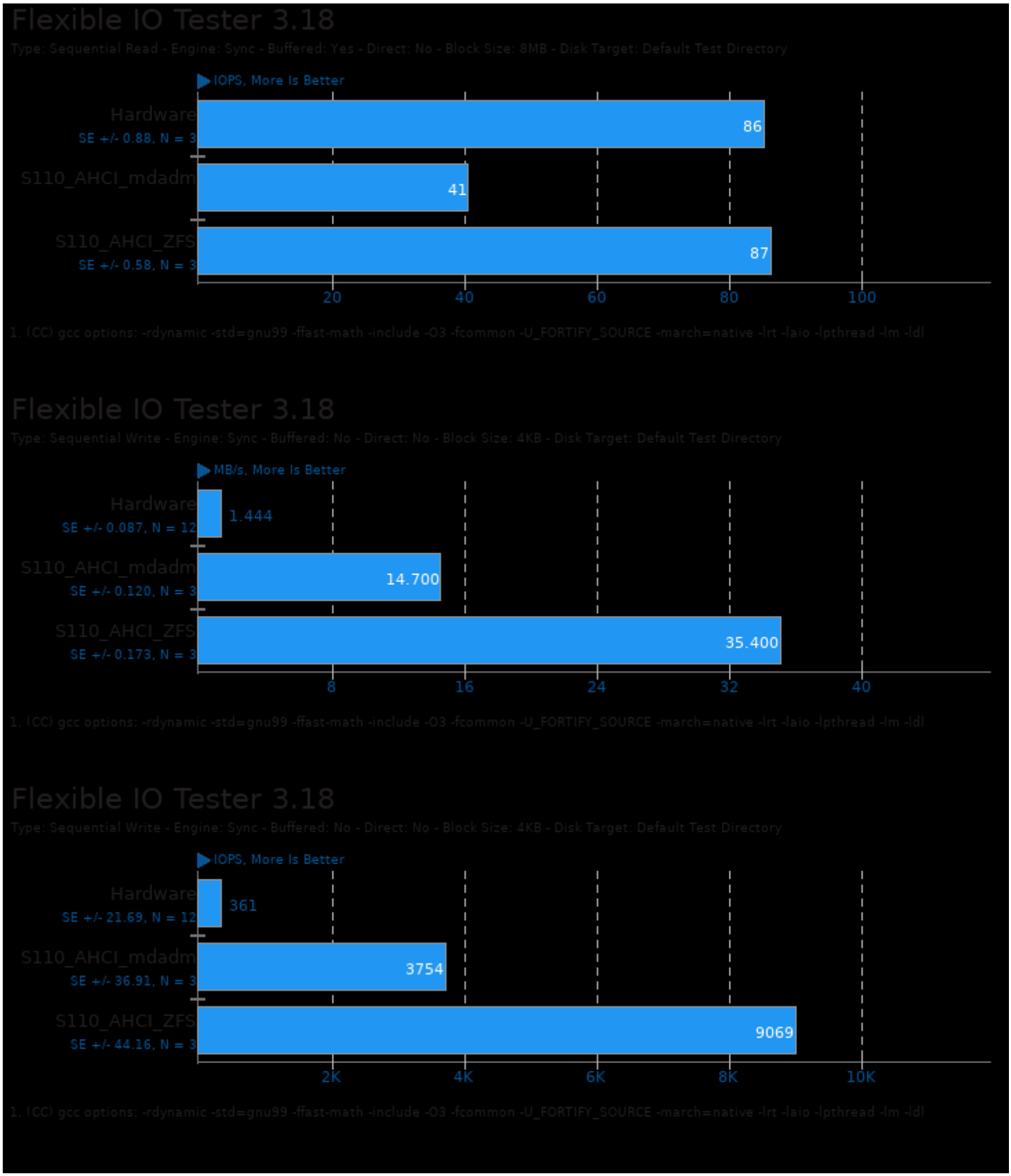

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.61, N = 15
40.4
S110_AHCI_mdadm
SE +/- 0.15, N = 3
77.7
S110_AHCI_ZFS
SE +/- 0.67, N = 3
143.0
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 103.22, N = 15
2584
S110_AHCI_mdadm
SE +/- 10.73, N = 3
4973
S110_AHCI_ZFS
SE +/- 36.56, N = 3
9136
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.44, N = 12
16.2
S110_AHCI_mdadm
SE +/- 0.35, N = 3
28.6
S110_AHCI_ZFS
SE +/- 0.17, N = 3
40.2
9
18
27
36
45
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

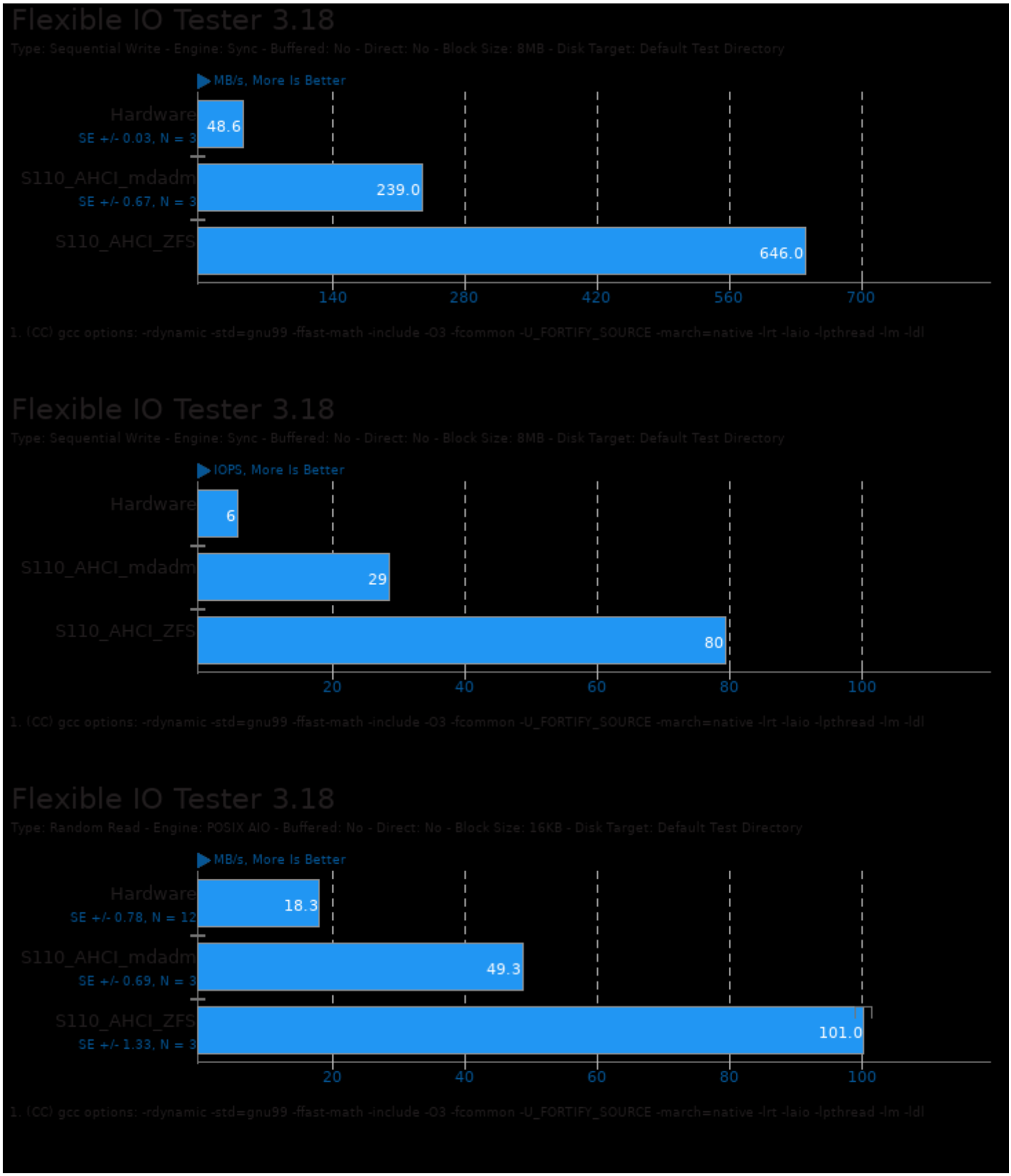

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 121.74, N = 12
4175
S110_AHCI_mdadm
SE +/- 46.39, N = 3
7403
S110_AHCI_ZFS
SE +/- 57.74, N = 3
10300
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 17.36, N = 3
1156
S110_AHCI_mdadm
SE +/- 0.67, N = 3
587
S110_AHCI_ZFS
SE +/- 7.54, N = 3
768
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 2.19, N = 3
144
S110_AHCI_mdadm
73
S110_AHCI_ZFS
SE +/- 0.88, N = 3
96
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

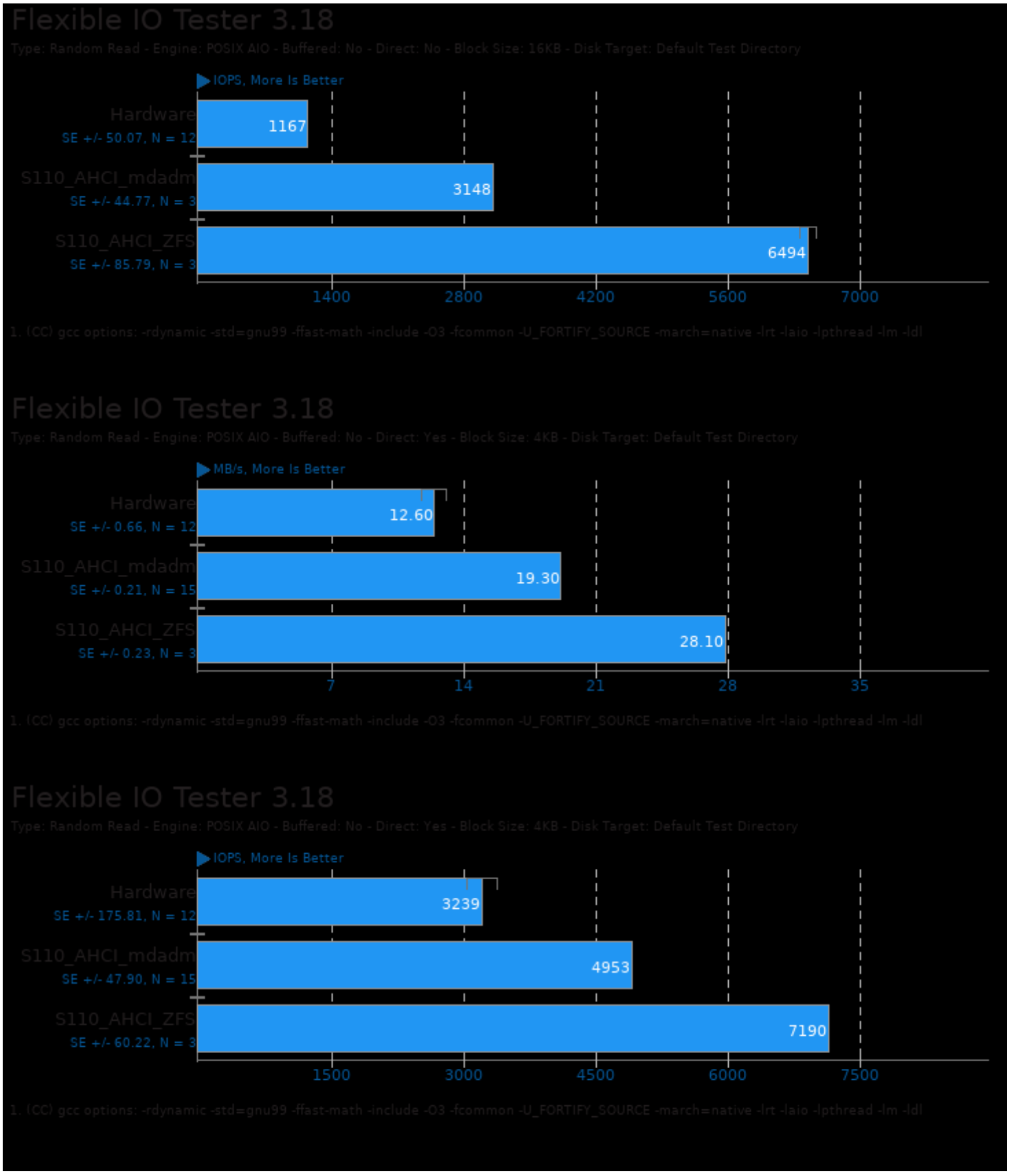

Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 2.52, N = 3
523
S110_AHCI_mdadm
289
S110_AHCI_ZFS
SE +/- 7.54, N = 3
586
130
260
390
520
650
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 666.67, N = 3
133667
S110_AHCI_mdadm
SE +/- 33.33, N = 3
73933
S110_AHCI_ZFS
SE +/- 2027.59, N = 3
149667
30K
60K
90K
120K
150K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 5.51, N = 3
696
S110_AHCI_mdadm
331
S110_AHCI_ZFS
SE +/- 3.84, N = 3
699
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.88, N = 3
86
S110_AHCI_mdadm
41
S110_AHCI_ZFS
SE +/- 0.58, N = 3
87
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.087, N = 12
1.444
S110_AHCI_mdadm
SE +/- 0.120, N = 3
14.700
S110_AHCI_ZFS
SE +/- 0.173, N = 3
35.400
8
16
24
32
40
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 21.69, N = 12
361
S110_AHCI_mdadm
SE +/- 36.91, N = 3
3754
S110_AHCI_ZFS
SE +/- 44.16, N = 3
9069
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

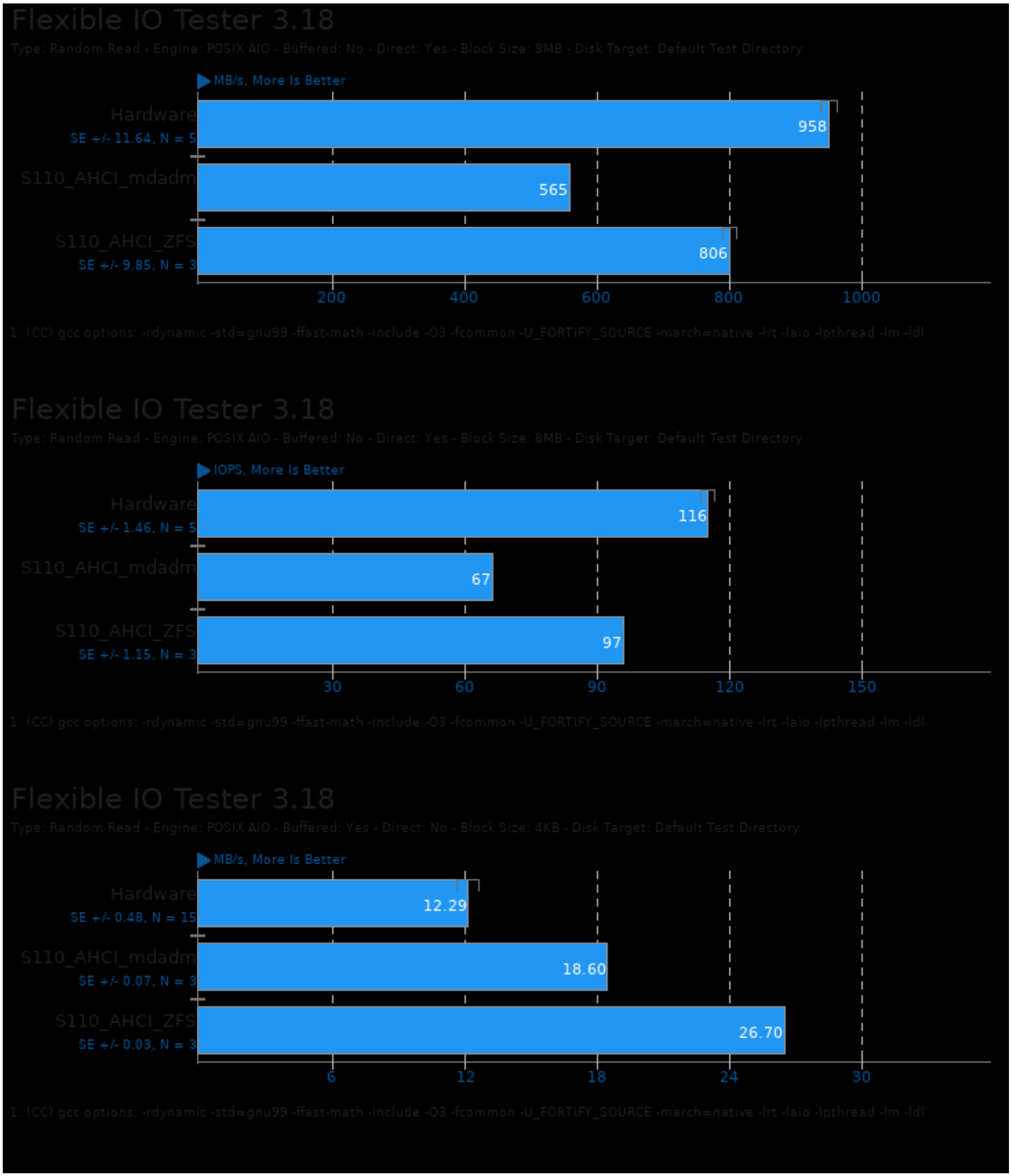
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
48.6
SE +/- 0.03, N = 3
S110_AHCI_mdadm
239.0
SE +/- 0.67, N = 3
S110_AHCI_ZFS
646.0
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
6
S110_AHCI_mdadm
29
S110_AHCI_ZFS
80
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
18.3
SE +/- 0.78, N = 12
S110_AHCI_mdadm
49.3
SE +/- 0.69, N = 3
S110_AHCI_ZFS
101.0
SE +/- 1.33, N = 3
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

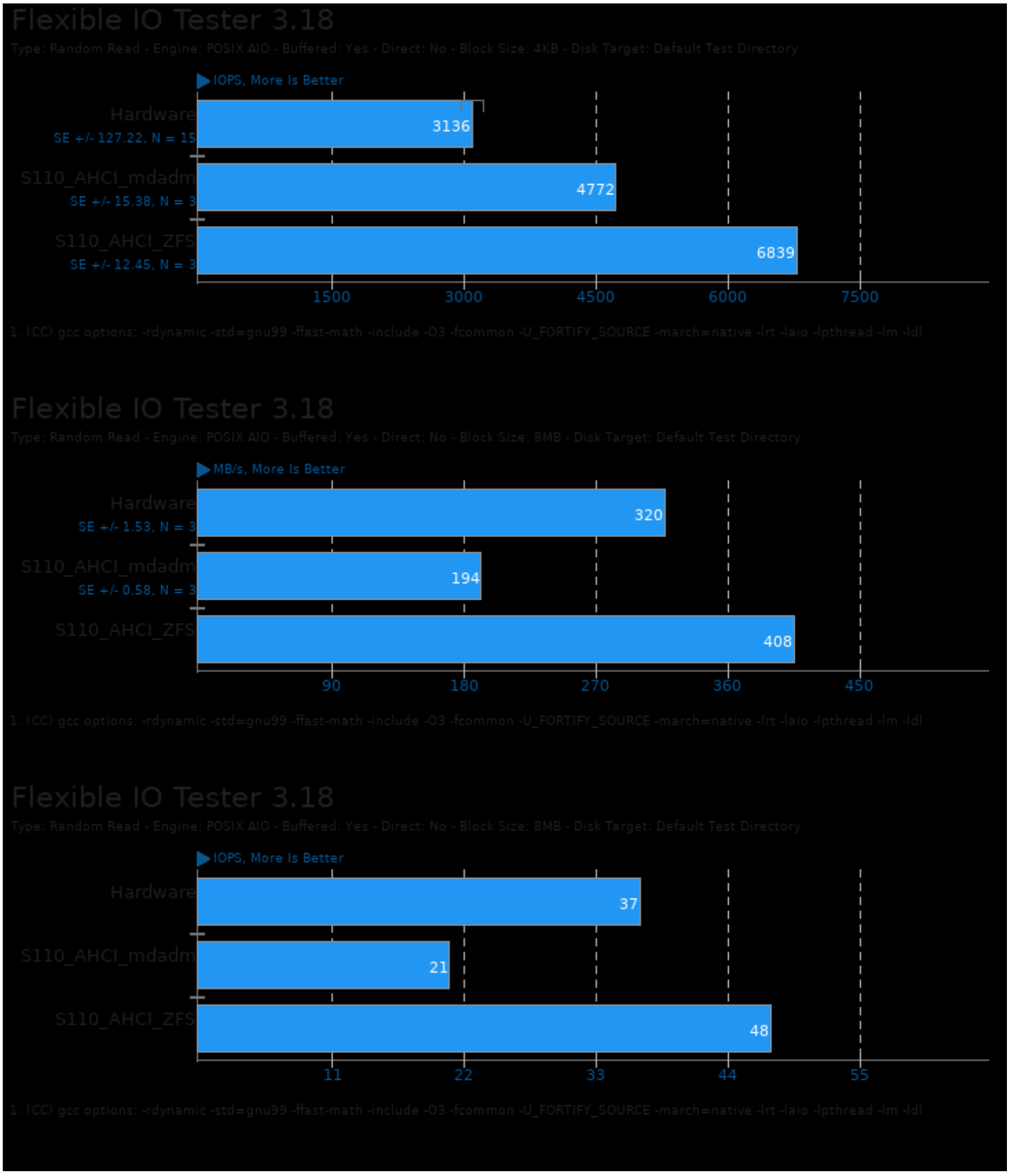
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 50.07, N = 12
1167
S110_AHCI_mdadm
SE +/- 44.77, N = 3
3148
S110_AHCI_ZFS
SE +/- 85.79, N = 3
6494
1400
2800
4200
5600
7000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.66, N = 12
12.60
S110_AHCI_mdadm
SE +/- 0.21, N = 15
19.30
S110_AHCI_ZFS
SE +/- 0.23, N = 3
28.10
7
14
21
28
35
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 175.81, N = 12
3239
S110_AHCI_mdadm
SE +/- 47.90, N = 15
4953
S110_AHCI_ZFS
SE +/- 60.22, N = 3
7190
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

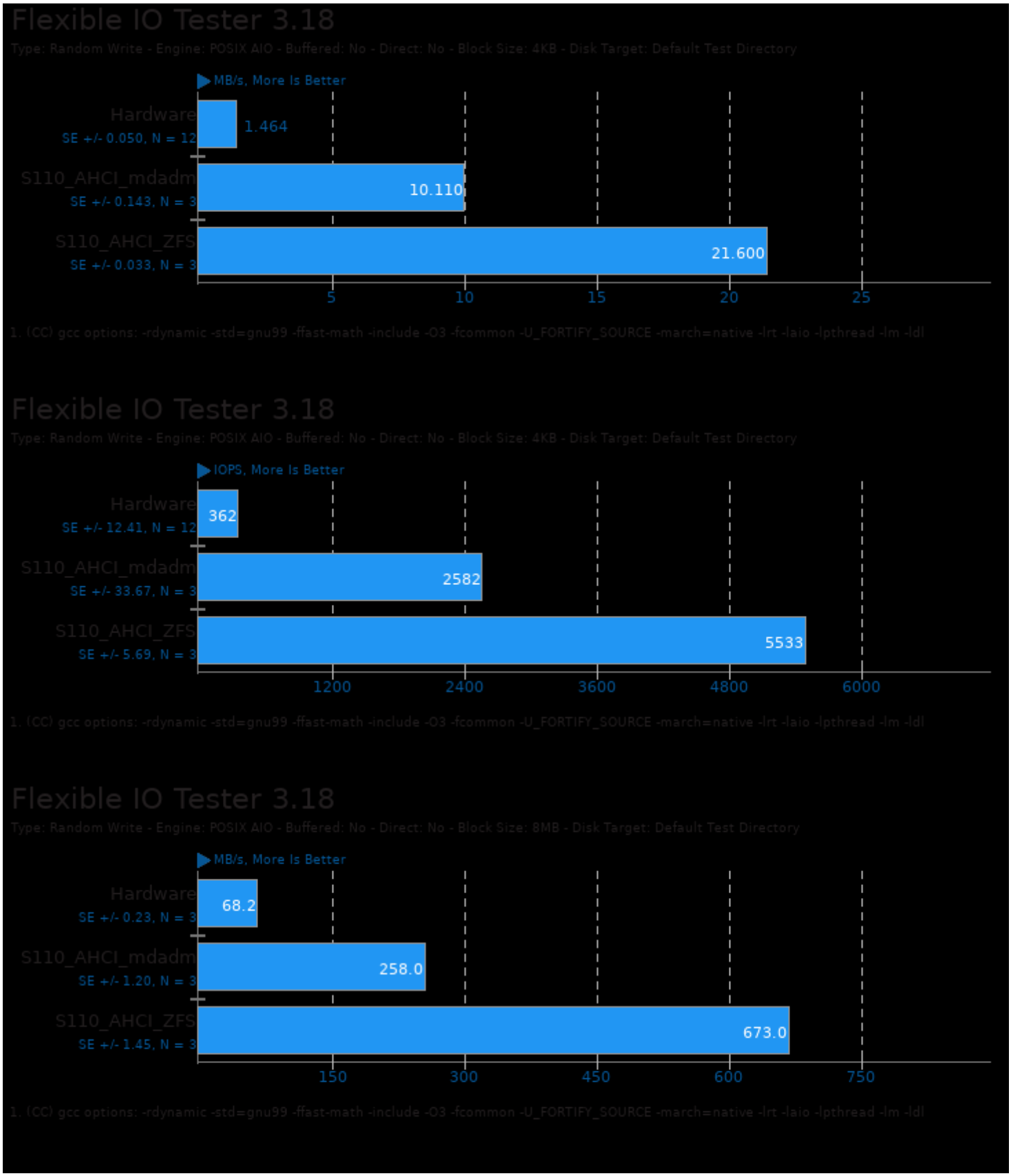
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 11.64, N = 5
958
S110_AHCI_mdadm
565
S110_AHCI_ZFS
SE +/- 9.85, N = 3
806
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1.46, N = 5
116
S110_AHCI_mdadm
67
S110_AHCI_ZFS
SE +/- 1.15, N = 3
97
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.48, N = 15
12.29
S110_AHCI_mdadm
SE +/- 0.07, N = 3
18.60
S110_AHCI_ZFS
SE +/- 0.03, N = 3
26.70
6
12
18
24
30
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

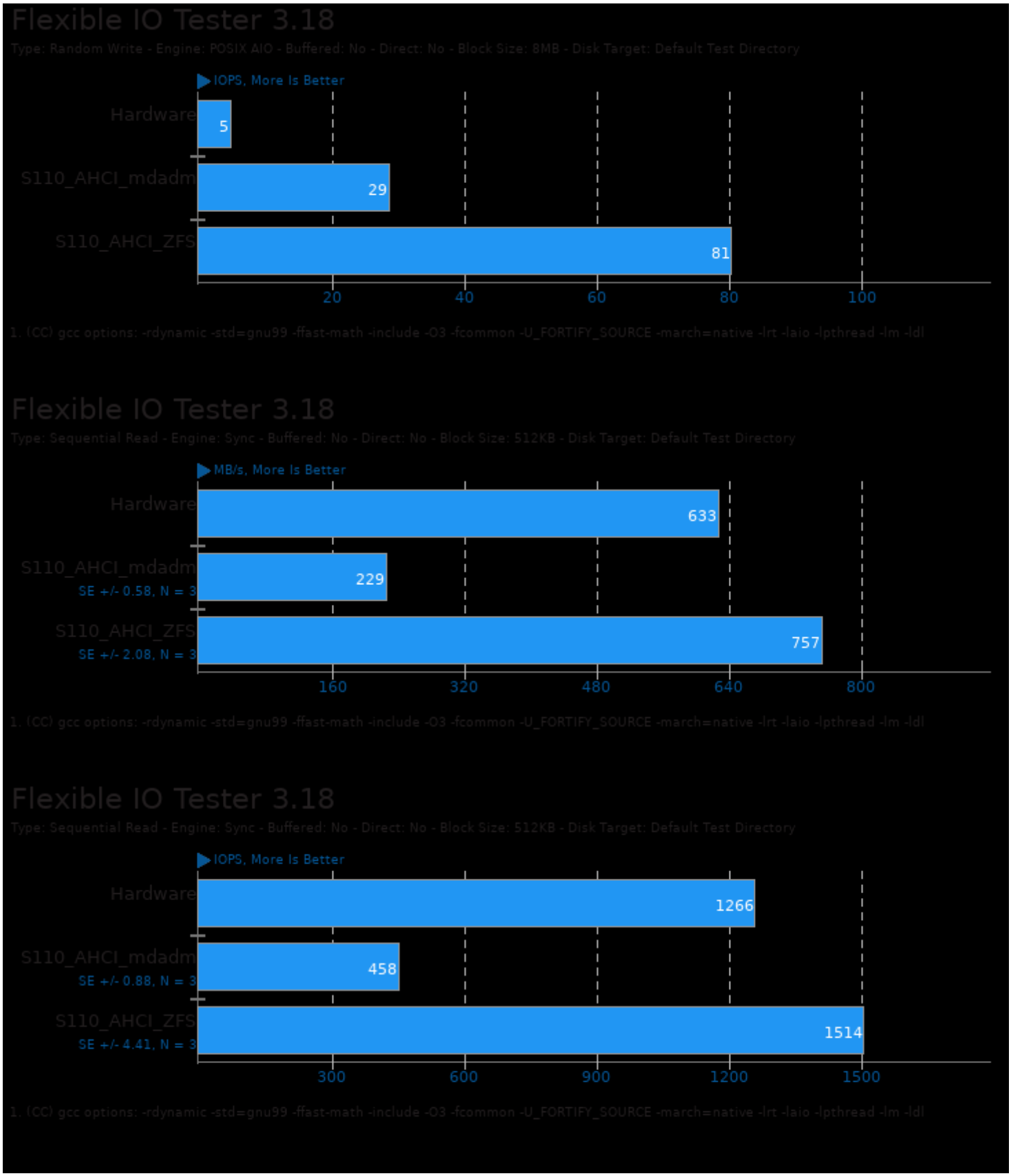
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 127.22, N = 15
3136
S110_AHCI_mdadm
SE +/- 15.38, N = 3
4772
S110_AHCI_ZFS
SE +/- 12.45, N = 3
6839
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.53, N = 3
320
S110_AHCI_mdadm
SE +/- 0.58, N = 3
194
S110_AHCI_ZFS
408
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
37
S110_AHCI_mdadm
21
S110_AHCI_ZFS
48
11
22
33
44
55
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

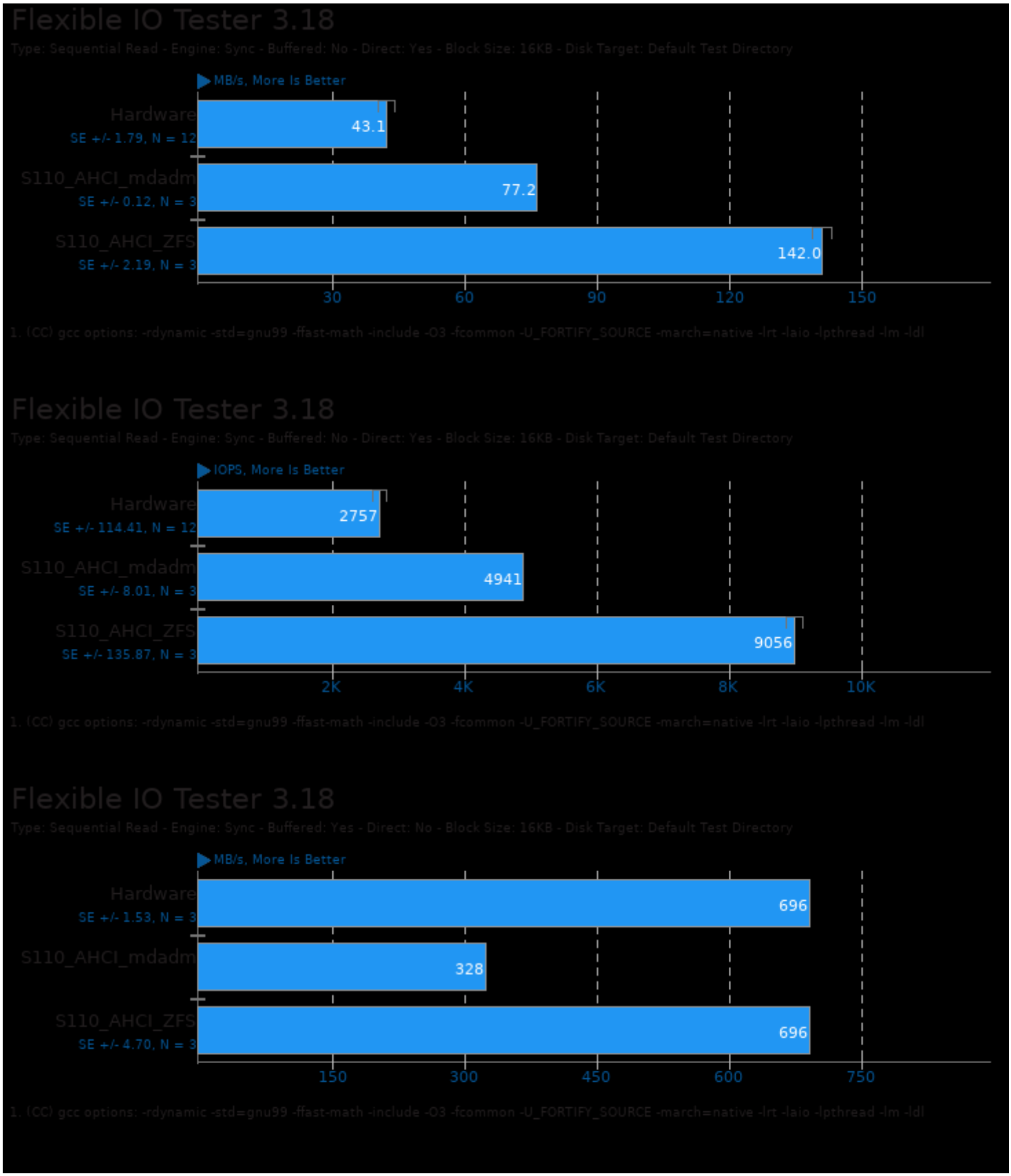
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.050, N = 12
1.464
S110_AHCI_mdadm
SE +/- 0.143, N = 3
10.110
S110_AHCI_ZFS
SE +/- 0.033, N = 3
21.600
5
10
15
20
25
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 12.41, N = 12
362
S110_AHCI_mdadm
SE +/- 33.67, N = 3
2582
S110_AHCI_ZFS
SE +/- 5.69, N = 3
5533
1200
2400
3600
4800
6000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.23, N = 3
68.2
S110_AHCI_mdadm
SE +/- 1.20, N = 3
258.0
S110_AHCI_ZFS
SE +/- 1.45, N = 3
673.0
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

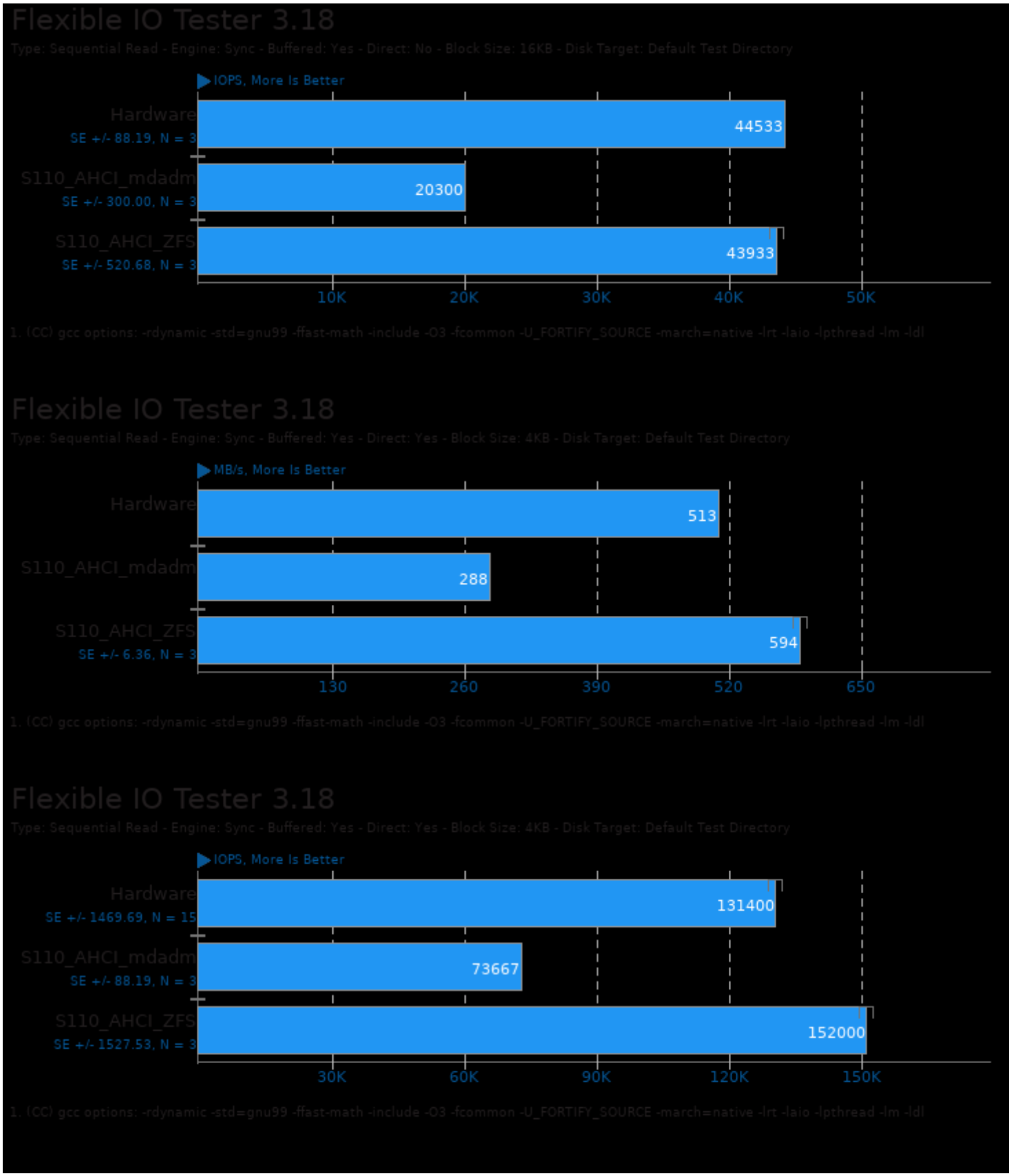
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
29
S110_AHCI_ZFS
81
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
633
S110_AHCI_mdadm
SE +/- 0.58, N = 3
229
S110_AHCI_ZFS
SE +/- 2.08, N = 3
757
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
1266
S110_AHCI_mdadm
SE +/- 0.88, N = 3
458
S110_AHCI_ZFS
SE +/- 4.41, N = 3
1514
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

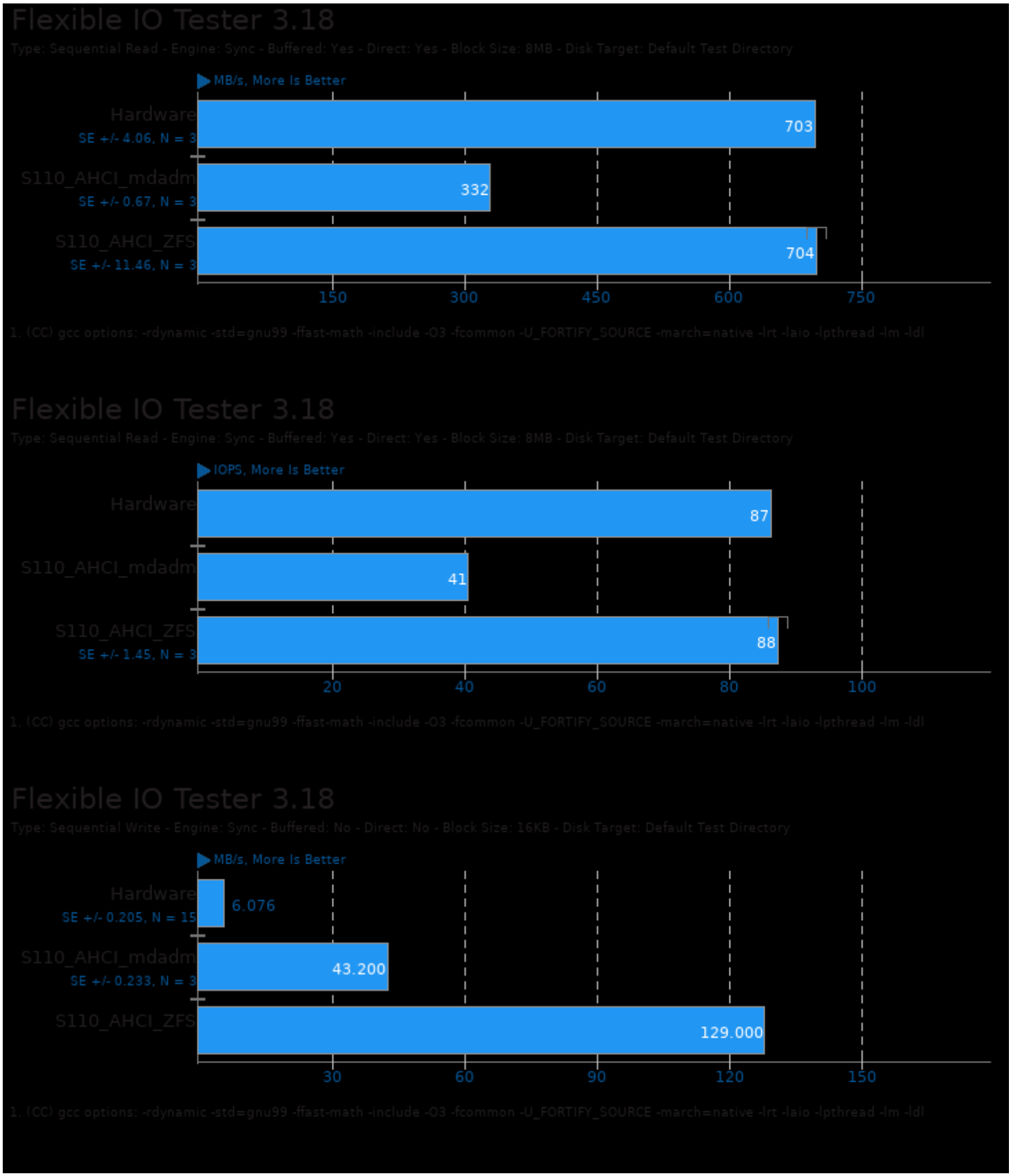
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.79, N = 12
43.1
S110_AHCI_mdadm
SE +/- 0.12, N = 3
77.2
S110_AHCI_ZFS
SE +/- 2.19, N = 3
142.0
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 114.41, N = 12
2757
S110_AHCI_mdadm
SE +/- 8.01, N = 3
4941
S110_AHCI_ZFS
SE +/- 135.87, N = 3
9056
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.53, N = 3
696
S110_AHCI_mdadm
328
S110_AHCI_ZFS
SE +/- 4.70, N = 3
696
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

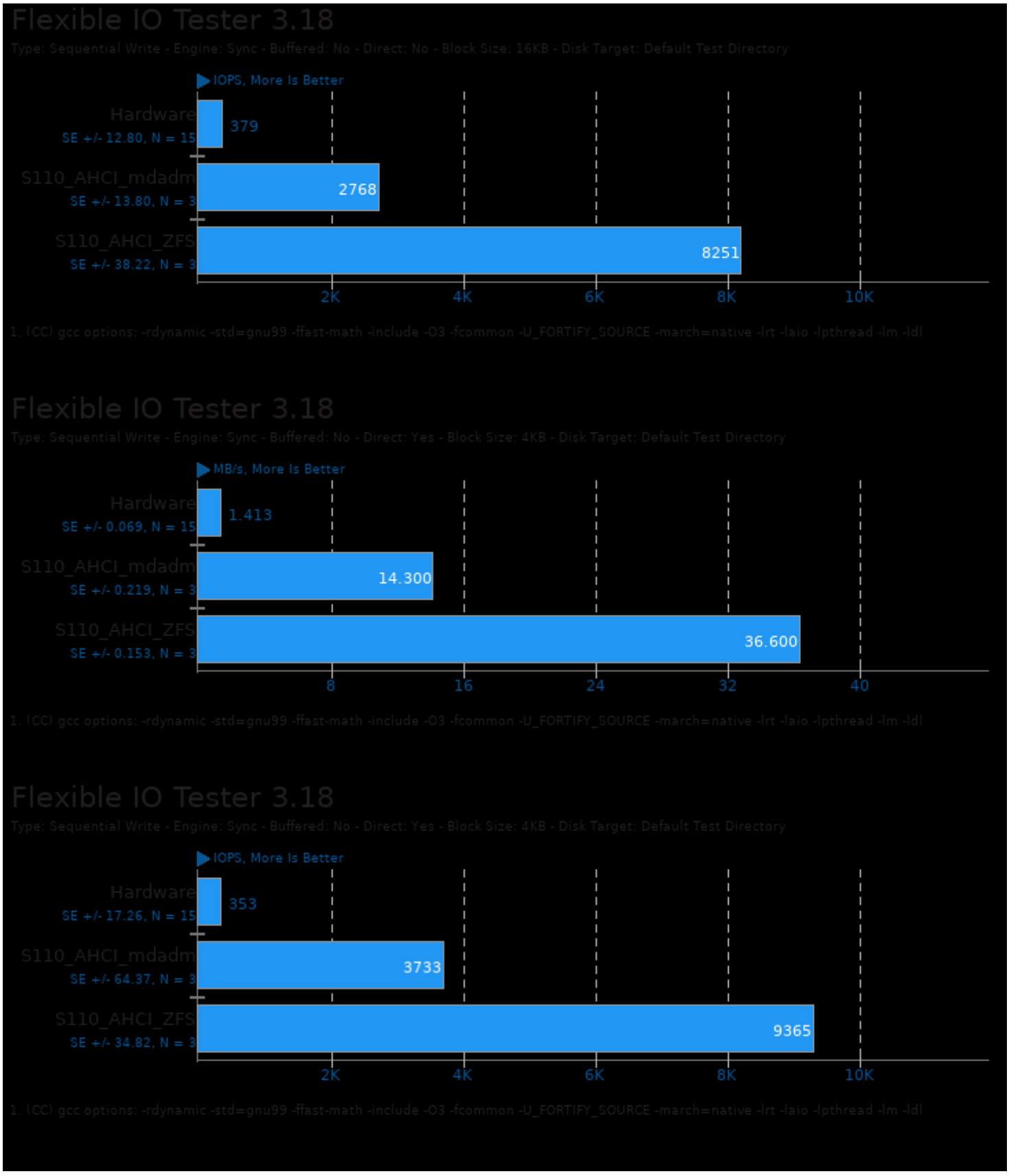
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 88.19, N = 3
44533
S110_AHCI_mdadm
SE +/- 300.00, N = 3
20300
S110_AHCI_ZFS
SE +/- 520.68, N = 3
43933
10K
20K
30K
40K
50K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
513
S110_AHCI_mdadm
288
S110_AHCI_ZFS
SE +/- 6.36, N = 3
594
130
260
390
520
650
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1469.69, N = 15
131400
S110_AHCI_mdadm
SE +/- 88.19, N = 3
73667
S110_AHCI_ZFS
SE +/- 1527.53, N = 3
152000
30K
60K
90K
120K
150K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

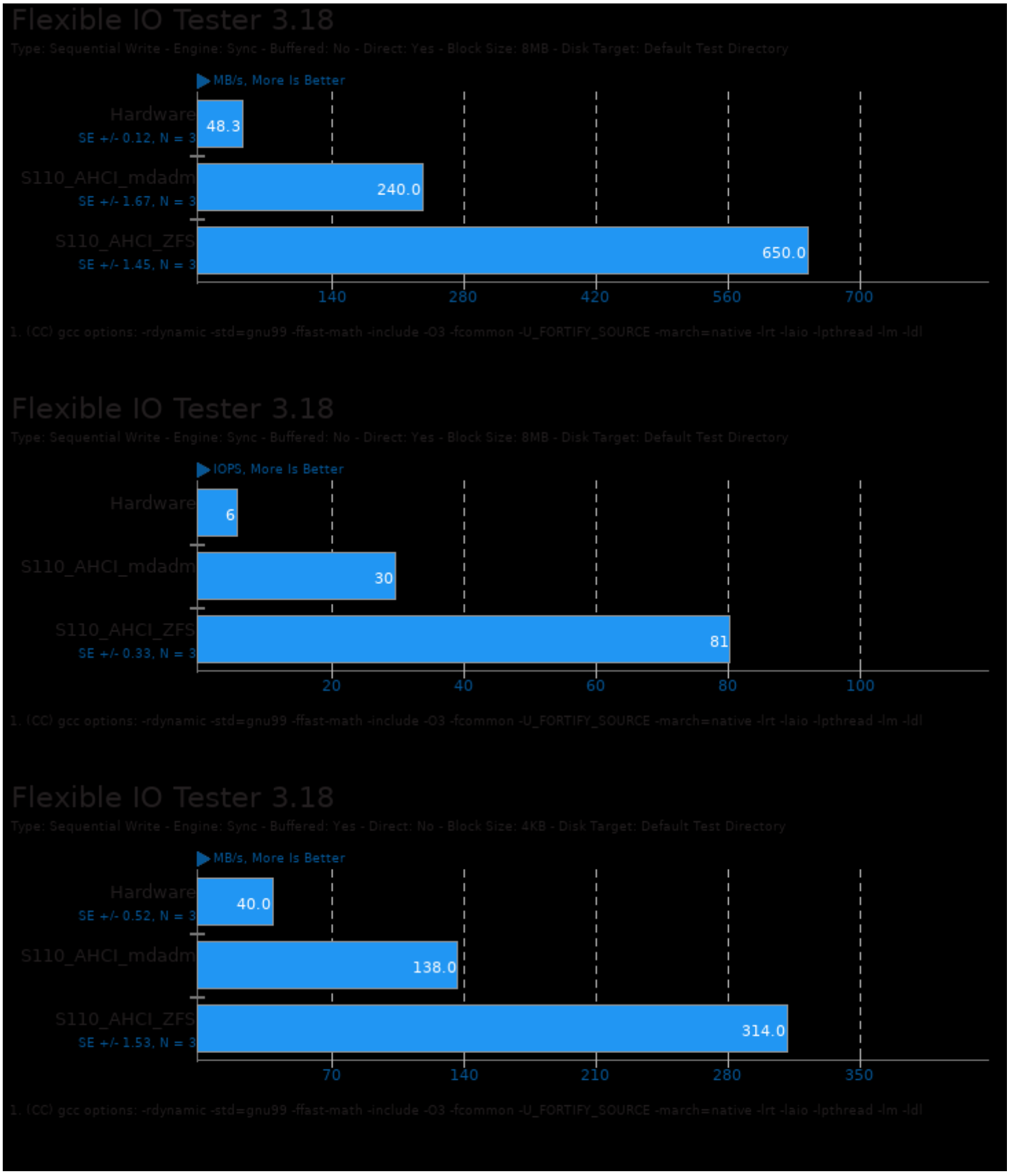
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 4.06, N = 3
703
S110_AHCI_mdadm
SE +/- 0.67, N = 3
332
S110_AHCI_ZFS
SE +/- 11.46, N = 3
704
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
87
S110_AHCI_mdadm
41
S110_AHCI_ZFS
SE +/- 1.45, N = 3
88
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.205, N = 15
6.076
S110_AHCI_mdadm
SE +/- 0.233, N = 3
43.200
S110_AHCI_ZFS
129.000
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

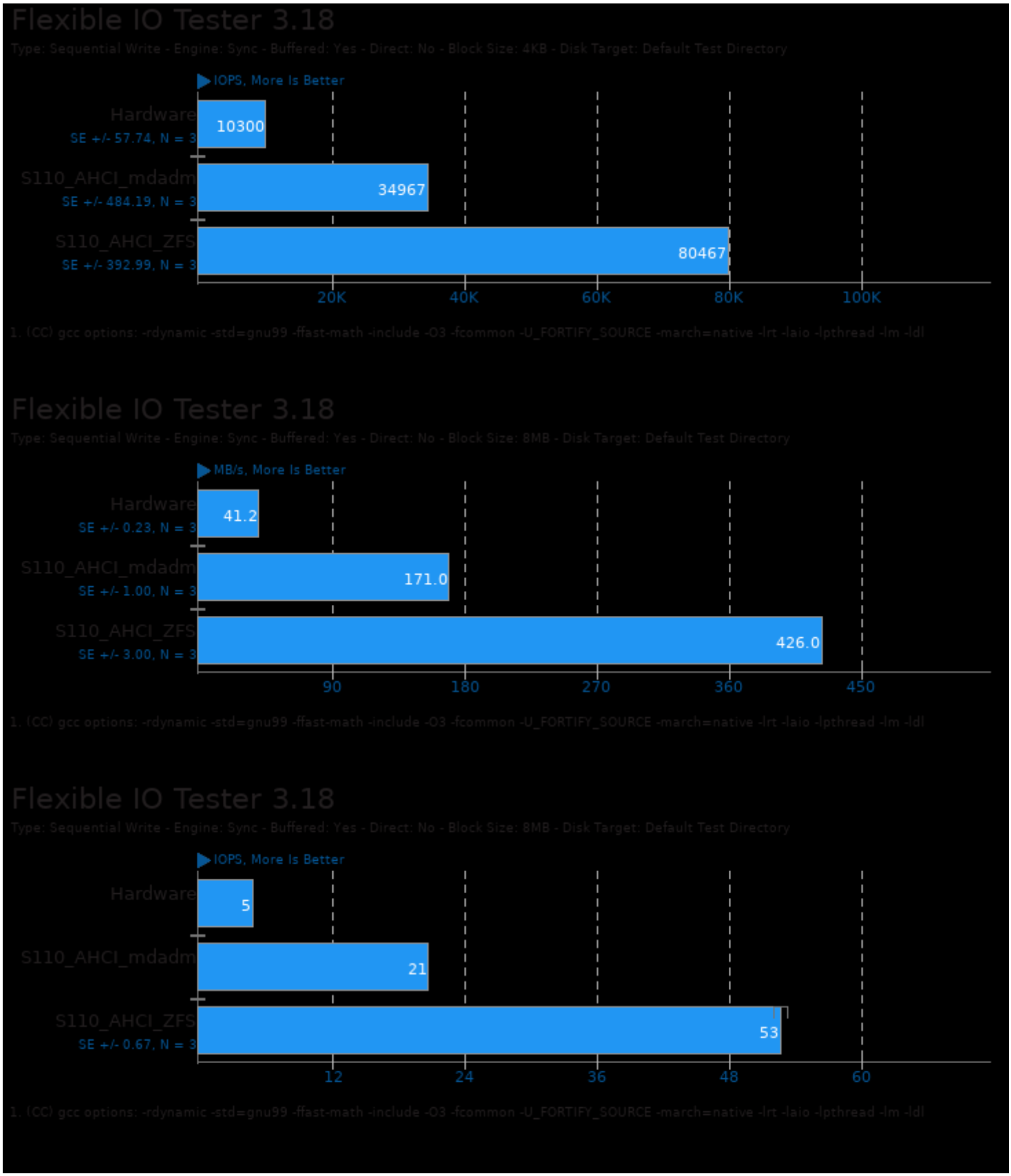
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
379
SE +/- 12.80, N = 15
S110_AHCI_mdadm
2768
SE +/- 13.80, N = 3
S110_AHCI_ZFS
8251
SE +/- 38.22, N = 3
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
1.413
SE +/- 0.069, N = 15
S110_AHCI_mdadm
14.300
SE +/- 0.219, N = 3
S110_AHCI_ZFS
36.600
SE +/- 0.153, N = 3
8
16
24
32
40
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
353
SE +/- 17.26, N = 15
S110_AHCI_mdadm
3733
SE +/- 64.37, N = 3
S110_AHCI_ZFS
9365
SE +/- 34.82, N = 3
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

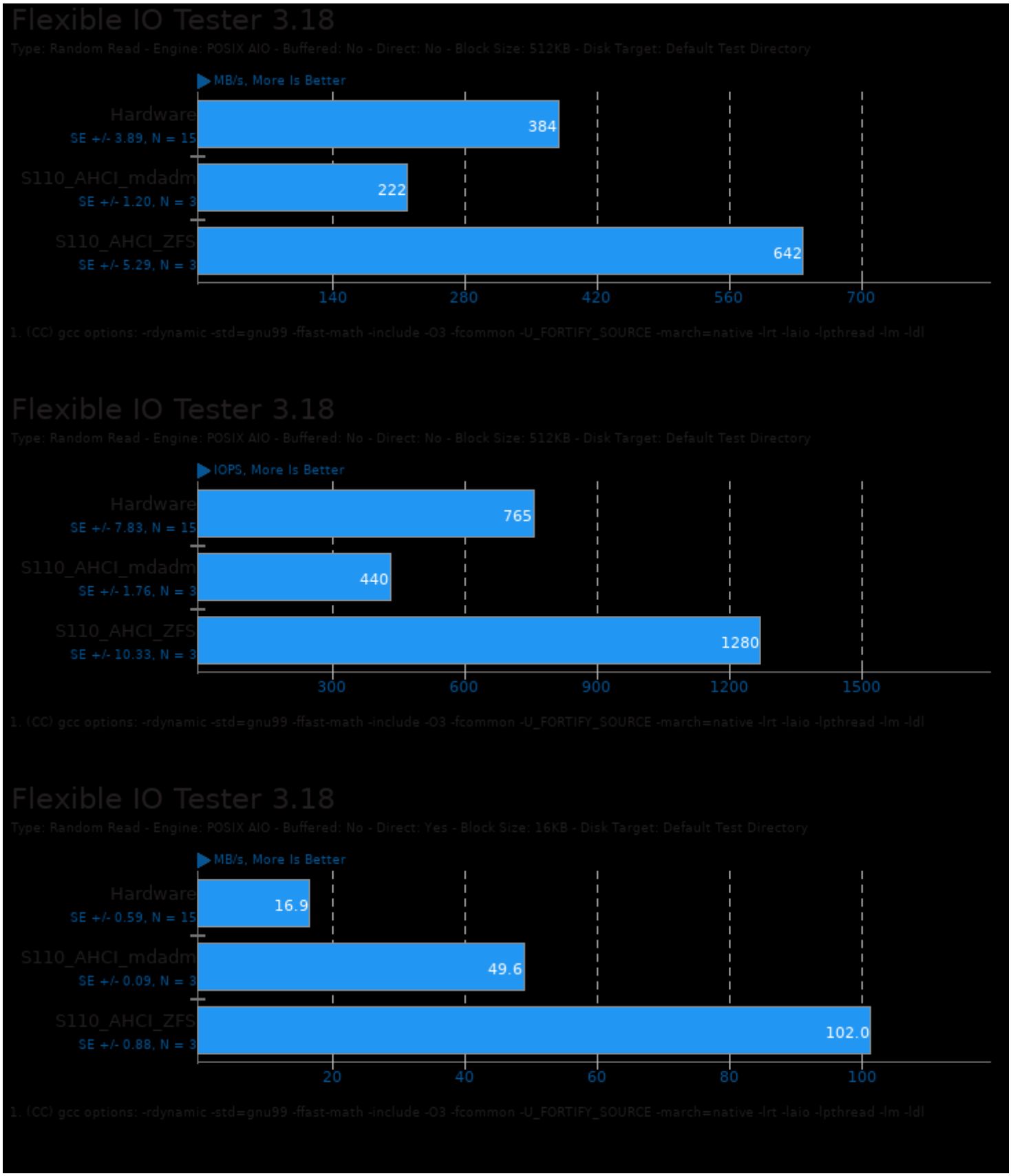
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.12, N = 3
48.3
S110_AHCI_mdadm
SE +/- 1.67, N = 3
240.0
S110_AHCI_ZFS
SE +/- 1.45, N = 3
650.0
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
6
S110_AHCI_mdadm
30
S110_AHCI_ZFS
SE +/- 0.33, N = 3
81
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.52, N = 3
40.0
S110_AHCI_mdadm
138.0
S110_AHCI_ZFS
SE +/- 1.53, N = 3
314.0
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

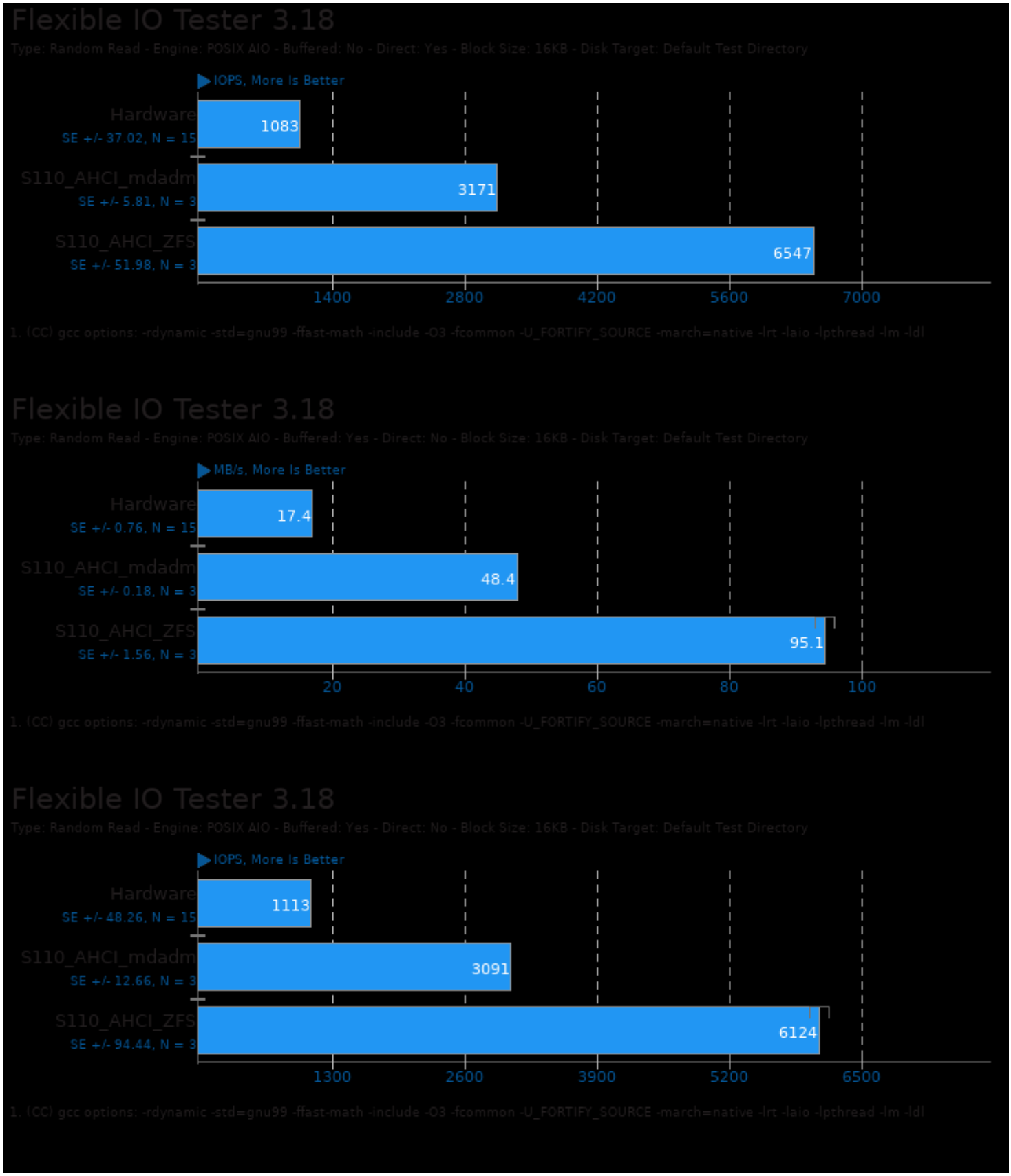
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 57.74, N = 3
10300
S110_AHCI_mdadm
SE +/- 484.19, N = 3
34967
S110_AHCI_ZFS
SE +/- 392.99, N = 3
80467
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.23, N = 3
41.2
S110_AHCI_mdadm
SE +/- 1.00, N = 3
171.0
S110_AHCI_ZFS
SE +/- 3.00, N = 3
426.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
21
S110_AHCI_ZFS
SE +/- 0.67, N = 3
53
12
24
36
48
60
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

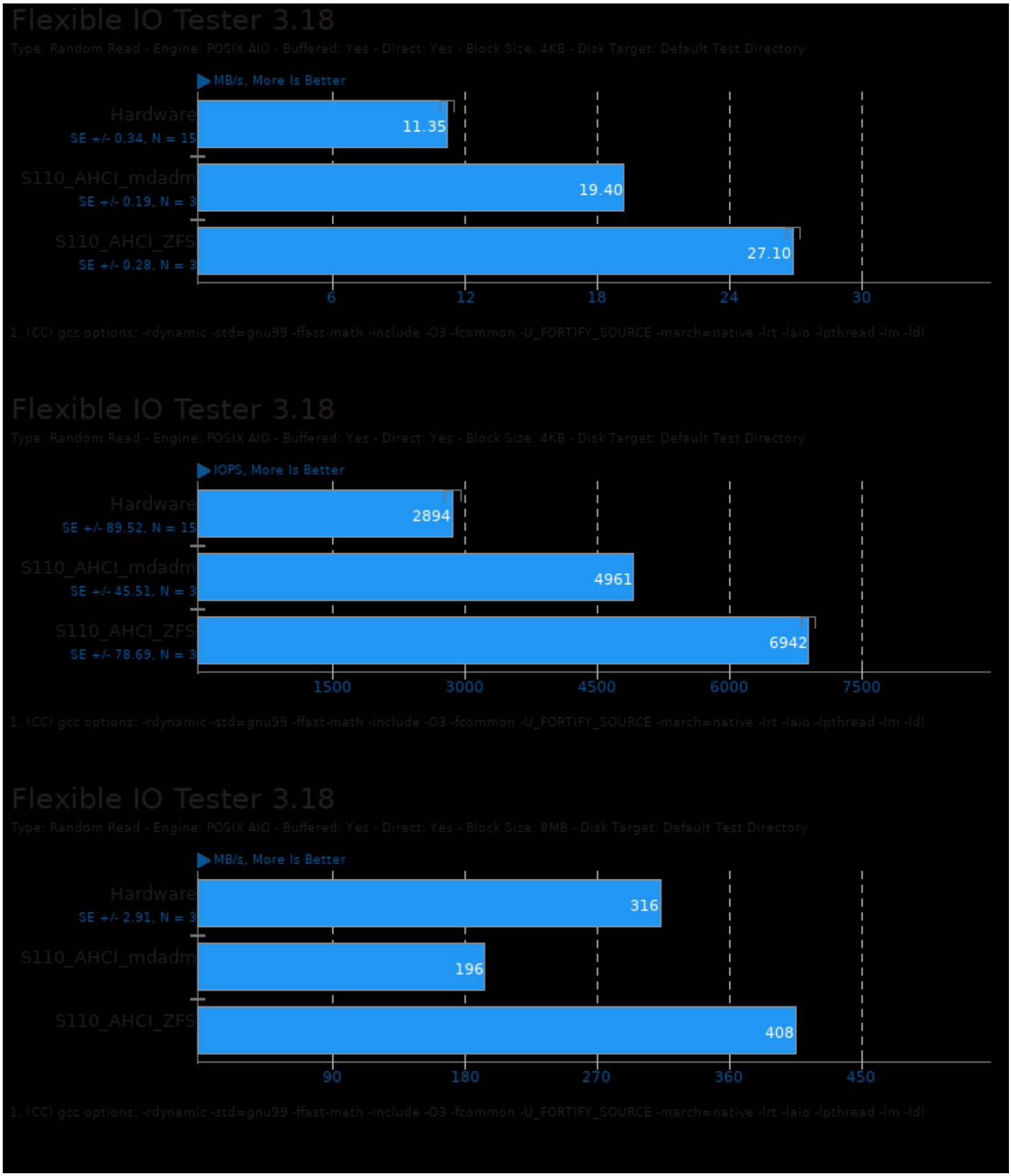
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 3.89, N = 15
384
S110_AHCI_mdadm
SE +/- 1.20, N = 3
222
S110_AHCI_ZFS
SE +/- 5.29, N = 3
642
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 7.83, N = 15
765
S110_AHCI_mdadm
SE +/- 1.76, N = 3
440
S110_AHCI_ZFS
SE +/- 10.33, N = 3
1280
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.59, N = 15
16.9
S110_AHCI_mdadm
SE +/- 0.09, N = 3
49.6
S110_AHCI_ZFS
SE +/- 0.88, N = 3
102.0
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

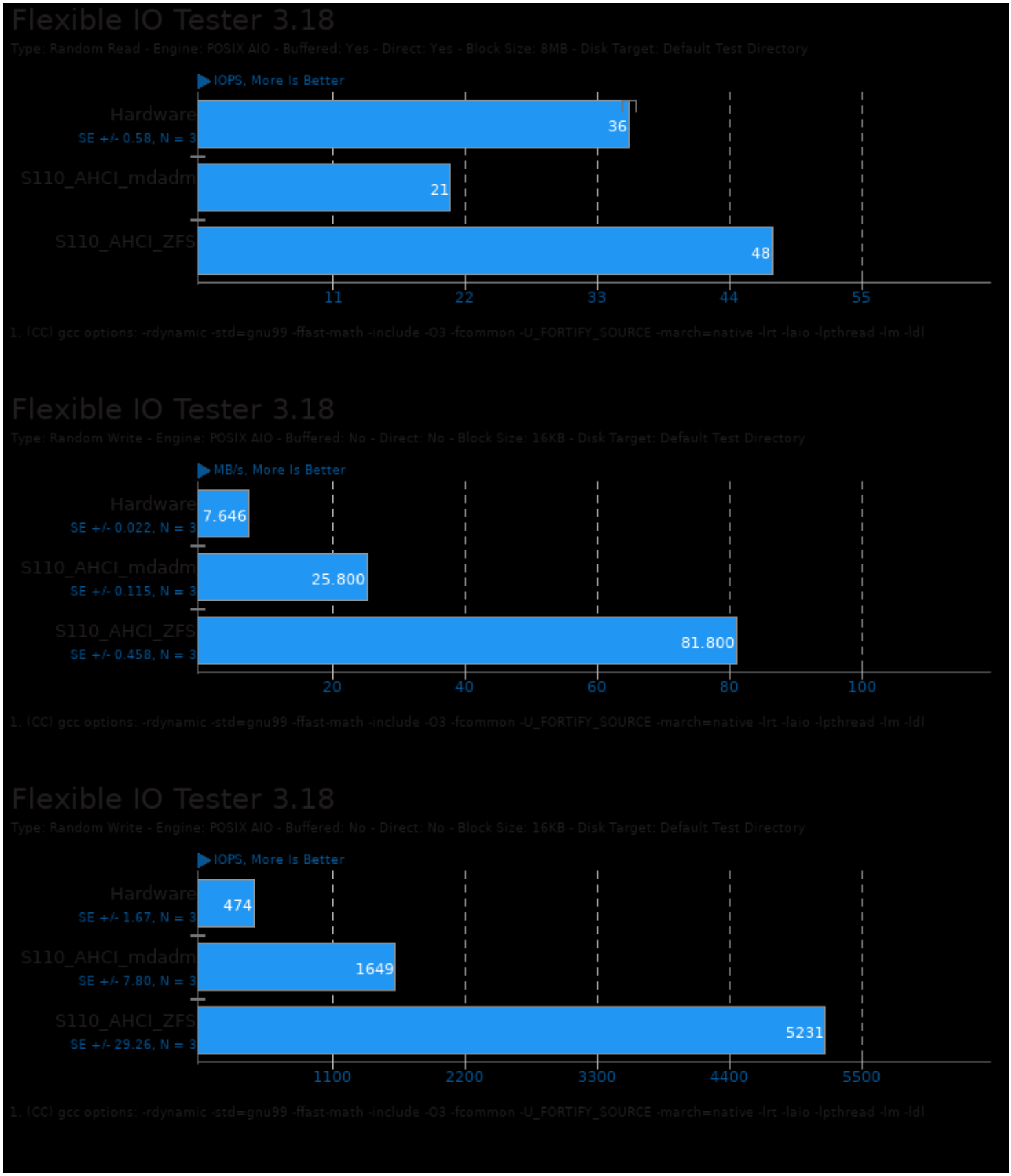
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 37.02, N = 15
1083
S110_AHCI_mdadm
SE +/- 5.81, N = 3
3171
S110_AHCI_ZFS
SE +/- 51.98, N = 3
6547
1400
2800
4200
5600
7000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.76, N = 15
17.4
S110_AHCI_mdadm
SE +/- 0.18, N = 3
48.4
S110_AHCI_ZFS
SE +/- 1.56, N = 3
95.1
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 48.26, N = 15
1113
S110_AHCI_mdadm
SE +/- 12.66, N = 3
3091
S110_AHCI_ZFS
SE +/- 94.44, N = 3
6124
1300
2600
3900
5200
6500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

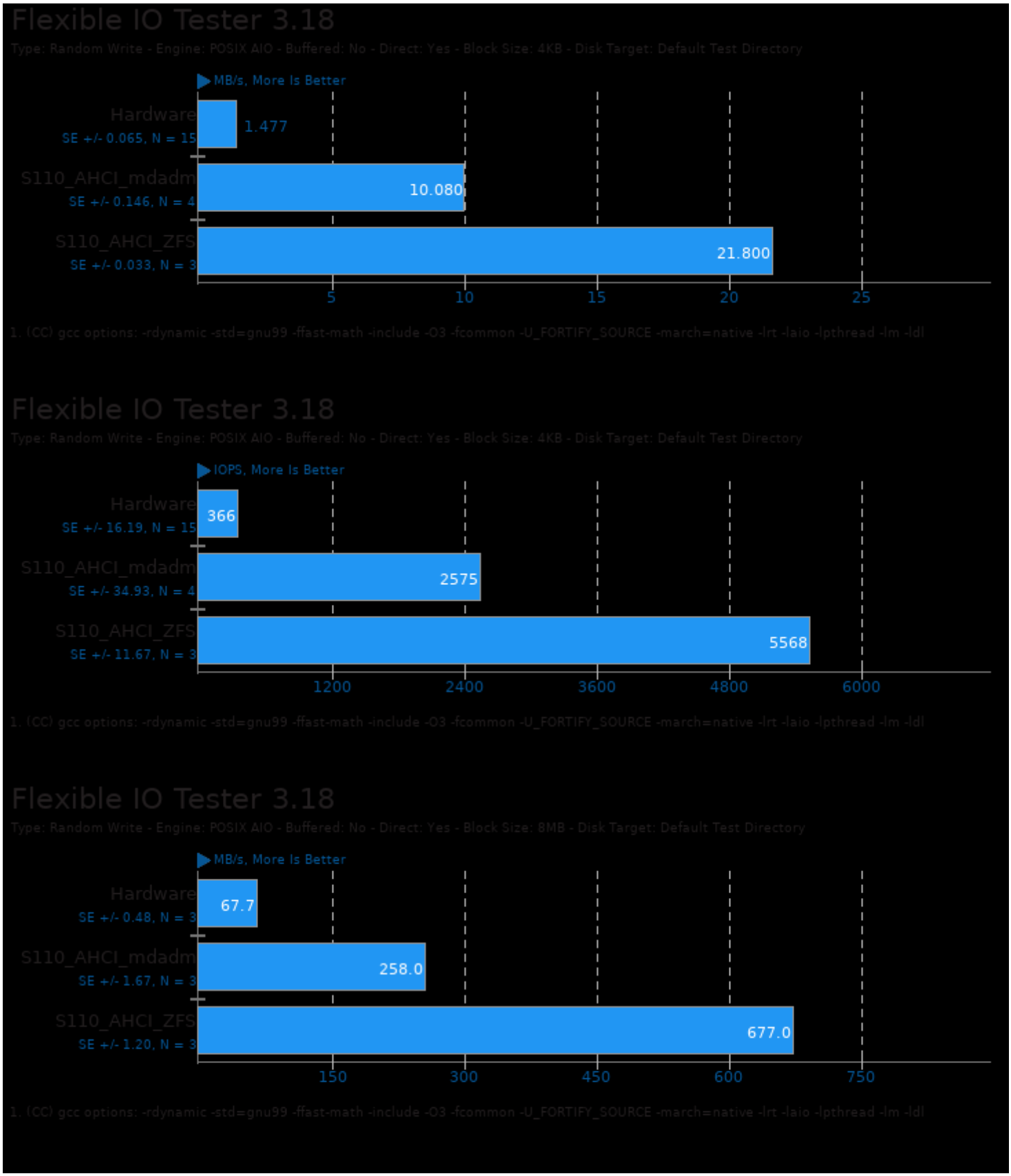
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.34, N = 15
11.35
S110_AHCI_mdadm
SE +/- 0.19, N = 3
19.40
S110_AHCI_ZFS
SE +/- 0.28, N = 3
27.10
6
12
18
24
30
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 89.52, N = 15
2894
S110_AHCI_mdadm
SE +/- 45.51, N = 3
4961
S110_AHCI_ZFS
SE +/- 78.69, N = 3
6942
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 2.91, N = 3
316
S110_AHCI_mdadm
196
S110_AHCI_ZFS
408
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

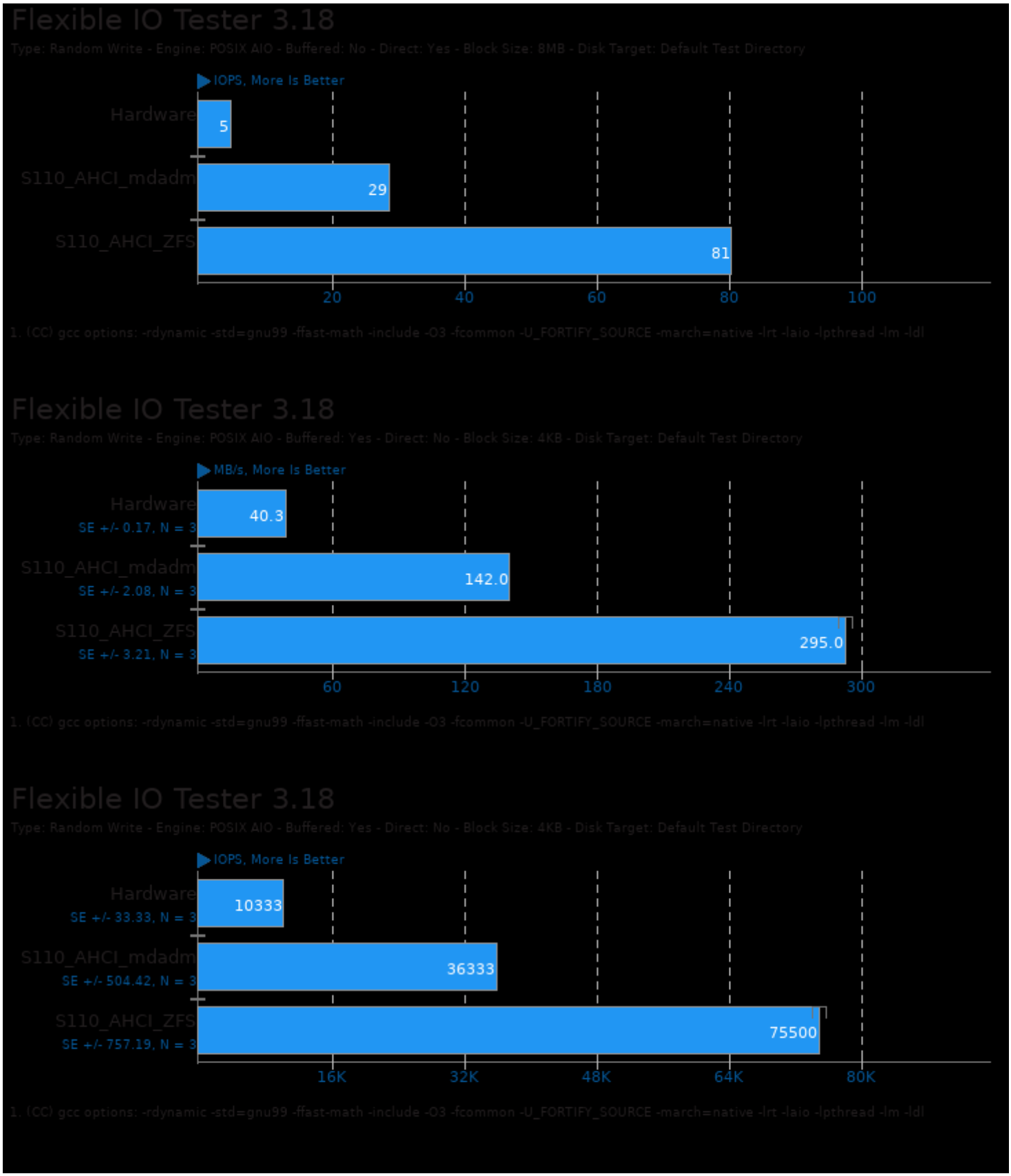
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.58, N = 3
36
S110_AHCI_mdadm
21
S110_AHCI_ZFS
48
11
22
33
44
55
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.022, N = 3
7.646
S110_AHCI_mdadm
SE +/- 0.115, N = 3
25.800
S110_AHCI_ZFS
SE +/- 0.458, N = 3
81.800
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1.67, N = 3
474
S110_AHCI_mdadm
SE +/- 7.80, N = 3
1649
S110_AHCI_ZFS
SE +/- 29.26, N = 3
5231
1100
2200
3300
4400
5500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

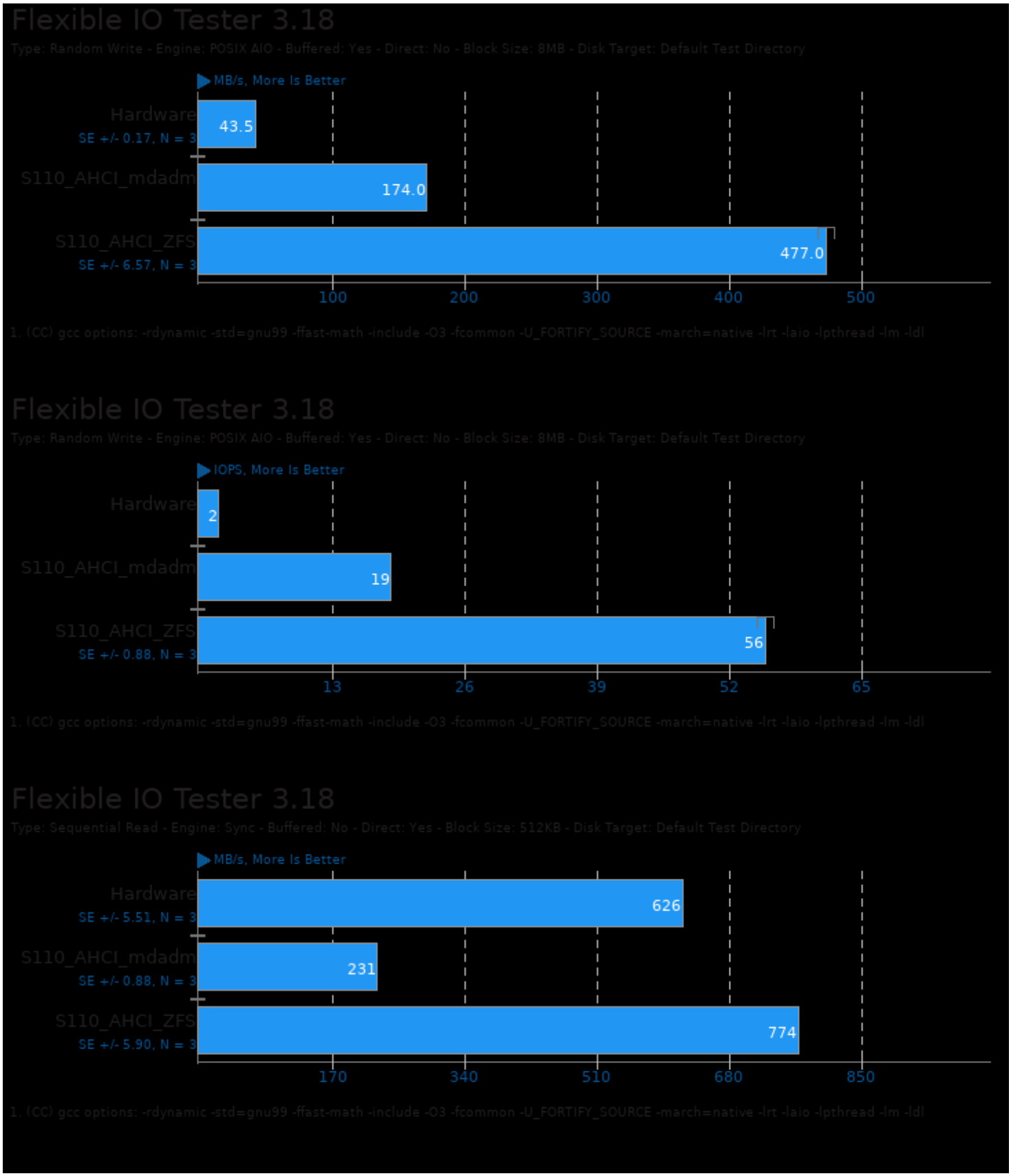
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.065, N = 15
1.477
S110_AHCI_mdadm
SE +/- 0.146, N = 4
10.080
S110_AHCI_ZFS
SE +/- 0.033, N = 3
21.800
5
10
15
20
25
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 16.19, N = 15
366
S110_AHCI_mdadm
SE +/- 34.93, N = 4
2575
S110_AHCI_ZFS
SE +/- 11.67, N = 3
5568
1200
2400
3600
4800
6000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.48, N = 3
67.7
S110_AHCI_mdadm
SE +/- 1.67, N = 3
258.0
S110_AHCI_ZFS
SE +/- 1.20, N = 3
677.0
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

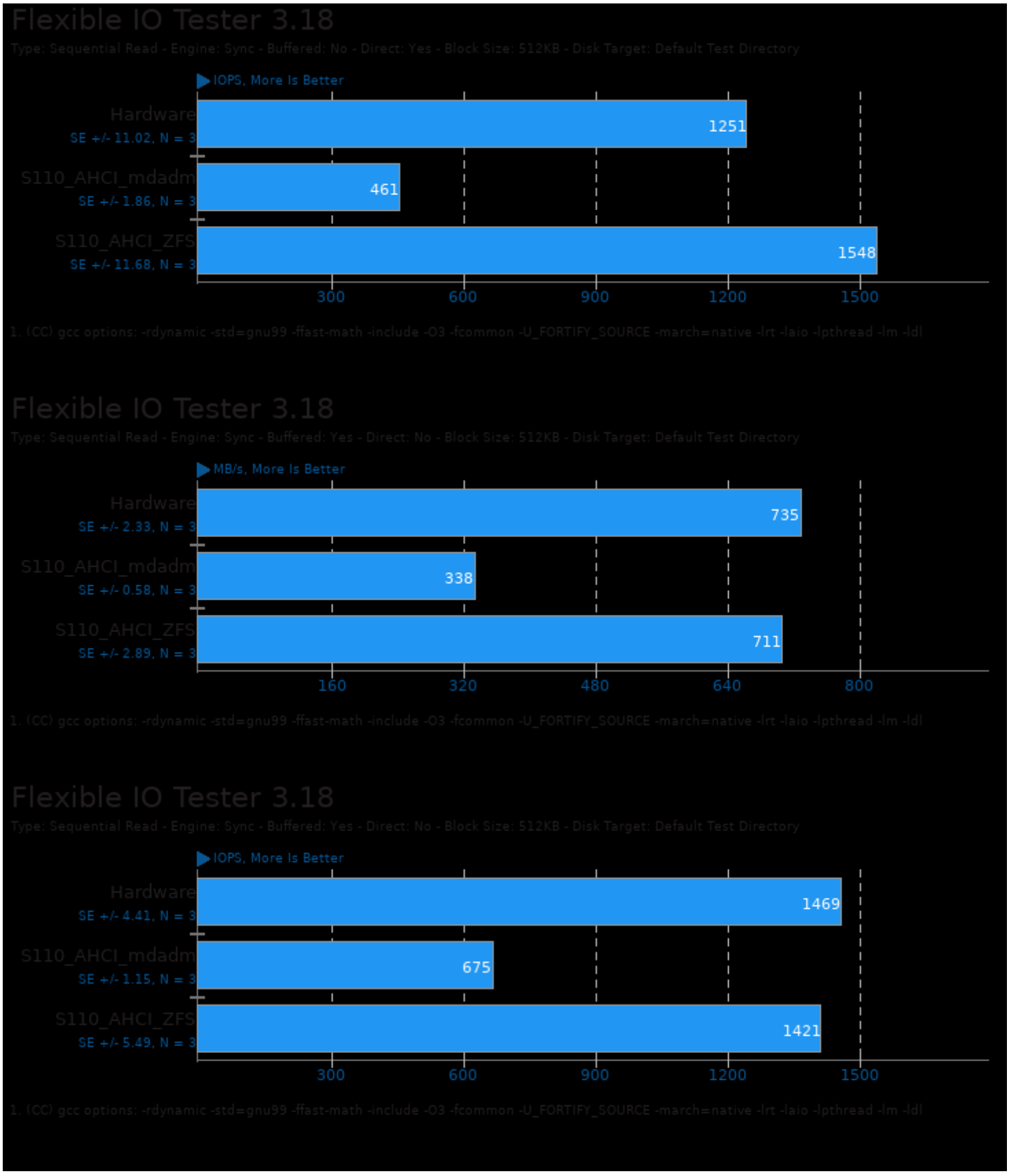
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
29
S110_AHCI_ZFS
81
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.17, N = 3
40.3
S110_AHCI_mdadm
SE +/- 2.08, N = 3
142.0
S110_AHCI_ZFS
SE +/- 3.21, N = 3
295.0
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 33.33, N = 3
10333
S110_AHCI_mdadm
SE +/- 504.42, N = 3
36333
S110_AHCI_ZFS
SE +/- 757.19, N = 3
75500
16K
32K
48K
64K
80K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

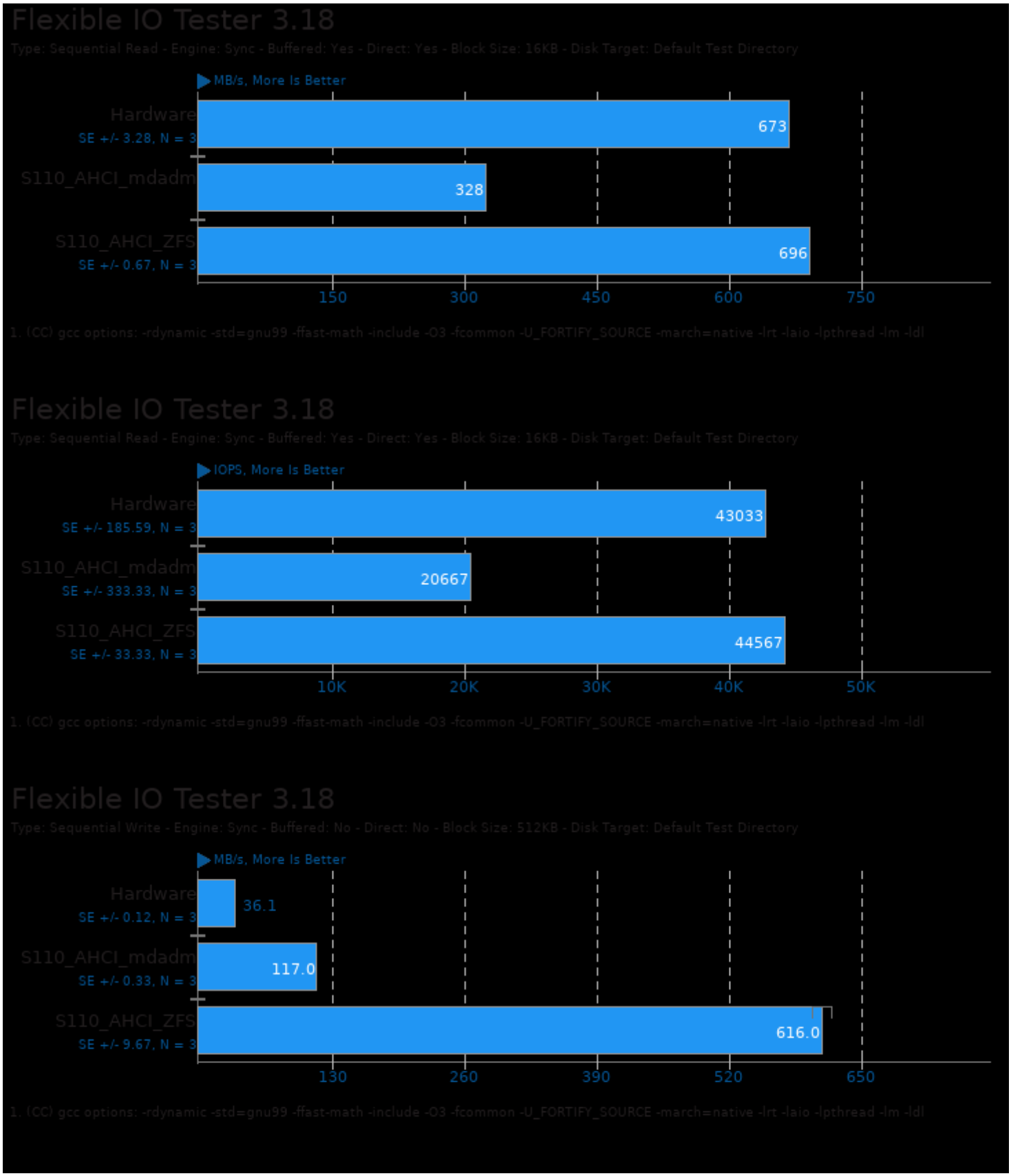
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.17, N = 3
43.5
S110_AHCI_mdadm
174.0
S110_AHCI_ZFS
SE +/- 6.57, N = 3
477.0
100
200
300
400
500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
2
S110_AHCI_mdadm
19
S110_AHCI_ZFS
SE +/- 0.88, N = 3
56
13
26
39
52
65
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 5.51, N = 3
626
S110_AHCI_mdadm
SE +/- 0.88, N = 3
231
S110_AHCI_ZFS
SE +/- 5.90, N = 3
774
170
340
510
680
850
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

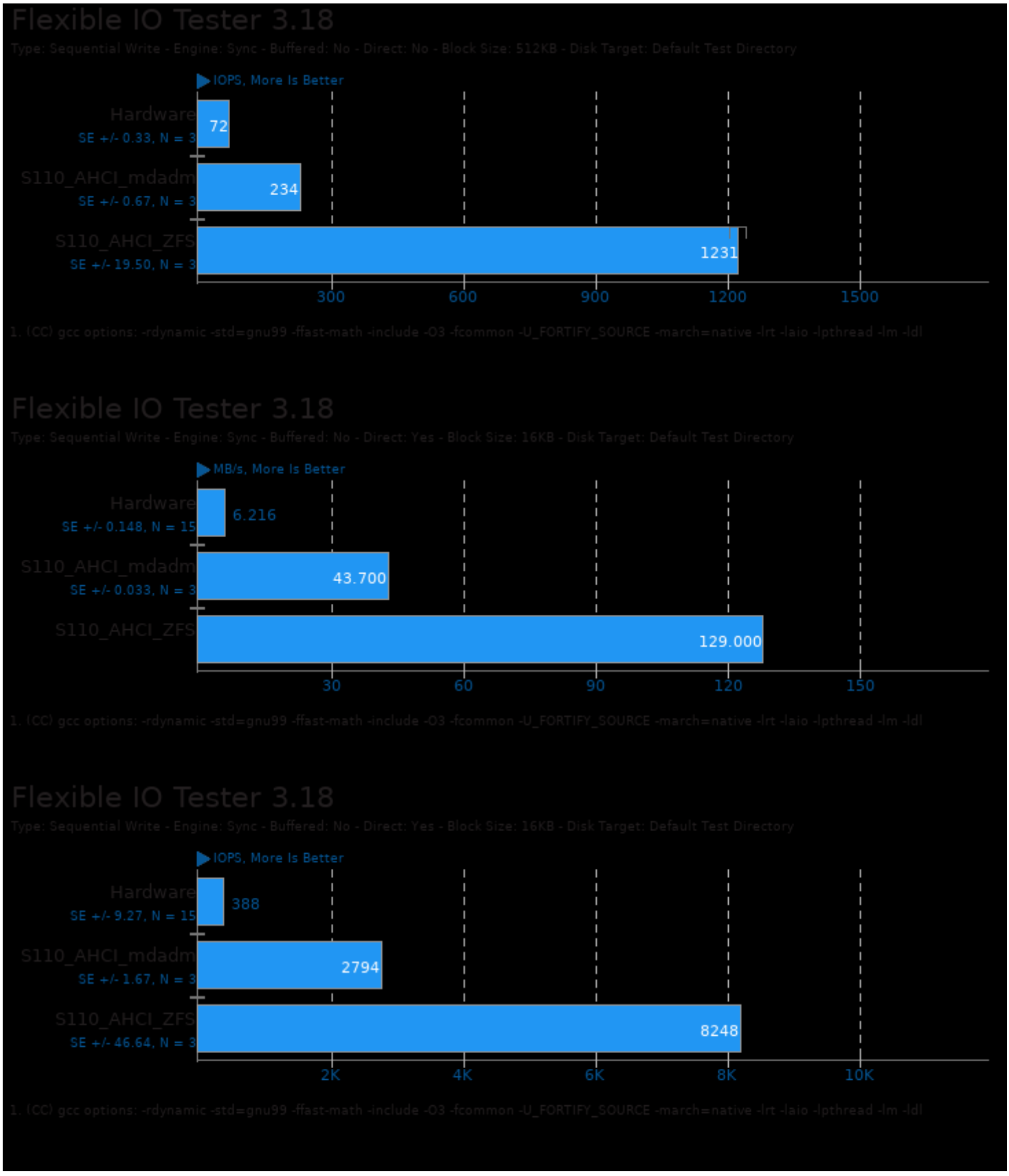
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 11.02, N = 3
1251
S110_AHCI_mdadm
SE +/- 1.86, N = 3
461
S110_AHCI_ZFS
SE +/- 11.68, N = 3
1548
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 2.33, N = 3
735
S110_AHCI_mdadm
SE +/- 0.58, N = 3
338
S110_AHCI_ZFS
SE +/- 2.89, N = 3
711
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 4.41, N = 3
1469
S110_AHCI_mdadm
SE +/- 1.15, N = 3
675
S110_AHCI_ZFS
SE +/- 5.49, N = 3
1421
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

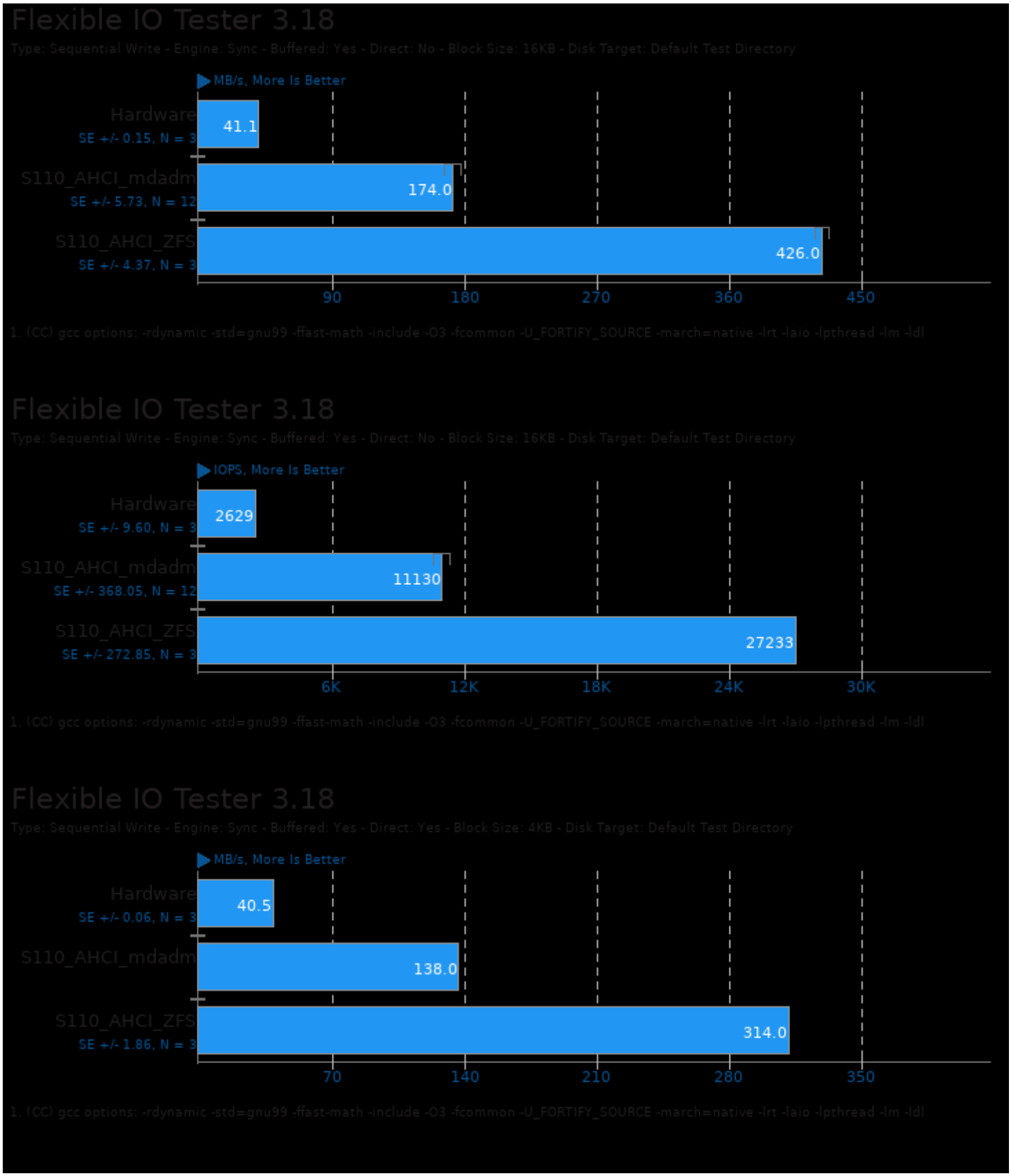
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 3.28, N = 3
673
S110_AHCI_mdadm
328
S110_AHCI_ZFS
SE +/- 0.67, N = 3
696
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 185.59, N = 3
43033
S110_AHCI_mdadm
SE +/- 333.33, N = 3
20667
S110_AHCI_ZFS
SE +/- 33.33, N = 3
44567
10K
20K
30K
40K
50K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.12, N = 3
36.1
S110_AHCI_mdadm
SE +/- 0.33, N = 3
117.0
S110_AHCI_ZFS
SE +/- 9.67, N = 3
616.0
130
260
390
520
650
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

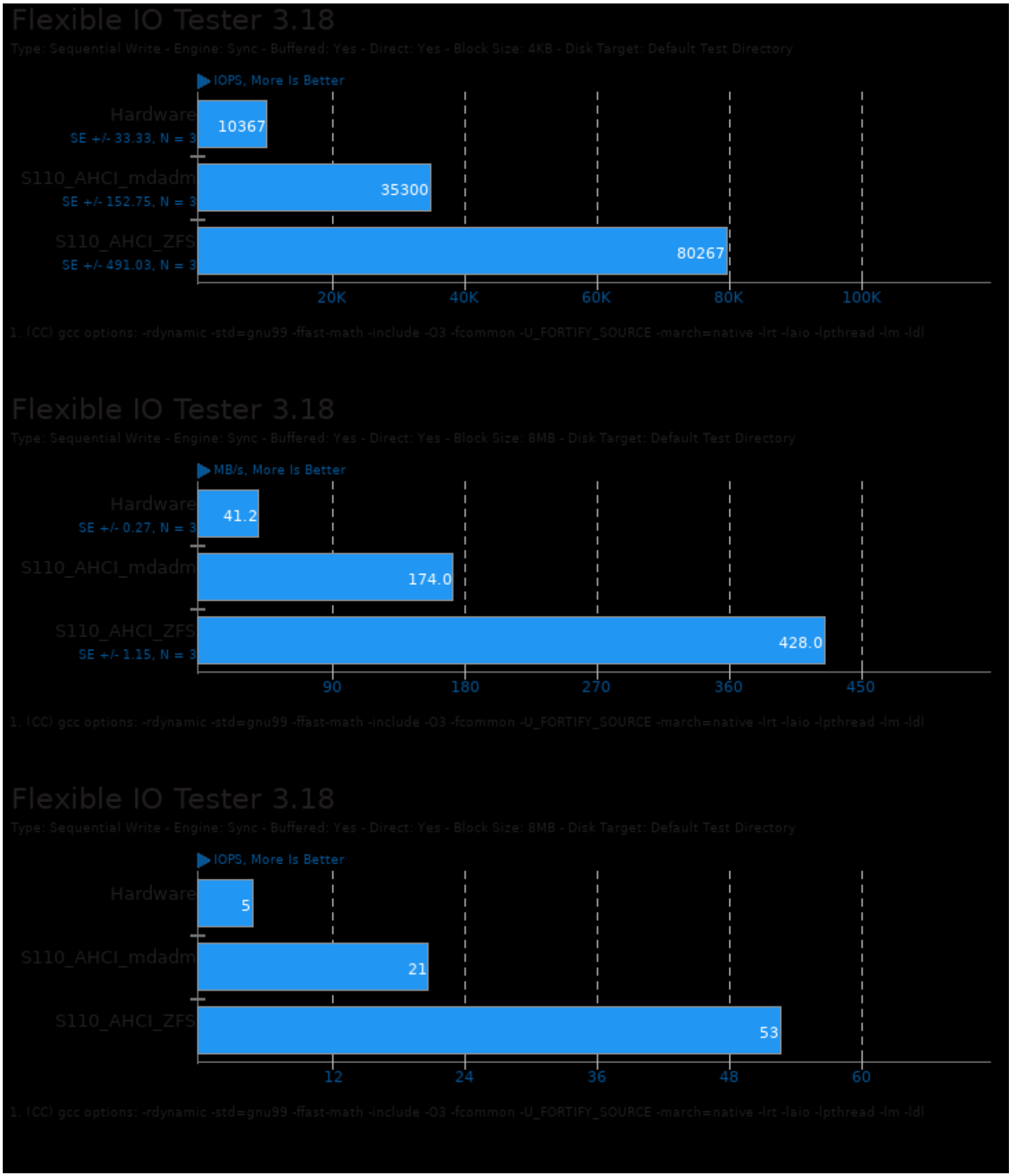
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.33, N = 3
72
S110_AHCI_mdadm
SE +/- 0.67, N = 3
234
S110_AHCI_ZFS
SE +/- 19.50, N = 3
1231
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.148, N = 15
6.216
S110_AHCI_mdadm
SE +/- 0.033, N = 3
43.700
S110_AHCI_ZFS
129.000
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 9.27, N = 15
388
S110_AHCI_mdadm
SE +/- 1.67, N = 3
2794
S110_AHCI_ZFS
SE +/- 46.64, N = 3
8248
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

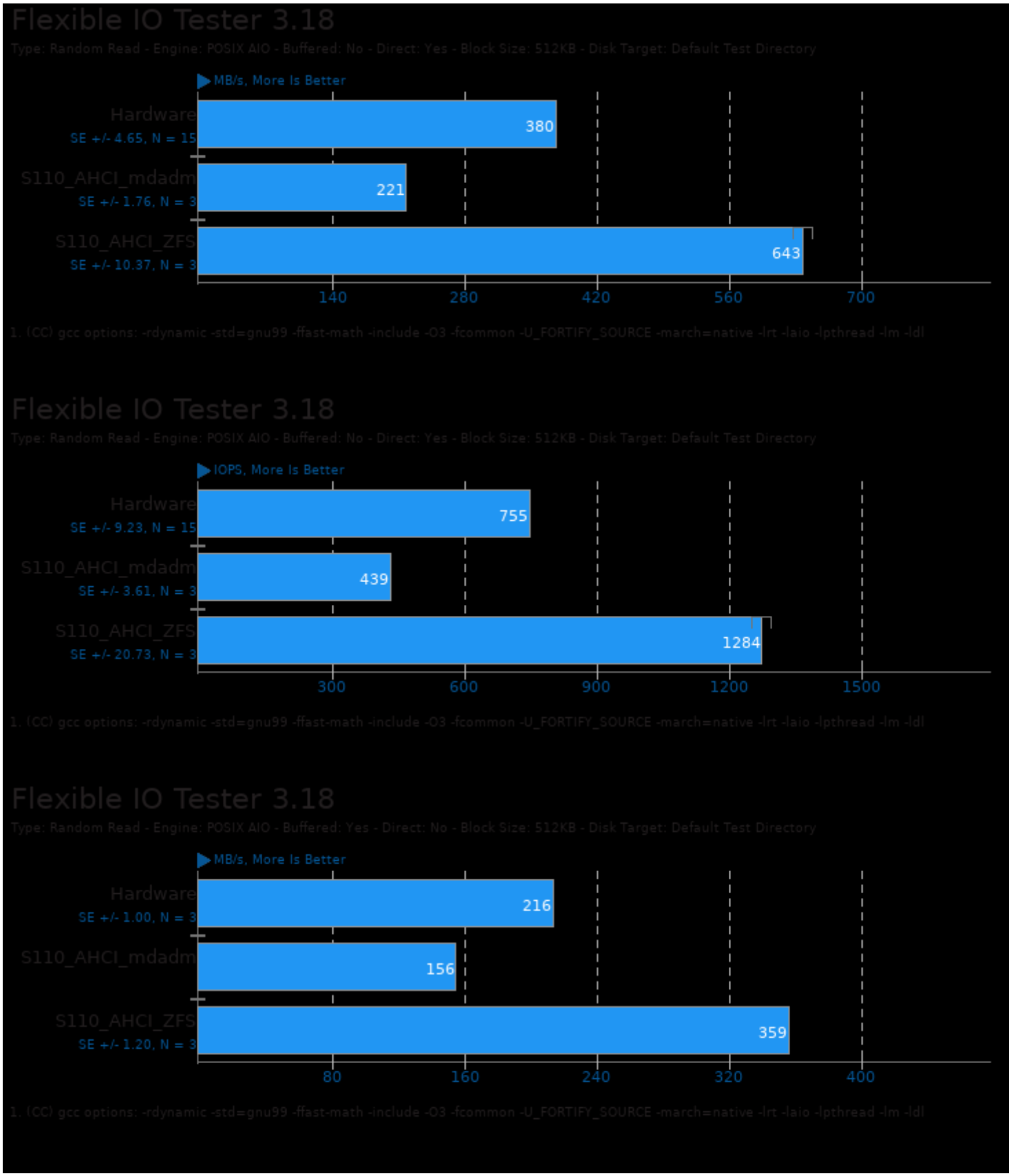
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.15, N = 3
41.1
S110_AHCI_mdadm
SE +/- 5.73, N = 12
174.0
S110_AHCI_ZFS
SE +/- 4.37, N = 3
426.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 9.60, N = 3
2629
S110_AHCI_mdadm
SE +/- 368.05, N = 12
11130
S110_AHCI_ZFS
SE +/- 272.85, N = 3
27233
6K
12K
18K
24K
30K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.06, N = 3
40.5
S110_AHCI_mdadm
138.0
S110_AHCI_ZFS
SE +/- 1.86, N = 3
314.0
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

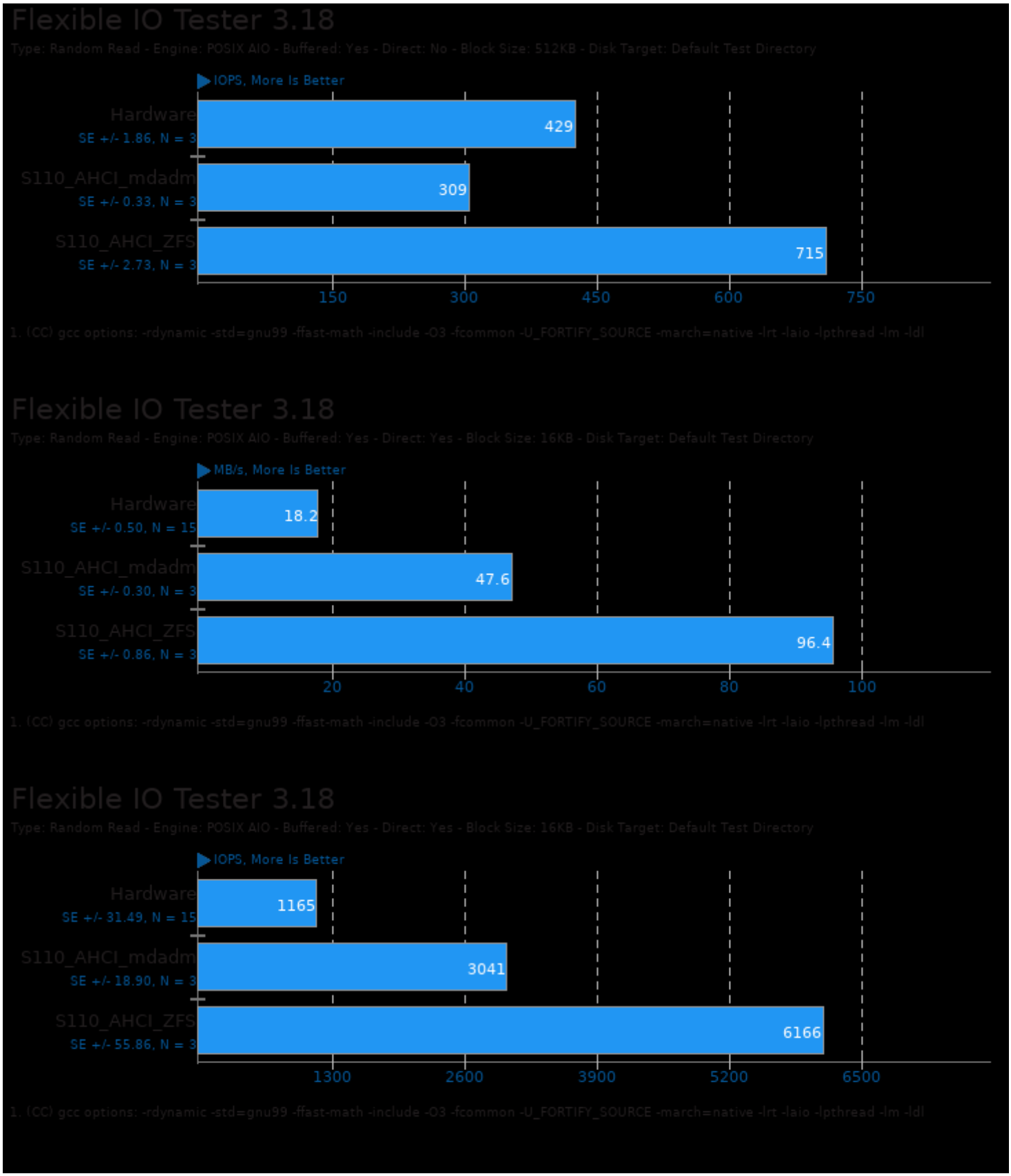
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 33.33, N = 3
10367
S110_AHCI_mdadm
SE +/- 152.75, N = 3
35300
S110_AHCI_ZFS
SE +/- 491.03, N = 3
80267
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.27, N = 3
41.2
S110_AHCI_mdadm
174.0
S110_AHCI_ZFS
SE +/- 1.15, N = 3
428.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
21
S110_AHCI_ZFS
53
12
24
36
48
60
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

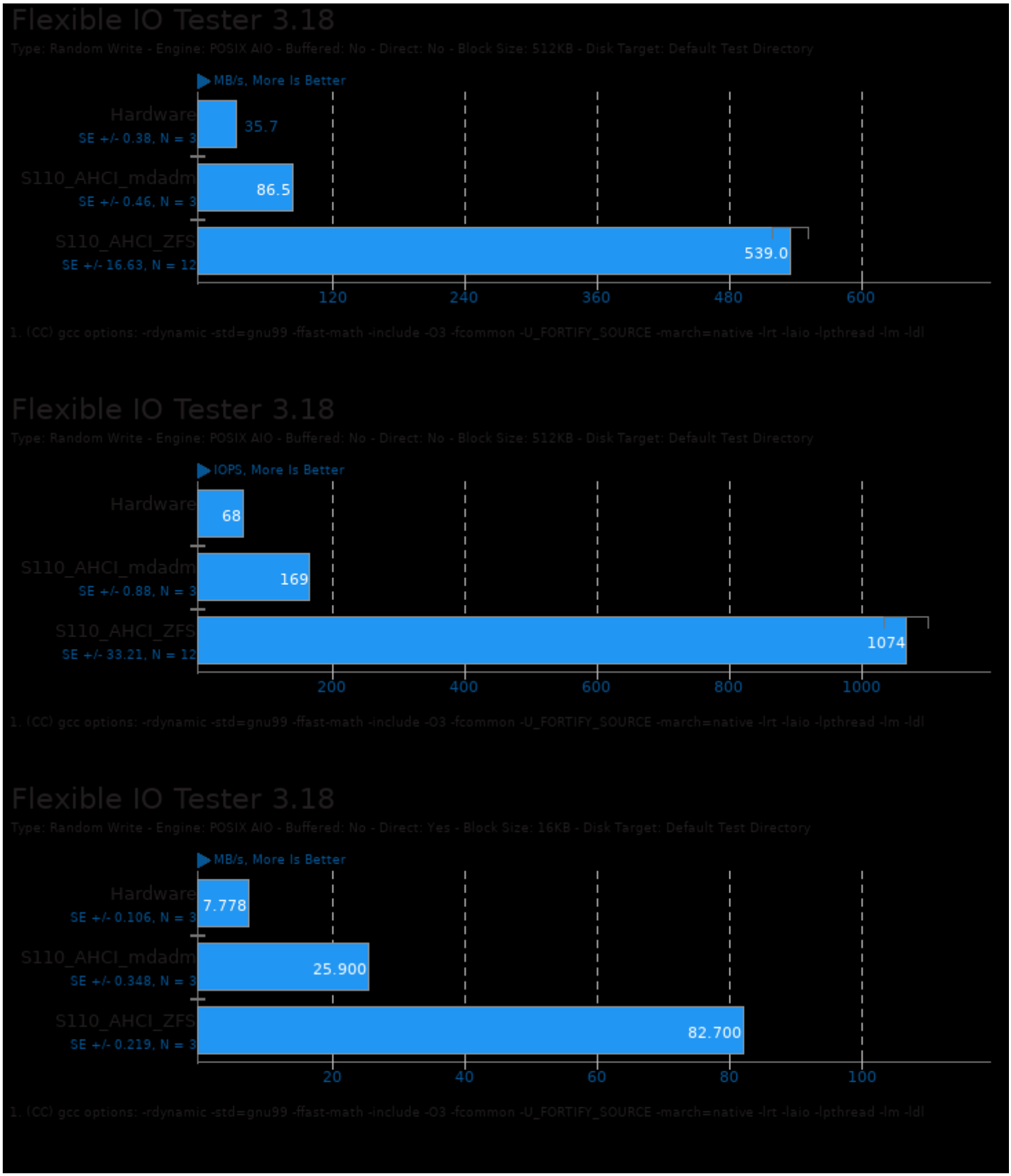
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 4.65, N = 15
380
S110_AHCI_mdadm
SE +/- 1.76, N = 3
221
S110_AHCI_ZFS
SE +/- 10.37, N = 3
643
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 9.23, N = 15
755
S110_AHCI_mdadm
SE +/- 3.61, N = 3
439
S110_AHCI_ZFS
SE +/- 20.73, N = 3
1284
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.00, N = 3
216
S110_AHCI_mdadm
156
S110_AHCI_ZFS
SE +/- 1.20, N = 3
359
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

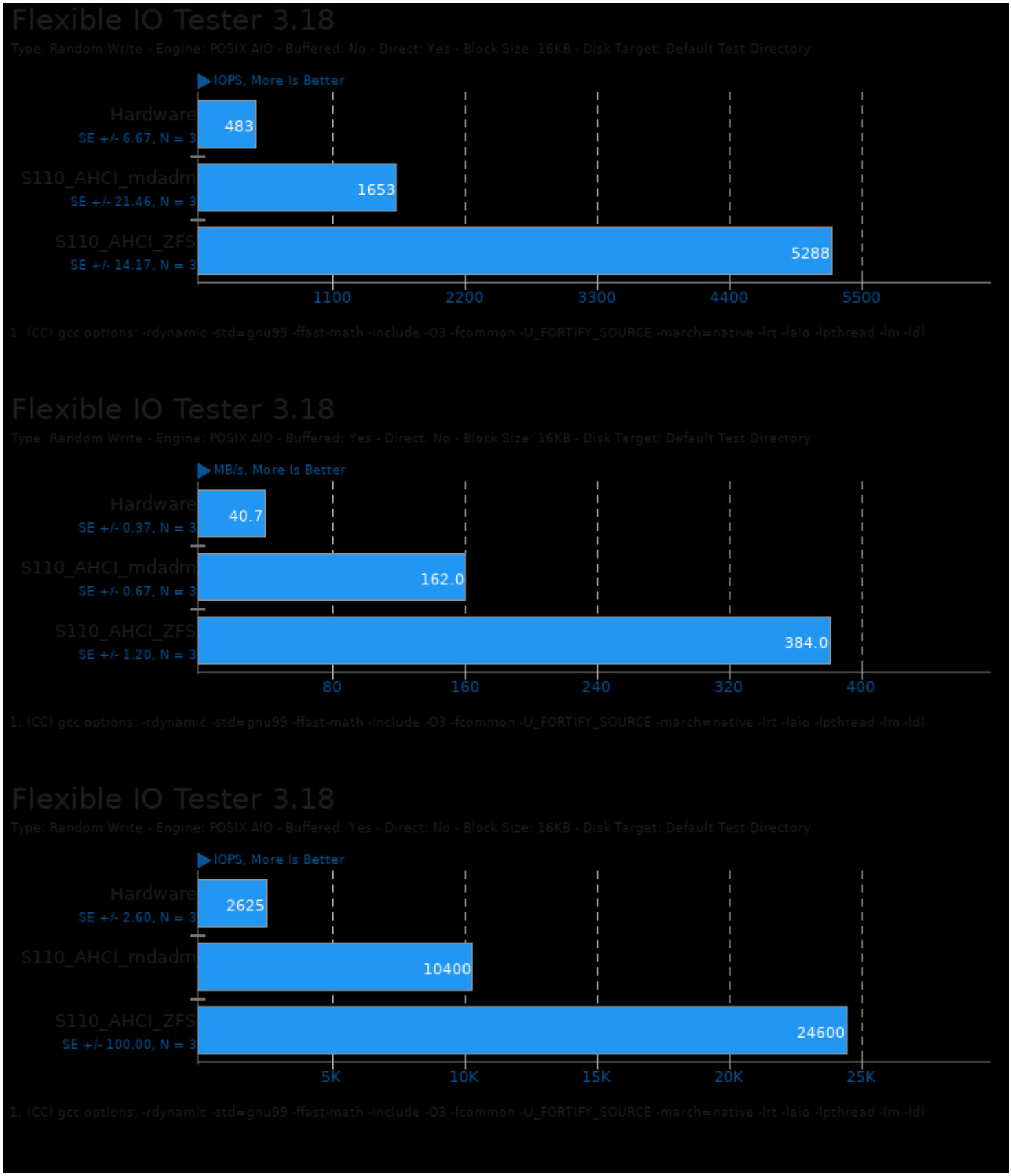
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1.86, N = 3
429
S110_AHCI_mdadm
SE +/- 0.33, N = 3
309
S110_AHCI_ZFS
SE +/- 2.73, N = 3
715
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.50, N = 15
18.2
S110_AHCI_mdadm
SE +/- 0.30, N = 3
47.6
S110_AHCI_ZFS
SE +/- 0.86, N = 3
96.4
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 31.49, N = 15
1165
S110_AHCI_mdadm
SE +/- 18.90, N = 3
3041
S110_AHCI_ZFS
SE +/- 55.86, N = 3
6166
1300
2600
3900
5200
6500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

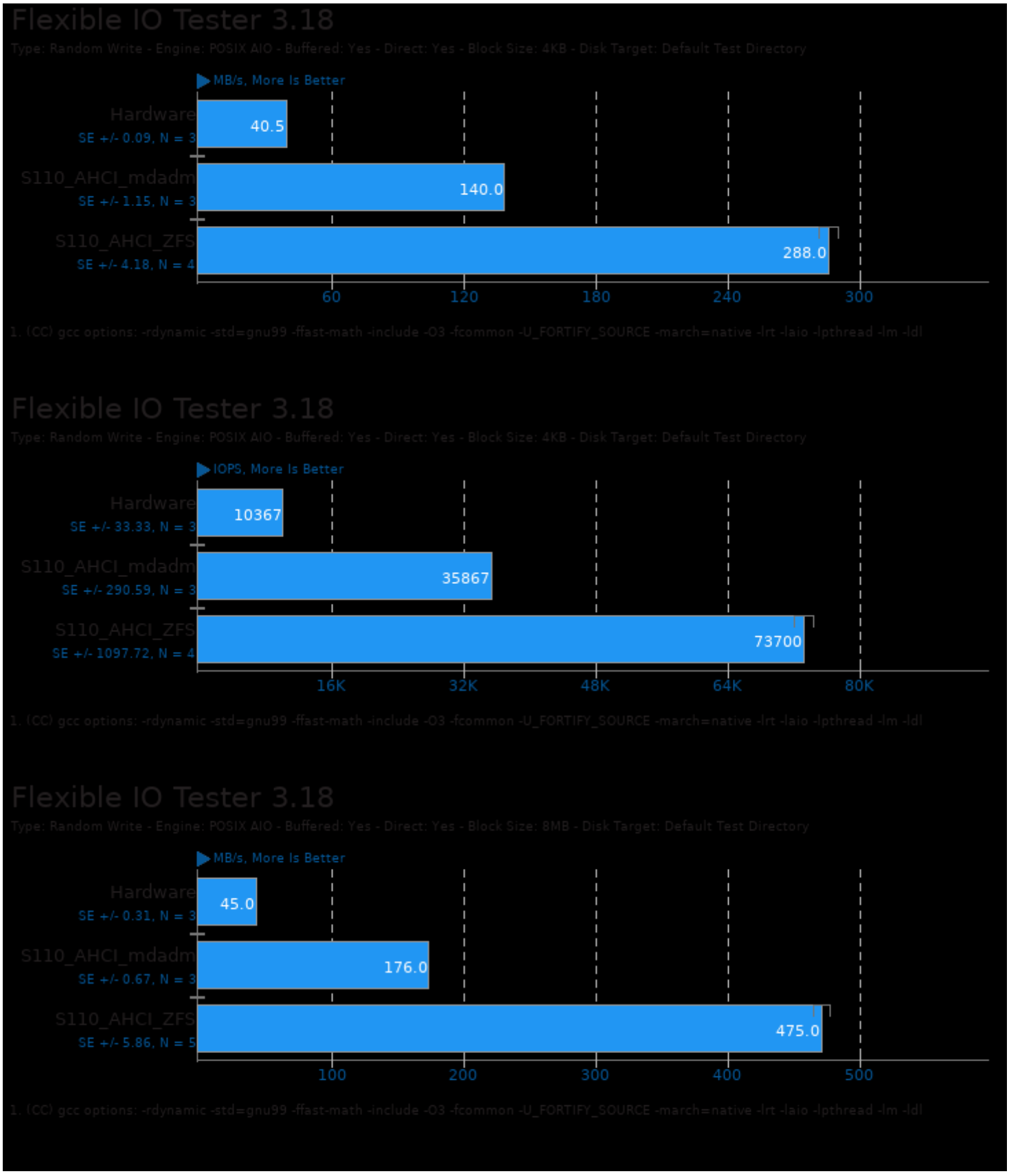
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.38, N = 3
35.7
S110_AHCI_mdadm
SE +/- 0.46, N = 3
86.5
S110_AHCI_ZFS
SE +/- 16.63, N = 12
539.0
120
240
360
480
600
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
68
S110_AHCI_mdadm
SE +/- 0.88, N = 3
169
S110_AHCI_ZFS
SE +/- 33.21, N = 12
1074
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.106, N = 3
7.778
S110_AHCI_mdadm
SE +/- 0.348, N = 3
25.900
S110_AHCI_ZFS
SE +/- 0.219, N = 3
82.700
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

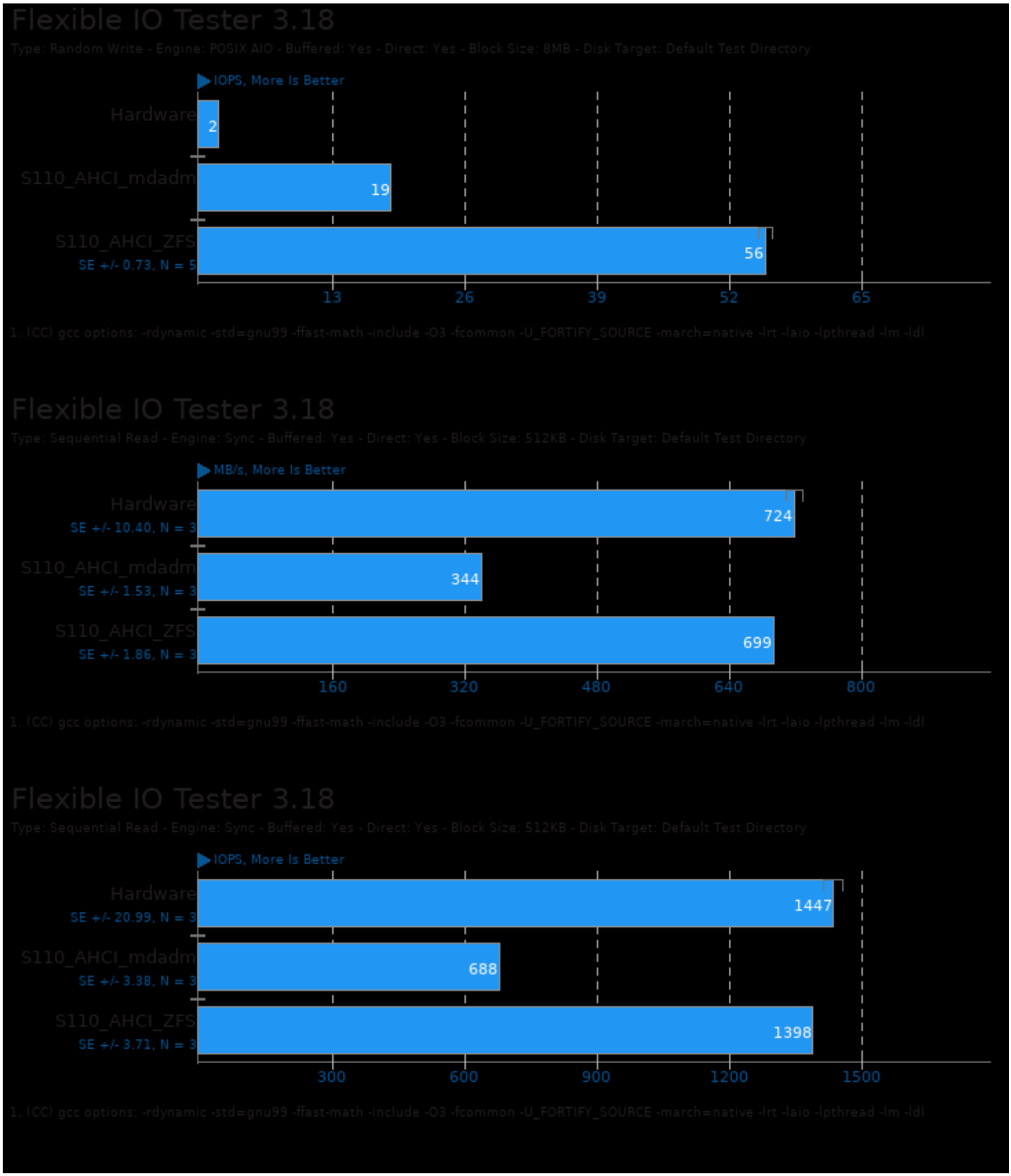
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 6.67, N = 3
483
S110_AHCI_mdadm
SE +/- 21.46, N = 3
1653
S110_AHCI_ZFS
SE +/- 14.17, N = 3
5288
1100
2200
3300
4400
5500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.37, N = 3
40.7
S110_AHCI_mdadm
SE +/- 0.67, N = 3
162.0
S110_AHCI_ZFS
SE +/- 1.20, N = 3
384.0
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 2.60, N = 3
2625
S110_AHCI_mdadm
10400
S110_AHCI_ZFS
SE +/- 100.00, N = 3
24600
5K
10K
15K
20K
25K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

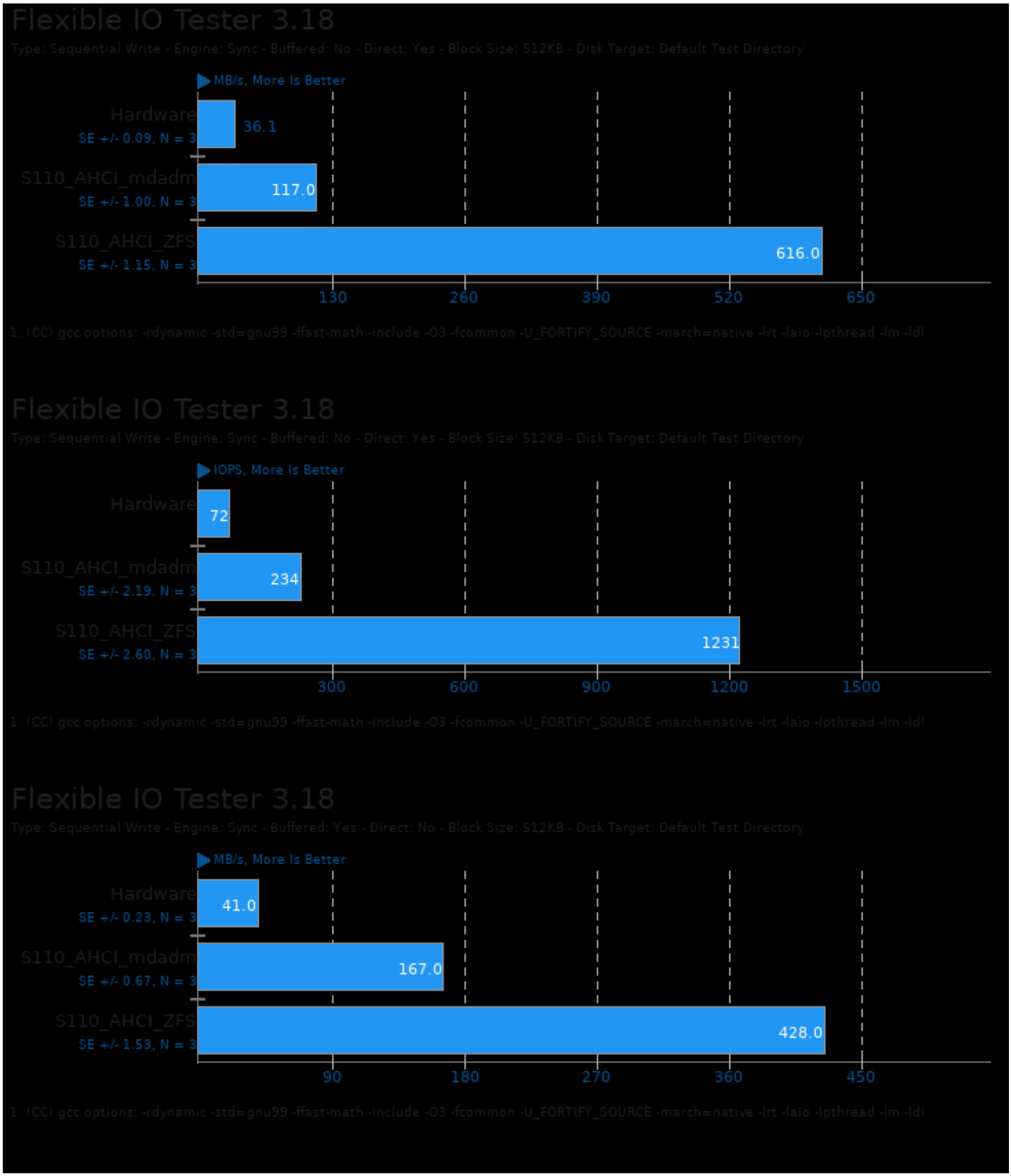
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.09, N = 3
40.5
S110_AHCI_mdadm
SE +/- 1.15, N = 3
140.0
S110_AHCI_ZFS
SE +/- 4.18, N = 4
288.0
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 33.33, N = 3
10367
S110_AHCI_mdadm
SE +/- 290.59, N = 3
35867
S110_AHCI_ZFS
SE +/- 1097.72, N = 4
73700
16K
32K
48K
64K
80K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.31, N = 3
45.0
S110_AHCI_mdadm
SE +/- 0.67, N = 3
176.0
S110_AHCI_ZFS
SE +/- 5.86, N = 5
475.0
100
200
300
400
500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

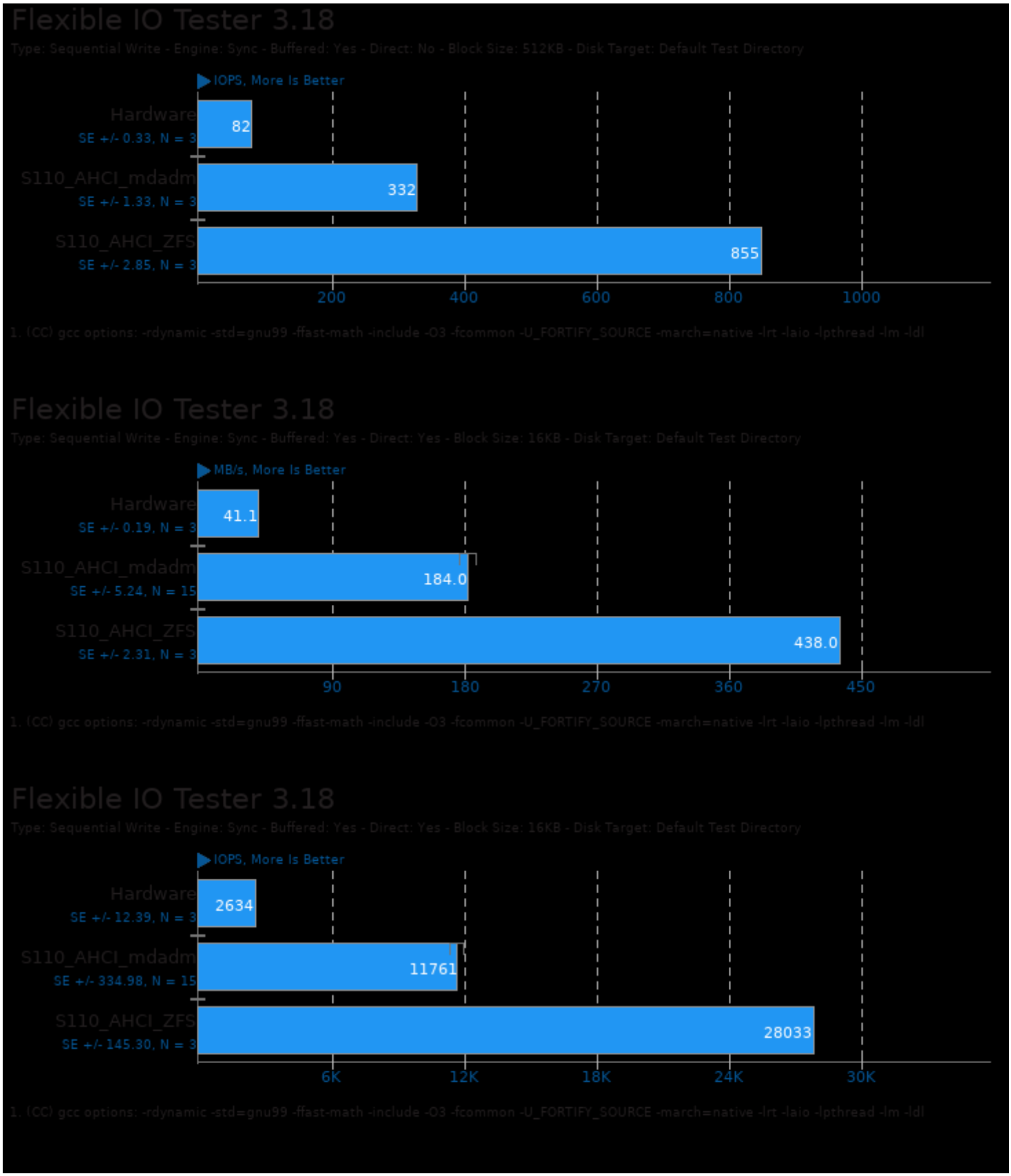
probaraid5

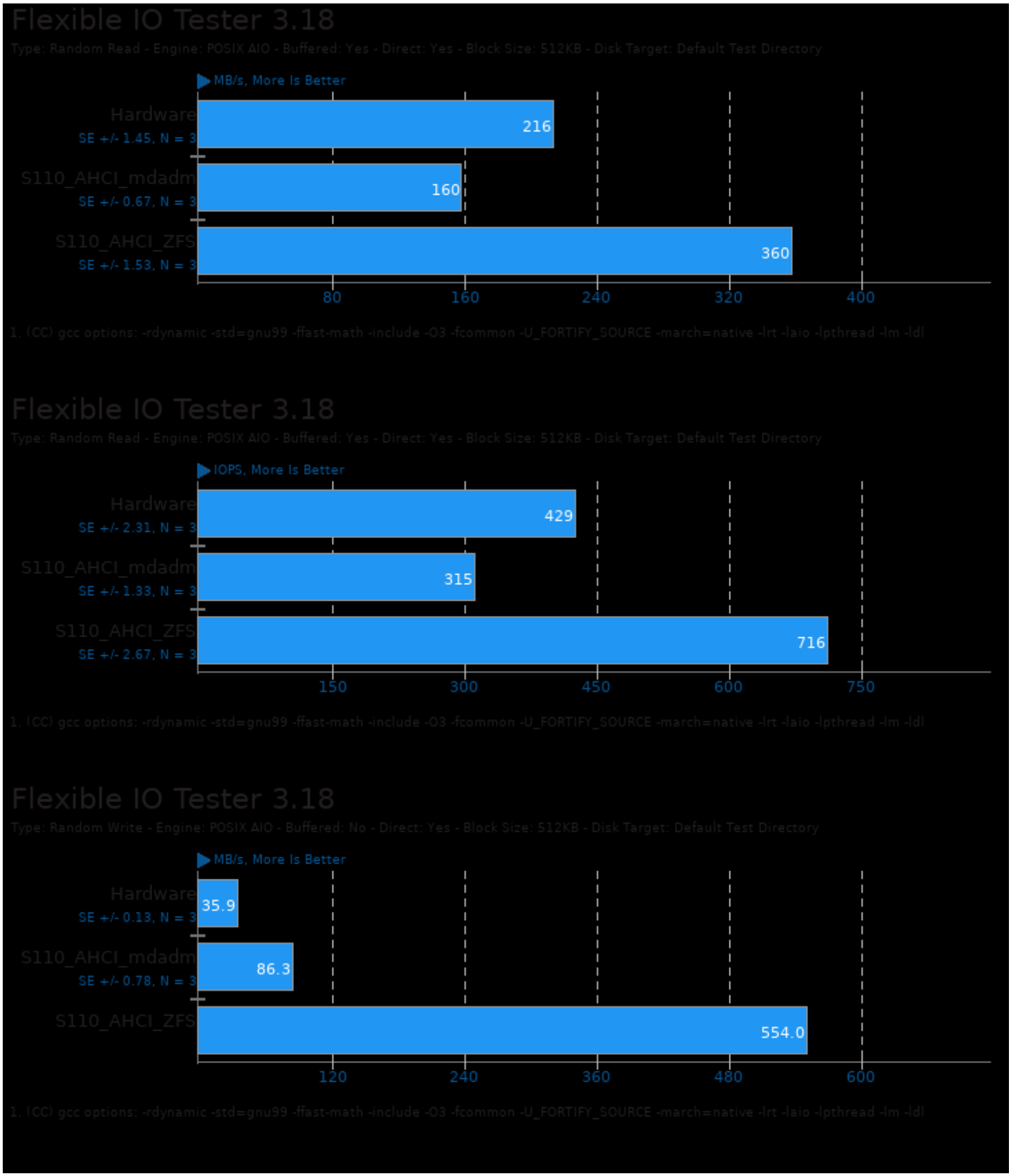

Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
2
S110_AHCI_mdadm
19
S110_AHCI_ZFS
SE +/- 0.73, N = 5
56
13
26
39
52
65
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 10.40, N = 3
724
S110_AHCI_mdadm
SE +/- 1.53, N = 3
344
S110_AHCI_ZFS
SE +/- 1.86, N = 3
699
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 20.99, N = 3
1447
S110_AHCI_mdadm
SE +/- 3.38, N = 3
688
S110_AHCI_ZFS
SE +/- 3.71, N = 3
1398
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

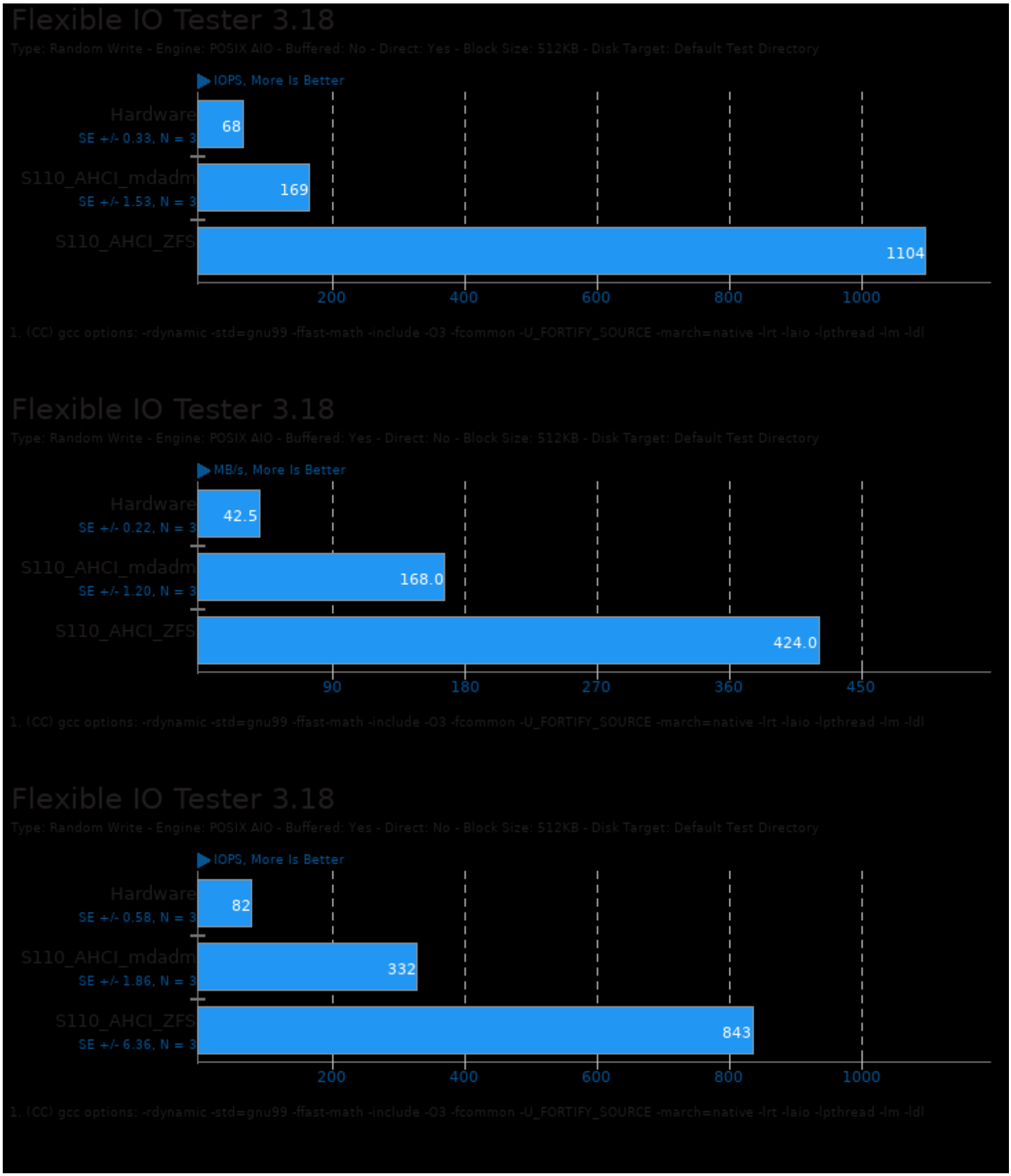
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.09, N = 3
36.1
S110_AHCI_mdadm
SE +/- 1.00, N = 3
117.0
S110_AHCI_ZFS
SE +/- 1.15, N = 3
616.0
130
260
390
520
650
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
72
S110_AHCI_mdadm
SE +/- 2.19, N = 3
234
S110_AHCI_ZFS
SE +/- 2.60, N = 3
1231
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.23, N = 3
41.0
S110_AHCI_mdadm
SE +/- 0.67, N = 3
167.0
S110_AHCI_ZFS
SE +/- 1.53, N = 3
428.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

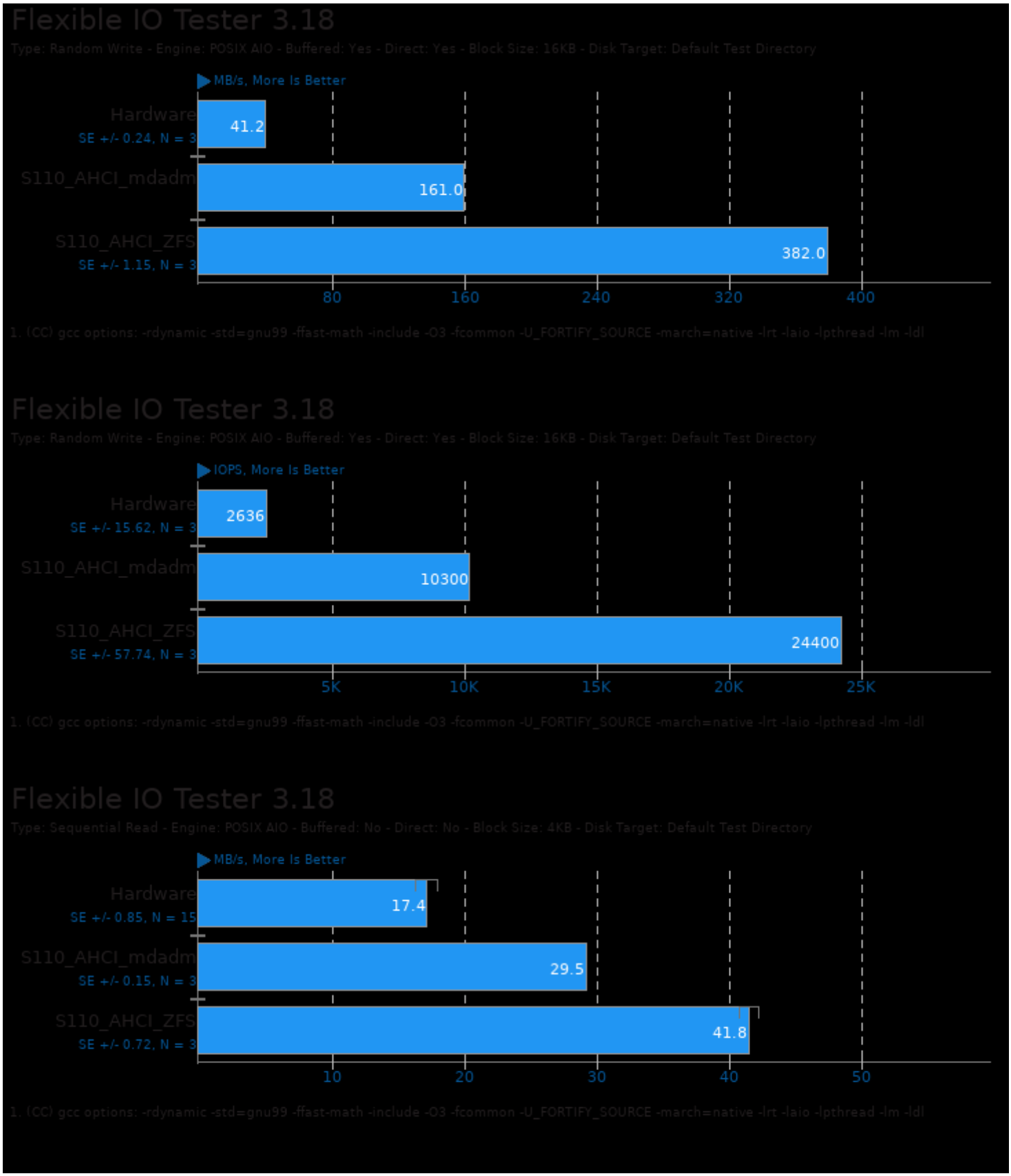
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.33, N = 3
82
S110_AHCI_mdadm
SE +/- 1.33, N = 3
332
S110_AHCI_ZFS
SE +/- 2.85, N = 3
855
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.19, N = 3
41.1
S110_AHCI_mdadm
SE +/- 5.24, N = 15
184.0
S110_AHCI_ZFS
SE +/- 2.31, N = 3
438.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 12.39, N = 3
2634
S110_AHCI_mdadm
SE +/- 334.98, N = 15
11761
S110_AHCI_ZFS
SE +/- 145.30, N = 3
28033
6K
12K
18K
24K
30K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

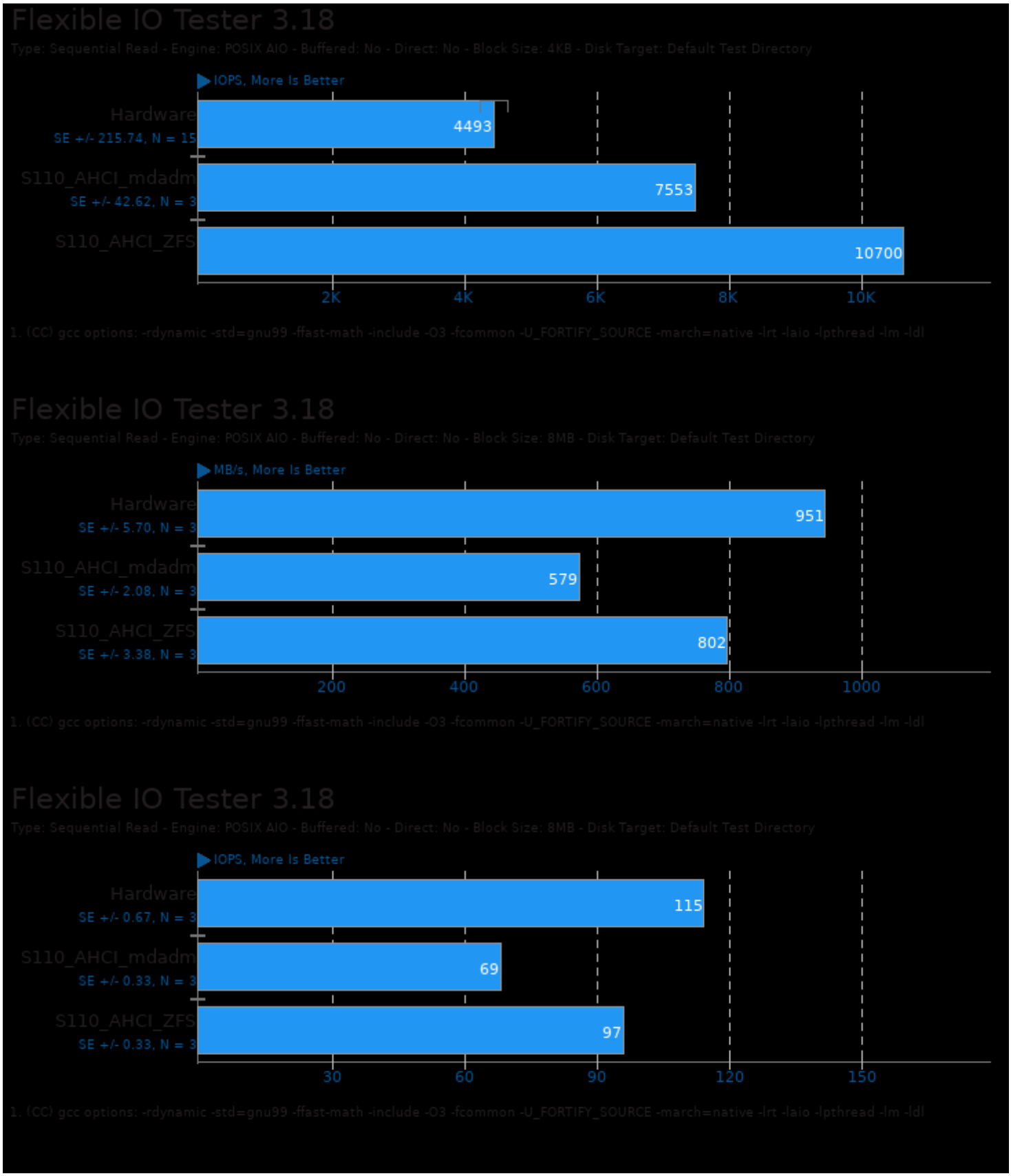

Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.45, N = 3
216
S110_AHCI_mdadm
SE +/- 0.67, N = 3
160
S110_AHCI_ZFS
SE +/- 1.53, N = 3
360
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 2.31, N = 3
429
S110_AHCI_mdadm
SE +/- 1.33, N = 3
315
S110_AHCI_ZFS
SE +/- 2.67, N = 3
716
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.13, N = 3
35.9
S110_AHCI_mdadm
SE +/- 0.78, N = 3
86.3
S110_AHCI_ZFS
554.0
120
240
360
480
600
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.33, N = 3
68
S110_AHCI_mdadm
SE +/- 1.53, N = 3
169
S110_AHCI_ZFS
1104
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.22, N = 3
42.5
S110_AHCI_mdadm
SE +/- 1.20, N = 3
168.0
S110_AHCI_ZFS
424.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.58, N = 3
82
S110_AHCI_mdadm
SE +/- 1.86, N = 3
332
S110_AHCI_ZFS
SE +/- 6.36, N = 3
843
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

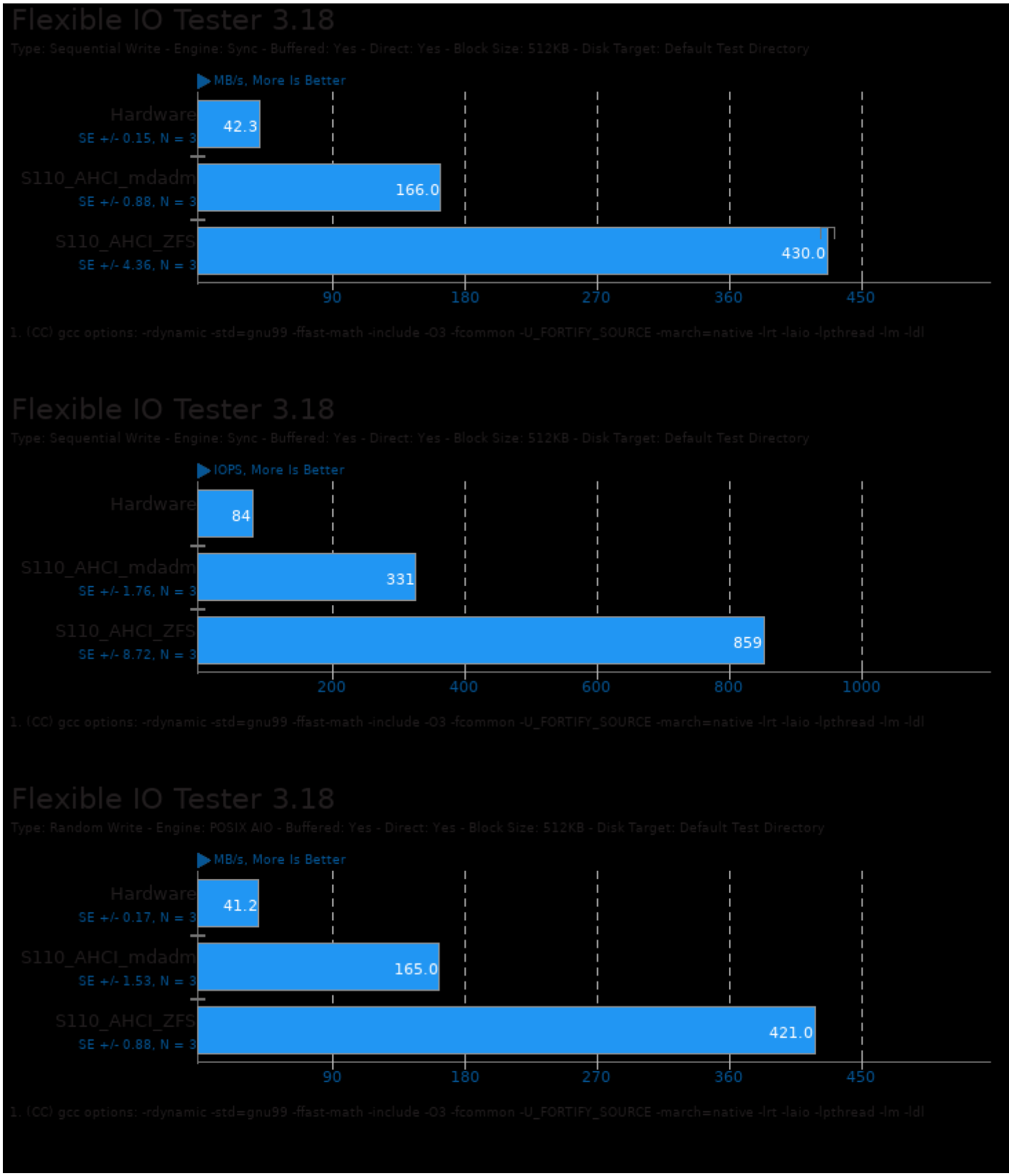
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.24, N = 3
41.2
S110_AHCI_mdadm
161.0
S110_AHCI_ZFS
SE +/- 1.15, N = 3
382.0
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 15.62, N = 3
2636
S110_AHCI_mdadm
10300
S110_AHCI_ZFS
SE +/- 57.74, N = 3
24400
5K
10K
15K
20K
25K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.85, N = 15
17.4
S110_AHCI_mdadm
SE +/- 0.15, N = 3
29.5
S110_AHCI_ZFS
SE +/- 0.72, N = 3
41.8
10
20
30
40
50
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

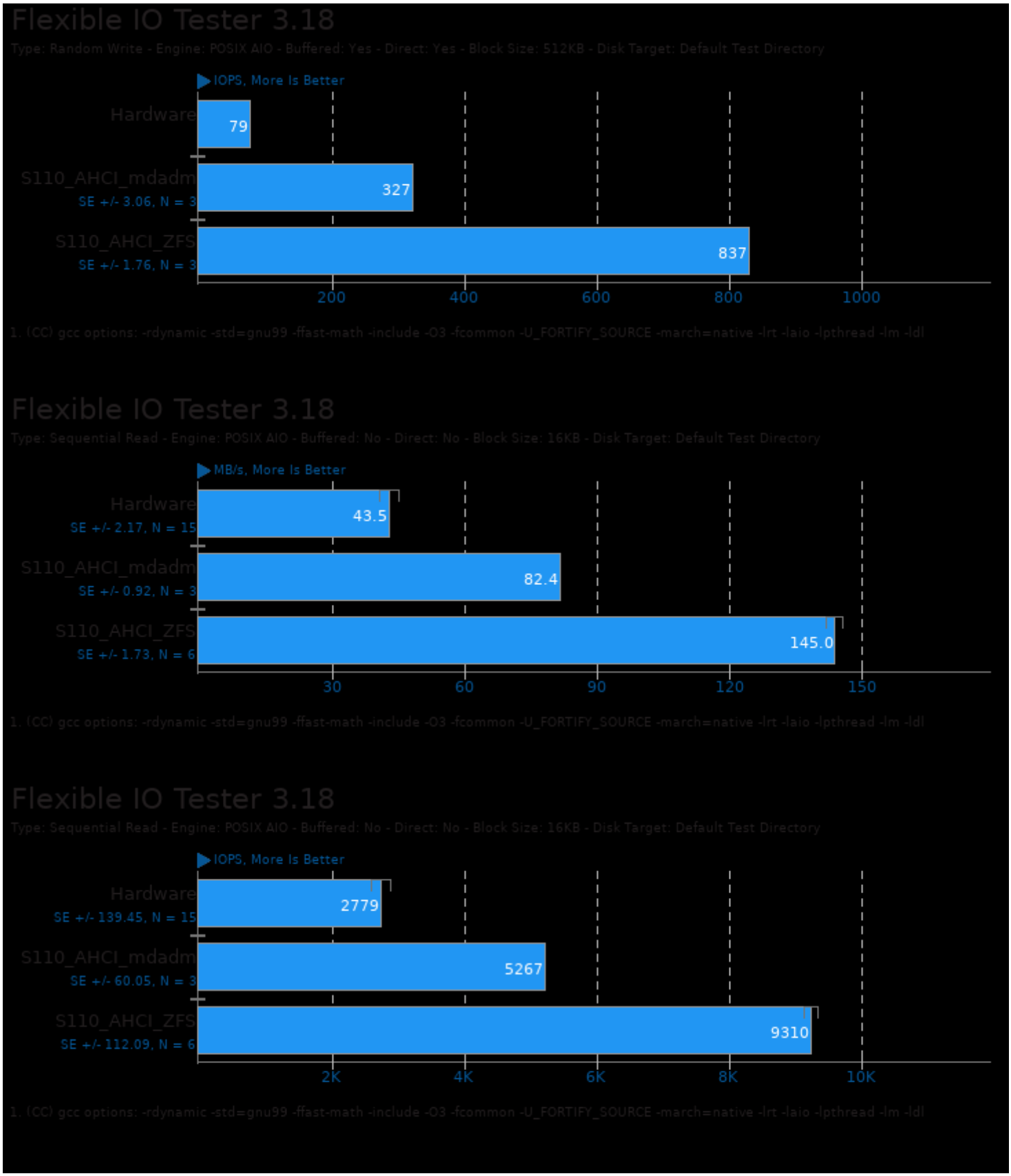
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 215.74, N = 15
4493
S110_AHCI_mdadm
SE +/- 42.62, N = 3
7553
S110_AHCI_ZFS
10700
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 5.70, N = 3
951
S110_AHCI_mdadm
SE +/- 2.08, N = 3
579
S110_AHCI_ZFS
SE +/- 3.38, N = 3
802
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.67, N = 3
115
S110_AHCI_mdadm
SE +/- 0.33, N = 3
69
S110_AHCI_ZFS
SE +/- 0.33, N = 3
97
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

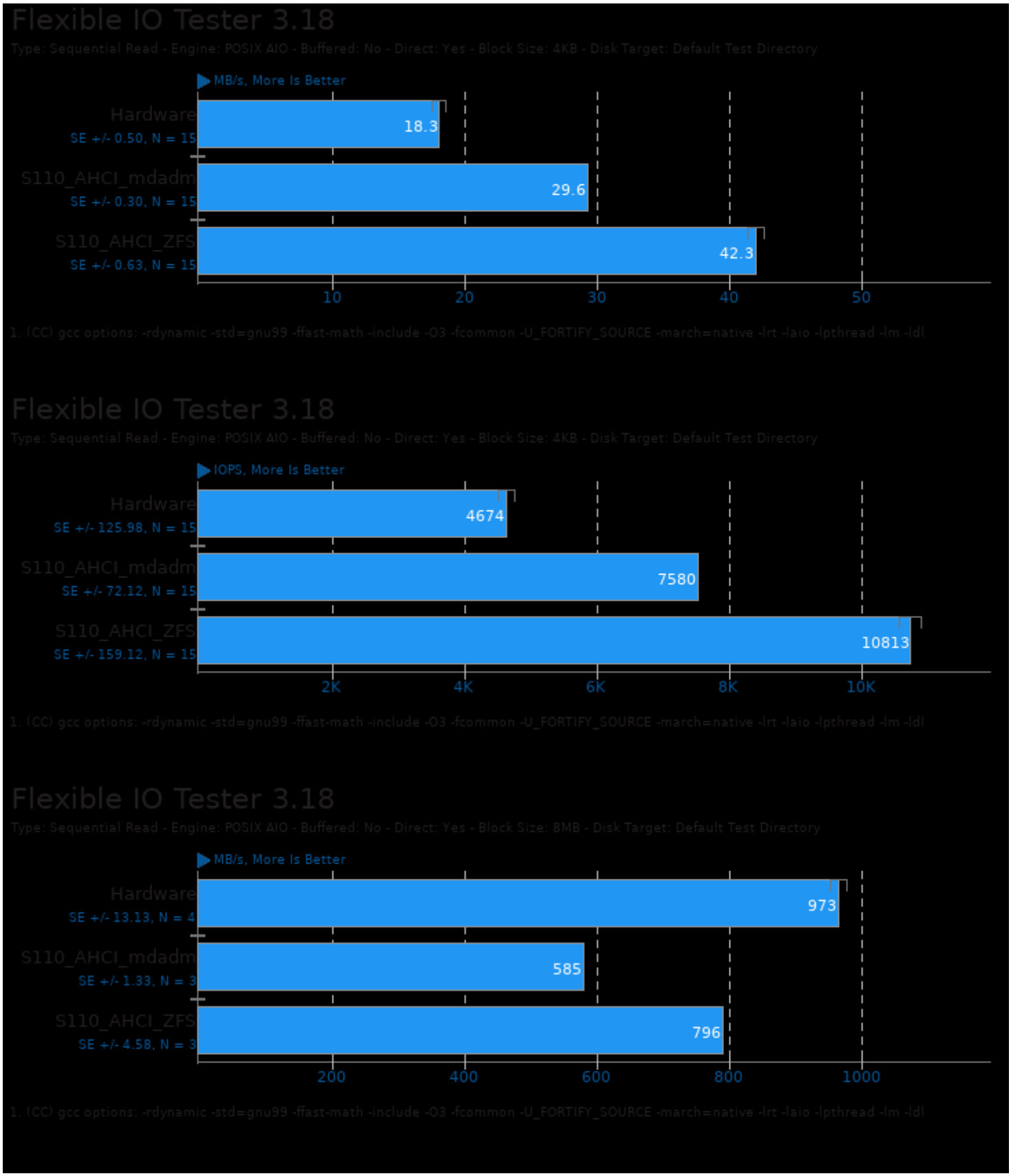
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.15, N = 3
42.3
S110_AHCI_mdadm
SE +/- 0.88, N = 3
166.0
S110_AHCI_ZFS
SE +/- 4.36, N = 3
430.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
84
S110_AHCI_mdadm
SE +/- 1.76, N = 3
331
S110_AHCI_ZFS
SE +/- 8.72, N = 3
859
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.17, N = 3
41.2
S110_AHCI_mdadm
SE +/- 1.53, N = 3
165.0
S110_AHCI_ZFS
SE +/- 0.88, N = 3
421.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

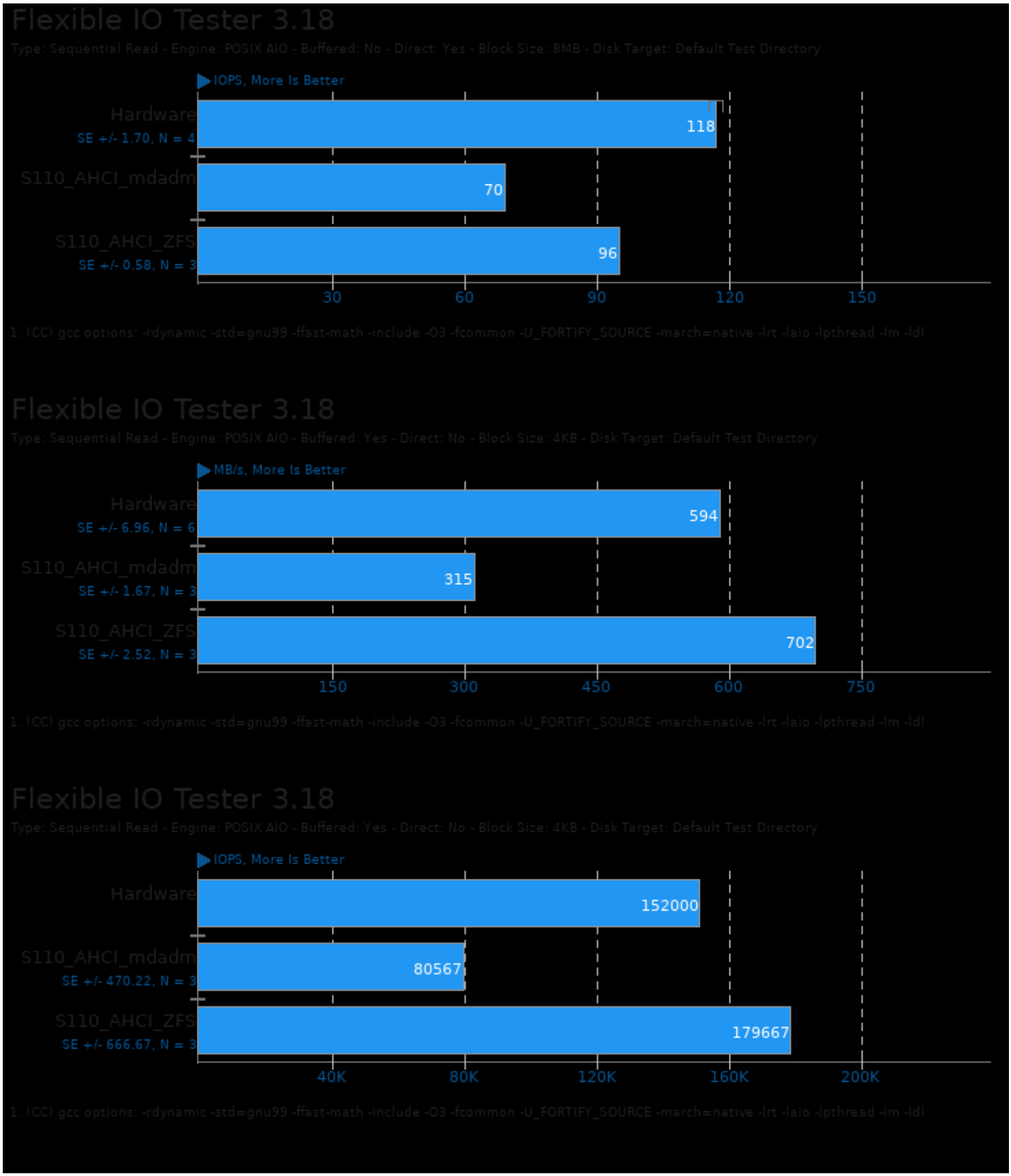
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
79
S110_AHCI_mdadm
SE +/- 3.06, N = 3
327
S110_AHCI_ZFS
SE +/- 1.76, N = 3
837
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 2.17, N = 15
43.5
S110_AHCI_mdadm
SE +/- 0.92, N = 3
82.4
S110_AHCI_ZFS
SE +/- 1.73, N = 6
145.0
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 139.45, N = 15
2779
S110_AHCI_mdadm
SE +/- 60.05, N = 3
5267
S110_AHCI_ZFS
SE +/- 112.09, N = 6
9310
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

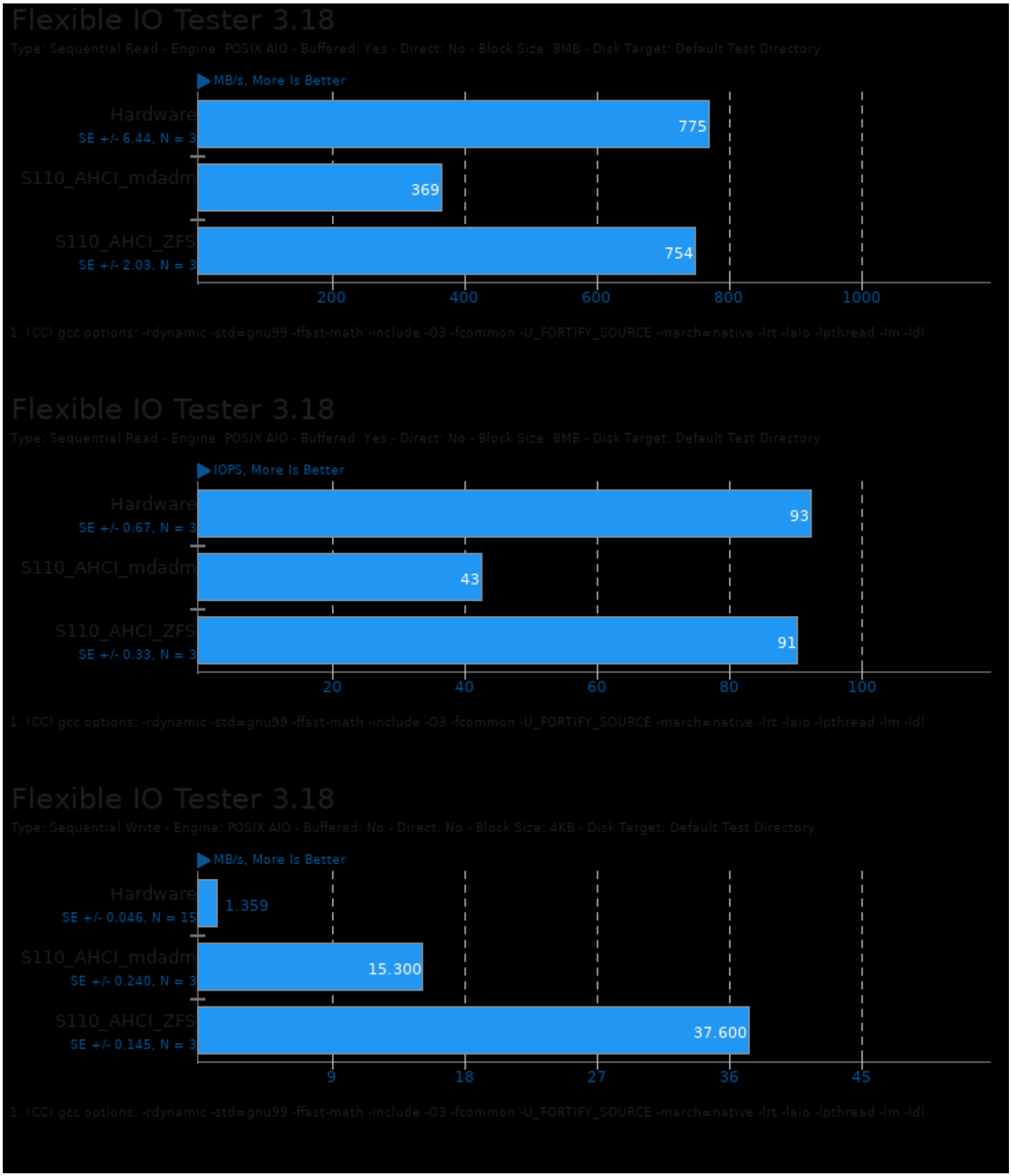
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.50, N = 15
18.3
S110_AHCI_mdadm
SE +/- 0.30, N = 15
29.6
S110_AHCI_ZFS
SE +/- 0.63, N = 15
42.3
10
20
30
40
50
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 125.98, N = 15
4674
S110_AHCI_mdadm
SE +/- 72.12, N = 15
7580
S110_AHCI_ZFS
SE +/- 159.12, N = 15
10813
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 13.13, N = 4
973
S110_AHCI_mdadm
SE +/- 1.33, N = 3
585
S110_AHCI_ZFS
SE +/- 4.58, N = 3
796
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

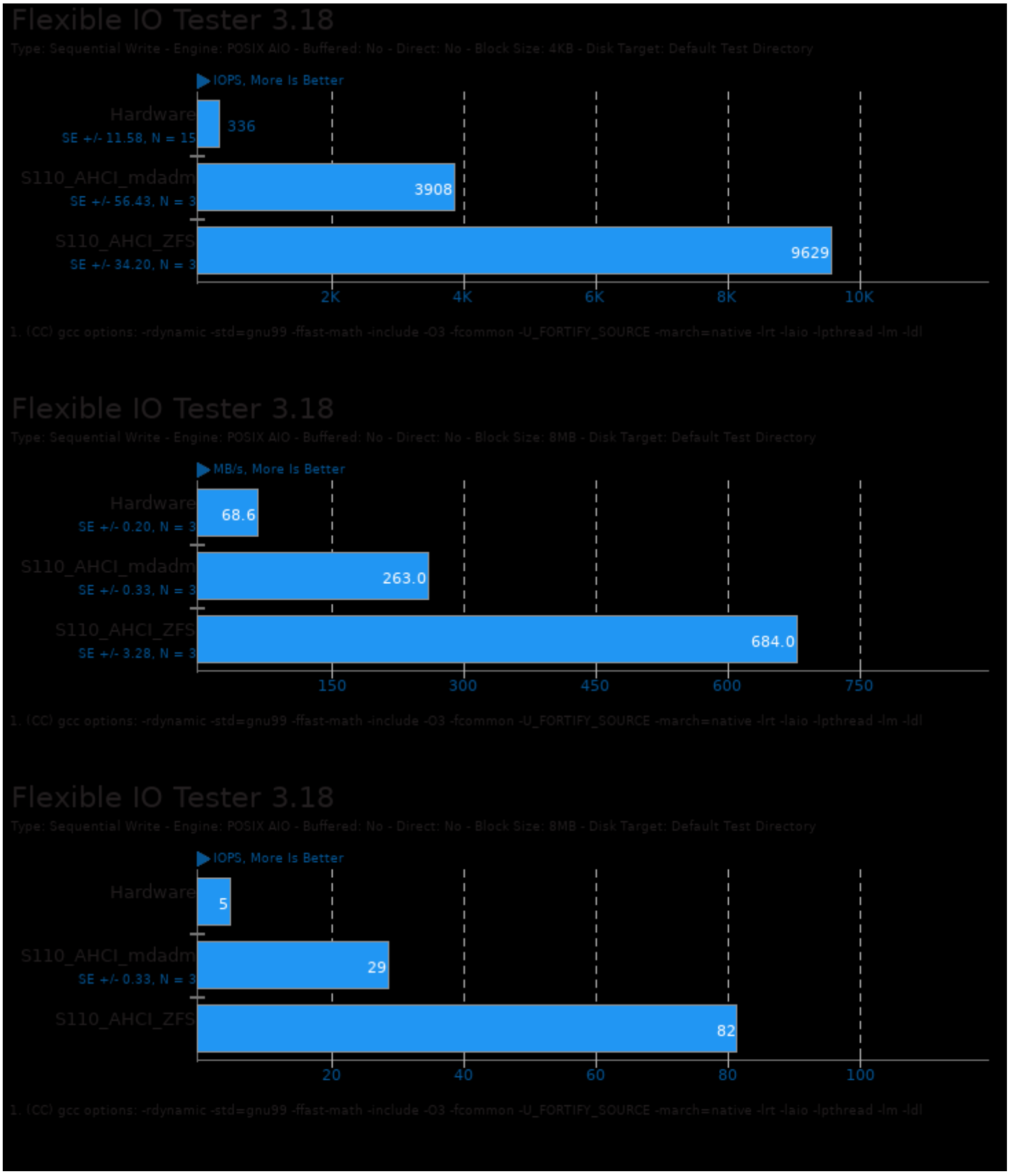
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1.70, N = 4
118
S110_AHCI_mdadm
70
S110_AHCI_ZFS
SE +/- 0.58, N = 3
96
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 6.96, N = 6
594
S110_AHCI_mdadm
SE +/- 1.67, N = 3
315
S110_AHCI_ZFS
SE +/- 2.52, N = 3
702
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
152000
S110_AHCI_mdadm
SE +/- 470.22, N = 3
80567
S110_AHCI_ZFS
SE +/- 666.67, N = 3
179667
40K
80K
120K
160K
200K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

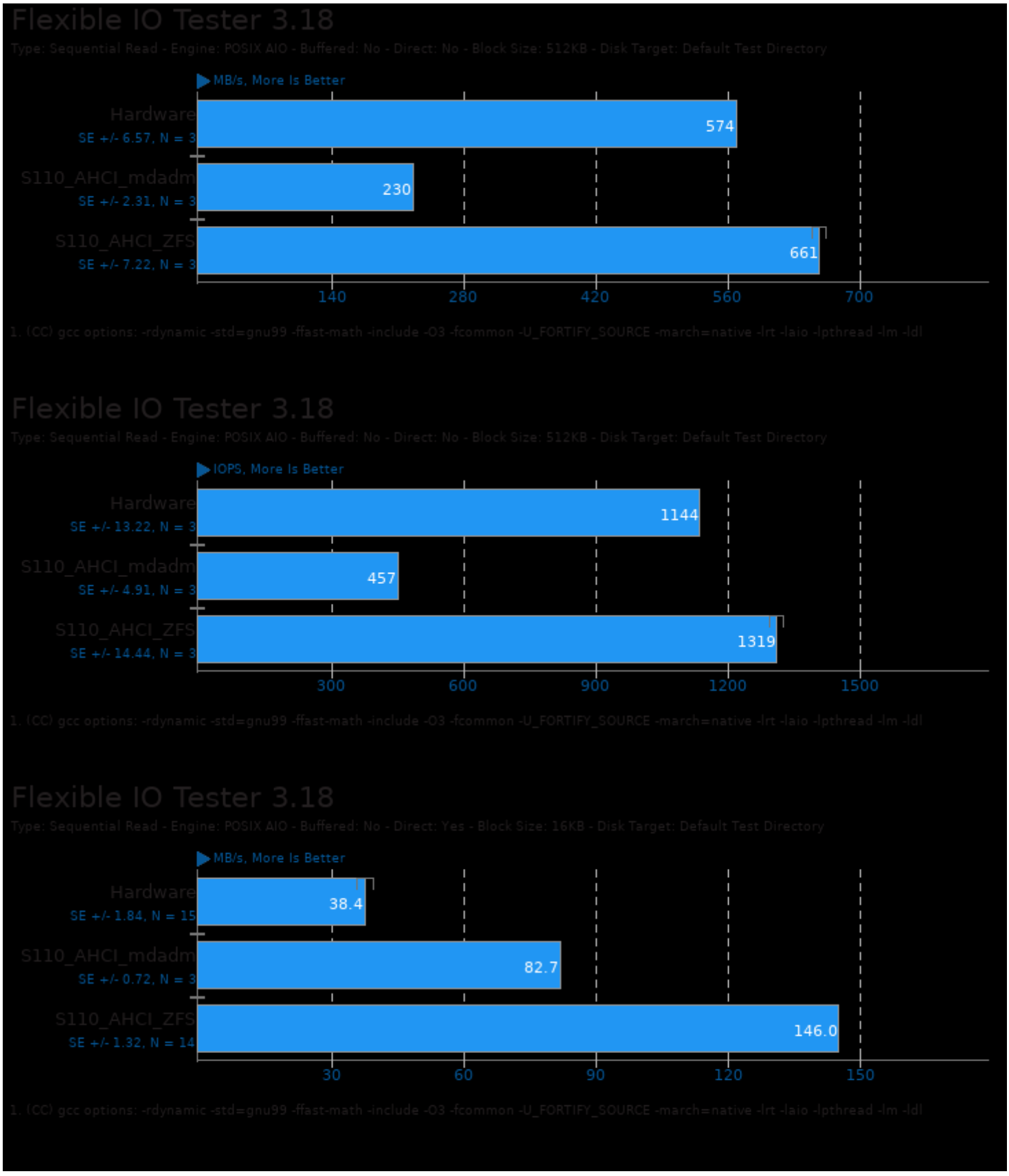
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 6.44, N = 3
775
S110_AHCI_mdadm
369
S110_AHCI_ZFS
SE +/- 2.03, N = 3
754
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.67, N = 3
93
S110_AHCI_mdadm
43
S110_AHCI_ZFS
SE +/- 0.33, N = 3
91
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.046, N = 15
1.359
S110_AHCI_mdadm
SE +/- 0.240, N = 3
15.300
S110_AHCI_ZFS
SE +/- 0.145, N = 3
37.600
9
18
27
36
45
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

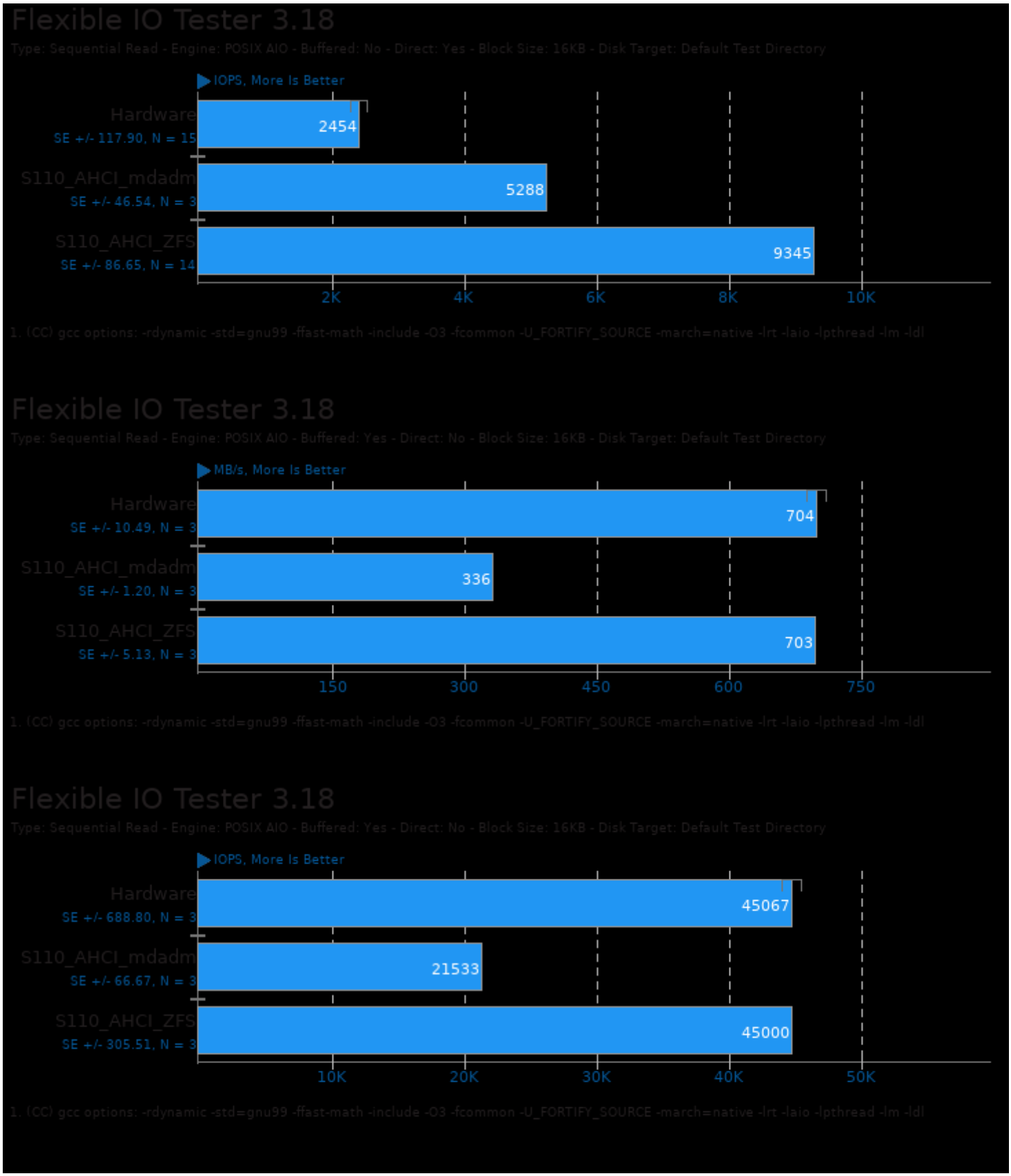
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 11.58, N = 15
336
S110_AHCI_mdadm
SE +/- 56.43, N = 3
3908
S110_AHCI_ZFS
SE +/- 34.20, N = 3
9629
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.20, N = 3
68.6
S110_AHCI_mdadm
SE +/- 0.33, N = 3
263.0
S110_AHCI_ZFS
SE +/- 3.28, N = 3
684.0
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
SE +/- 0.33, N = 3
29
S110_AHCI_ZFS
82
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

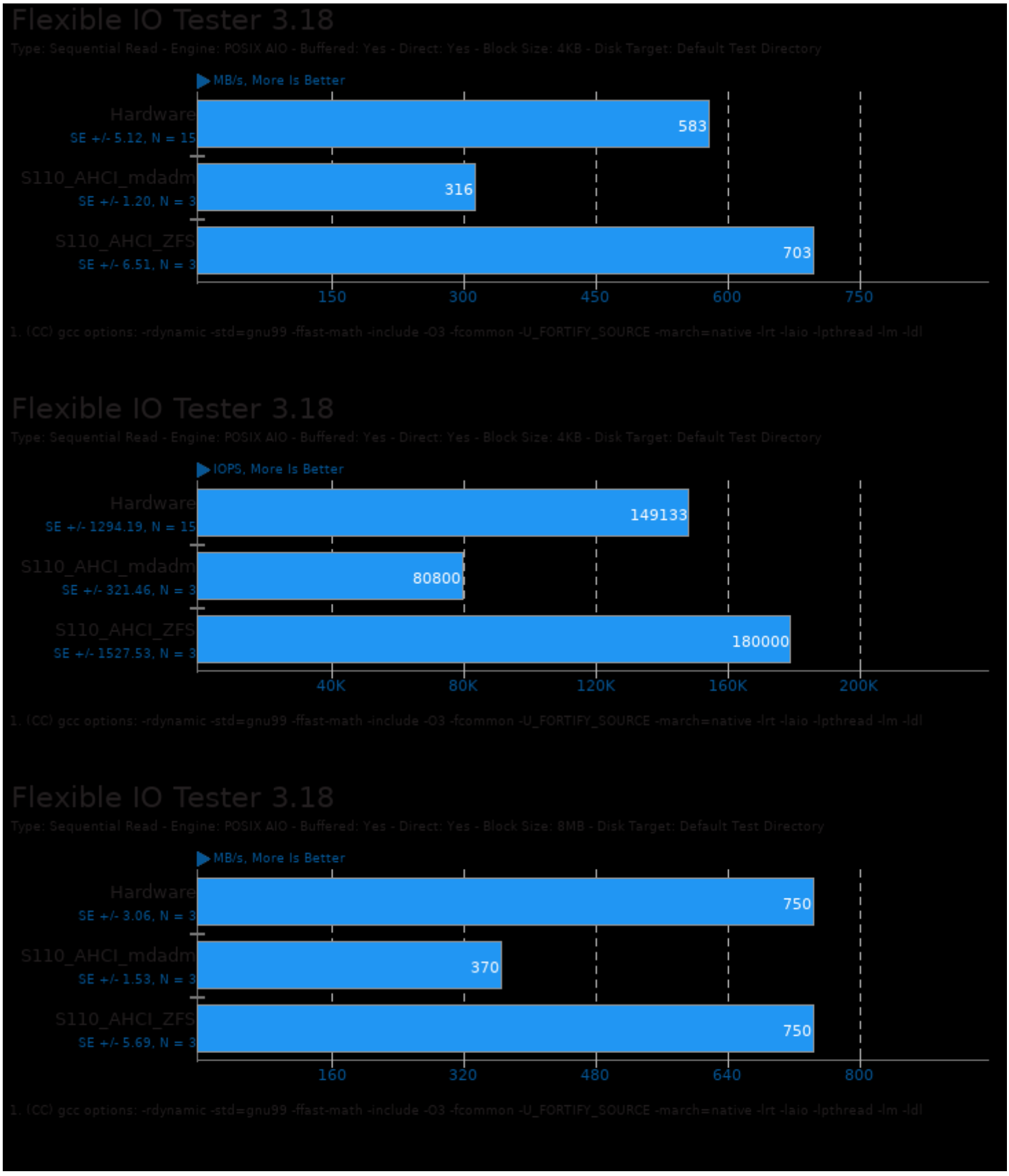
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 6.57, N = 3
574
S110_AHCI_mdadm
SE +/- 2.31, N = 3
230
S110_AHCI_ZFS
SE +/- 7.22, N = 3
661
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 13.22, N = 3
1144
S110_AHCI_mdadm
SE +/- 4.91, N = 3
457
S110_AHCI_ZFS
SE +/- 14.44, N = 3
1319
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.84, N = 15
38.4
S110_AHCI_mdadm
SE +/- 0.72, N = 3
82.7
S110_AHCI_ZFS
SE +/- 1.32, N = 14
146.0
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

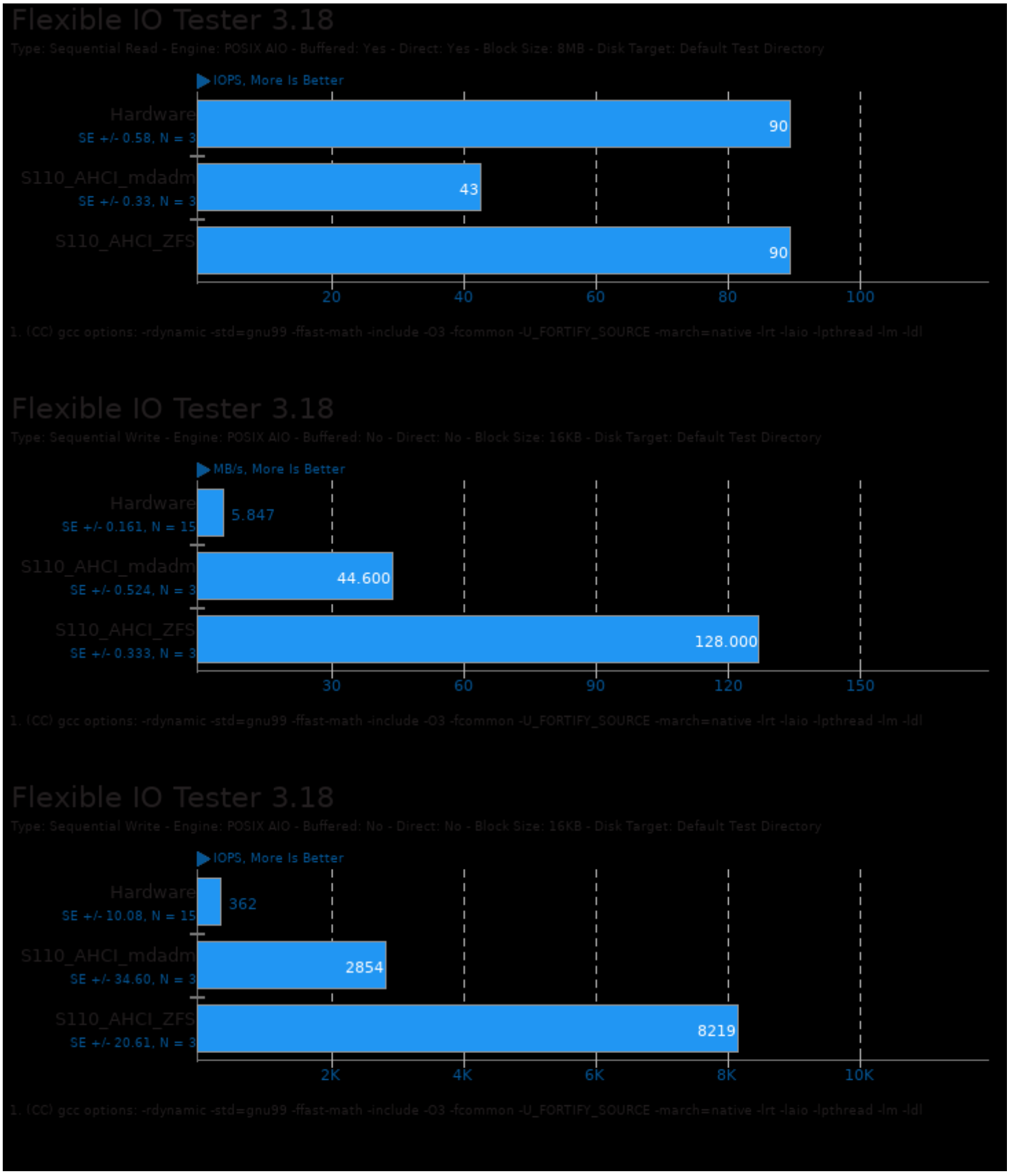
probaraid5

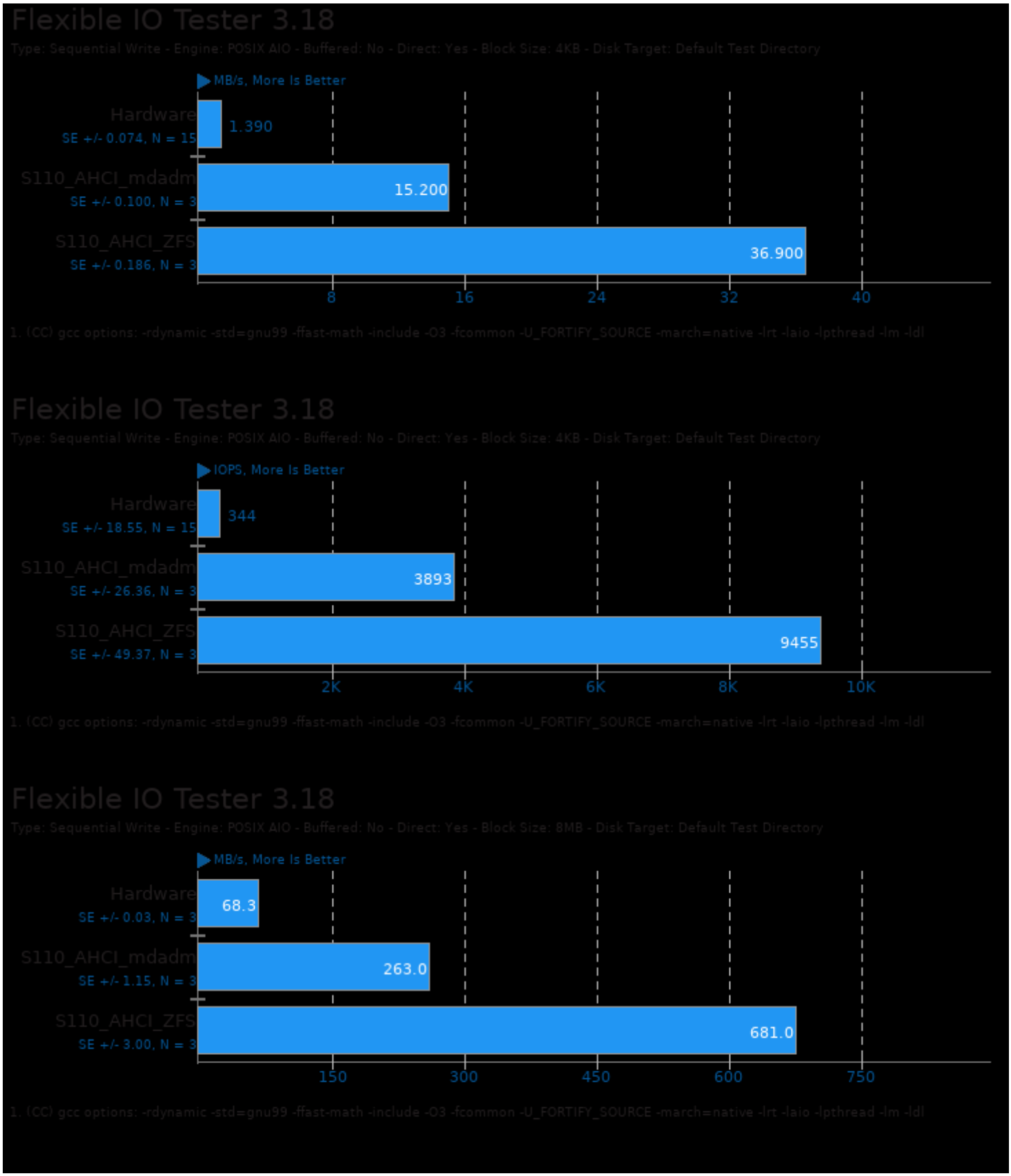

Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 117.90, N = 15
2454
S110_AHCI_mdadm
SE +/- 46.54, N = 3
5288
S110_AHCI_ZFS
SE +/- 86.65, N = 14
9345
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 10.49, N = 3
704
S110_AHCI_mdadm
SE +/- 1.20, N = 3
336
S110_AHCI_ZFS
SE +/- 5.13, N = 3
703
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 688.80, N = 3
45067
S110_AHCI_mdadm
SE +/- 66.67, N = 3
21533
S110_AHCI_ZFS
SE +/- 305.51, N = 3
45000
10K
20K
30K
40K
50K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

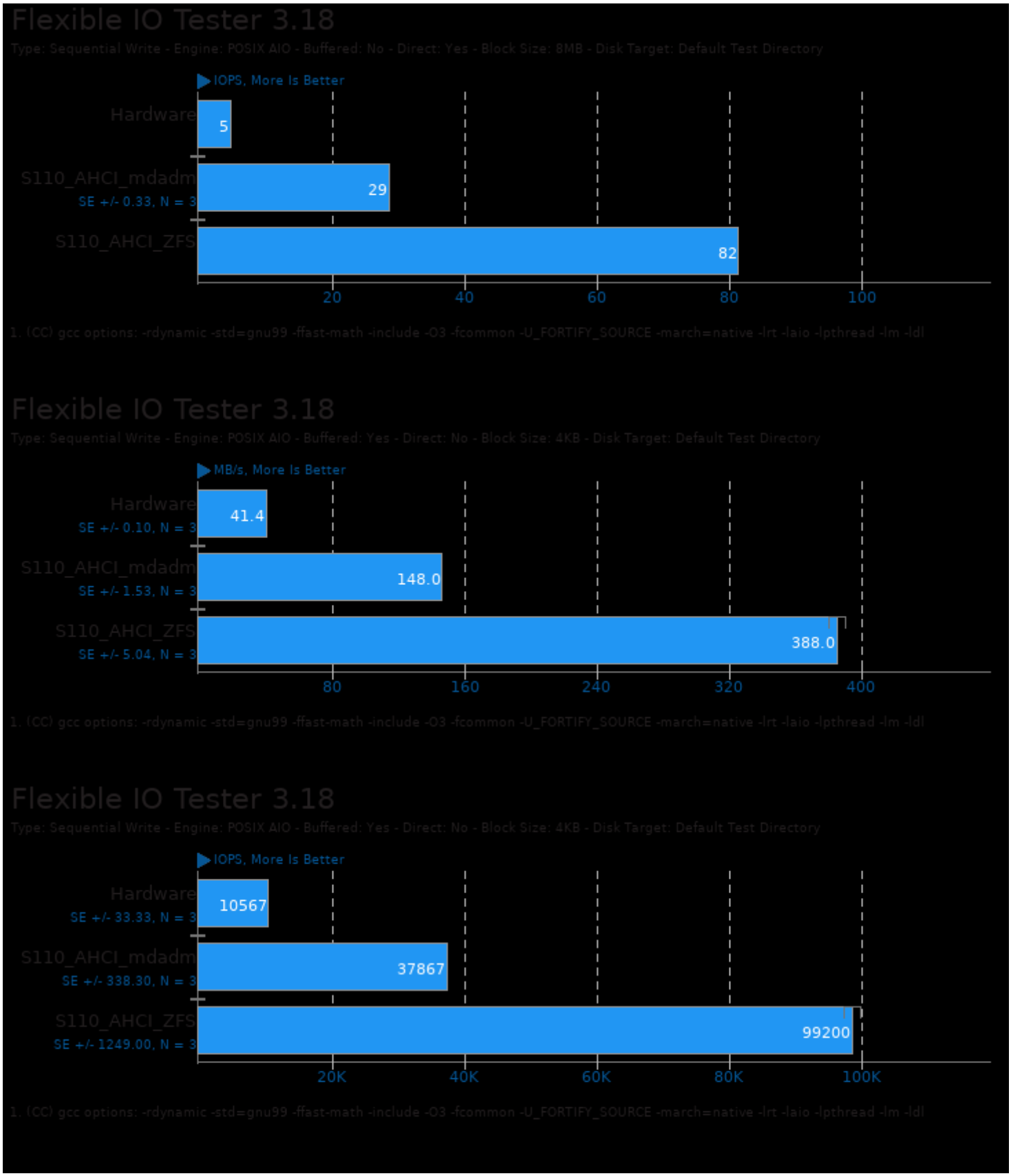
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 5.12, N = 15
583
S110_AHCI_mdadm
SE +/- 1.20, N = 3
316
S110_AHCI_ZFS
SE +/- 6.51, N = 3
703
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1294.19, N = 15
149133
S110_AHCI_mdadm
SE +/- 321.46, N = 3
80800
S110_AHCI_ZFS
SE +/- 1527.53, N = 3
180000
40K
80K
120K
160K
200K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 3.06, N = 3
750
S110_AHCI_mdadm
SE +/- 1.53, N = 3
370
S110_AHCI_ZFS
SE +/- 5.69, N = 3
750
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

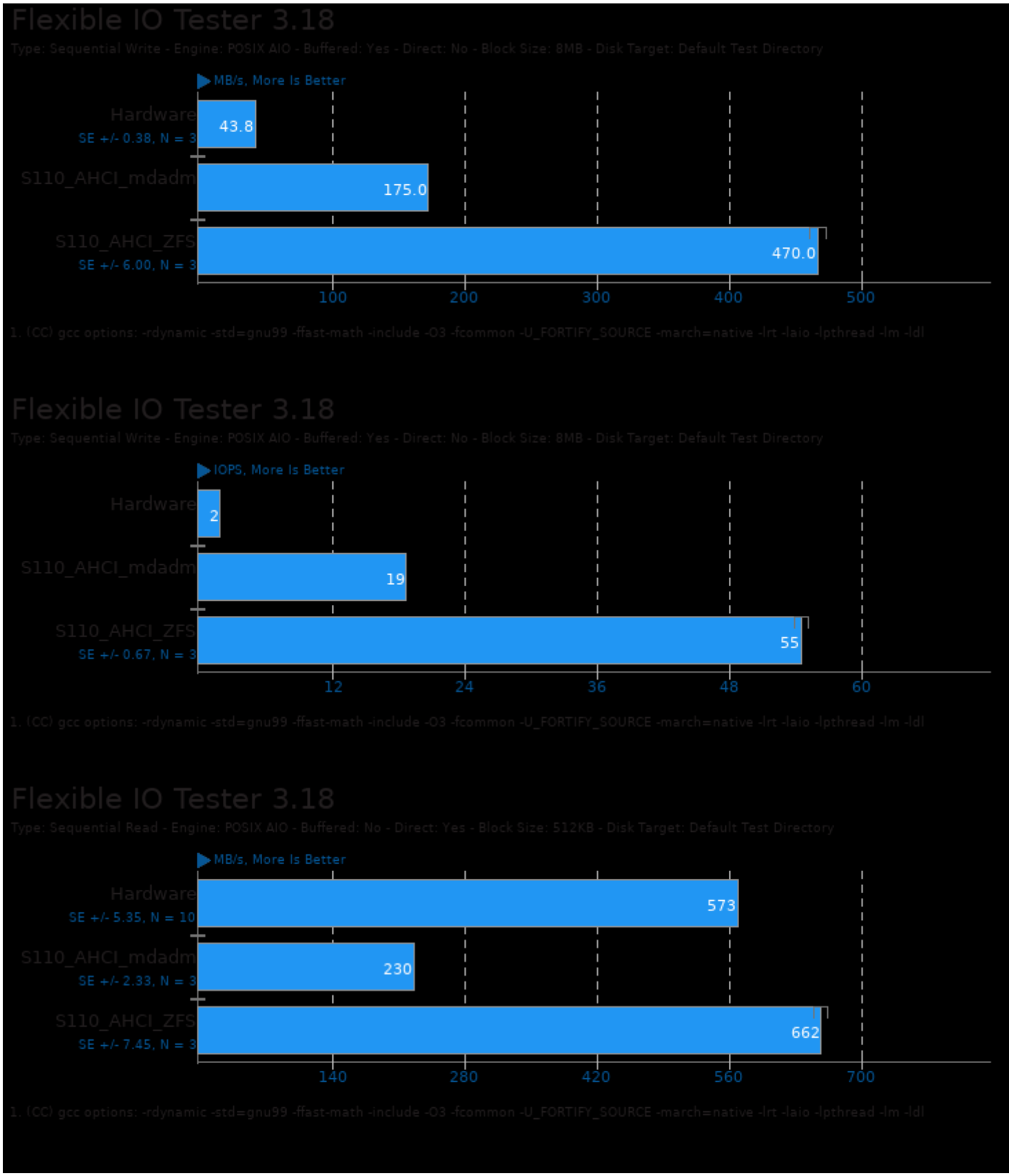
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 0.58, N = 3
90
S110_AHCI_mdadm
SE +/- 0.33, N = 3
43
S110_AHCI_ZFS
90
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.161, N = 15
5.847
S110_AHCI_mdadm
SE +/- 0.524, N = 3
44.600
S110_AHCI_ZFS
SE +/- 0.333, N = 3
128.000
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 10.08, N = 15
362
S110_AHCI_mdadm
SE +/- 34.60, N = 3
2854
S110_AHCI_ZFS
SE +/- 20.61, N = 3
8219
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

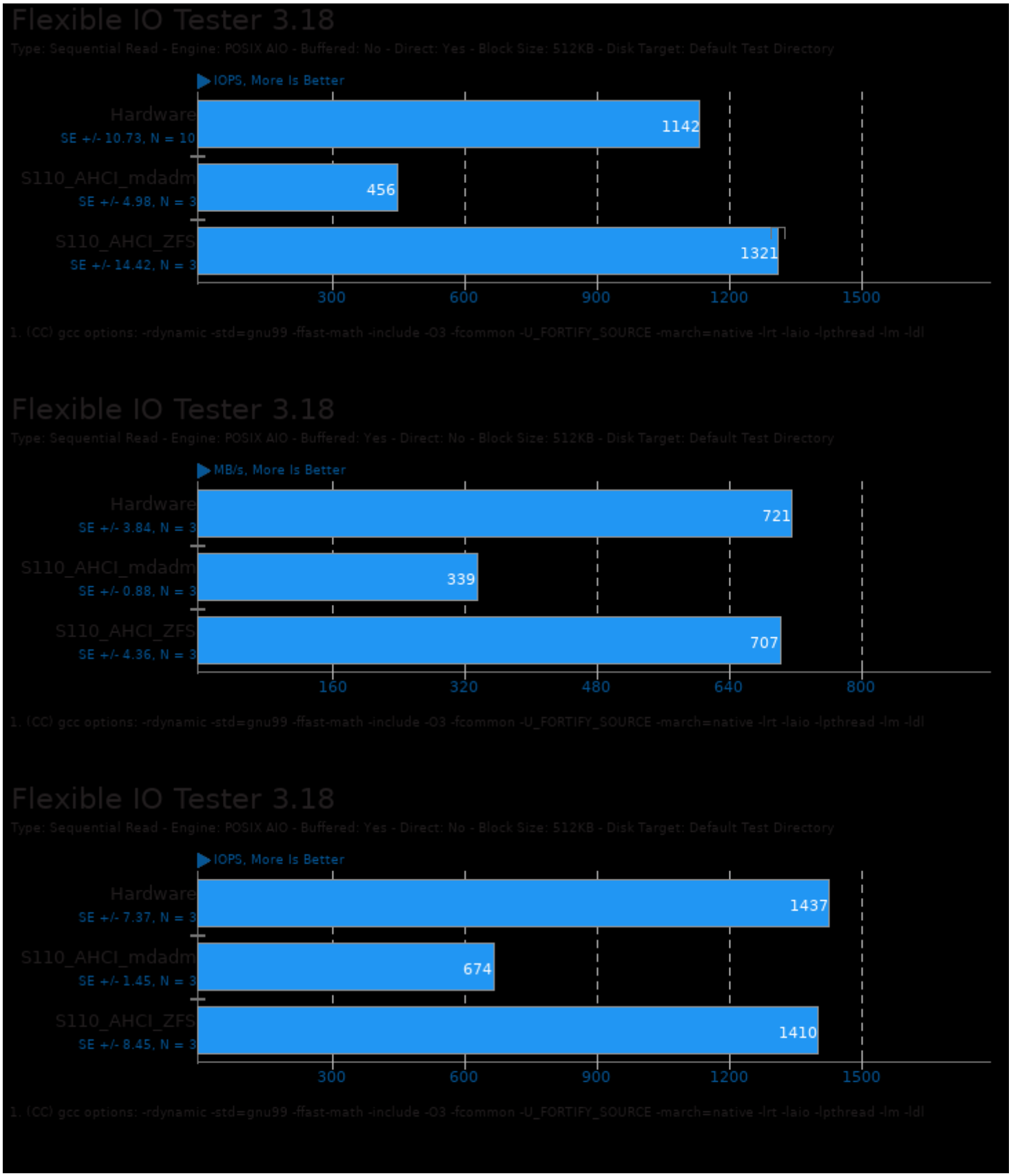

Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.074, N = 15
1.390
S110_AHCI_mdadm
SE +/- 0.100, N = 3
15.200
S110_AHCI_ZFS
SE +/- 0.186, N = 3
36.900
8
16
24
32
40
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 18.55, N = 15
344
S110_AHCI_mdadm
SE +/- 26.36, N = 3
3893
S110_AHCI_ZFS
SE +/- 49.37, N = 3
9455
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.03, N = 3
68.3
S110_AHCI_mdadm
SE +/- 1.15, N = 3
263.0
S110_AHCI_ZFS
SE +/- 3.00, N = 3
681.0
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
5
S110_AHCI_mdadm
SE +/- 0.33, N = 3
29
S110_AHCI_ZFS
82
20
40
60
80
100
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.10, N = 3
41.4
S110_AHCI_mdadm
SE +/- 1.53, N = 3
148.0
S110_AHCI_ZFS
SE +/- 5.04, N = 3
388.0
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 33.33, N = 3
10567
S110_AHCI_mdadm
SE +/- 338.30, N = 3
37867
S110_AHCI_ZFS
SE +/- 1249.00, N = 3
99200
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

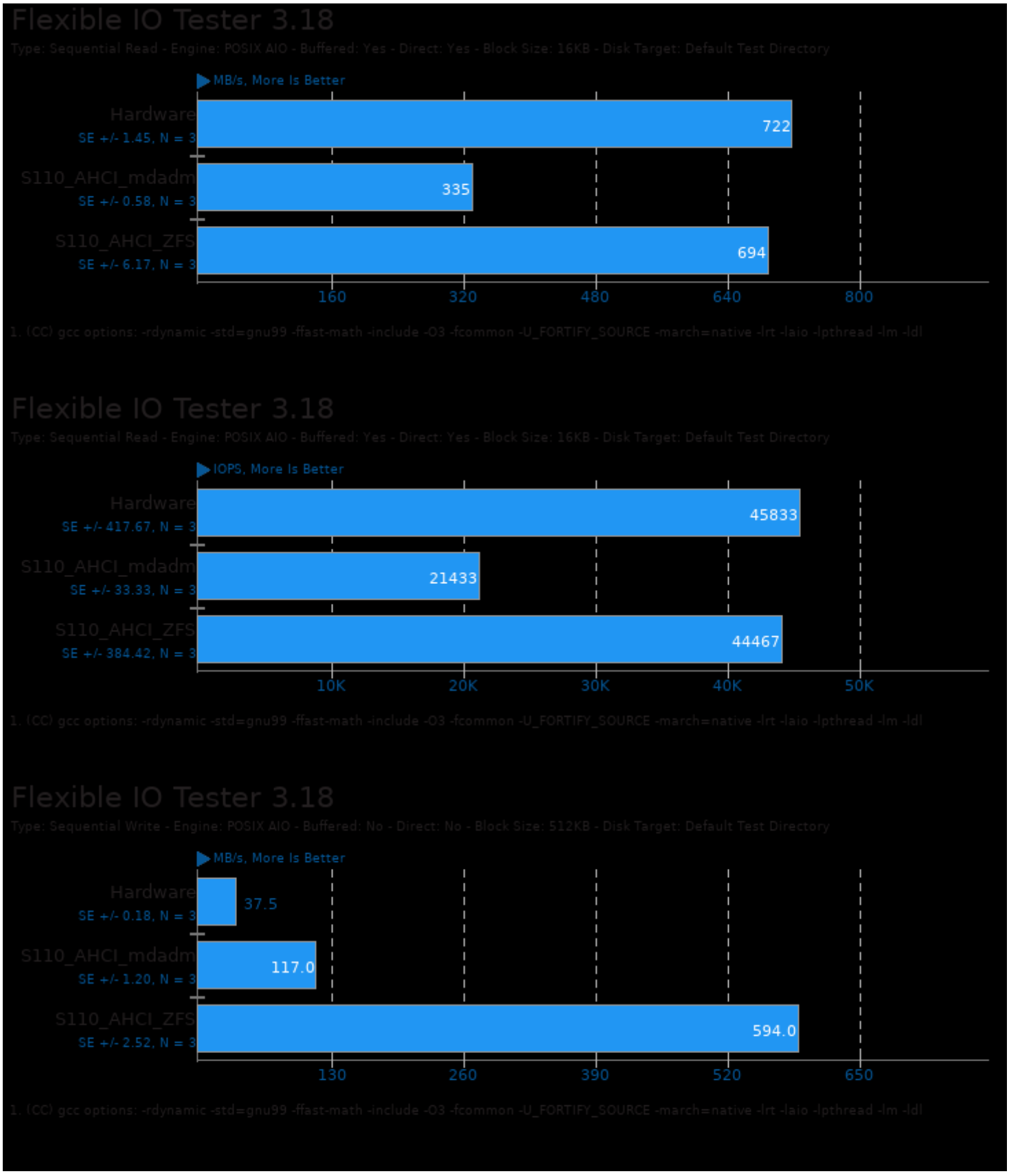
probaraid5

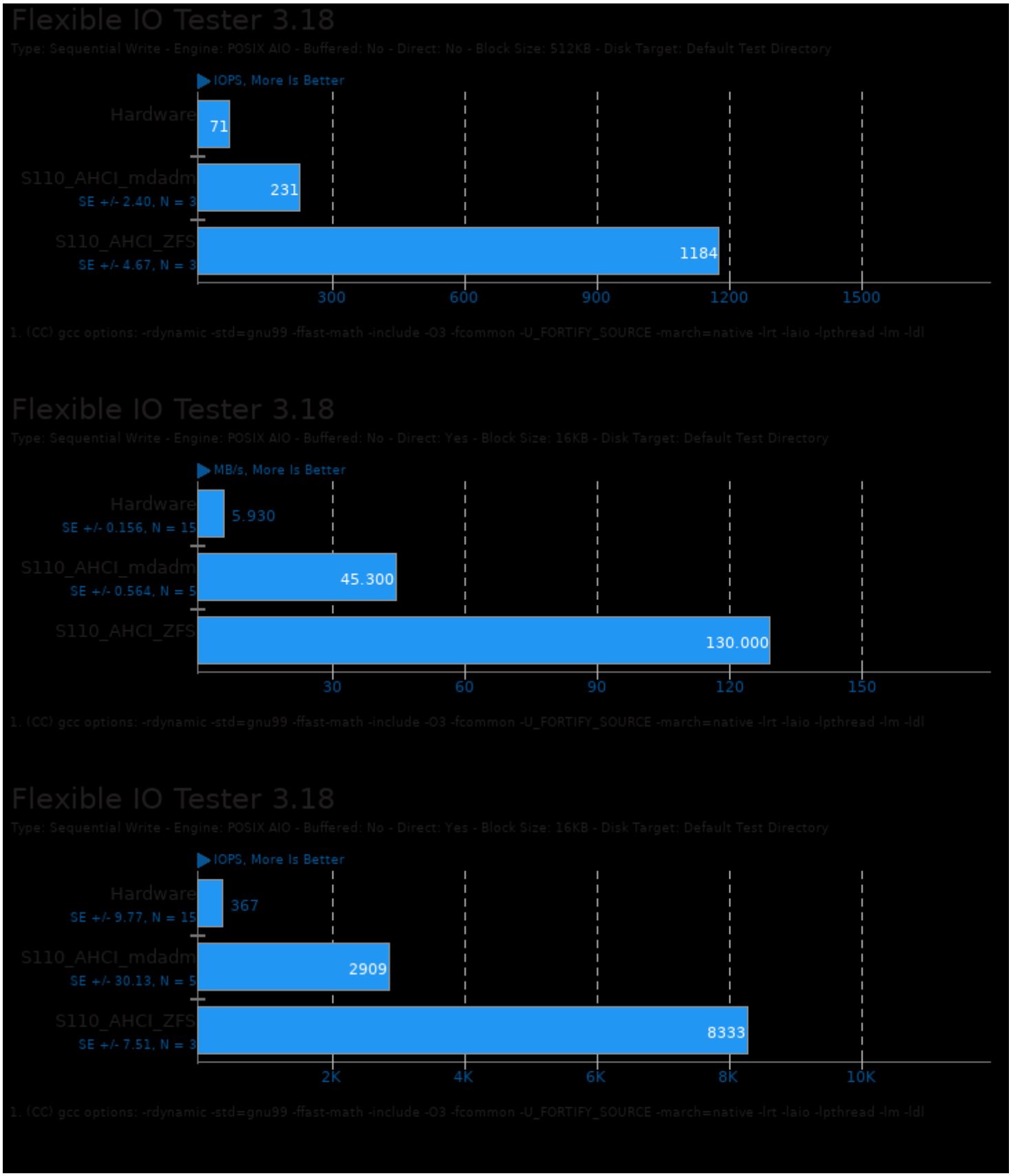

Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.38, N = 3
43.8
S110_AHCI_mdadm
175.0
S110_AHCI_ZFS
SE +/- 6.00, N = 3
470.0
100
200
300
400
500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
2
S110_AHCI_mdadm
19
S110_AHCI_ZFS
SE +/- 0.67, N = 3
55
12
24
36
48
60
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 5.35, N = 10
573
S110_AHCI_mdadm
SE +/- 2.33, N = 3
230
S110_AHCI_ZFS
SE +/- 7.45, N = 3
662
140
280
420
560
700
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

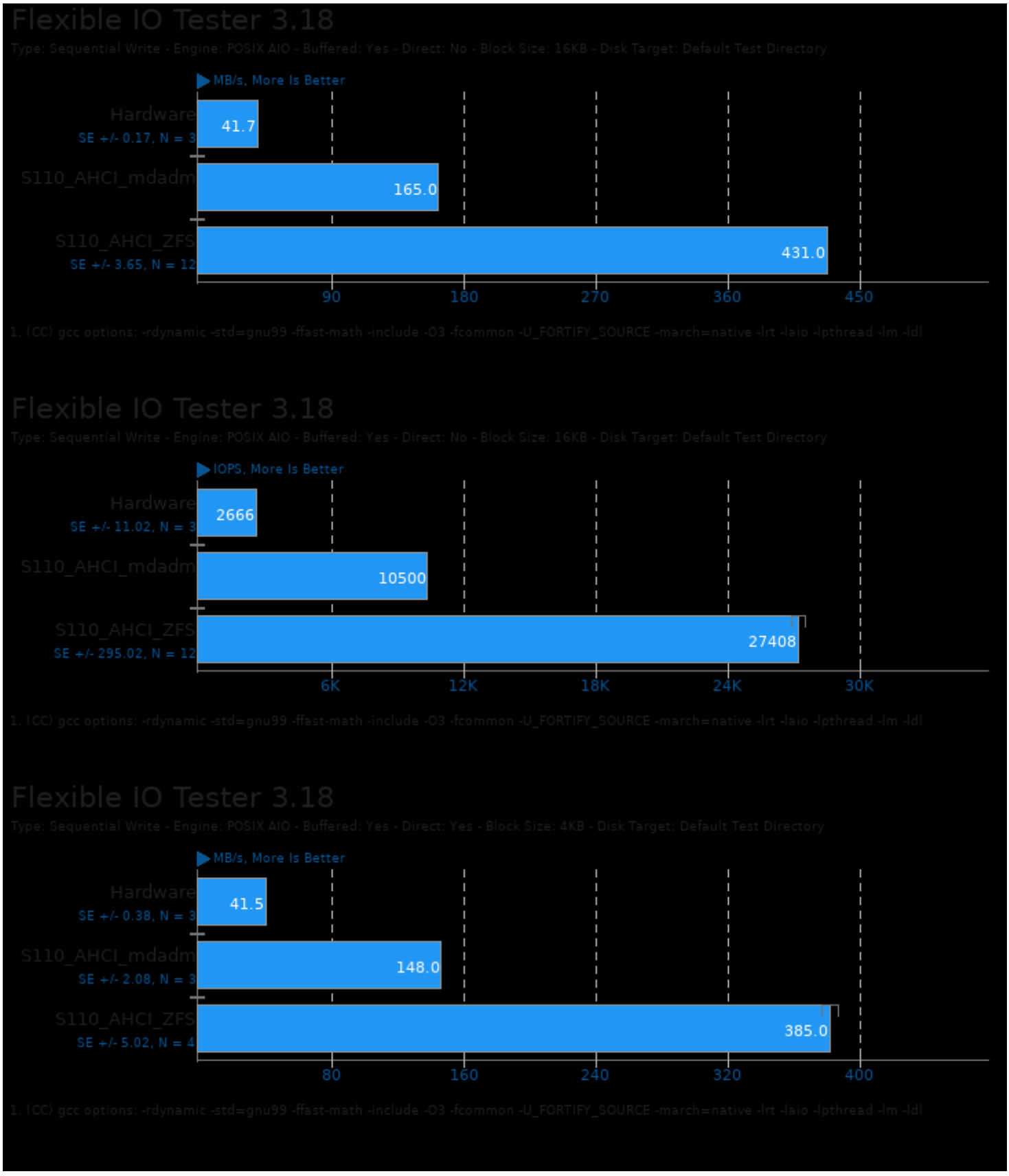

Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 10.73, N = 10
1142
S110_AHCI_mdadm
SE +/- 4.98, N = 3
456
S110_AHCI_ZFS
SE +/- 14.42, N = 3
1321
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 3.84, N = 3
721
S110_AHCI_mdadm
SE +/- 0.88, N = 3
339
S110_AHCI_ZFS
SE +/- 4.36, N = 3
707
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 7.37, N = 3
1437
S110_AHCI_mdadm
SE +/- 1.45, N = 3
674
S110_AHCI_ZFS
SE +/- 8.45, N = 3
1410
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

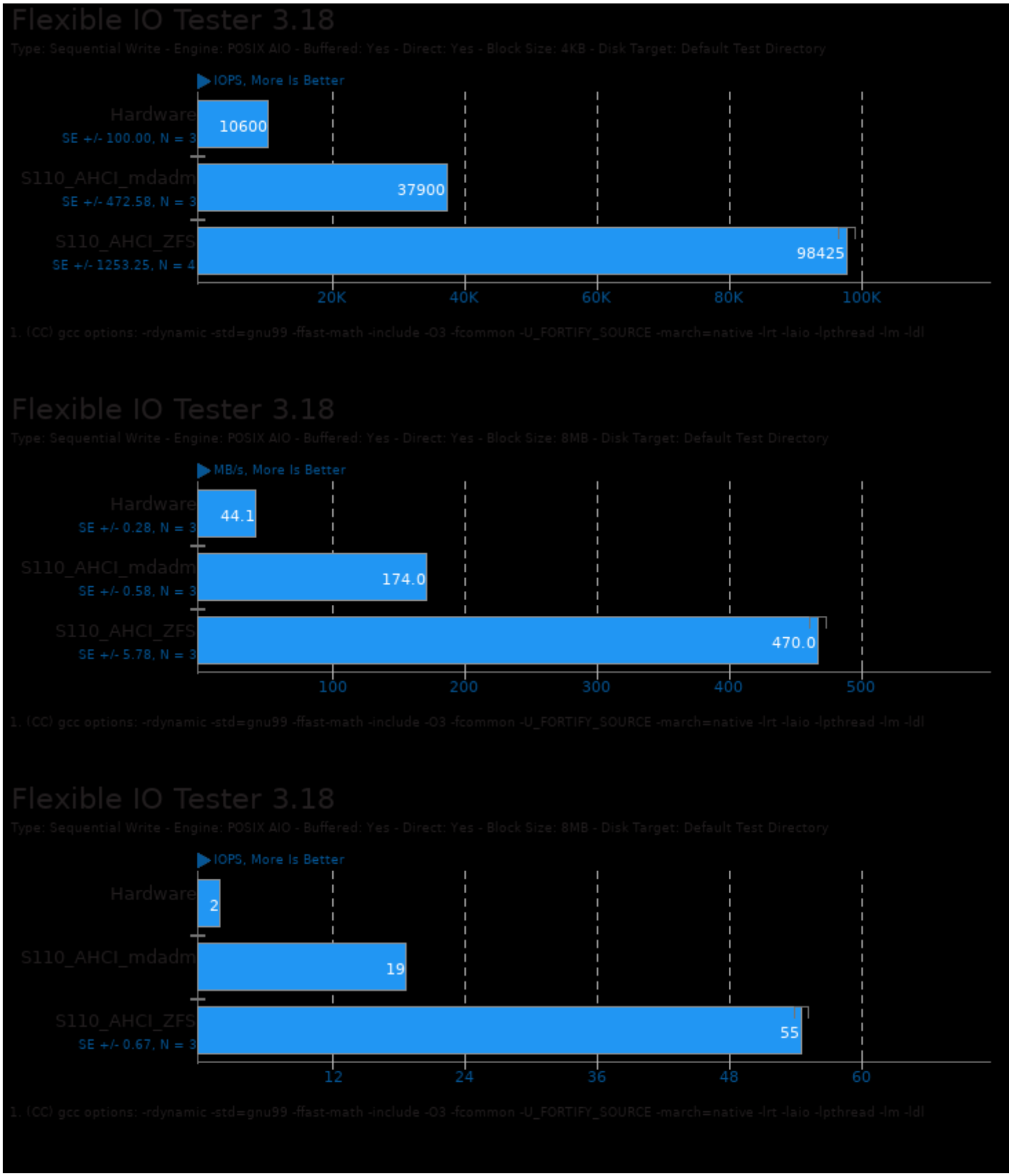

Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 1.45, N = 3
722
S110_AHCI_mdadm
SE +/- 0.58, N = 3
335
S110_AHCI_ZFS
SE +/- 6.17, N = 3
694
160
320
480
640
800
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 417.67, N = 3
45833
S110_AHCI_mdadm
SE +/- 33.33, N = 3
21433
S110_AHCI_ZFS
SE +/- 384.42, N = 3
44467
10K
20K
30K
40K
50K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.18, N = 3
37.5
S110_AHCI_mdadm
SE +/- 1.20, N = 3
117.0
S110_AHCI_ZFS
SE +/- 2.52, N = 3
594.0
130
260
390
520
650
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
71
S110_AHCI_mdadm
SE +/- 2.40, N = 3
231
S110_AHCI_ZFS
SE +/- 4.67, N = 3
1184
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.156, N = 15
5.930
S110_AHCI_mdadm
SE +/- 0.564, N = 5
45.300
S110_AHCI_ZFS
130.000
30
60
90
120
150
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 9.77, N = 15
367
S110_AHCI_mdadm
SE +/- 30.13, N = 5
2909
S110_AHCI_ZFS
SE +/- 7.51, N = 3
8333
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

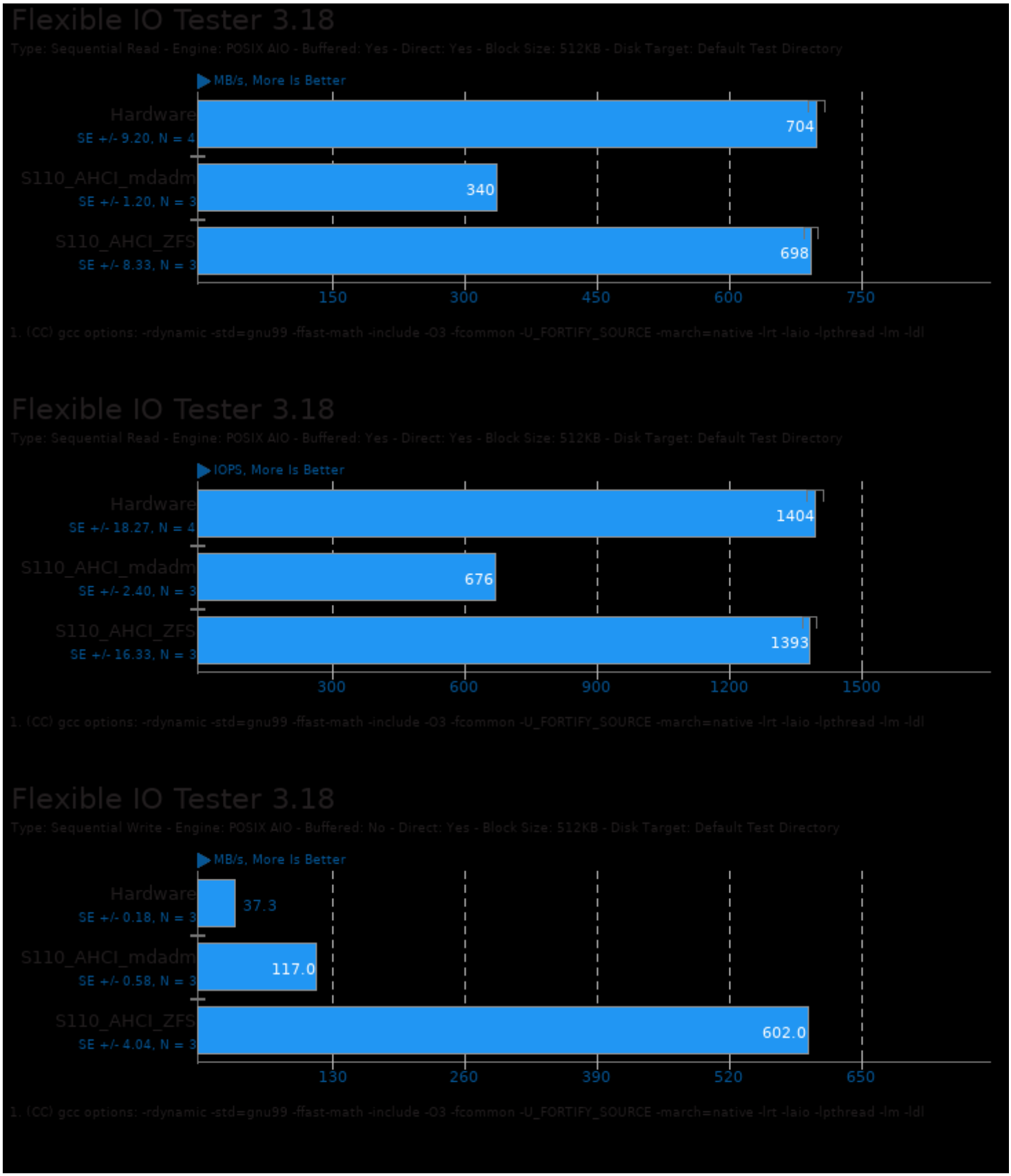
probaraid5

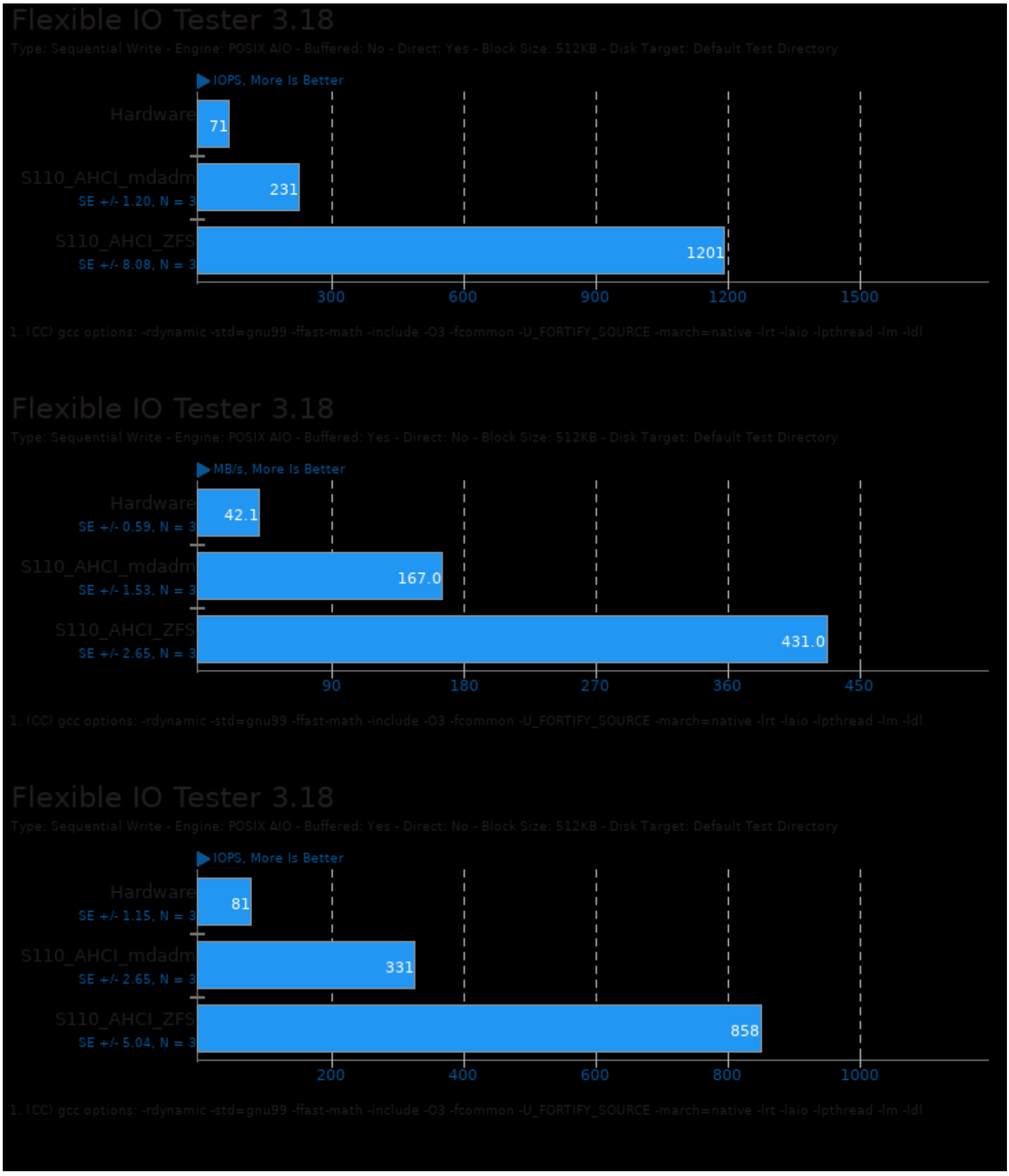

Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.17, N = 3
41.7
S110_AHCI_mdadm
165.0
S110_AHCI_ZFS
SE +/- 3.65, N = 12
431.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 11.02, N = 3
2666
S110_AHCI_mdadm
10500
S110_AHCI_ZFS
SE +/- 295.02, N = 12
27408
6K
12K
18K
24K
30K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.38, N = 3
41.5
S110_AHCI_mdadm
SE +/- 2.08, N = 3
148.0
S110_AHCI_ZFS
SE +/- 5.02, N = 4
385.0
80
160
240
320
400
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

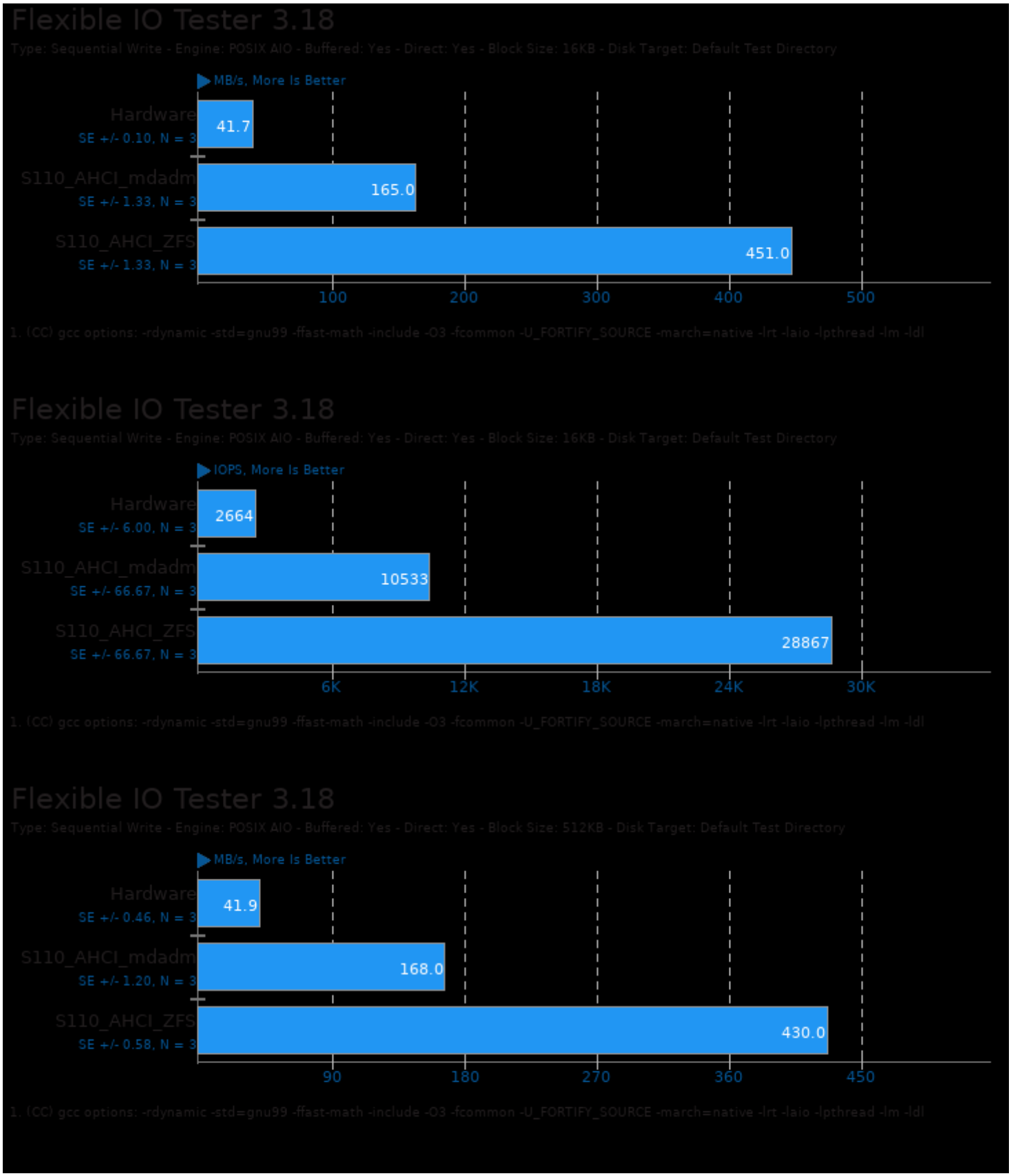

Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 4KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 100.00, N = 3
10600
S110_AHCI_mdadm
SE +/- 472.58, N = 3
37900
S110_AHCI_ZFS
SE +/- 1253.25, N = 4
98425
20K
40K
60K
80K
100K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.28, N = 3
44.1
S110_AHCI_mdadm
SE +/- 0.58, N = 3
174.0
S110_AHCI_ZFS
SE +/- 5.78, N = 3
470.0
100
200
300
400
500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 8MB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
2
S110_AHCI_mdadm
19
S110_AHCI_ZFS
SE +/- 0.67, N = 3
55
12
24
36
48
60
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

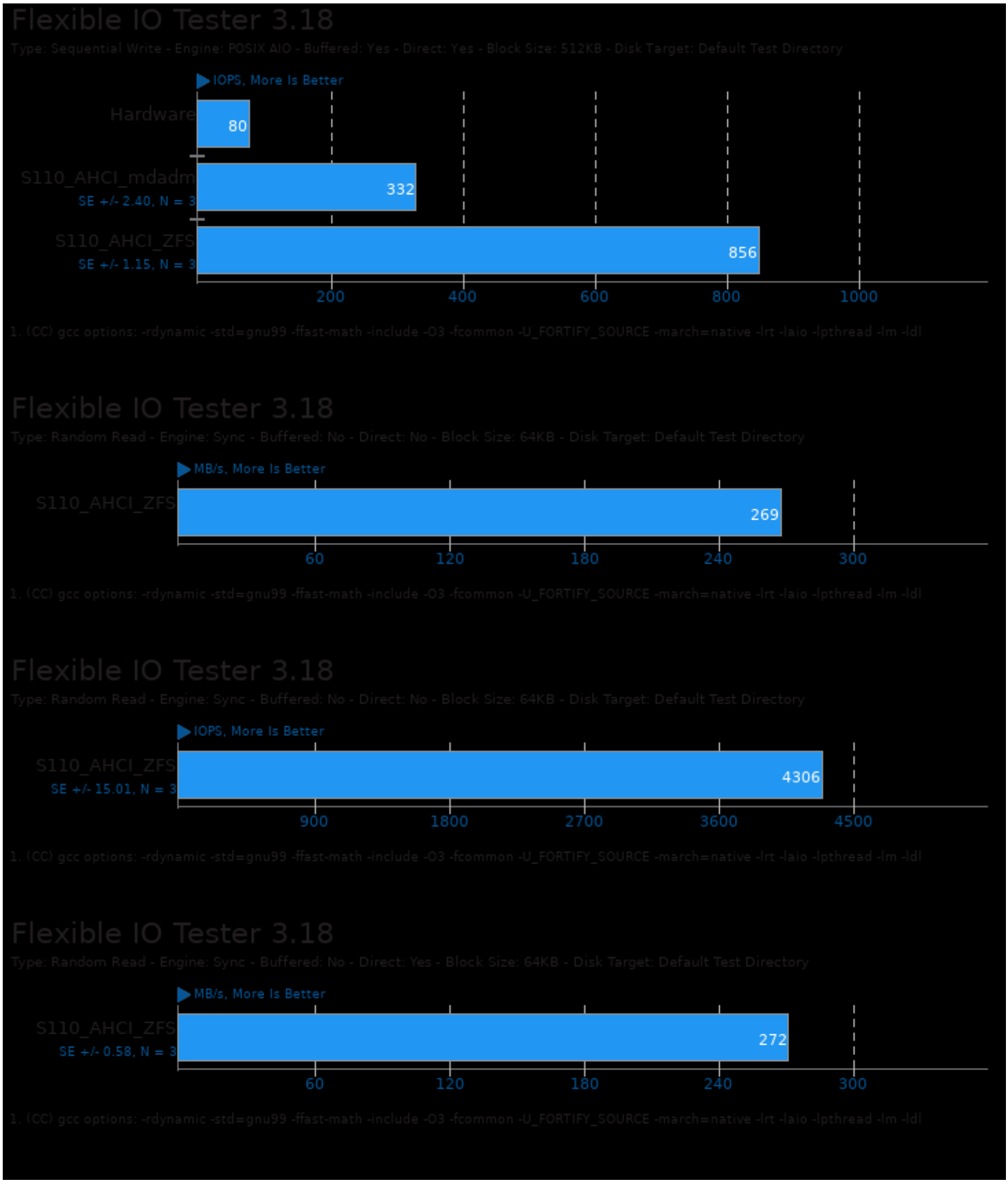

Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 9.20, N = 4
704
S110_AHCI_mdadm
SE +/- 1.20, N = 3
340
S110_AHCI_ZFS
SE +/- 8.33, N = 3
698
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 18.27, N = 4
1404
S110_AHCI_mdadm
SE +/- 2.40, N = 3
676
S110_AHCI_ZFS
SE +/- 16.33, N = 3
1393
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.18, N = 3
37.3
S110_AHCI_mdadm
SE +/- 0.58, N = 3
117.0
S110_AHCI_ZFS
SE +/- 4.04, N = 3
602.0
130
260
390
520
650
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
71
S110_AHCI_mdadm
SE +/- 1.20, N = 3
231
S110_AHCI_ZFS
SE +/- 8.08, N = 3
1201
300
600
900
1200
1500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.59, N = 3
42.1
S110_AHCI_mdadm
SE +/- 1.53, N = 3
167.0
S110_AHCI_ZFS
SE +/- 2.65, N = 3
431.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 1.15, N = 3
81
S110_AHCI_mdadm
SE +/- 2.65, N = 3
331
S110_AHCI_ZFS
SE +/- 5.04, N = 3
858
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

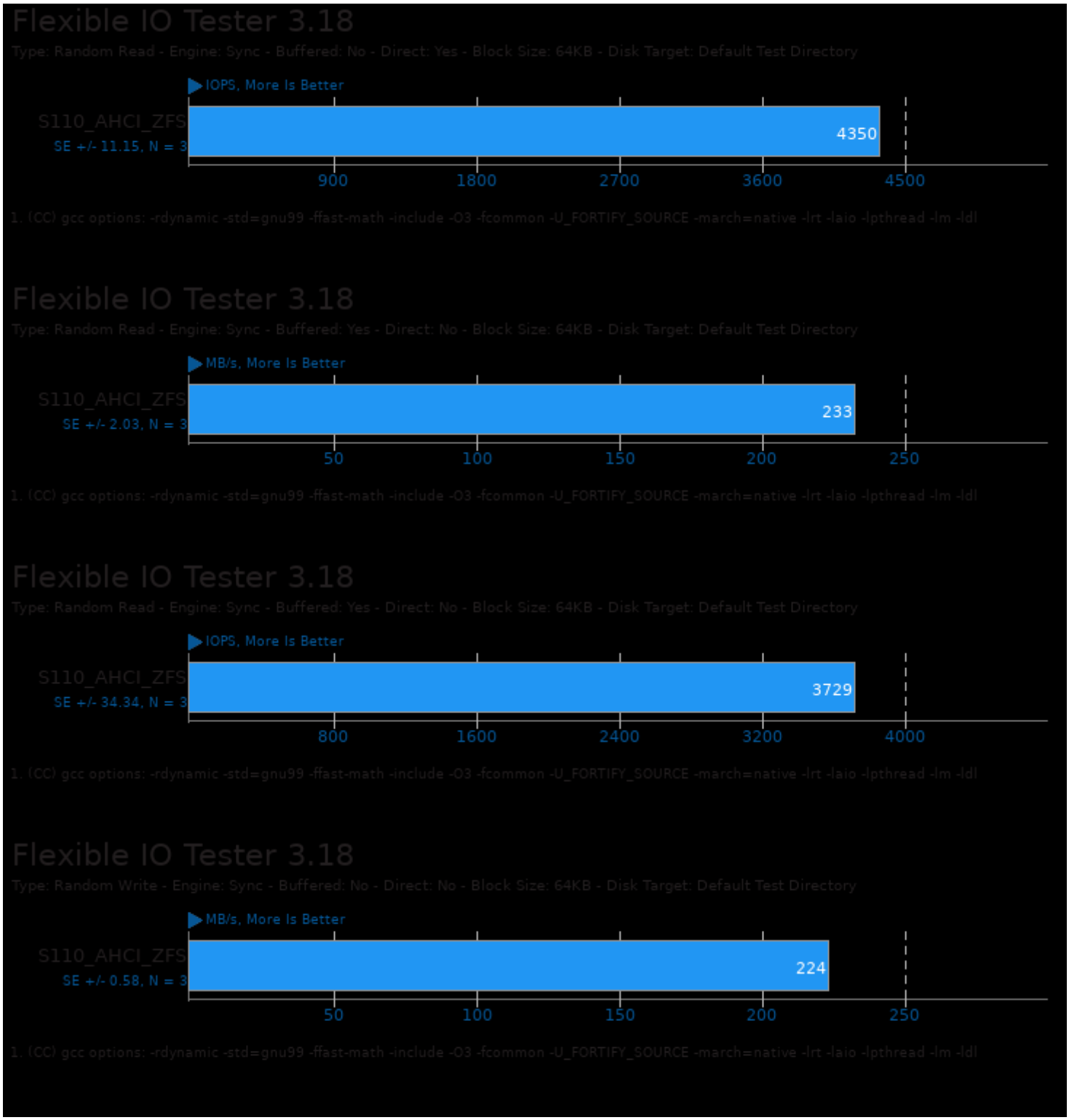
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.10, N = 3
41.7
S110_AHCI_mdadm
SE +/- 1.33, N = 3
165.0
S110_AHCI_ZFS
SE +/- 1.33, N = 3
451.0
100
200
300
400
500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 16KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
SE +/- 6.00, N = 3
2664
S110_AHCI_mdadm
SE +/- 66.67, N = 3
10533
S110_AHCI_ZFS
SE +/- 66.67, N = 3
28867
6K
12K
18K
24K
30K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
MB/s, More Is Better
Hardware
SE +/- 0.46, N = 3
41.9
S110_AHCI_mdadm
SE +/- 1.20, N = 3
168.0
S110_AHCI_ZFS
SE +/- 0.58, N = 3
430.0
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

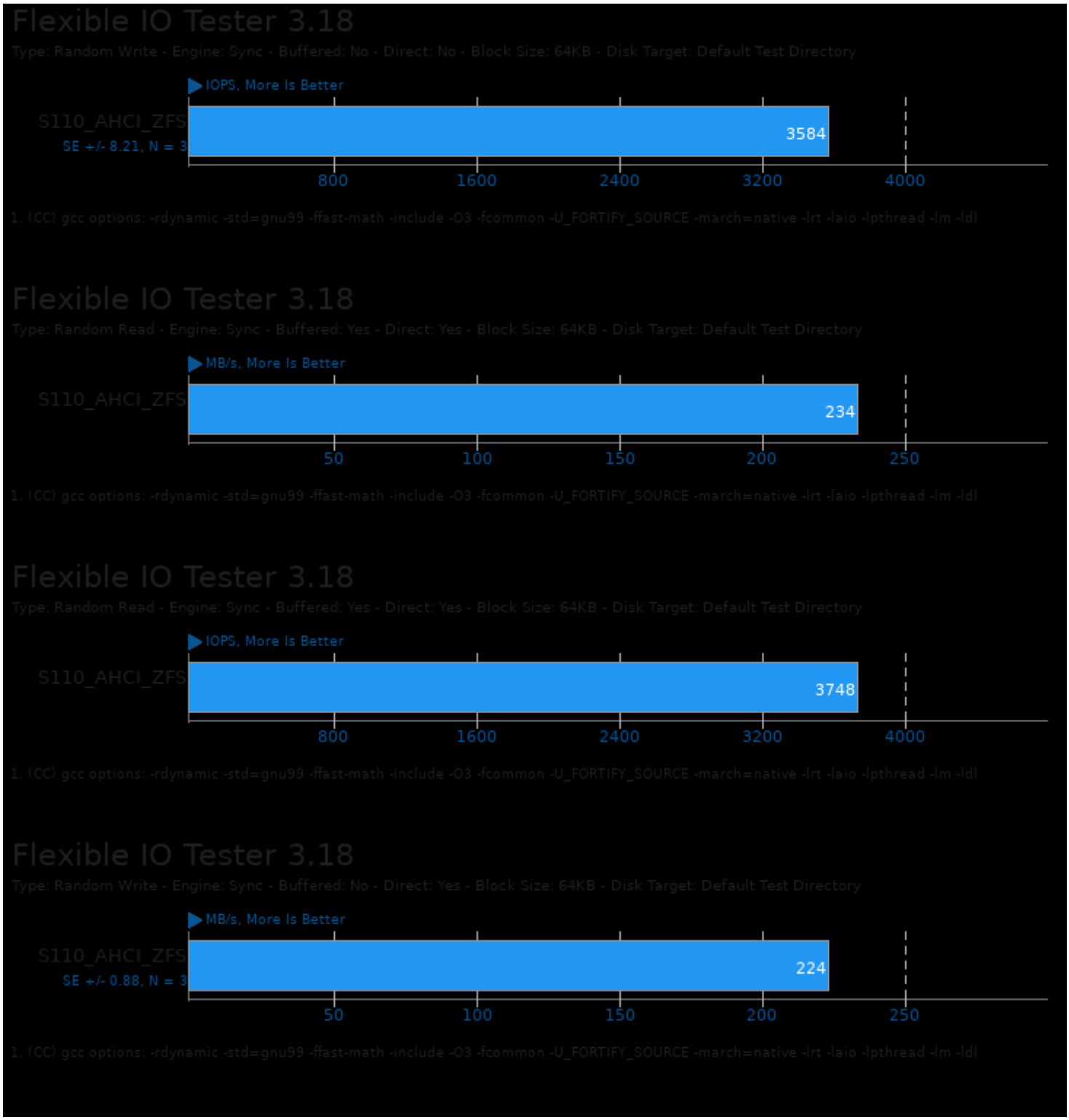
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 512KB - Disk Target: Default Test Directory
IOPS, More Is Better
Hardware
80
S110_AHCI_mdadm
SE +/- 2.40, N = 3
332
S110_AHCI_ZFS
SE +/- 1.15, N = 3
856
200
400
600
800
1000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
269
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 15.01, N = 3
4306
900
1800
2700
3600
4500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.58, N = 3
272
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

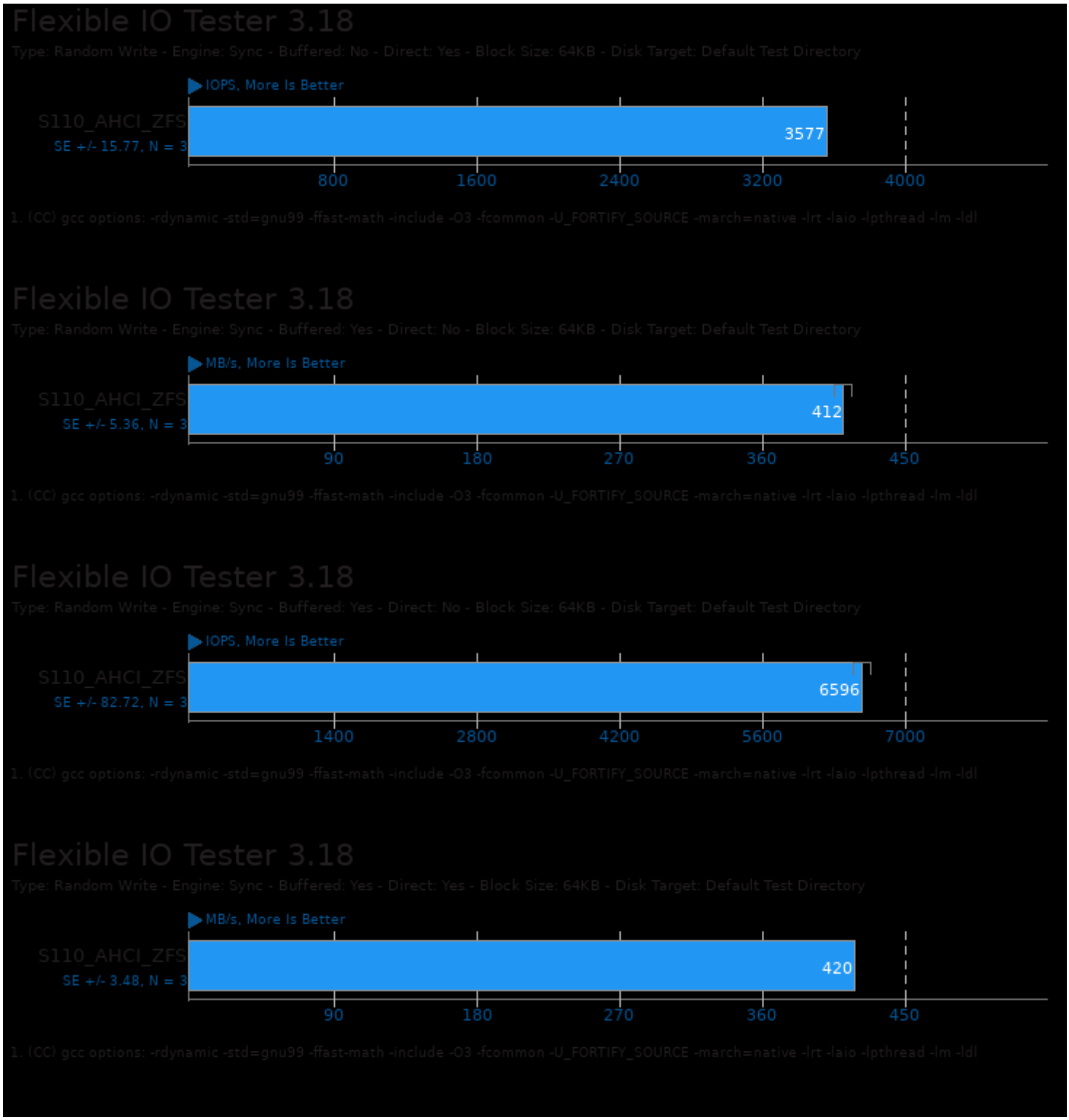
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 11.15, N = 3
4350
900
1800
2700
3600
4500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 2.03, N = 3
233
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 34.34, N = 3
3729
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.58, N = 3
224
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

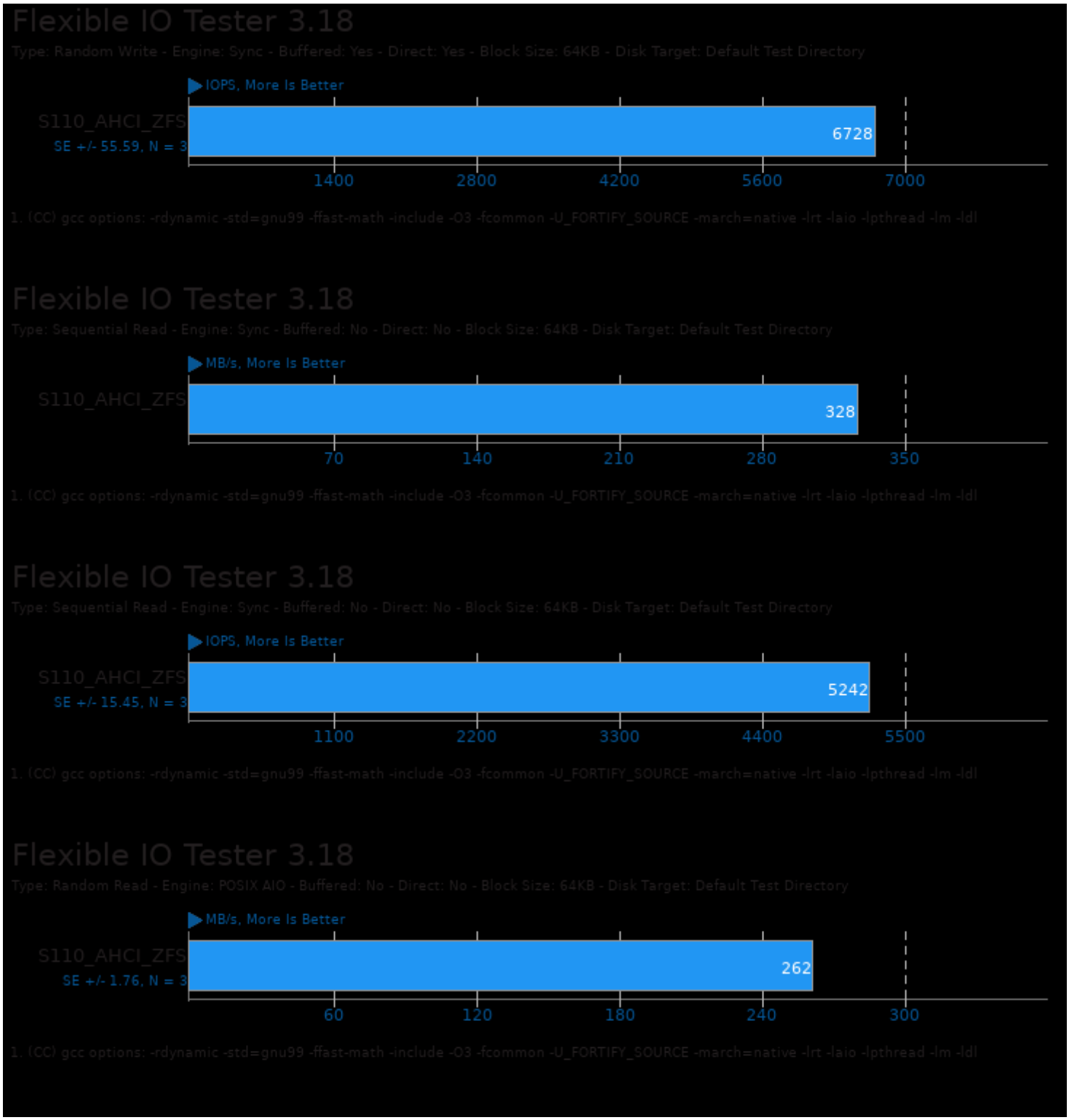
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 8.21, N = 3
3584
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
234
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
3748
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.88, N = 3
224
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

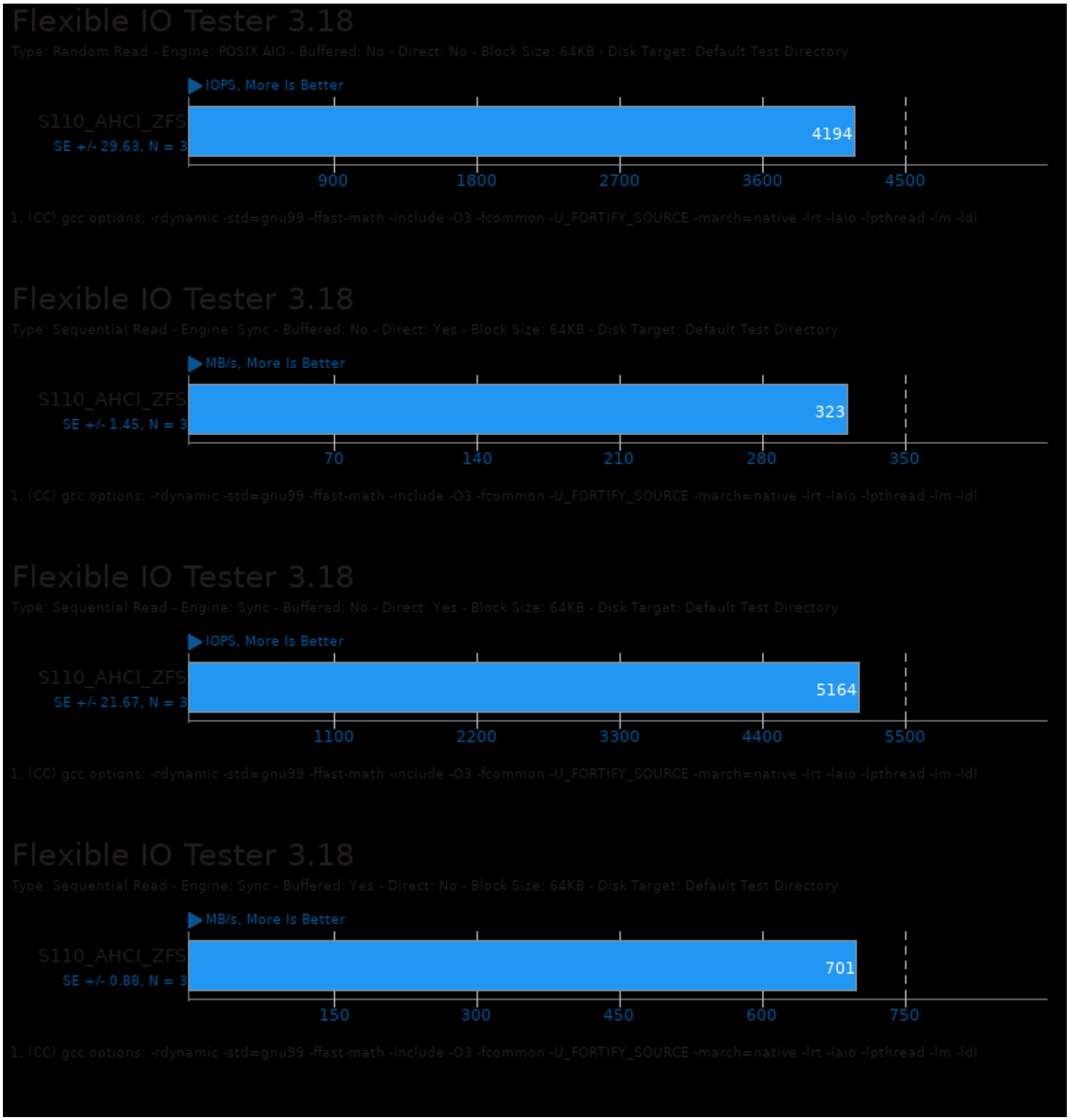
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 15.77, N = 3
3577
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 5.36, N = 3
412
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 82.72, N = 3
6596
1400
2800
4200
5600
7000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 3.48, N = 3
420
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

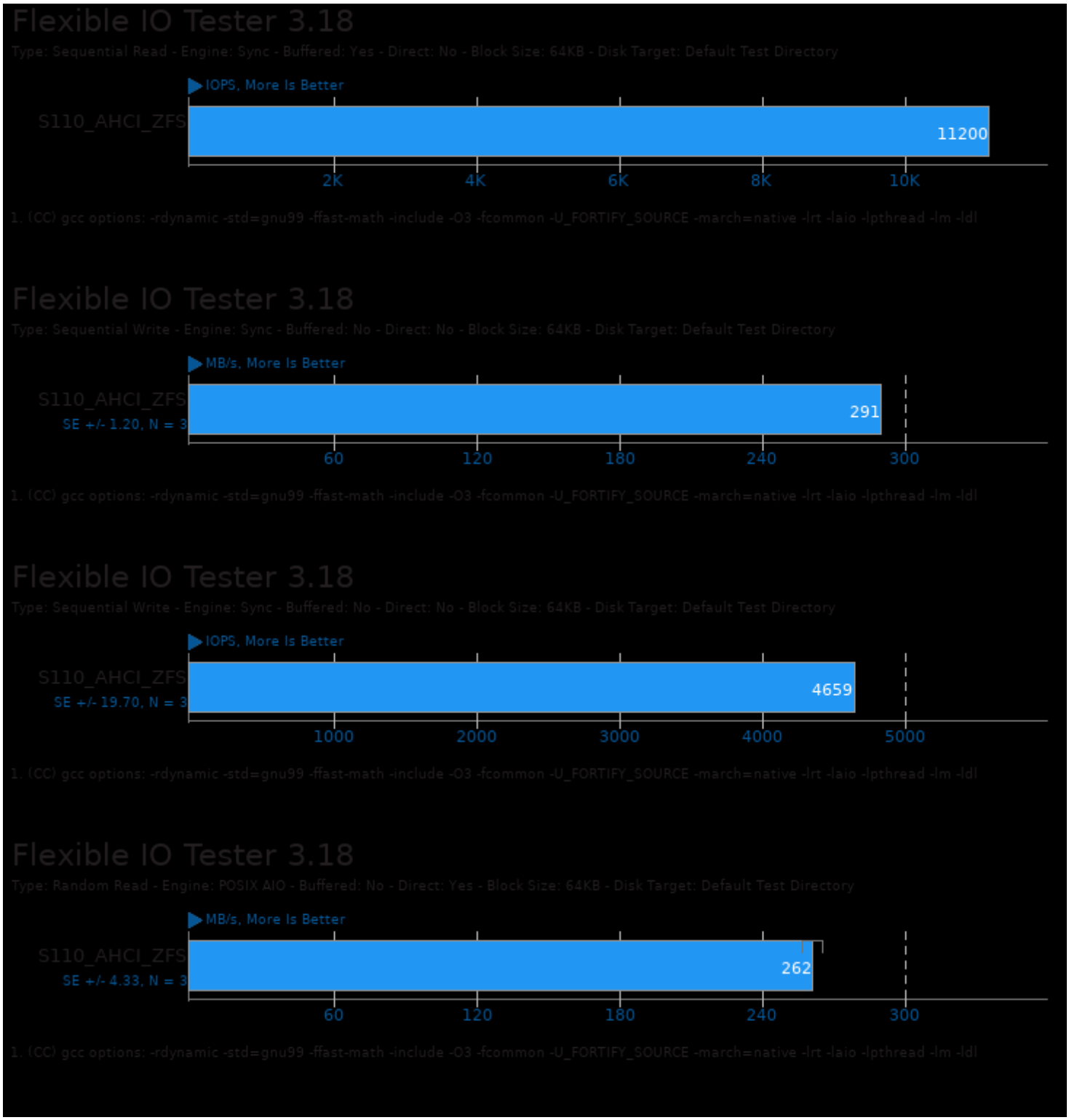
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 55.59, N = 3
6728
1400
2800
4200
5600
7000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
328
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 15.45, N = 3
5242
1100
2200
3300
4400
5500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.76, N = 3
262
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

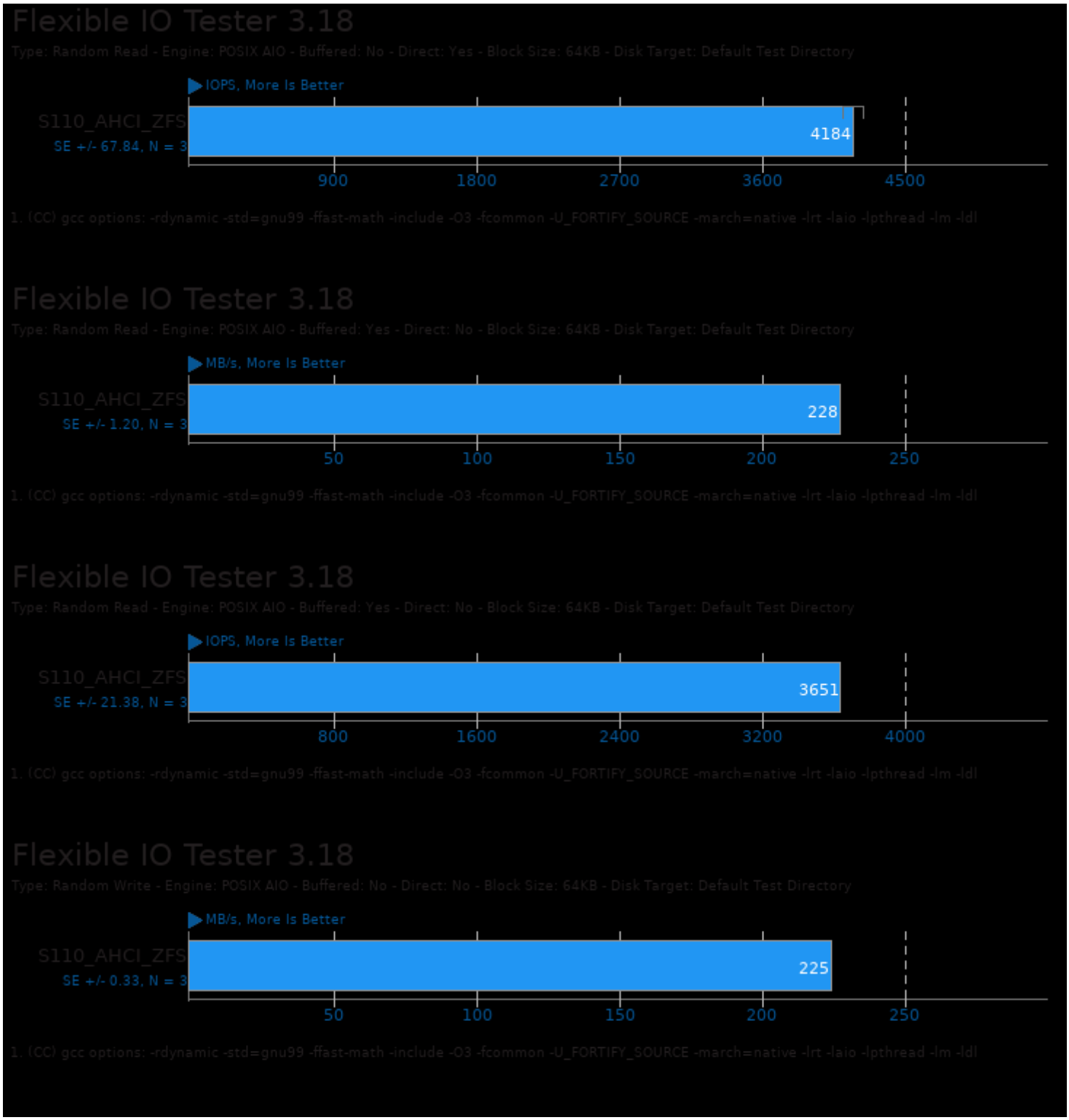
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 29.63, N = 3
4194
900
1800
2700
3600
4500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.45, N = 3
323
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 21.67, N = 3
5164
1100
2200
3300
4400
5500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.88, N = 3
701
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

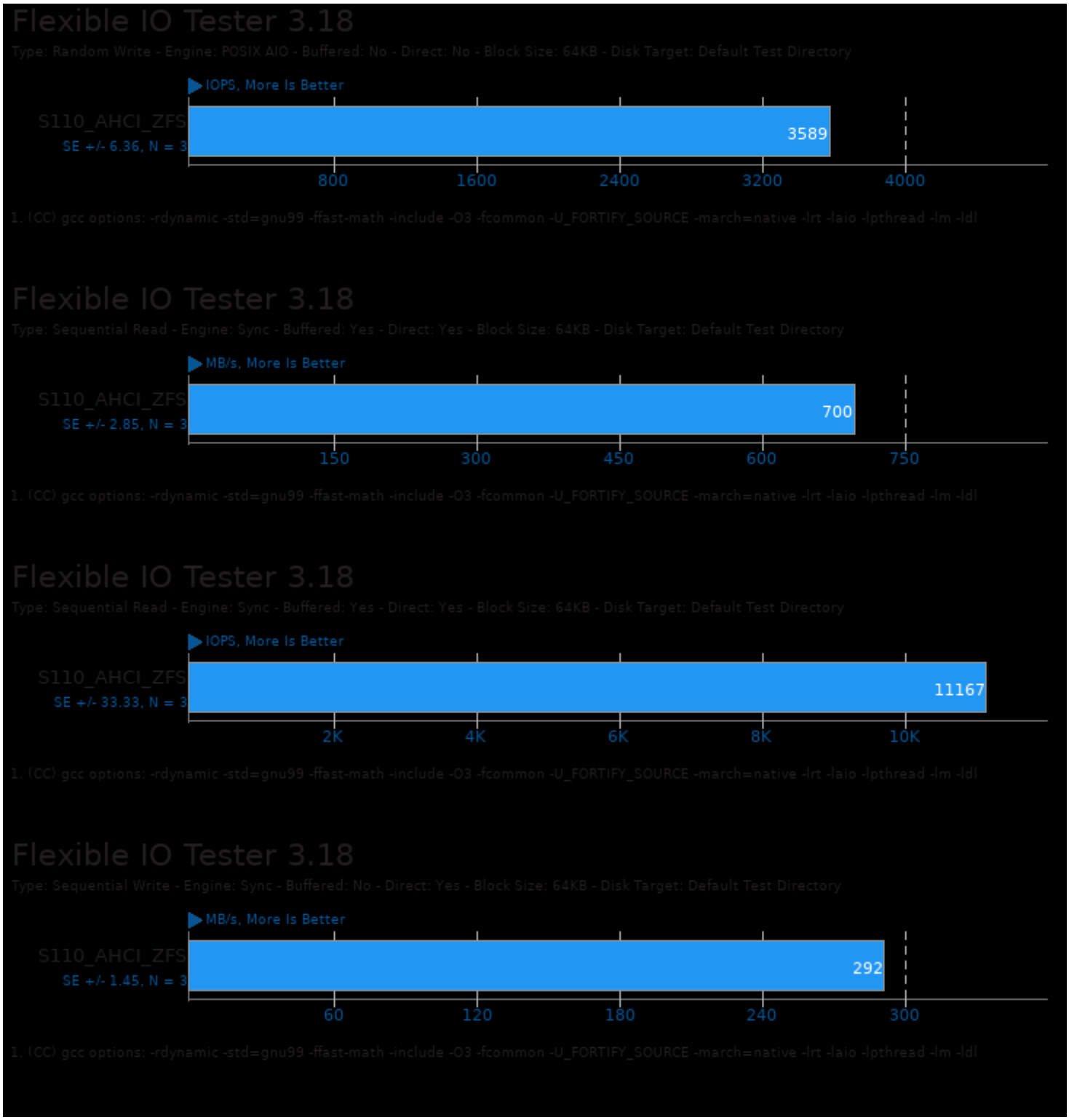
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
11200
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.20, N = 3
291
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 19.70, N = 3
4659
1000
2000
3000
4000
5000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 4.33, N = 3
262
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

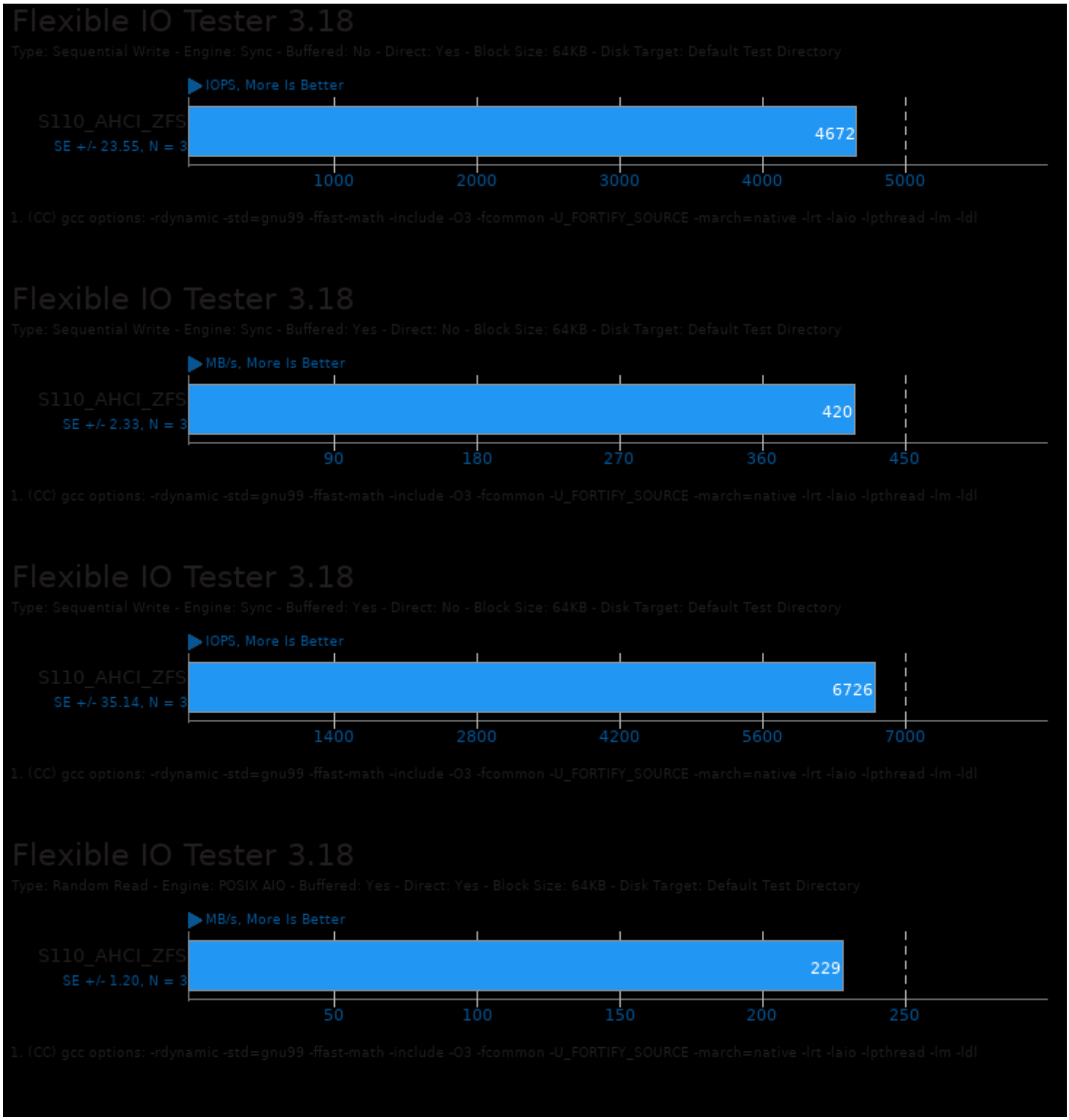
probaraid5


Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 67.84, N = 3
4184
900
1800
2700
3600
4500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.20, N = 3
228
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 21.38, N = 3
3651
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.33, N = 3
225
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

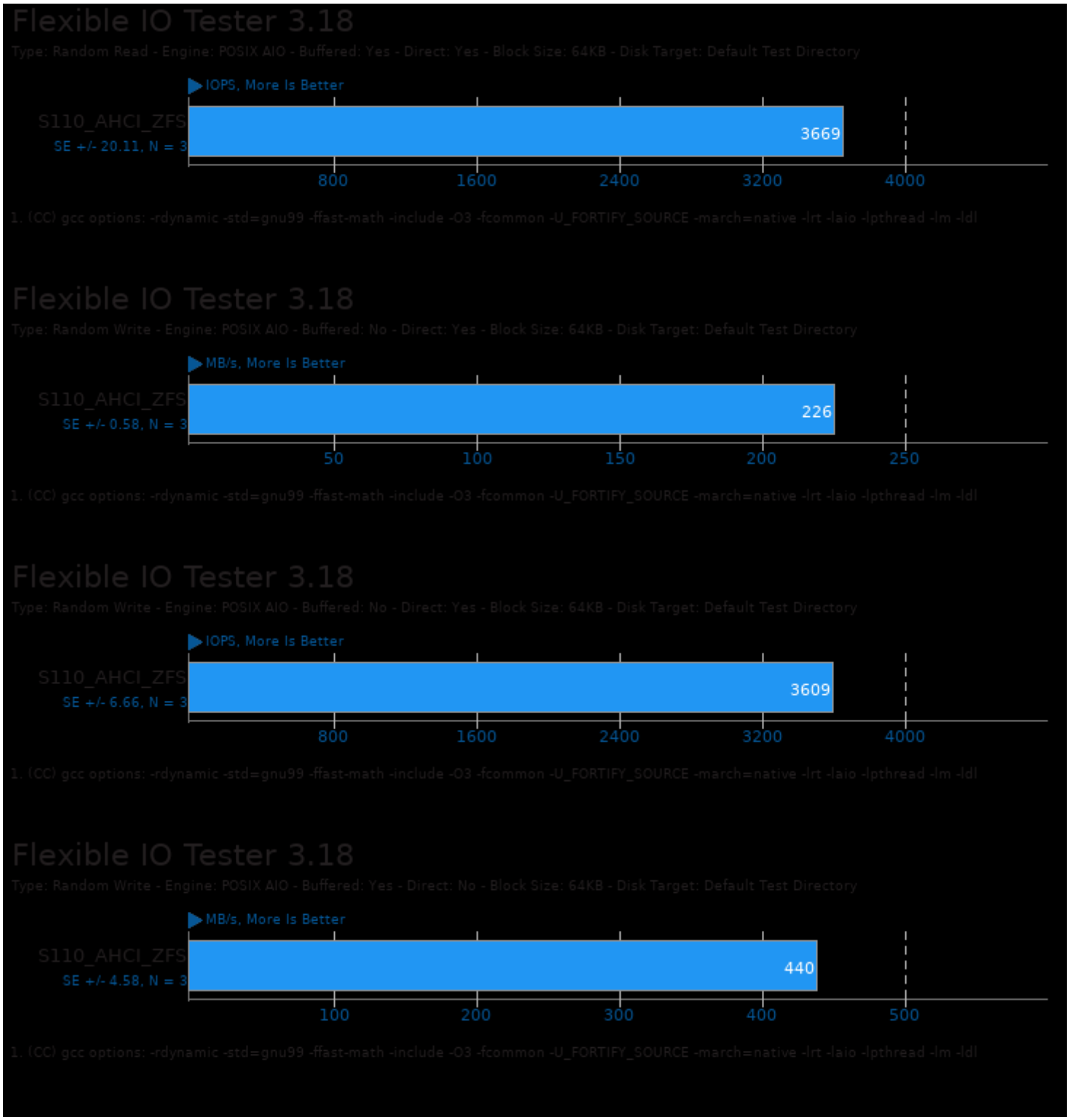
probaraid5


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 6.36, N = 3
3589
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 2.85, N = 3
700
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 33.33, N = 3
11167
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.45, N = 3
292
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

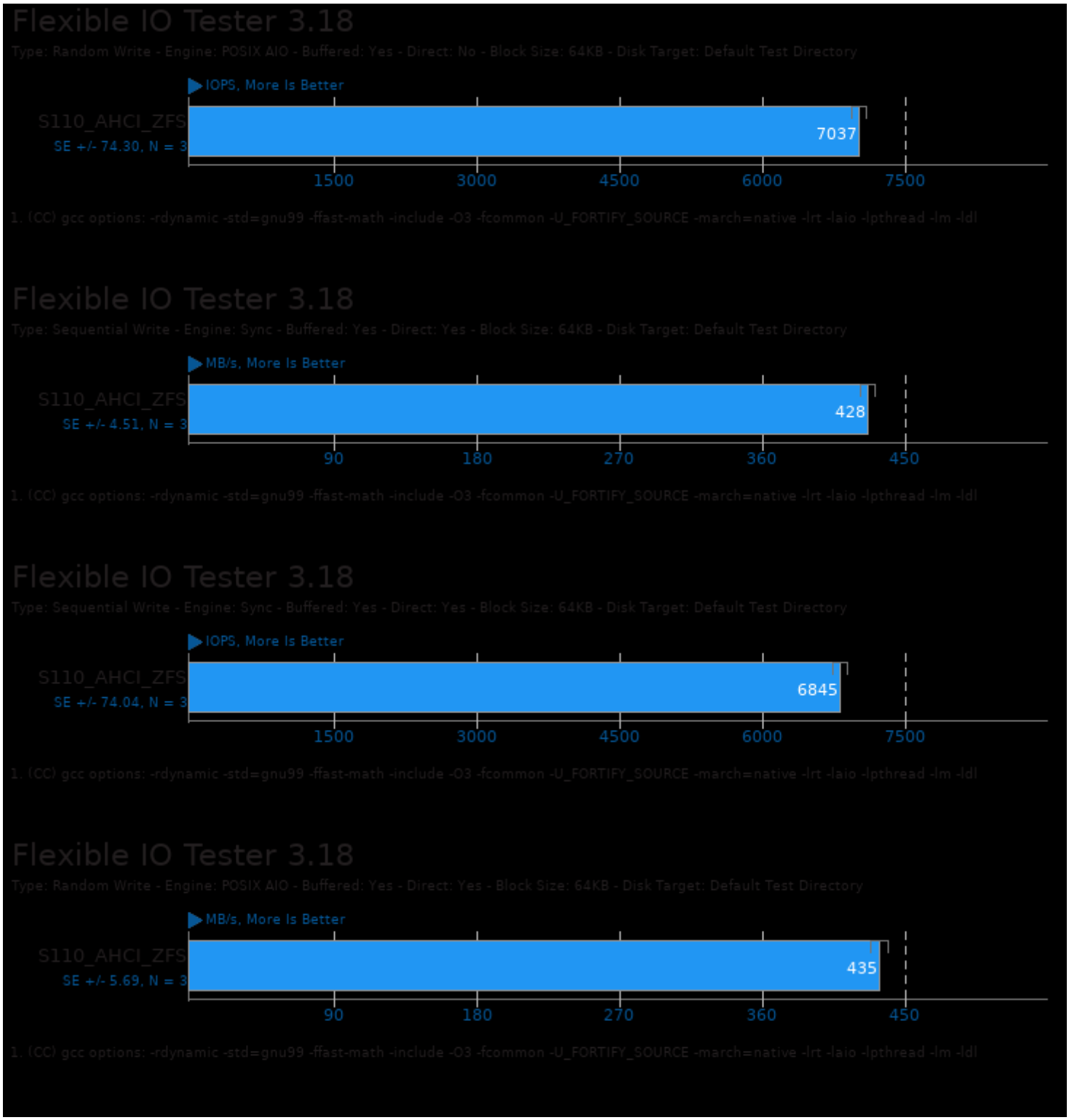
probaraid5

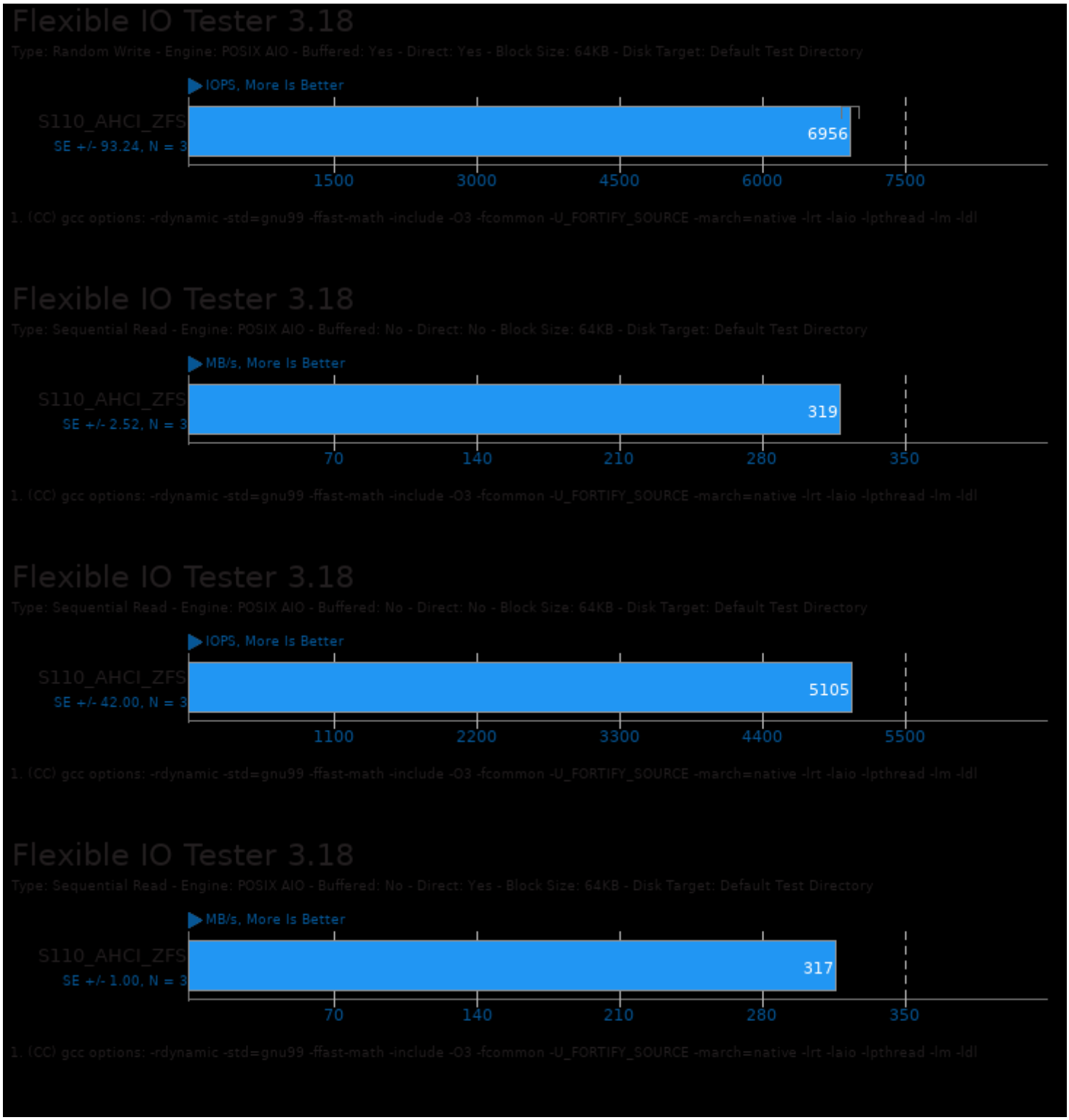

Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 23.55, N = 3
4672
1000
2000
3000
4000
5000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 2.33, N = 3
420
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 35.14, N = 3
6726
1400
2800
4200
5600
7000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.20, N = 3
229
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

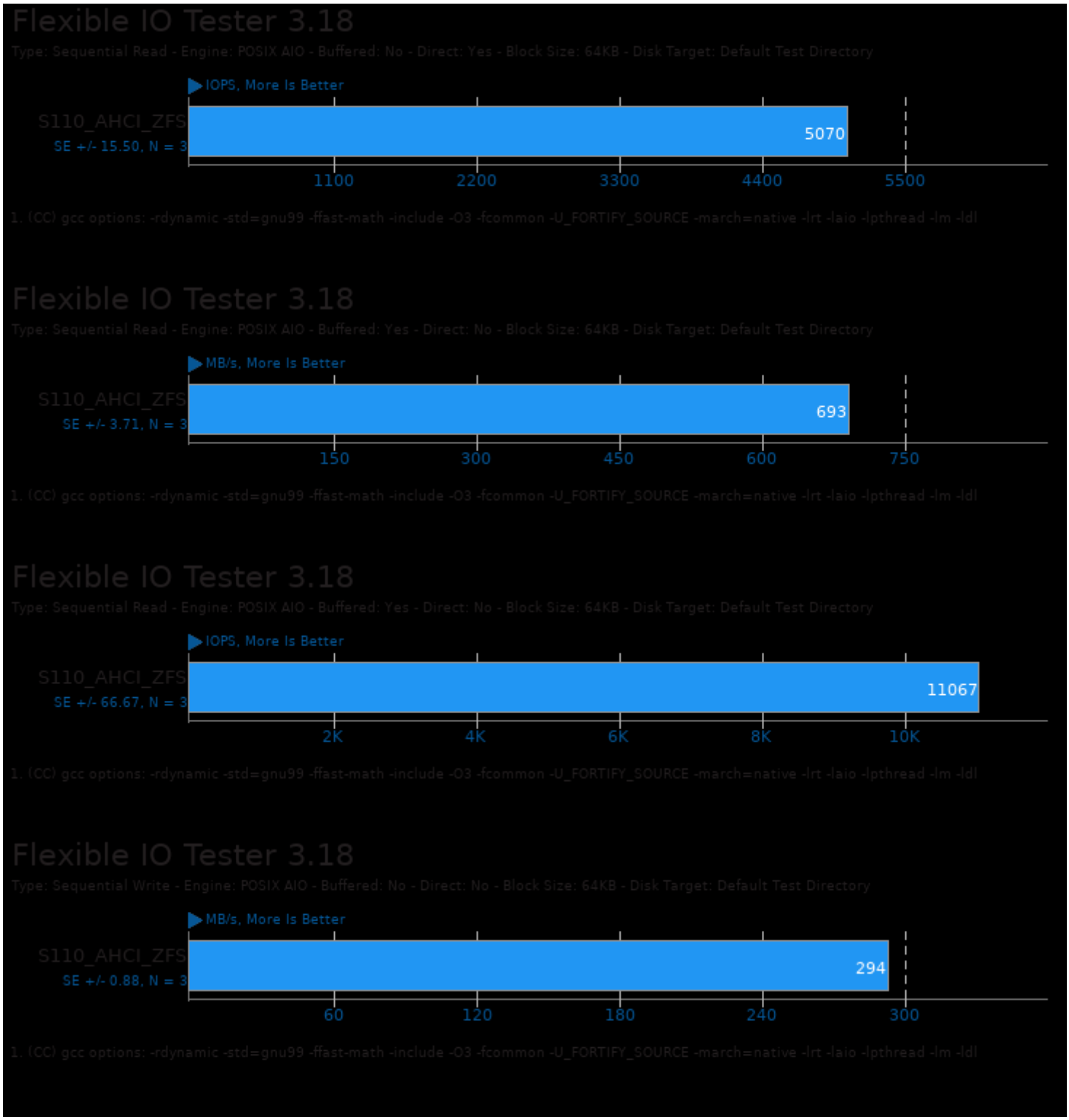

Flexible IO Tester 3.18
Type: Random Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 20.11, N = 3
3669
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.58, N = 3
226
50
100
150
200
250
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 6.66, N = 3
3609
800
1600
2400
3200
4000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 4.58, N = 3
440
100
200
300
400
500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5

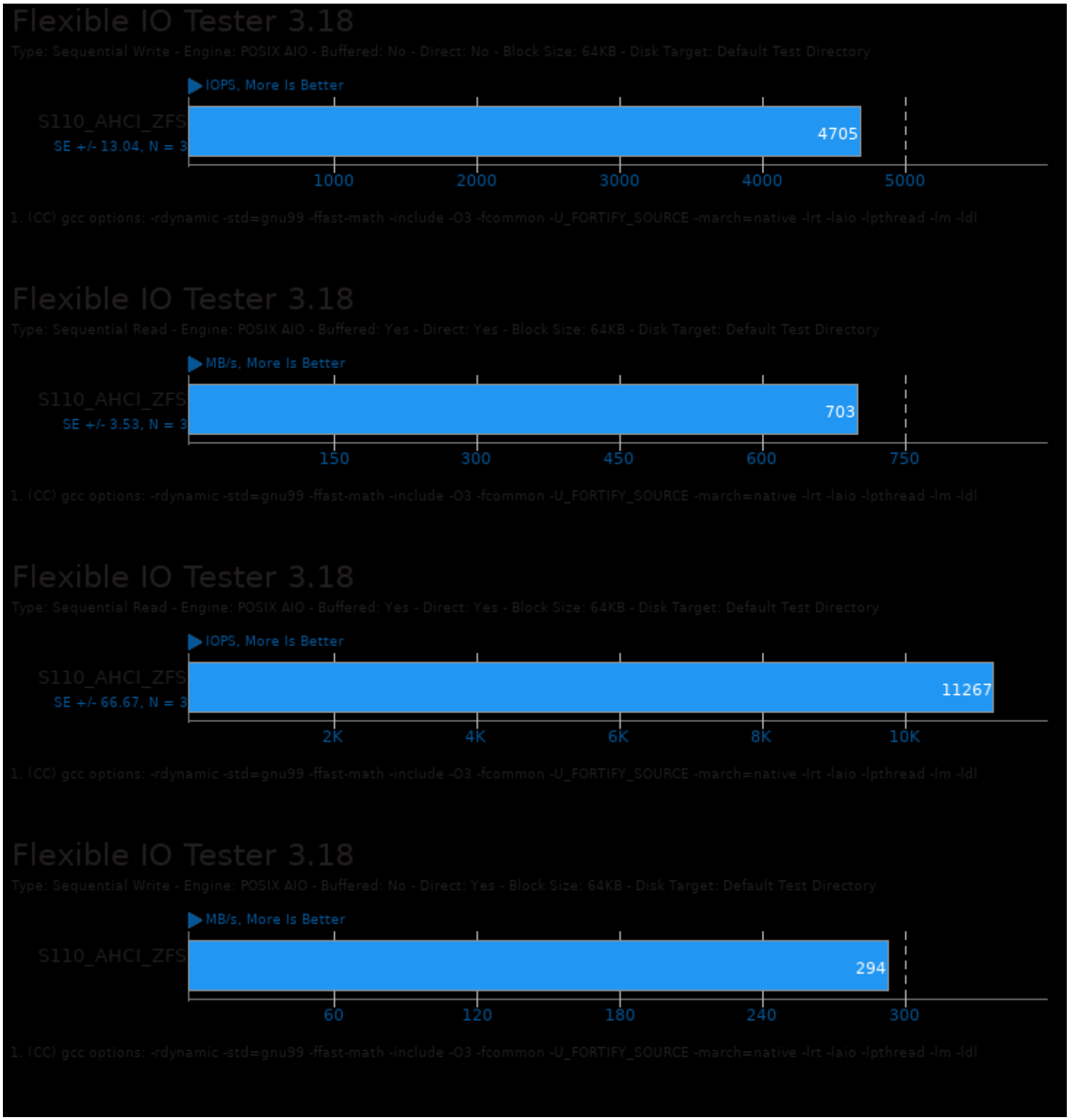

Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 74.30, N = 3
7037
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 4.51, N = 3
428
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: Sync - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 74.04, N = 3
6845
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 5.69, N = 3
435
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl


Flexible IO Tester 3.18
Type: Random Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 93.24, N = 3
6956
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 2.52, N = 3
319
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 42.00, N = 3
5105
1100
2200
3300
4400
5500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.00, N = 3
317
70
140
210
280
350
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

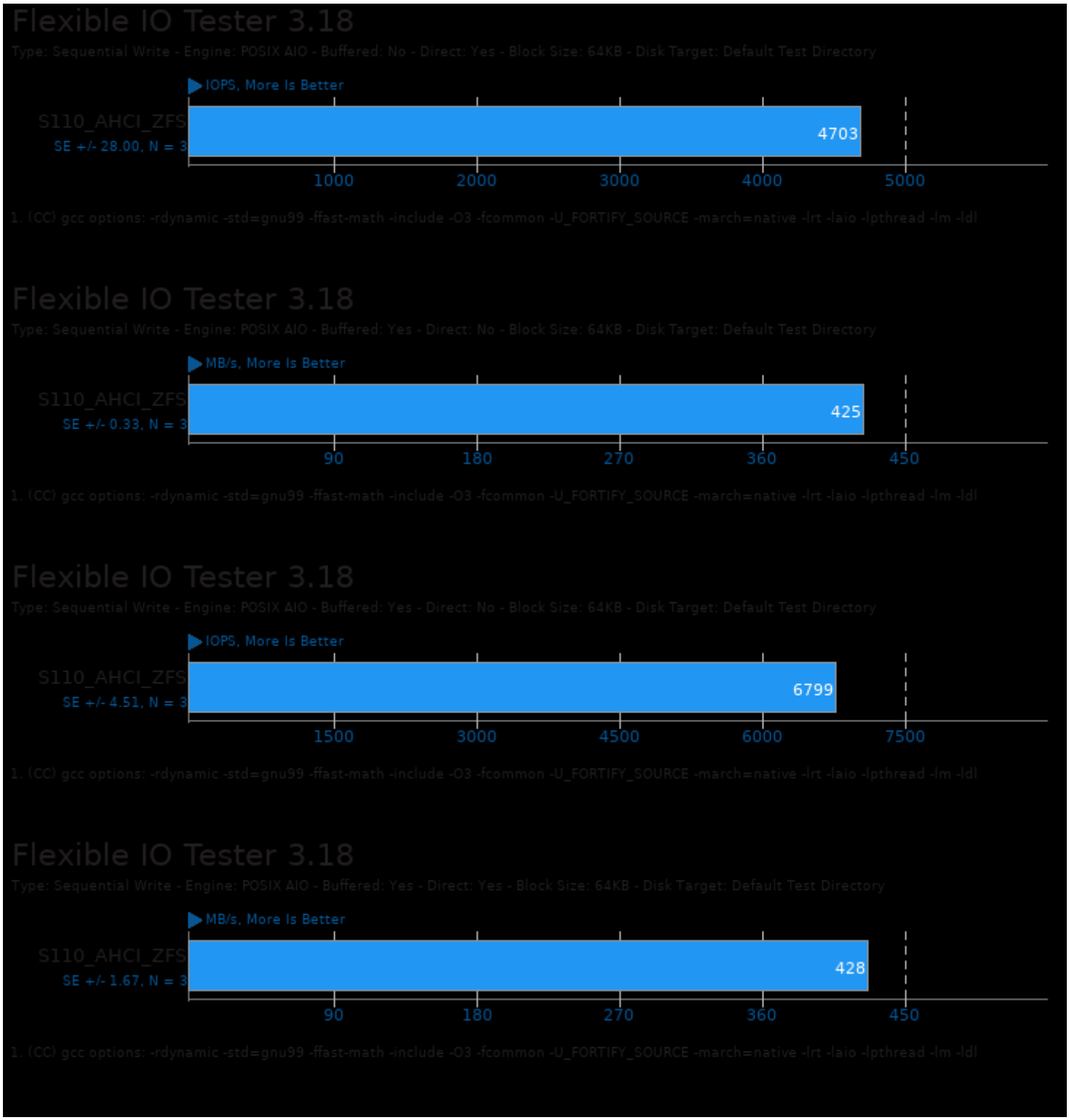
probaraid5


Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 15.50, N = 3
5070
1100
2200
3300
4400
5500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 3.71, N = 3
693
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 66.67, N = 3
11067
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.88, N = 3
294
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

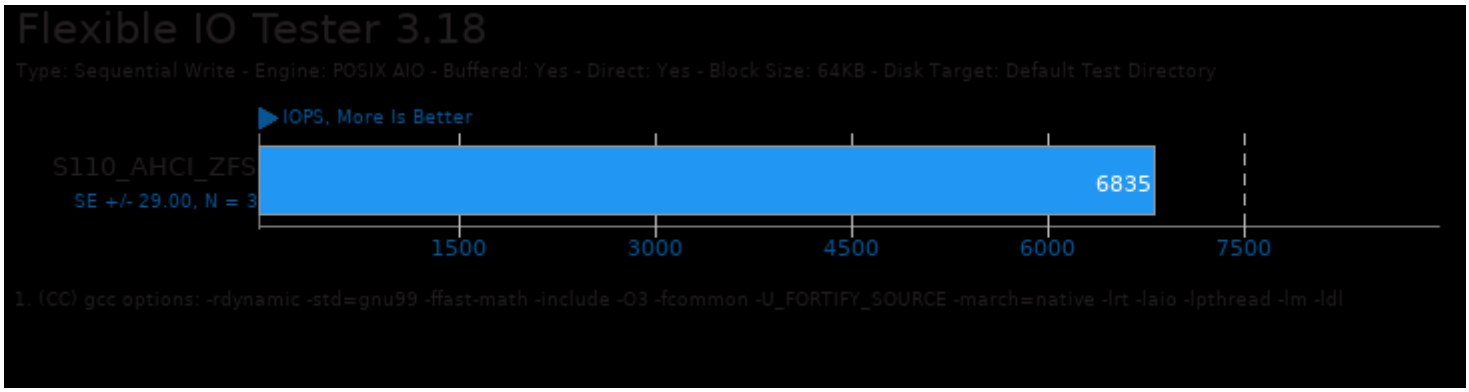
probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 13.04, N = 3
4705
1000
2000
3000
4000
5000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 3.53, N = 3
703
150
300
450
600
750
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Read - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 66.67, N = 3
11267
2K
4K
6K
8K
10K
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
294
60
120
180
240
300
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

probaraid5


Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: No - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 28.00, N = 3
4703
1000
2000
3000
4000
5000
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 0.33, N = 3
425
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 64KB - Disk Target: Default Test Directory
IOPS, More Is Better
S110_AHCI_ZFS
SE +/- 4.51, N = 3
6799
1500
3000
4500
6000
7500
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl
Flexible IO Tester 3.18
Type: Sequential Write - Engine: POSIX AIO - Buffered: Yes - Direct: Yes - Block Size: 64KB - Disk Target: Default Test Directory
MB/s, More Is Better
S110_AHCI_ZFS
SE +/- 1.67, N = 3
428
90
180
270
360
450
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -fcommon -U_FORTIFY_SOURCE -march=native -lrt -laio -lpthread -lm -ldl

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