

AVERAGE of cold						direction	prefetch		branch								asc								desc							
						master	off	prefetch	prefetch-back	on	prefetch	prefetch-back	master	off	prefetch	prefetch-back	on	prefetch	prefetch-back	off	prefetch	prefetch-back	on	prefetch	prefetch-back	master	off	prefetch	prefetch-back	on	prefetch	prefetch-back
buffered	data	0 io_uring	io_uring	3	16	2232	2224	2208	1880	1860	51246	51239	51217	7283	2470	100%	99%	84%	83%	2296%	2296%	2295%	326%	111%	2296%	2296%	2295%	326%	111%			
					128	2242	2203	2220	1866	1881	51240	51255	51208	6078	2478	98%	99%	83%	84%	2285%	2286%	2284%	271%	111%	2285%	2286%	2284%	271%	111%			
					16	2241	2222	2218	2128	2126	51265	51213	51341	6791	3409	99%	99%	95%	95%	2288%	2285%	2291%	303%	152%	2288%	2285%	2291%	303%	152%			
					128	2233	2219	2220	2122	2103	51320	51242	51223	6332	3420	99%	99%	95%	94%	2298%	2295%	2294%	284%	153%	2298%	2295%	2294%	284%	153%			
		worker		3	16	2233	2204	2199	11957	12650	51528	51288	51442	18454	2835	99%	98%	536%	567%	2308%	2297%	2304%	827%	127%	2308%	2297%	2304%	827%	127%			
					128	2253	2208	2257	1808	1813	51366	51281	51282	18492	2806	98%	100%	80%	80%	2280%	2276%	2276%	821%	125%	2280%	2276%	2276%	821%	125%			
					12	16	2235	2216	2214	1865	1888	51304	51249	51207	8099	2435	99%	99%	83%	84%	2295%	2293%	2291%	362%	109%	2295%	2293%	2291%	362%	109%		
					128	2275	2212	2197	1870	1855	51247	51230	51208	6732	2443	97%	97%	82%	82%	2253%	2252%	2251%	296%	107%	2253%	2252%	2251%	296%	107%			
		4 io_uring	io_uring	3	16	2441	2475	2417	1619	1619	11960	12077	12027	22348	2208	101%	99%	66%	66%	490%	495%	493%	916%	90%	490%	495%	493%	916%	90%			
					128	2392	2475	2474	1622	1624	11939	12000	11937	21419	2215	103%	103%	68%	68%	499%	502%	499%	895%	93%	499%	502%	499%	895%	93%			
					16	2455	2451	2417	1562	1563	11979	12095	11904	5106	2114	100%	98%	64%	64%	488%	493%	485%	208%	86%	488%	493%	485%	208%	86%			
					128	2450	2408	2459	1564	1567	11905	11971	11999	5185	2125	98%	100%	64%	64%	486%	489%	490%	212%	87%	486%	489%	490%	212%	87%			
		worker		3	16	18520	17446	17619	18671	18970	12022	12260	12015	15982	3451	94%	95%	101%	102%	65%	66%	65%	86%	19%	65%	66%	65%	86%	19%			
					128	2395	2424	2468	2615	2632	12046	12020	11997	7508	3440	101%	103%	109%	110%	503%	502%	501%	314%	144%	503%	502%	501%	314%	144%			
					12	16	2454	2474	2416	1786	1787	11948	12127	12020	6278	2137	101%	98%	73%	73%	487%	494%	490%	256%	87%	487%	494%	490%	256%	87%		
					128	2356	2492	2478	1783	1784	11947	12035	11901	4981	2138	106%	105%	76%	76%	507%	511%	505%	211%	91%	507%	511%	505%	211%	91%			
	raid-nvme	0 io_uring	io_uring	3	16	1932	1920	1917	1404	1393	55468	55385	55379	14602	2555	99%	99%	73%	72%	2871%	2867%	2866%	756%	132%	2871%	2867%	2866%	756%	132%			
					128	1929	1940	1900	1381	1379	58571	58529	58510	5424	2589	101%	99%	72%	72%	3037%	3035%	3034%	281%	134%	3037%	3035%	3034%	281%	134%			
					16	1930	1910	1922	1737	1738	58557	58537	58524	14864	3440	99%	100%	90%	90%	3034%	3033%	3032%	770%	178%	3034%	3033%	3032%	770%	178%			
					128	1971	1919	1918	1731	1739	58960	58878	58859	5371	3435	97%	97%	88%	88%	2991%	2987%	2986%	273%	174%	2991%	2987%	2986%	273%	174%			
		worker		3	16	1940	1912	1911	1369	1400	52207	52125	52191	28107	2742	99%	99%	71%	72%	2690%	2686%	2690%	1448%	141%	2690%	2686%	2690%	1448%	141%			
					128	1939	1912	1901	1376	1380	55429	55400	55395	30425	2800	99%	98%	71%	71%	2859%	2858%	2857%	1569%	144%	2859%	2858%	2857%	1569%	144%			
					12	16	1949	1904	1906	1381	1388	55486	55394	55387	14771	2532	98%	98%	71%	71%	2847%	2842%	2842%	758%	130%	2847%	2842%	2842%	758%	130%		
					128	1929	1913	1925	1412	1385	55468	55395	55443	12202	2535	99%	100%	73%	72%	2876%	2872%	2875%	633%	131%	2876%	2872%	2875%	633%	131%			
		4 io_uring	io_uring	3	16	1377	1381	1372	1214	1217	13191	13261	13105	22575	1938	100%	100%	88%	88%	958%	963%	951%	1639%	141%	958%	963%	951%	1639%	141%			
					128	1416	1388	1383	1214	1255	13820	13824	13788	21555	1971	98%	98%	86%	89%	976%	976%	973%	1522%	139%	976%	976%	973%	1522%	139%			
					16	1377	1391	1380	1077	1079	13835	13760	13802	3608	1828	101%	100%	78%	78%	1005%	999%	1002%	262%	133%	1005%	999%	1002%	262%	133%			
					128	1375	1365	1368	1065	1055	13915	13867	13835	2477	1847	99%	100%	77%	77%	1012%	1009%	1006%	180%	134%	1012%	1009%	1006%	180%	134%			
		worker		3	16	1377	1341	1367	1468	1466	12391	12405	12383	16921	3102	97%	99%	107%	106%	900%	901%	899%	1229%	225%	900%	901%	899%	1229%	225%			
					128	1378	1387	1402	1493	1504	13092	13105	13150	8260	3211	101%	102%	108%	109%	950%	951%	954%	599%	233%	950%	951%	954%	599%	233%			
					12	16	1383	1368	1375	1317	1324	13086	13084	13114	7541	1840	99%	99%	95%	96%	946%	946%	948%	545%	133%	946%	946%	948%	545%	133%		
					128	1390	1366	1364	1349	1347	13120	13141	13093	5264	1836	98%	98%	97%	97%	944%	945%	942%	379%	132%	944%	945%	942%	379%	132%			
	raid-sata	0 io_uring	io_uring	3	16	4827	4858	4764	4831	4804	16786	117000	116061	21245	12582	101%	99%	100%	100%	2419%	2424%	2404%	440%	261%	2419%	2424%	2404%	440%	261%			
					128	4938	4795	4878	4898	4803	117640	120055	116125	12723	13006	97%	99%	99%	97%	2382%	2431%	2352%	258%	263%	2382%	2431%	2352%	258%	263%			
					16	4926	4927	5494	4914	4824	117076	116829	116925	21552	13107	100%	112%	100%	98%	2377%	2372%	2374%	438%	266%	2377%	2372%	2374%	438%	266%			
					128	4824	4942	4810	4898	4776	116449	119204	116834	12344	13103	102%	100%	102%	99%	2414%	2471%	2422%	256%	272%	2414%	2471%	2422%	256%	272%			
		worker		3	16	5178	5167	5119	4846	4812	118175	115474	115608	43433	14666	100%	99%	94%	93%	2282%	2230%	2233%	839%	283%	2282%	2230%	2233%	839%	283%			
					128	4914	4777	4782	4827	4806	116087	118332	118362	43337	14724	97%	97%	98%	98%	2363%	2408%	2409%	882%	300%	2363%	2408%	2409%	882%	300%			
					12	16	4903	4745	4778	4908	4761	116483	118456	115819	21916	12527	97%	97%	100%	97%	2376%	2416%	2362%	447%	256%	2376%	2416%	2362%	447%	256%		
					128	4874	4783	4809	4909	4865	116263	117735	115956	19496	12462	98%	99%	101%	100%	2386%	2416%	2379%	400%	256%	2386%	2416%	2379%	400%	256%			
		4 io_uring	io_uring	3	16	5514	5168	5085	4863	4872	28576	28633	28776	23751	7760	94%	92%	88%	88%	518%	519%	522%	431%	141%	518%	519%	522%	431%	141%			
					128	5151	5149	5217	4794	4812	28637	28612	28598	23758	7766	100%	101%	93%	93%	556%	555%	555%	461%	151%	556%	555%	555%	461%	151%			
					16	5136	5072	5076	4881	4808	28795	28680	28632	8965	7600	99%	99%	95%	94%	561%	558%	557%	175%	148%	561%	558%	557%	175%	148%			
worker		3	128	5134	5124	5154	4906	4915	28624	28620	29471	7590	7545	100%	100%	96%	96%	558%	557%	574%	148%	147%	558%	557%	574%	148%	147%					
			16	5112	4996	5076	6284	5917	28387	28404	28413	36158	12204	98%	99%	123%	116%	555%	556%	556%	707%	239%	555%	556%	556%	707%	239%					
			128	5123	5458	5433	5375	5273	28510	28517	28456	17549	12280	107%	106%	105%	103%	556%	557%	555%	343%	240%	556%	557%	555%	343%	240%					
			12	16	5171	5116	5176	4876	5043	28570	28490	28513	14011	7577	99%	100%	94%	98%	553%	551%	551%	271%	147%	553%	551%	551%	271%	147%				
128	5237	5468	5272	5011	4938	28540	28509	28581	11606	7572	104%	101%	96%	94%	545%	544%	546%	222%	145%	545%	544%	546%	222%	145%								
direct	data	0 io_uring	io_uring	3	16	19730	19672	19710	2828	2799	50797	50728	50652	6634	2535	100%	100%	14%	14%	257%	257%	257%	34%	13%	257%	257%	257%	34%	13%			
					128	19716	19718	19742	2812	2809	50726	50695	50738	6325	2535	100%	100%	14%	14%	257%	257%	257%	32%	13%	257%	257%	257%	32%	13%			
					16	19739	19675	19721	4670	4666	50719	50791	50670	50725	8782	100%	100%	24%	24%	257%	257%	257%	257%	44%	257%	257%	257%	257%	44%	44%		
					128	19717	19716	19708	4642																							

raid-sata	worker	3	128	15246	15378	15100	8666	8719	57962	57865	57818	57991	8964	101%	99%	57%	57%	380%	380%	379%	380%	59%		
			16	15401	14670	15427	3198	3222	57985	57979	57883	32732	2628	95%	100%	21%	21%	377%	376%	376%	213%	17%		
			128	15398	15029	15664	3174	3225	57986	57932	57868	32715	2586	98%	102%	21%	21%	377%	376%	376%	212%	17%		
		12	16	15660	15166	15263	3031	3008	58014	57940	57907	15756	2479	97%	97%	19%	19%	370%	370%	370%	101%	16%		
			128	15269	15016	15229	3021	3007	58004	57905	57885	13066	2476	98%	100%	20%	20%	380%	379%	379%	86%	16%		
			3	16	12908	12867	12765	1667	1662	13827	13864	13931	3559	1742	100%	99%	13%	13%	107%	107%	108%	28%	13%	
		4 io_uring	128	12849	12886	12899	1657	1676	13805	13795	13866	2427	1737	100%	100%	13%	13%	107%	107%	108%	19%	14%		
			sync	3	16	12786	12864	12842	2930	2937	13791	13857	13846	13886	2699	101%	100%	23%	23%	108%	108%	108%	109%	21%
				128	12925	12919	12844	2964	2998	13840	13759	13751	13970	2666	100%	99%	23%	23%	107%	106%	106%	108%	21%	
	worker	3		16	13019	12820	12797	3006	3029	13801	13859	13797	19363	2937	98%	98%	23%	23%	106%	106%	106%	149%	23%	
		12	128	12857	12739	12829	3006	3028	13832	13804	13876	8954	2939	99%	100%	23%	24%	108%	107%	108%	70%	23%		
			16	12827	12846	12909	1661	1669	13848	13795	13860	8011	1800	100%	101%	13%	13%	108%	108%	108%	62%	14%		
	0 io_uring		128	12865	12914	12838	1674	1667	13811	13804	13840	5657	1783	100%	100%	13%	13%	107%	107%	108%	44%	14%		
		3	16	48234	48265	47054	13465	13207	117289	118306	117154	21089	12992	100%	98%	28%	27%	243%	245%	243%	44%	27%		
		sync	128	46489	47029	48733	13217	13565	117477	120831	119316	12790	12995	101%	105%	28%	29%	253%	260%	257%	28%	28%		
	3		16	46487	46492	47342	26134	26206	120741	117537	117471	117974	32187	100%	102%	56%	56%	260%	253%	253%	254%	69%		
	128		46645	46742	46727	26269	26311	117880	117813	121461	118512	32568	100%	100%	56%	56%	253%	253%	260%	254%	70%			
	worker	3	16	46689	47868	47901	15186	15208	118251	117907	119449	43319	15021	103%	103%	33%	33%	253%	253%	256%	93%	32%		
		128	46207	46294	46633	15340	15329	117581	119845	118211	44676	15013	100%	101%	33%	33%	254%	259%	256%	97%	32%			
		12	16	48097	46308	46299	13094	13345	116642	117999	118655	22530	12563	96%	96%	27%	28%	243%	245%	247%	47%	26%		
	4 io_uring	3	128	46457	46367	46436	13179	13238	116832	119591	116839	19874	12681	100%	100%	28%	28%	251%	257%	251%	43%	27%		
			16	27190	27147	27066	8549	7726	29079	29404	28891	8970	7600	100%	100%	31%	28%	107%	108%	106%	33%	28%		
			128	27183	27119	27133	7815	7739	28941	28936	28891	7554	7567	100%	100%	29%	28%	106%	106%	106%	28%	28%		
		sync	3	16	27367	27544	27125	11739	12180	28887	28879	29478	29029	11460	101%	99%	43%	45%	106%	106%	108%	106%	42%	
			128	27273	27221	27290	11700	11781	28995	29038	29114	28100	11491	100%	100%	43%	43%	106%	106%	107%	103%	42%		
			3	16	27230	27812	26700	12486	12376	28505	28510	28604	37169	12340	102%	98%	46%	45%	105%	105%	105%	137%	45%	
		worker	128	26851	28870	27526	13186	12511	28757	29789	29643	18369	12570	108%	103%	49%	47%	107%	111%	110%	68%	47%		
			12	16	27711	26919	26975	7768	7743	30505	29350	29381	14351	7576	97%	97%	28%	28%	110%	106%	106%	52%	27%	
			128	27088	26996	27051	7751	7769	28864	28838	28710	11605	7591	100%	100%	29%	29%	107%	106%	106%	43%	28%		