AVERAGE of timing							branch	prefetch	limit																
							master	patched		patched-limit								patched-limit-instrument							
							off	off	on	off	on							off	on						
rows	data	sb	io	iomethod	ioworkers	workers	0	0	0	0	0	1	4	16	64	128	0	0	1	4	16	64	128		
1000000	random	128MB	buffered	io_uring	32	1	2960	2968	1898	2942	1874	3056	2260	1933	1895	1901	3094	1953	3169	2392	2036	1975	1967		
						2	3373	3360	2251	3357	2212	3487	2620	2242	2200	2205	3411	2282	3558	2741	2351	2283	2294		
						4	3989	3955	3219	3960	3183	4014	3174	3185	3175	3181	4018	3224	4109	3260	3283	3223	3216		
						8	5585	5577	5361	5594	5239	5605	4745	5261	5237	5194	5605	5225	5670	4829	5204	5231	5249		
					worker	12	1	2975	2950	1453	2954	1437	4864	2194	1498	1470	1457	3038	1530	5160	2233	1613	1499	1516		
							2	3372	3393	1960	3377	2103	5450	2634	2034	2074	2009	3445	2085	5543	2727	2127	2072	2063		
							4	3984	3967	6149	3950	5966	6741	6256	6000	6173	6091	4007	6049	6888	6288	6148	5863	5994		
							8	5596	5591	11561	5571	11538	13820	12033	11477	11491	11549	5607	11618	13877	12246	11718	11540	11527		
						32	1	2978	2983	1438	2969	1452	4768	2156	1515	1446	1450	3061	1510	5090	2212	1678	1497	1504		
							2	3412	3386	2018	3381	2037	5487	2630	2031	2206	2013	3459	2082	5528	2697	2133	2084	2210		
							4	3966	3962	7562	3946	7499	7115	7997	7559	7516	7530	4017	7399	7112	7819	7407	7410	7389		
							8	5601	5679	18386	5626	18284	17914	18742	18506	18375	18522	5602	18481	17945	18915	18625	18475	18630		
				direct	io_uring	32	1	31591	31618	2792	31620	2797	31056	13341	3375	2787	2798	31729	2843	31128	13369	3403	2851	2851		
							2	36478	36496	3453	36615	3449	35873	13776	3838	3457	3455	36634	3486	35956	13761	3872	3487	3483		
							4	39846	39838	4446	39899	4448	38980	14440	4705	4440	4449	39877	4459	39107	14449	4752	4480	4476		
							8	42289	42321	6181	42314	6176	41345	15545	6375	6176	6178	42387	6191	41345	15548	6397	6198	6198		
					worker	12	1	31607	31590	2955	31590	2955	33588	14423	3569	2954	2965	31731	2963	33587	14394	3576	2960	2966		
							2	36534	36498	6324	36498	6325	39399	15228	6326	6323	6322	36575	6321	39393	15307	6327	6330	6321		
							4	39708	39682	13510	39761	13522	43139	16018	13514	13511	13515	39780	13513	43238	16013	13517	13524	13518		
							8	42289	42340	19351	42370	19354	46549	27890	20126	19364	19353	42431	19371	46613	27878	20140	19370	19363		
						32	1	31615	31589	2804	31608	2802	33552	14442	3546	2807	2804	31691	2817	33616	14385	3560	2820	2819		
							2	36614	36557	4016	36564	4007	39482	15281	4316	3995	4005	36615	4022	39564	15197	4328	4026	4024		
							4	39814	39688	5508	39907	5512	43243	16116	5670	5586	5530	39785	5511	43345	16116	5863	5626	5548		
							8	42345	42375	10995	42312	10974	46614	19422	11215	10980	10978	42393	10970	46587	19363	11234	10992	10978		
		8GB	buffered	io_uring	32	1	2626	2549	1140	2526	1211	2481	1715	1206	1162	1150	2593	1223	2616	1800	1284	1214	1295		
							2	2681	2663	1285	2689	1306	2697	1869	1343	1279	1282	2759	1391	2677	1911	1444	1338	1359		
							4	2900	2815	1500	2811	1492	2746	1961	1518	1475	1490	2878	1561	2785	2033	1590	1541	1554		
							8	3007	3028	1848	2999	1922	2941	2162	1840	1916	1835	3082	1998	2996	2233	1912	1897	1903		
					worker	12	1	2522	2520	1133	2569	1132	2698	1854	1203	1119	1126	2590	1170	2742	1917	1327	1177	1185		
							2	2701	2652	1288	2700	1316	2845	1986	1372	1324	1326	2763	1365	2863	2016	1418	1368	1362		
							4	2825	2891	1720	2824	1698	2971	2110	1733	1762	1773	2874	1861	3012	2153	1908	1736	1746		
							8	2998	3032	2138	3010	2128	3269	2619	2339	2134	2143	3077	2197	3337	2697	2399	2208	2178		
						32	1	2537	2558	1143	2538	1129	2720	1855	1201	1117	1134	2584	1170	2822	1991	1262	1171	1178		
							2	2687	2696	1263	2672	1266	2847	1991	1342	1272	1243	2746	1318	2878	2037	1382	1310	1313		
							4	2829	2812	1538	2823	1474	2982	2113	1550	1475	1479	2884	1551	3031	2178	1625	1639	1554		
							8	3008	3026	2045	3026	1998	3351	2680	2105	2009	1997	3086	2041	3358	2615	2249	2064	2021		
				direct	io_uring	32	1	3664	3673	1203	3669	1297	3601	2690	1657	1277	1254	3737	1276	3658	2746	1721	1354	1374		
							2	3802	3815	1317	3810	1298	3737	2800	1773	1409	1354	3842	1354	3758	2856	1874	1460	1403		
							4	4023	4084	1464	3980	1534	3906	2956	1904	1558	1573	4064	1536	4033	3016	1980	1626	1553		
							8	4284	4236	1678	4243	1675	4129	3230	2157	1800	1726	4300	1743	4265	3232	2214	1860	1778		
					worker	12	1	3694	3716	1212	3705	1204	3788	2807	1691	1281	1235	3781	1271	3891	2894	1809	1361	1315		
							2	3811	3803	1436	3780	1501	3949	2982	1960	1539	1481	3844	1479	3988	3008	1933	1592	1527		
							4	4015	4009	1963	4020	1972	4237	3153	2351	2090	2006	4080	2038	4248	3223	2506	2143	2063		
							8	4241	4239	2493	4285	2452	4469	3637	3110	2627	2599	4297	2574	4510	3683	3168	2768	2559		
						32	1	3694	3704	1211	3664	1194	3837	2955	1702	1350	1222	3737	1255	3895	2932	1794	1404	1302		
							2	3810	3802	1422	3799	1344	3979	2982	1880	1444	1376	3869	1377	4025	3005	1921	1522	1416		
							4	4017	4094	1562	4039	1554	4172	3161	2090	1683	1604	4090	1616	4233	3214	2139	1742	1718		
							8	4232	4235	1930	4233	1935	4447	3504	2473	2071	1973	4293	1978	4510	3581	2526	2122	2020		
	sequential	128MB	buffered	io_uring	32	1	644	645	636	640	629	651	640	622	633	637	698	705	714	693	686	693	696		
							2	660	654	649	654	649	669	645	641	697	651	714	713	734	708	704	718	714		
							4	689	681	684	685	683	695	678	666	682	684	743	745	760	736	729	809	751		
							8	802	792	822	797	804	820	788	770	795	806	852	854	867	841	823	856	877		
					worker	12	1	636	638	566	637	561	668	619	647	560	553	692	630	720	691	682	627	623		
							2	663	655	577	661	578	692	635	754	579	585	716	675	734	705	695	645	643		
							4	684	685	617	682	619	795	682	682	610	623	742	674	832	778	746	671	729		
							8	810	796	778	801	801	1115	905	895	774	768	849	812	1161	972	939	814	821		

					32	1	657	640	564	643	557	672	618	627	568	564	696	621	714	683	679	621	622
						2	665	653	585	658	581	694	634	638	627	582	721	638	737	754	769	640	640
						4	693	686	620	683	610	777	770	741	613	613	741	751	836	744	747	677	673
						8	795	802	774	805	766	1238	909	883	770	771	856	812	1268	948	939	815	802
			direct	io_uring	32	1	2317	2309	723	2286	711	2118	1730	1019	705	710	2423	774	2176	1783	1087	775	768
						2	2672	2672	734	2622	730	2213	1575	1070	743	729	2754	817	2227	1630	1139	795	796
						4	2902	2904	782	2897	772	2388	1682	1140	776	782	2971	834	2435	1745	1206	841	855
						8	4019	4005	906	4002	903	3412	1925	1282	885	912	4070	954	3433	1956	1360	965	973
				worker	12	1	2340	2518	708	2295	700	2109	1809	1037	706	702	2406	763	2029	1845	1100	771	771
						2	2674	2709	772	2678	722	2386	1651	1121	722	725	2703	786	2414	1710	1164	790	790
						4	2890	2887	779	2889	763	2601	1790	1153	772	762	2956	833	2613	1835	1231	852	827
						8	3998	4013	872	4008	885	3703	2035	1319	885	884	4056	943	3717	2111	1373	973	941
					32	1	2306	2361	706	2466	719	2104	1807	1044	699	703	2444	768	2084	1850	1105	775	768
						2	2669	2658	727	2655	722	2355	1676	1098	720	719	2707	792	2361	1693	1164	792	786
						4	2885	2920	759	2921	786	2599	1769	1158	779	763	2953	842	2612	1827	1224	820	825
						8	4009	4016	882	3997	888	3708	2064	1363	894	874	4071	955	3715	2089	1368	932	937
		8GB	buffered	io_uring	32	1	658	646	610	656	602	666	642	641	638	628	715	675	729	705	695	710	685
						2	692	683	617	685	718	694	670	667	664	645	744	688	761	733	724	730	704
						4	747	745	666	747	664	758	731	706	705	746	806	723	819	790	765	766	749
						8	871	867	807	870	805	882	850	832	838	814	921	885	940	910	884	881	858
				worker	12	1	659	661	565	652	566	666	639	632	567	609	713	633	732	703	694	626	634
						2	689	684	679	680	589	765	674	691	589	586	743	650	797	723	716	663	650
						4	747	748	634	742	658	845	745	730	631	628	803	695	905	882	783	715	684
						8	876	865	830	867	788	1171	984	951	787	777	921	831	1212	1007	1031	837	824
					32	1	658	648	577	654	582	663	635	634	576	566	715	632	743	701	684	631	626
						2	686	683	592	684	594	703	660	654	584	583	743	646	782	722	718	701	647
						4	750	745	679	746	632	843	756	813	629	628	806	687	911	804	779	684	690
						8	880	869	786	866	819	1328	990	945	787	785	920	910	1356	1034	984	845	829
			direct	io_uring	32	1	2423	2503	741	2503	741	2167	1705	1039	747	725	2550	800	2238	1766	1101	794	796
						2	2690	2693	757	2698	759	2242	1600	1098	763	760	2810	870	2283	1697	1205	866	865
						4	2938	2922	824	2945	818	2446	1729	1182	807	817	2994	874	2464	1769	1250	864	870
						8	4050	4066	928	4114	953	3473	1949	1316	928	927	4114	1027	3473	1997	1374	975	1000
				worker	12	1	2525	2453	846	2539	746	2217	1790	1055	715	712	2551	791	2222	1853	1126	767	772
						2	2694	2722	736	2687	776	2388	1684	1134	739	743	2755	798	2417	1749	1193	801	806
						4	2938	2948	808	2943	788	2638	1809	1183	780	817	2995	867	2630	1873	1248	834	846
						8	4060	4048	887	4096	983	3776	2114	1382	945	940	4128	951	3789	2118	1413	978	949
					32	1	2501	2519	727	2489	724	2173	1783	1065	707	712	2646	783	2208	1828	1124	770	775
						2	2703	2739	738	2701	738	2410	1680	1114	740	733	2792	814	2422	1744	1173	799	803
						4	2930	2954	787	2942	785	2651	1807	1183	778	786	3012	846	2645	1874	1245	839	841
						8	4062	4028	892	4037	964	3757	2071	1349	918	891	4162	952	3775	2124	1411	946	981

								patched		patched-limit						patched-limit-instrument						
								off	on	off	on					off	on					
rows	data	sb	io	iomethod	ioworkers	workers		0	0	0	0	1	4	16	64	128	0	0	1	4	16	64	128
1000000	random	128MB	buffered	io_uring	32	1		100%	64%	99%	63%	103%	76%	65%	64%	64%	105%	66%	107%	81%	69%	67%	66%
						2		100%	67%	100%	66%	103%	78%	66%	65%	65%	101%	68%	105%	81%	70%	68%	68%
						4		99%	81%	99%	80%	101%	80%	80%	80%	80%	101%	81%	103%	82%	82%	81%	81%
						8		100%	96%	100%	94%	100%	85%	94%	94%	93%	100%	94%	102%	86%	93%	94%	94%
				worker	12	1		99%	49%	99%	48%	164%	74%	50%	49%	49%	102%	51%	173%	75%	54%	50%	51%
						2		101%	58%	100%	62%	162%	78%	60%	61%	60%	102%	62%	164%	81%	63%	61%	61%
						4		100%	154%	99%	150%	169%	157%	151%	155%	153%	101%	152%	173%	158%	154%	147%	150%
						8		100%	207%	100%	206%	247%	215%	205%	205%	206%	100%	208%	248%	219%	209%	206%	206%
					32	1		100%	48%	100%	49%	160%	72%	51%	49%	49%	103%	51%	171%	74%	56%	50%	51%
						2		99%	59%	99%	60%	161%	77%	60%	65%	59%	101%	61%	162%	79%	63%	61%	65%
						4		100%	191%	100%	189%	179%	202%	191%	190%	190%	101%	187%	179%	197%	187%	187%	186%
						8		101%	328%	100%	326%	320%	335%	330%	328%	331%	100%	330%	320%	338%	333%	330%	333%
			direct	io_uring	32	1		100%	9%	100%	9%	98%	42%	11%	9%	9%	100%	9%	99%	42%	11%	9%	9%
						2		100%	9%	100%	9%	98%	38%	11%	9%	9%	100%	10%	99%	38%	11%	10%	10%
						4		100%	11%	100%	11%	98%	36%	12%	11%	11%	100%	11%	98%	36%	12%	11%	11%
						8		100%	15%	100%	15%	98%	37%	15%	15%	15%	100%	15%	98%	37%	15%	15%	15%

			worker	12	1	100%	9%	100%	9%	106%	46%	11%	9%	9%	100%	9%	106%	46%	11%	9%	9%
					2	100%	17%	100%	17%	108%	42%	17%	17%	17%	100%	17%	108%	42%	17%	17%	17%
					4	100%	34%	100%	34%	109%	40%	34%	34%	34%	100%	34%	109%	40%	34%	34%	34%
					8	100%	46%	100%	46%	110%	66%	48%	46%	46%	100%	46%	110%	66%	48%	46%	46%
				32	1	100%	9%	100%	9%	106%	46%	11%	9%	9%	100%	9%	106%	45%	11%	9%	9%
					2	100%	11%	100%	11%	108%	42%	12%	11%	11%	100%	11%	108%	42%	12%	11%	11%
					4	100%	14%	100%	14%	109%	40%	14%	14%	14%	100%	14%	109%	40%	15%	14%	14%
					8	100%	26%	100%	26%	110%	46%	26%	26%	26%	100%	26%	110%	46%	27%	26%	26%
	8GB	buffered	io_uring	32	1	97%	43%	96%	46%	94%	65%	46%	44%	44%	99%	47%	100%	69%	49%	46%	49%
					2	99%	48%	100%	49%	101%	70%	50%	48%	48%	103%	52%	100%	71%	54%	50%	51%
					4	97%	52%	97%	51%	95%	68%	52%	51%	51%	99%	54%	96%	70%	55%	53%	54%
					8	101%	61%	100%	64%	98%	72%	61%	64%	61%	102%	66%	100%	74%	64%	63%	63%
			worker	12	1	100%	45%	102%	45%	107%	74%	48%	44%	45%	103%	46%	109%	76%	53%	47%	47%
					2	98%	48%	100%	49%	105%	74%	51%	49%	49%	102%	51%	106%	75%	53%	51%	50%
					4	102%	61%	100%	60%	105%	75%	61%	62%	63%	102%	66%	107%	76%	68%	61%	62%
					8	101%	71%	100%	71%	109%	87%	78%	71%	71%	103%	73%	111%	90%	80%	74%	73%
				32	1	101%	45%	100%	45%	107%	73%	47%	44%	45%	102%	46%	111%	78%	50%	46%	46%
					2	100%	47%	99%	47%	106%	74%	50%	47%	46%	102%	49%	107%	76%	51%	49%	49%
					4	99%	54%	100%	52%	105%	75%	55%	52%	52%	102%	55%	107%	77%	57%	58%	55%
					8	101%	68%	101%	66%	111%	89%	70%	67%	66%	103%	68%	112%	87%	75%	69%	67%
		direct	io_uring	32	1	100%	33%	100%	35%	98%	73%	45%	35%	34%	102%	35%	100%	75%	47%	37%	37%
					2	100%	35%	100%	34%	98%	74%	47%	37%	36%	101%	36%	99%	75%	49%	38%	37%
					4	102%	36%	99%	38%	97%	73%	47%	39%	39%	101%	38%	100%	75%	49%	40%	39%
					8	99%	39%	99%	39%	96%	75%	50%	42%	40%	100%	41%	100%	75%	52%	43%	41%
			worker	12	1	101%	33%	100%	33%	103%	76%	46%	35%	33%	102%	34%	105%	78%	49%	37%	36%
					2	100%	38%	99%	39%	104%	78%	51%	40%	39%	101%	39%	105%	79%	51%	42%	40%
					4	100%	49%	100%	49%	106%	79%	59%	52%	50%	102%	51%	106%	80%	62%	53%	51%
					8	100%	59%	101%	58%	105%	86%	73%	62%	61%	101%	61%	106%	87%	75%	65%	60%
				32	1	100%	33%	99%	32%	104%	80%	46%	37%	33%	101%	34%	105%	79%	49%	38%	35%
					2	100%	37%	100%	35%	104%	78%	49%	38%	36%	102%	36%	106%	79%	50%	40%	37%
					4	102%	39%	101%	39%	104%	79%	52%	42%	40%	102%	40%	105%	80%	53%	43%	43%
					8	100%	46%	100%	46%	105%	83%	58%	49%	47%	101%	47%	107%	85%	60%	50%	48%
sequential	128MB	buffered	io_uring	32	1	100%	99%	99%	98%	101%	99%	97%	98%	99%	108%	109%	111%	108%	107%	108%	108%
					2	99%	98%	99%	98%	101%	98%	97%	106%	99%	108%	108%	111%	107%	107%	109%	108%
					4	99%	99%	99%	99%	101%	98%	97%	99%	99%	108%	108%	110%	107%	106%	117%	109%
					8	99%	103%	99%	100%	102%	98%	96%	99%	100%	106%	106%	108%	105%	103%	107%	109%
			worker	12	1	100%	89%	100%	88%	105%	97%	102%	88%	87%	109%	99%	113%	109%	107%	99%	98%
					2	99%	87%	100%	87%	104%	96%	114%	87%	88%	108%	102%	111%	106%	105%	97%	97%
					4	100%	90%	100%	90%	116%	100%	100%	89%	91%	108%	99%	122%	114%	109%	98%	106%
					8	98%	96%	99%	99%	138%	112%	111%	96%	95%	105%	100%	143%	120%	116%	101%	101%
				32	1	97%	86%	98%	85%	102%	94%	95%	87%	86%	106%	95%	109%	104%	103%	95%	95%
					2	98%	88%	99%	87%	104%	95%	96%	94%	88%	109%	96%	111%	113%	116%	96%	96%
					4	99%	89%	99%	88%	112%	111%	107%	89%	89%	107%	108%	121%	107%	108%	98%	97%
					8	101%	97%	101%	96%	156%	114%	111%	97%	97%	108%	102%	160%	119%	118%	103%	101%
		direct	io_uring	32	1	100%	31%	99%	31%	91%	75%	44%	30%	31%	105%	33%	94%	77%	47%	33%	33%
					2	100%	27%	98%	27%	83%	59%	40%	28%	27%	103%	31%	83%	61%	43%	30%	30%
					4	100%	27%	100%	27%	82%	58%	39%	27%	27%	102%	29%	84%	60%	42%	29%	29%
					8	100%	23%	100%	22%	85%	48%	32%	22%	23%	101%	24%	85%	49%	34%	24%	24%
			worker	12	1	108%	30%	98%	30%	90%	77%	44%	30%	30%	103%	33%	87%	79%	47%	33%	33%
					2	101%	29%	100%	27%	89%	62%	42%	27%	27%	101%	29%	90%	64%	44%	30%	30%
					4	100%	27%	100%	26%	90%	62%	40%	27%	26%	102%	29%	90%	63%	43%	29%	29%
					8	100%	22%	100%	22%	93%	51%	33%	22%	22%	101%	24%	93%	53%	34%	24%	24%
				32	1	102%	31%	107%	31%	91%	78%	45%	30%	30%	106%	33%	90%	80%	48%	34%	33%
					2	100%	27%	99%	27%	88%	63%	41%	27%	27%	101%	30%	88%	63%	44%	30%	29%
					4	101%	26%	101%	27%	90%	61%	40%	27%	26%	102%	29%	91%	63%	42%	28%	29%
					8	100%	22%	100%	22%	92%	51%	34%	22%	22%	102%	24%	93%	52%	34%	23%	23%
	8GB	buffered	io_uring	32	1	98%	93%	100%	92%	101%	98%	97%	97%	95%	109%	103%	111%	107%	106%	108%	104%
					2	99%	89%	99%	104%	100%	97%	96%	96%	93%	108%	99%	110%	106%	105%	105%	102%
					4	100%	89%	100%	89%	101%	98%	94%	94%	100%	108%	97%	110%	106%	102%	103%	100%
					8	100%	93%	100%	92%	101%	98%	96%	96%	93%	106%	102%	108%	105%	102%	101%	99%

	worker	12	1	100%	86%	99%	86%	101%	97%	96%	86%	92%	108%	96%	111%	107%	105%	95%	96%
			2	99%	99%	99%	85%	111%	98%	100%	85%	85%	108%	94%	116%	105%	104%	96%	94%
			4	100%	85%	99%	88%	113%	100%	98%	84%	84%	107%	93%	121%	118%	105%	96%	92%
			8	99%	95%	99%	90%	134%	112%	109%	90%	89%	105%	95%	138%	115%	118%	96%	94%
		32	1	99%	88%	99%	89%	101%	97%	96%	88%	86%	109%	96%	113%	107%	104%	96%	95%
			2	99%	86%	100%	87%	102%	96%	95%	85%	85%	108%	94%	114%	105%	105%	102%	94%
			4	99%	91%	99%	84%	112%	101%	108%	84%	84%	107%	92%	121%	107%	104%	91%	92%
			8	99%	89%	98%	93%	151%	112%	107%	89%	89%	105%	103%	154%	117%	112%	96%	94%
direct	io_uring	32	1	103%	31%	103%	31%	89%	70%	43%	31%	30%	105%	33%	92%	73%	45%	33%	33%
			2	100%	28%	100%	28%	83%	59%	41%	28%	28%	104%	32%	85%	63%	45%	32%	32%
			4	99%	28%	100%	28%	83%	59%	40%	27%	28%	102%	30%	84%	60%	43%	29%	30%
			8	100%	23%	102%	24%	86%	48%	32%	23%	23%	102%	25%	86%	49%	34%	24%	25%
	worker	12	1	97%	33%	101%	30%	88%	71%	42%	28%	28%	101%	31%	88%	73%	45%	30%	31%
			2	101%	27%	100%	29%	89%	63%	42%	27%	28%	102%	30%	90%	65%	44%	30%	30%
			4	100%	27%	100%	27%	90%	62%	40%	27%	28%	102%	30%	90%	64%	42%	28%	29%
			8	100%	22%	101%	24%	93%	52%	34%	23%	23%	102%	23%	93%	52%	35%	24%	23%
		32	1	101%	29%	100%	29%	87%	71%	43%	28%	28%	106%	31%	88%	73%	45%	31%	31%
			2	101%	27%	100%	27%	89%	62%	41%	27%	27%	103%	30%	90%	65%	43%	30%	30%
			4	101%	27%	100%	27%	90%	62%	40%	27%	27%	103%	29%	90%	64%	42%	29%	29%
			8	99%	22%	99%	24%	93%	51%	33%	23%	22%	102%	23%	93%	52%	35%	23%	24%