mixbench/read-only (v0.03-21-gd04caf3)
---------- Device specifications ----------
Device: NVIDIA A40
CUDA driver version: 11.60
GPU clock rate: 1740 MHz
Memory clock rate: 3625 MHz
Memory bus width: 384 bits
WarpSize: 32
L2 cache size: 6144 KB
Total global mem: 45434 MB
ECC enabled: Yes
Compute Capability: 8.6
Total SPs: 10752 (84 MPs x 128 SPs/MP)
Compute throughput: 37416.96 GFlops (theoretical single precision FMAs)
Memory bandwidth: 696.10 GB/sec

Total GPU memory 47641198592, free 47366537216
Buffer size: 256MB
Trade-off type: compute with global memory (block strided)
Elements per thread: 8
Thread fusion degree: 4

	Single Precision ops				Double precision ops				Half precision ops				Integer operations			
Compute iters	Flops/byte	ex.time	GFLOPS	GB/sec	Flops/byte	ex.time	GFLOPS	GB/sec	Flops/byte	ex.time	GFLOPS	GB/sec	Iops/byte	ex.time	GIOPS	GB/sec
0	0.25	0.23	146.29	585.14	0.125	0.45	74.14	593.09	0.5	0.23	293.88	587.77	0.25	0.23	147.6	590.41
1	0.75	0.23	442.69	590.25	0.375	0.45	221.41	590.41	1.5	0.23	881.9	587.93	0.75	0.23	442.81	590.41
2	1.25	0.23	738.02	590.41	0.625	0.46	364.09	582.54	2.5	0.23	1482.71	593.09	1.25	0.23	738.02	590.41
3	1.75	0.23	1037.9	593.09	0.875	0.5	472	539.43	3.5	0.23	2066.45	590.41	1.75	0.23	1024.43	585.39
4	2.25	0.23	1328.43	590.41	1.125	0.63	476.43	423.5	4.5	0.23	2656.86	590.41	2.25	0.23	1328.43	590.41
5	2.75	0.23	1623.64	590.41	1.375	0.77	478.68	348.13	5.5	0.23	3232.72	587.77	2.75	0.23	1623.64	590.41
6	3.25	0.23	1918.85	590.41	1.625	0.91	480.25	295.54	6.5	0.23	3821.02	587.85	3.25	0.23	1918.85	590.41
7	3.75	0.23	2214.05	590.41	1.875	1.05	481.45	256.78	7.5	0.23	4408.25	587.77	3.75	0.23	2204.13	587.77
8	4.25	0.23	2498.01	587.77	2.125	1.18	482.72	227.16	8.5	0.23	4996.02	587.77	4.25	0.23	2498.01	587.77
9	4.75	0.23	2804.86	590.5	2.375	1.32	483.38	203.53	9.5	0.23	5583.78	587.77	4.75	0.23	2791.89	587.77
10	5.25	0.23	3086.64	587.93	2.625	1.46	483.92	184.35	10.5	0.23	6171.55	587.77	5.25	0.23	3085.78	587.77
11	5.75	0.23	3379.66	587.77	2.875	1.59	484.36	168.47	11.5	0.23	6759.32	587.77	5.75	0.23	3379.66	587.77
12	6.25	0.23	3690.09	590.41	3.125	1.73	485.31	155.3	12.5	0.23	7314.29	585.14	6.25	0.23	3673.54	587.77
13	6.75	0.23	3967.43	587.77	3.375	1.87	485.32	143.8	13.5	0.23	7934.85	587.77	6.75	0.23	3932.71	582.62
14	7.25	0.23	4261.31	587.77	3.625	2	485.58	133.95	14.5	0.23	8486.94	585.31	7.25	0.23	4259.52	587.52
15	7.75	0.23	4555.19	587.77	3.875	2.14	486.03	125.43	15.5	0.23	9110.39	587.77	7.75	0.23	4534.86	585.14
16	8.25	0.23	4849.08	587.77	4.125	2.28	486.22	117.87	16.5	0.23	9654.86	585.14	8.25	0.23	4805.97	582.54
17	8.75	0.23	5142.96	587.77	4.375	2.41	486.38	111.17	17.5	0.23	10149.38	579.96	8.75	0.23	5120	585.14
18	9.25	0.23	5442.95	588.43	4.625	2.55	486.72	105.24	18.5	0.23	10825.14	585.14	9.25	0.23	5412.57	585.14
20	10.25	0.23	5998.55	585.22	5.125	2.83	486.95	95.01	20.5	0.23	11942.12	582.54	10.25	0.23	5997.71	585.14
22	11.25	0.23	6582.86	585.14	5.625	3.1	487.3	86.63	22.5	0.23	13107.2	582.54	11.25	0.23	6555.42	582.7
24	12.25	0.23	7174	585.63	6.125	3.37	487.44	79.58	24.5	0.23	14272.28	582.54	12.25	0.23	7104.57	579.96
28	14.25	0.23	8375.68	587.77	7.125	3.92	487.8	68.46	28.5	0.23	16462.98	577.65	14.25	0.23	8228.09	577.41
32	16.25	0.23	9468.94	582.7	8.125	4.47	488.07	60.07	32.5	0.23	18601.92	572.37	16.25	0.23	9300.96	572.37
40	20.25	0.23	11744.28	579.96	10.125	5.57	488.37	48.23	40.5	0.24	23080.07	569.88	20.25	0.24	11402.16	563.07
48	24.25	0.23	14002.19	577.41	12.125	6.66	488.86	40.32	48.5	0.24	27283.23	562.54	24.25	0.24	13299.15	548.42
56	28.25	0.23	16171.57	572.44	14.125	7.75	489.07	34.62	56.5	0.24	31513.06	557.75	28.25	0.26	14577.89	516.03
64	32.25	0.24	18378.57	569.88	16.125	8.85	489.13	30.33	64.5	0.26	33415.59	518.07	32.25	0.29	15150.8	469.79
80	40.25	0.23	23044.05	572.52	20.125	11.04	489.26	24.31	80.5	0.31	35057.78	435.5	40.25	0.35	15380.9	382.13
96	48.25	0.24	27259.59	564.97	24.125	13.23	489.38	20.29	96.5	0.37	35429.83	367.15	48.25	0.42	15576.91	322.84
128	64.25	0.26	32768	510.01	32.125	17.62	489.53	15.24	128.5	0.47	36456.17	283.71	64.25	0.55	15711.52	244.54
192	96.25	0.38	33913.12	352.34	48.125	26.38	489.66	10.17	192.5	0.72	36096.36	187.51	96.25	0.81	15888.77	165.08
256	128.25	0.5	34306.09	267.49	64.125	35.15	489.73	7.64	256.5	0.95	36388.94	141.87	128.25	1.08	15979.07	124.59