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mixbench/alternating (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

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Total GPU memory 47641198592, free 47366537216
Buffer size:      64MB
Trade-off type:   compute with global memory (block strided)

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Compute iters	Single Precision ops				Double precision ops				Half precision ops				Integer operations			
	Flops/byte	ex.time	GFLOPS	GB/sec	Flops/byte	ex.time	GFLOPS	GB/sec	Flops/byte	ex.time	GFLOPS	GB/sec	lops/byte	ex.time	GIOPS	GB/sec
0	0	9.82	0	874.65	0	27.83	0	617.29	0	10.85	0	791.46	0	11.04	0	778.32
1	0.129	9.63	111.53	864.33	0.065	27.28	39.36	610.12	0.258	9.77	219.87	852.01	0.129	9.79	109.63	849.61
2	0.267	9.62	223.27	837.26	0.133	25.77	83.34	625.07	0.533	9.85	435.82	817.16	0.267	9.52	225.6	845.99
3	0.414	8.55	376.7	910.35	0.207	24.76	130.09	628.75	0.828	9.35	689.33	832.94	0.414	8.64	372.85	901.05
4	0.571	8.12	528.72	925.25	0.286	24.23	177.29	620.51	1.143	8.31	1033.84	904.61	0.571	8.11	529.65	926.89
5	0.741	7.16	750.05	1012.57	0.37	23.28	230.62	622.67	1.481	7.39	1453.54	981.14	0.741	7.34	731.53	987.57
6	0.923	6.92	930.69	1008.25	0.462	22.75	283.25	613.7	1.846	7.1	1815.5	983.4	0.923	7.23	891.01	965.27
7	1.12	6.02	1247.88	1114.18	0.56	21.87	343.62	613.6	2.24	6.08	2471.81	1103.49	1.12	6.28	1197.4	1069.1
8	1.333	5.87	1462.44	1096.83	0.667	20.89	411.29	616.93	2.667	5.77	2975.74	1115.9	1.333	6.01	1429.35	1072.01
9	1.565	5.04	1916.18	1224.23	0.783	20.55	470.17	600.77	3.13	5.13	3764.33	1202.5	1.565	5.36	1801.68	1151.07
10	1.818	4.92	2181.41	1199.77	0.909	20.17	532.22	585.44	3.636	5.03	4266.84	1173.38	1.818	5.38	1995.77	1097.67
11	2.095	4.02	2938.03	1402.24	1.048	21.79	542.01	517.37	4.19	4.22	5591.18	1334.26	2.095	4.37	2703.78	1290.44
12	2.4	4.14	3115.4	1298.08	1.2	23.72	543.28	452.73	4.8	4.35	5921.37	1233.62	2.4	4.86	2650.73	1104.47
13	2.737	3.4	4109.58	1501.58	1.368	25.67	543.87	397.44	5.474	3.86	7237.32	1322.2	2.737	3.79	3679.21	1344.33
14	3.111	3.51	4277.41	1374.88	1.556	27.63	543.97	349.69	6.222	4.12	7303.74	1173.82	3.111	4.35	3456.57	1111.04
15	3.529	2.7	5971.6	1691.95	1.765	29.58	544.43	308.51	7.059	3.58	8993.01	1274.01	3.529	3.08	5237.64	1484
16	4	5.76	2983.15	745.79	2	31.5	545.35	272.68	8	6.83	5032.91	629.11	4	7.12	2411.56	602.89
17	4.533	4.65	3923.79	865.54	2.267	33.46	545.58	240.7	9.067	5.91	6180.93	681.72	4.533	4.96	3683.01	812.43
18	5.143	4.91	3938.75	765.87	2.571	35.41	545.83	212.27	10.286	5.61	6888.34	669.7	5.143	6.1	3167.9	615.98
19	5.846	3.85	5302.93	907.08	2.923	37.36	546.13	186.84	11.692	4.77	8545.12	730.83	5.846	4.23	4821.62	824.75
20	6.667	4.08	5259.98	789	3.333	39.3	546.45	163.93	13.333	4.63	9277.64	695.82	6.667	4.93	4355.46	653.32
21	7.636	3.6	6257.49	819.43	3.818	41.26	546.53	143.14	15.273	3.99	11315.57	740.9	7.636	3.76	5991.76	784.64
22	8.8	4.5	5244.07	595.92	4.4	43.21	546.64	124.24	17.6	4.67	10117.84	574.88	8.8	4.77	4950.36	562.54
23	10.222	3.51	7045.65	689.25	5.111	45.16	546.85	106.99	20.444	3.62	13656.43	667.98	10.222	3.73	6620.33	647.64
24	12	3.81	6763.19	563.6	6	47.1	547.1	91.18	24	3.89	13234.4	551.43	12	3.95	6516.27	543.02
25	14.286	3.06	8770.29	613.92	7.143	49.05	547.24	76.61	28.571	3.16	17000.26	595.01	14.286	3.17	8469.92	592.89
26	17.333	2.95	9456.46	545.57	8.667	51.02	547.15	63.13	34.667	3.04	18340.38	529.05	17.333	3.1	8994.71	518.93
27	21.6	2.14	13533.65	626.56	10.8	52.96	547.42	50.69	43.2	1.74	33366.59	772.37	21.6	2.25	12857.2	595.24
28	28	2.04	14761.25	527.19	14	54.91	547.5	39.11	56	1.78	33766.68	602.98	28	1.83	16429.84	586.78
29	38.667	1.11	27949.18	722.82	19.333	56.86	547.62	28.33	77.333	1.84	33825.03	437.39	38.667	1.9	16401.67	424.18
30	60	1.01	31742.97	529.05	30	58.81	547.7	18.26	120	1.9	33916.2	282.64	60	1.95	16548.3	275.8
31	124	0.97	34180.71	275.65	62	60.75	547.9	8.84	248	1.92	34747.04	140.11	124	1.92	17299.55	139.51
32	inf	1	34274.19	0	inf	62.7	548.01	0	inf	1.97	34934.34	0	inf	1.99	17305.02	0