

Array addition performance tests

Test name	Device type	Device info	Dim grid / global size	Dim block / local size	Data size	Number of iterations	Mean execution time per iteration (s)	Variance execution time per iteration	Number of operations (per iteration)	Throughput (MFLOPS)	Speed-up
/arrayAddSerial	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	512	10	0.8820349303	0.0050092597	262144	0.2972036492	1.0000000000
/arrayAddOpenMP_CPU	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	512	10	0.0904874724	0.0020586101	262144	2.8970198090	9.7475916489
/arrayAddOpenCLIPER_CPU	CL_DEVICE_TYPE_CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	512	0	512	10	0.0008490375	0.0000000445	262144	308.7543248000	1038.8645145827
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Hawaii	512	0	512	10	0.0001329484	0.0000000000	262144	1971.7725070000	6634.4155348993
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Ellesmere	512	0	512	10	0.0000262080	0.0000000000	262144	10002.4420000000	33655.1789644383
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	NVIDIA Corporation GeForce GTX 1070	512	0	512	10	0.0000643264	0.0000000007	262144	4075.2163960000	13711.8652730450
/arrayAddCUDA	GPU	NVIDIA Corporation GeForce GTX 1070	16	32	512	10	0.0000293248	0.0000000002	262144	8939.3276890000	30078.1222334104
/arrayAddSerial	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	1024	10	6.7121031750	0.2703134404	1048576	0.1562216749	1.0000000000
/arrayAddOpenMP_CPU	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	1024	10	0.4006018200	0.0052511320	1048576	2.6175018380	16.7550491283
/arrayAddOpenCLIPER_CPU	CL_DEVICE_TYPE_CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	1024	0	1024	10	0.0007461557	0.0000000519	1048576	1405.3045500000	8995.5798434563
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Hawaii	1024	0	1024	10	0.0002586816	0.0000000050	1048576	4053.5391770000	25947.3544890707
/performanceTests/arrayAddOp	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Ellesmere	1024	0	1024	10	0.0000927360	0.0000000000	1048576	11307.1083500000	72378.6142921843
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	NVIDIA Corporation GeForce GTX 1070	1024	0	1024	10	0.0000903360	0.0000000002	1048576	11607.5097400000	74301.5317813496
/arrayAddCUDA	GPU	NVIDIA Corporation GeForce GTX 1070	32	32	1024	10	0.0000830176	0.0000000010	1048576	12630.7673000000	80851.5675586496
/arrayAddSerial	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	2048	10	77.2442343900	55.7900166200	4194304	0.0542992501	1.0000000000
/arrayAddOpenMP_CPU	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	2048	10	3.1781983860	0.0084710531	4194304	1.3197111980	24.3044092937
/arrayAddOpenCLIPER_CPU	CL_DEVICE_TYPE_CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	2048	0	2048	10	0.0027116515	0.0000000165	4194304	1546.7710360000	28486.0478531257
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Hawaii	2048	0	2048	10	0.0009316446	0.0000001180	4194304	4502.0429460000	82911.6965739940
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Ellesmere	2048	0	2048	10	0.0003382090	0.0000000000	4194304	12401.5517100000	228392.6884934710
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	NVIDIA Corporation GeForce GTX 1070	2048	0	2048	10	0.0002758848	0.0000000002	4194304	15203.0992600000	279987.2787119840
/arrayAddCUDA	GPU	NVIDIA Corporation GeForce GTX 1070	64	32	2048	10	0.0002607616	0.0000000005	4194304	16084.8222200000	296225.4947633560
/arrayAddSerial	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	4096	10	662.6646953000	931.5266550000	16777216	0.0253178057	1.0000000000
/arrayAddOpenMP_CPU	CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	0	0	4096	10	29.0978831700	0.7941493217	16777216	0.5765785746	22.7736392860
/arrayAddOpenCLIPER_CPU	CL_DEVICE_TYPE_CPU	Intel(R) Corporation Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	4096	0	4096	10	0.0113060961	0.0000049335	16777216	1483.9088450000	58611.2739038190
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Hawaii	4096	0	4096	10	0.0026675111	0.0000000131	16777216	6289.4643620000	248420.5952507560
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	Advanced Micro Devices, Inc. Ellesmere	4096	0	4096	10	0.0013374880	0.0000000000	16777216	12543.8254400000	495454.6846775450
/arrayAddOpenCLIPER_GPU	CL_DEVICE_TYPE_GPU	NVIDIA Corporation GeForce GTX 1070	4096	0	4096	10	0.0010032224	0.0000000002	16777216	16723.3267500000	660536.1835022820
/arrayAddCUDA	GPU	NVIDIA Corporation GeForce GTX 1070	128	32	4096	10	0.0010168448	0.0000000015	16777216	16499.2886300000	651687.1497349600

