

Array product performance tests

| Test name | Device type | Device info | 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 |
|---------------------------|--------------------|--|-----------|----------------------|---------------------------------------|---------------------------------------|--------------------------------------|---------------------|----------------|
| ./arrayMultSerial | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 512 | 10 | 0.4962324454 | 0.0000069835 | 268173312 | 540.4187382000 | 1.0000000000 |
| ./arrayMultOpenMP_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 512 | 10 | 0.1490161420 | 0.0000366334 | 268173312 | 1799.6259220000 | 3.3300583329 |
| ./arrayMultOpenCLIPER_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 512 | 10 | 0.0170048581 | 0.0000004275 | 268173312 | 15770.3939900000 | 29.1818045456 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 512 | 10 | 0.0672291797 | 0.0000102270 | 268173312 | 3988.9422000000 | 7.3812063097 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | Advanced Micro Devices, Inc. Ellesmere | 512 | 10 | 0.0270948697 | 0.0000241808 | 268173312 | 9897.5678780000 | 18.3146274883 |
| ./arrayMultCUDA | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 512 | 10 | 0.0087374782 | 0.0000000285 | 268173312 | 30692.3010600000 | 56.7935544973 |
| ./arrayMultSerial | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 1024 | 10 | 4.0079034670 | 0.0042675697 | 2146435072 | 535.5505914000 | 1.0000000000 |
| ./arrayMultOpenMP_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 1024 | 10 | 1.5786645470 | 0.0000077876 | 2146435072 | 1359.6524200000 | 2.5387936117 |
| ./arrayMultOpenCLIPER_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 1024 | 10 | 0.1962942582 | 0.0000059673 | 2146435072 | 10934.7827700000 | 20.4178334290 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 1024 | 10 | 0.8428064256 | 0.0000396283 | 2146435072 | 2546.7711290000 | 4.7554258549 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | Advanced Micro Devices, Inc. Ellesmere | 1024 | 10 | 0.2908544155 | 0.0000221546 | 2146435072 | 7379.7575610000 | 13.7797580281 |
| ./arrayMultCUDA | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 1024 | 10 | 0.0589459930 | 0.0000098125 | 2146435072 | 36413.5874900000 | 67.9928060542 |
| ./arrayMultSerial | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 2048 | 10 | 114.3568016000 | 1.6043785610 | 17175674880 | 150.1937325000 | 1.0000000000 |
| ./arrayMultOpenMP_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 2048 | 10 | 41.6306849100 | 0.0229194308 | 17175674880 | 412.5724791000 | 2.7469353879 |
| ./arrayMultOpenCLIPER_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 2048 | 10 | 4.9830269400 | 0.0026027781 | 17175674880 | 3446.8356460000 | 22.9492641675 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 2048 | 10 | 7.4377245390 | 0.0005891005 | 17175674880 | 2309.2647210000 | 15.3752402365 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | Advanced Micro Devices, Inc. Ellesmere | 2048 | 10 | 2.4986983080 | 0.0016043584 | 17175674880 | 6873.8490060000 | 45.7665502209 |
| ./arrayMultCUDA | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 2048 | 10 | 0.4282155842 | 0.0000915902 | 17175674880 | 40109.8781000000 | 267.0542731733 |
| ./arrayMultSerial | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 4096 | 10 | 963.0431537000 | 23.6793472400 | 137422176256 | 142.6957616000 | 1.0000000000 |
| ./arrayMultOpenMP_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 4096 | 10 | 376.9185892000 | 28.0603231100 | 137422176256 | 364.5937881000 | 2.5550428695 |
| ./arrayMultOpenCLIPER_CPU | CL_DEVICE_TYPE_CPU | Intel(R) Corporation Intel(R) Core(TM) i7-4790 CPU @ 3.60GHz | 4096 | 10 | 48.9569322300 | 0.0521709703 | 137422176256 | 2807.0013780000 | 19.6712316282 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 4096 | 10 | 59.3544116200 | 0.0128243147 | 137422176256 | 2315.2815860000 | 16.2253003174 |
| ./arrayMultOpenCLIPER_GPU | CL_DEVICE_TYPE_GPU | Advanced Micro Devices, Inc. Ellesmere | 4096 | 10 | 26.0629421800 | 0.1002814766 | 137422176256 | 5272.7038750000 | 36.9506691550 |
| ./arrayMultCUDA | CL_DEVICE_TYPE_GPU | NVIDIA Corporation GeForce GTX 760 | 4096 | 10 | 3.3673362730 | 0.0000936671 | 137422176256 | 40810.3513000000 | 285.9955393888 |

