Intel® Core i5-6300HQ CPU @ 2.30GHz (Skylake) L1: 32KB, L2: 256KB, L3: 6MB Compiler: clang 12.0.0 Flag:-march=native -O3 add_naive 4.0 add_inplace 50% Theoretical Maximum Performance (no FMA) add_inplace_vec add_inplace_vec_2x_unroll L1 Cache L2 Cache L3 Cache 3.5 add_inplace_vec_3x_unroll add_inplace_vec_4x_unroll Performance [FLOPS/cycle] add_inplace_vec_6x_unroll/ add_inplace_vec_8x_unroll 1.0 0.5 2^{11} 2^{10} 2^{12} 2^{13} 2³ 2^4 25 26 27 28 29 2^{14} 2^{15} 2^{16} 2^{17} Quad-double array size