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 → add\_inplace add\_inplace\_vec add\_inplace\_vec\_2x\_unroll L1 Cache L2\Cache L3 Cache add\_inplace\_vec\_3x\_unroll add\_inplace\_vec\_4x\_unroll add\_inplace\_vec\_6x\_unroll add\_inplace\_vec\_8x\_unroll 6 4 2

 $2^{11}$ 

 $2^{12}$ 

 $2^{13}$ 

 $2^{14}$ 

 $2^{15}$ 

 $2^{16}$ 

 $2^{17}$ 

 $2^{10}$ 

Quad-double array size

Speedup

2<sup>3</sup>

24

2<sup>5</sup>

26

27

28

2<sup>9</sup>