Observed Execution Times:

For disordered array of uint from 0 to 15

And (bits per pass). All with 12500000 repeats.

4 : 3694 Ms

31 : 9457 Ms

22 : 7426 Ms

21 : 6801 Ms

13 : 6407 Ms

12 : 5909 Ms

1111 :16224 Ms

Further experiments such as Cache misses for larger data, etc. Have to be designed (It is necessary to generate input data.)