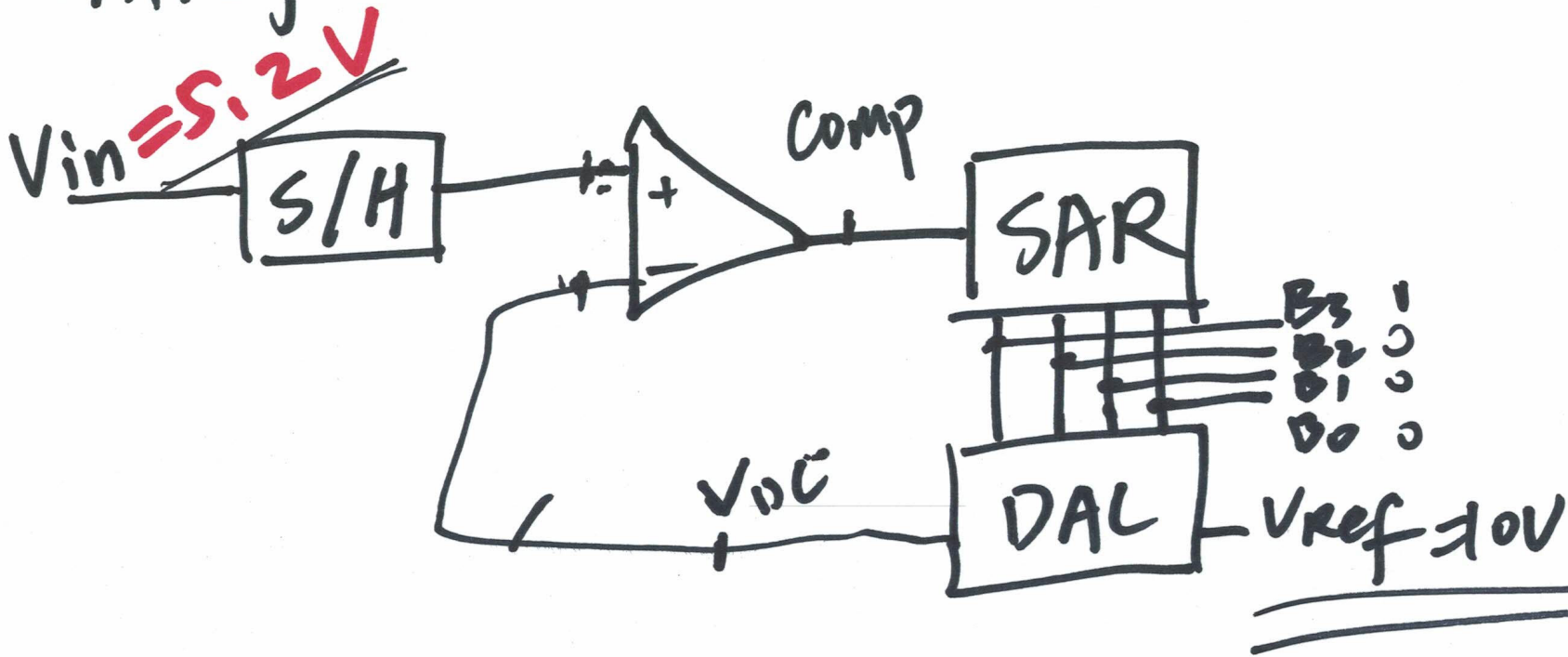


$$v_{out} = \frac{5}{2^3} + \frac{5}{2} = 0.625 + 2.5 = 3.125 \text{ V}$$

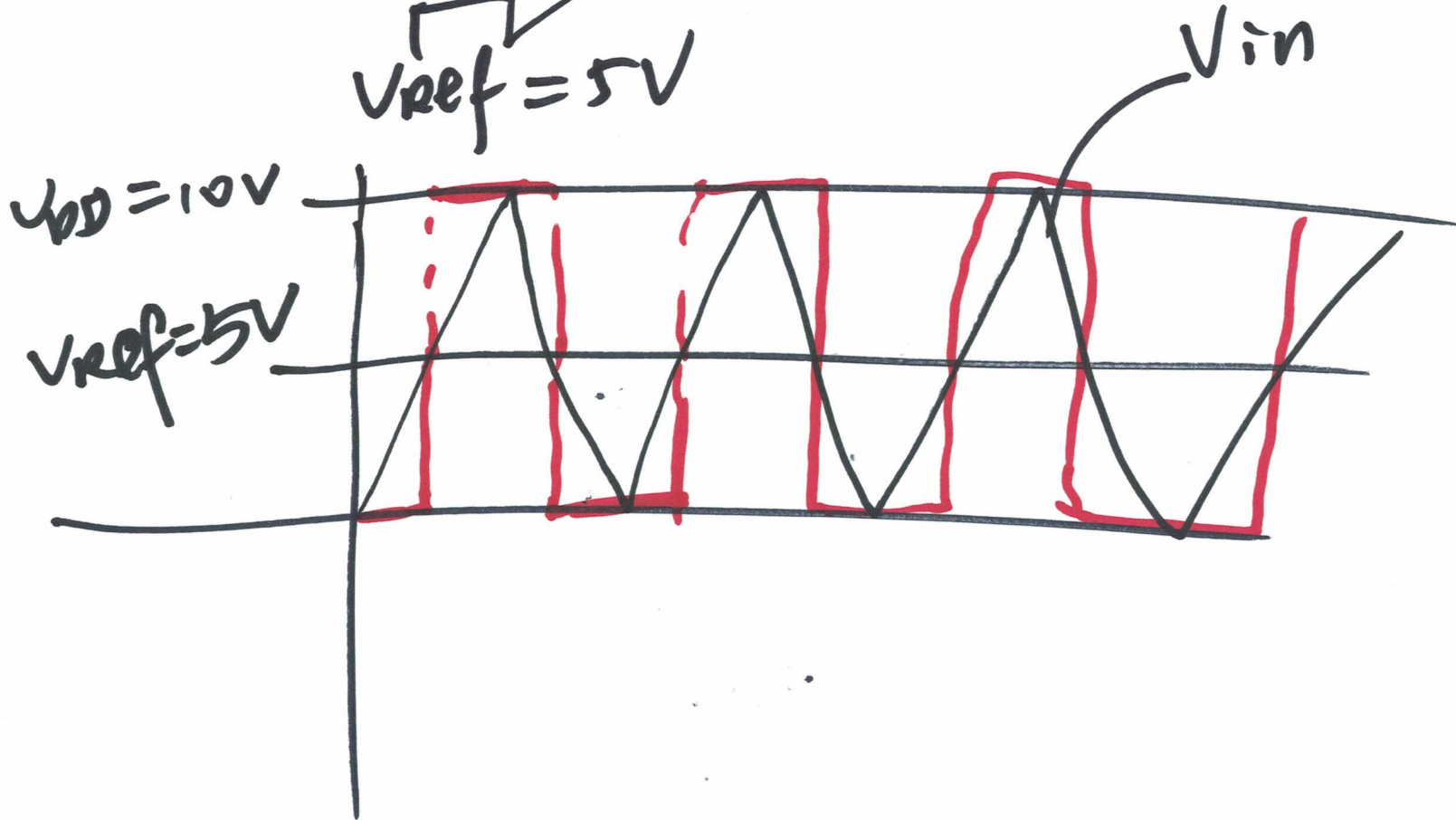
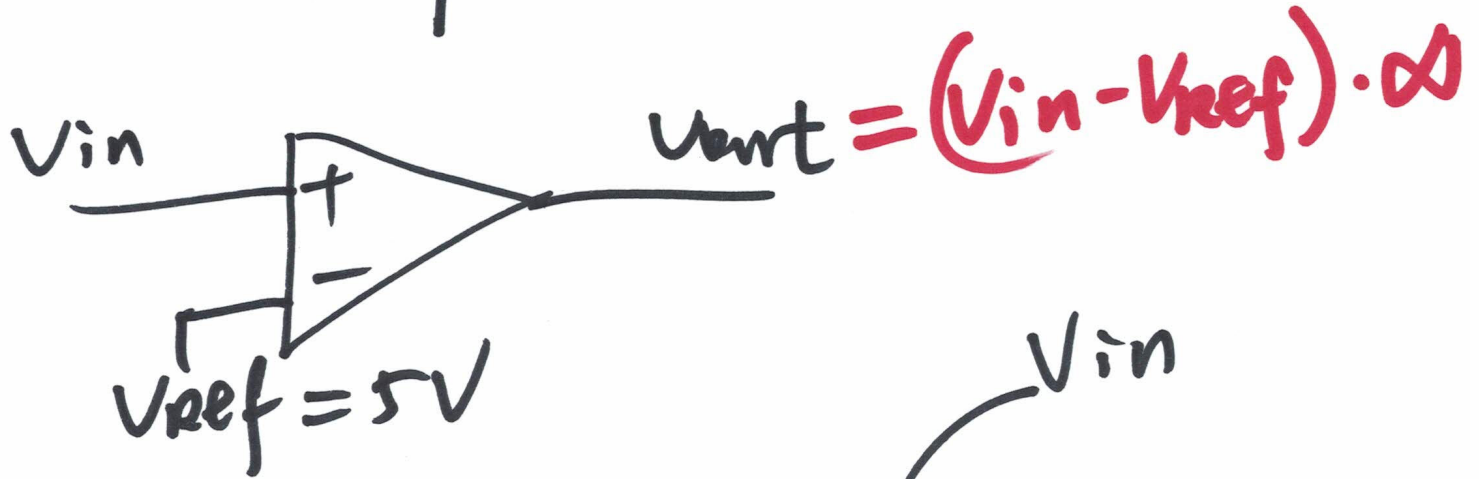
①

Successive Approximation Register ADC (SAR)

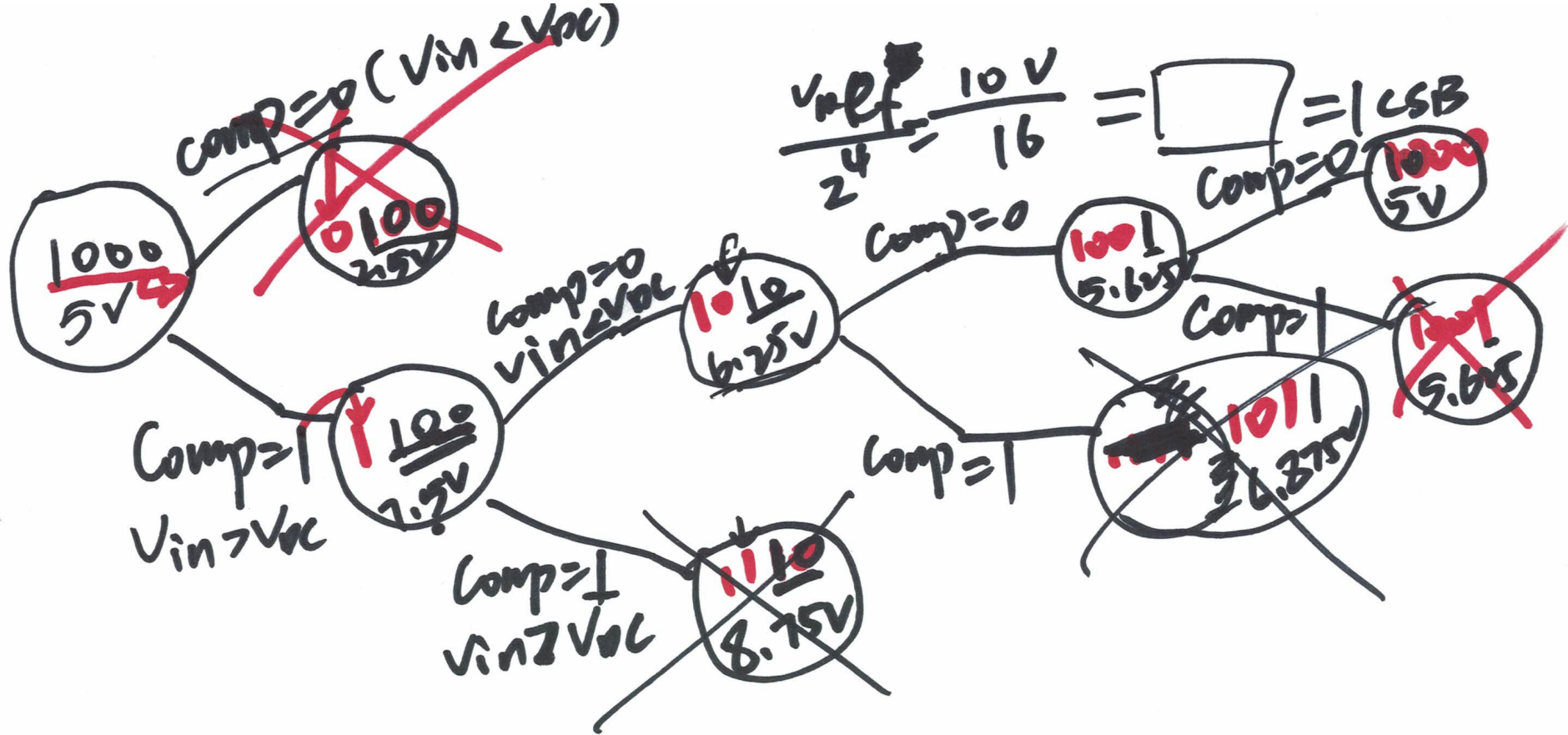
- Low cost
- high resolution (8-18 bits)
- Low power
- ATmega328 uses a 10-bit SAR ADC



Comparator



⑦



n + 1 states during the conversion

(4)