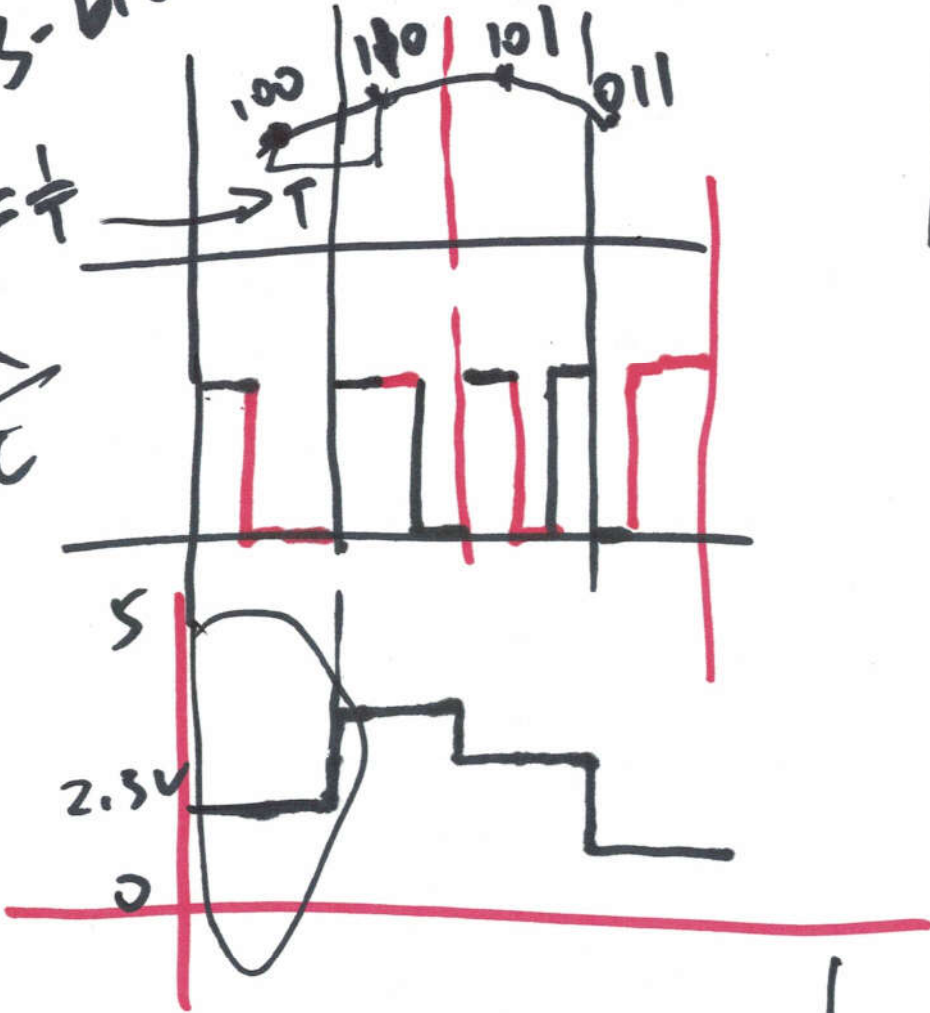


# ADC

① 3-bit

$f_s = \frac{1}{T}$   
SAR  
ADC



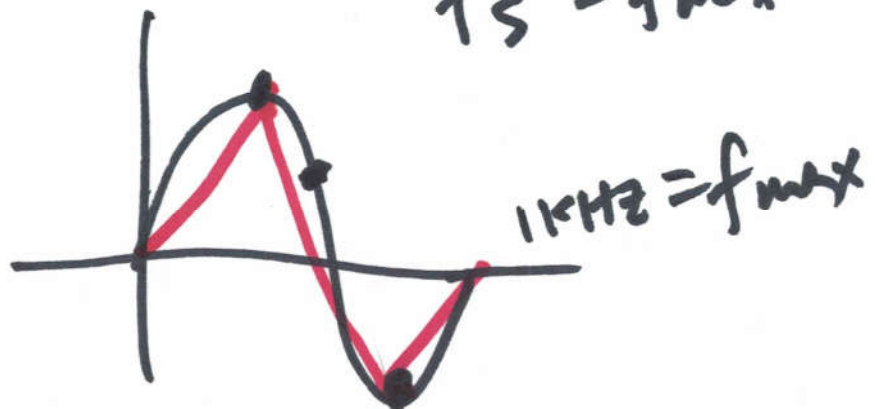
S/H

② Nyquist-Shannon sampling theorem.

$$\underline{f_s} \geq \underline{2 f_{max}}$$

$$\uparrow$$

$$f_s = f_{max}$$

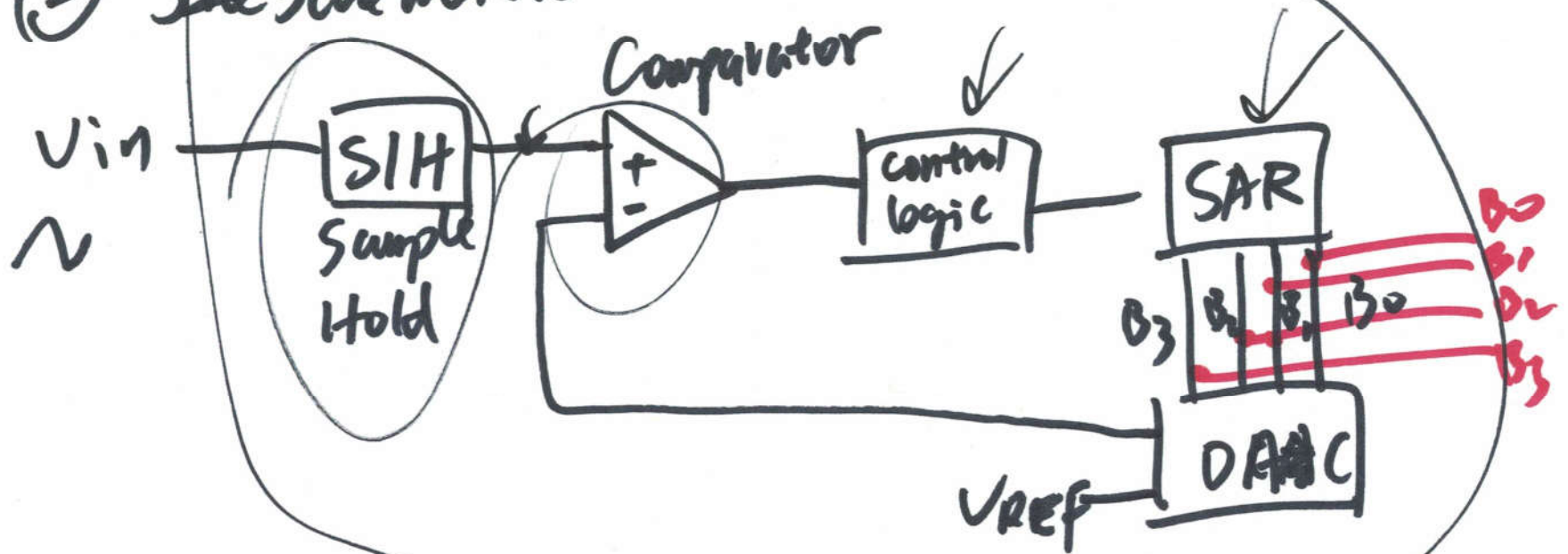


①

# ① Successive Approximation ADC (SAR ADC)

- low cost
- high resolution (8-18 bit)
- low power consumption (wearable devices)

## ② Schematic



②