

ECE 614 - Lecture 27

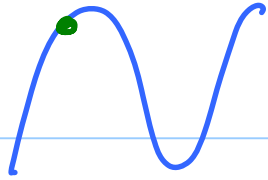
Note Title

12/9/2014

* Flash $\leq 6\text{-bit}$

* SAR ADC 8-16 bits, few MHz's

* Pipelined ADC $\leq 10\text{-}12\text{ bits}$, 500 MHz
10-200 MHz



$$V_{in} > \frac{V_{REF}}{2}$$

$$MSB = 1$$

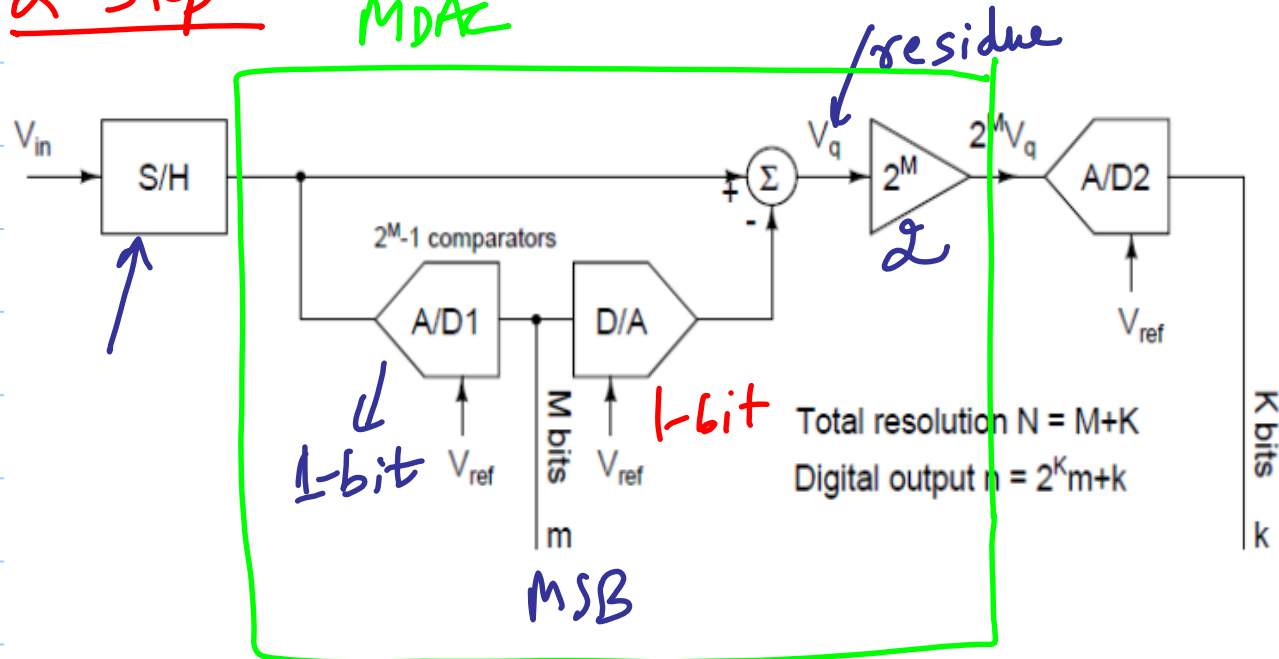
$$\text{residue: } \left(V_{in} - \frac{V_{REF}}{2} \right)$$

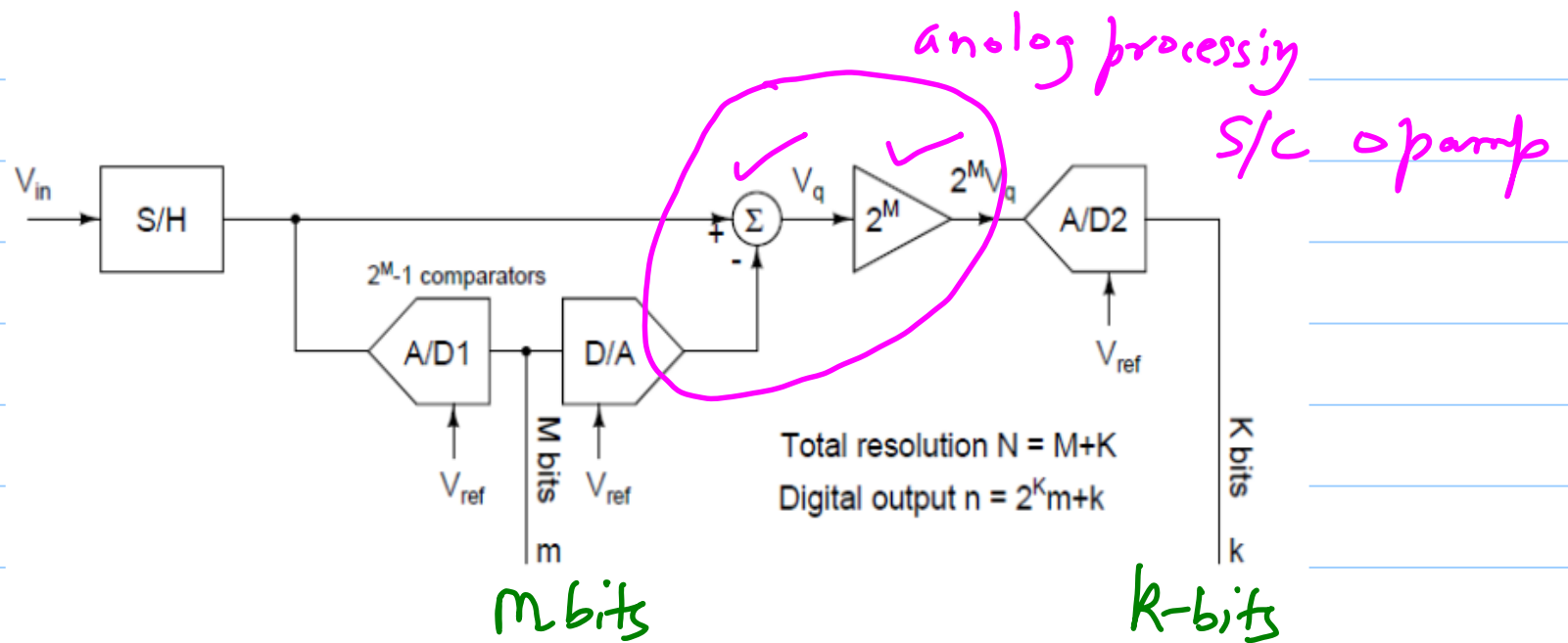
MDAC

2x residue

2-Step

MDAC





$$N = (m + k) \text{ bits}$$

