Lecture 37

DAC specifications

- bit resolution
- accuracy
- linearity
- setting time

ADC (A/D converters)

staircase:

problems with staircase :

b) susceptible to noise

successive approximation ADC

bits are set starting from _____

1)
2)
3)
4)

Ex 3-bit ADC , 0-7V
$V_{in} = 2.5V$

good:

bad:

Flash ADC

- resistor ladder
- input v_{in}
- _____ encoder

good:

bad:

Integrating ADC

Dual slope ADC

1)

$v_1 =$

2)

slope $\propto$ input voltage

good:

bad: