

ECG 721

Memory circuit

Design

OCT. 14, 2015

Lecture 15

Review for the

Exam

Study EOC problems }
Chs. 16-18 H.W., Quizzes }
Short questions

Ch. 16

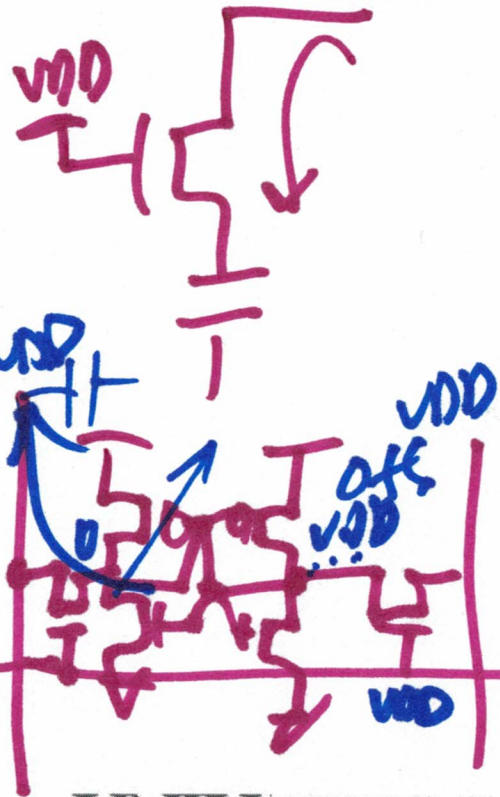
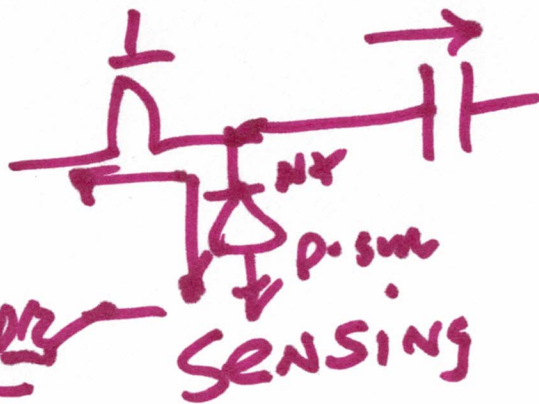
SRAM — layout, leakage
 DRAM — 6T1N1
 Flash — EPROM
 Resistive
 ROM — EEPROM

basics — sense amp design
 I/O, addresses,
 decoding,

Charge sharing
 EQ. → fire WL → fire NSA, fire PSH
 (operation of
 word line drivers)

bitline
 bitline

folded
 open



Ch. 17

Sensing using $\Delta \Sigma$ modulation
Look at HW, Quizzes, EOC.

Know circuitry

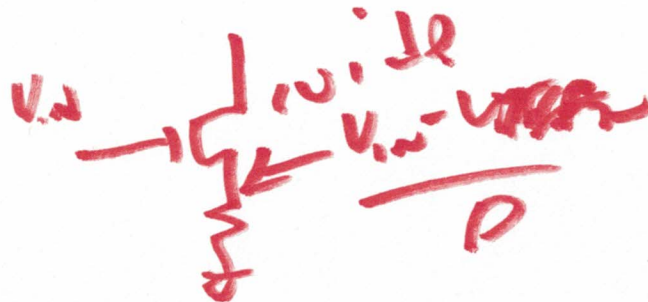
CMOS Image sensors

PIN PD and a

pinned PD?

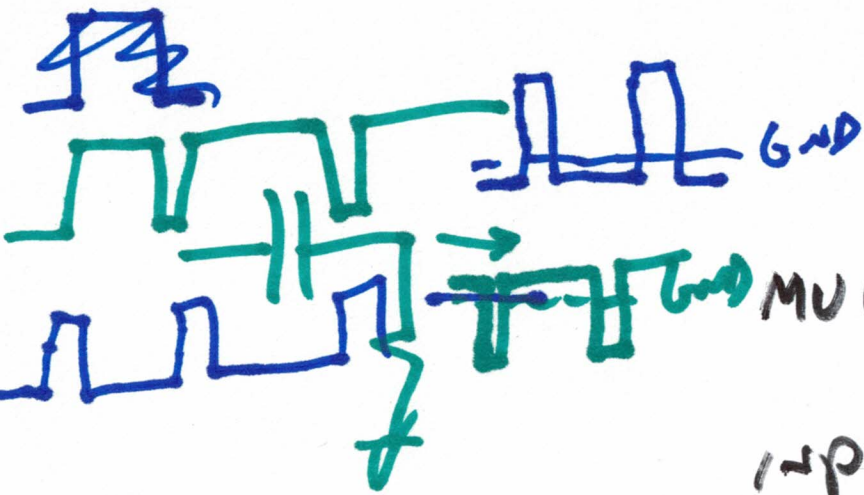
3T APS.

How do you do a V-to-I
conversion?

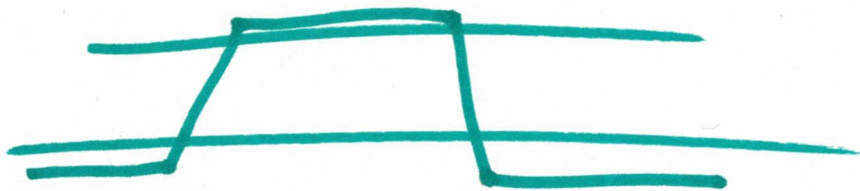


Ch. 18

Design & operation of
Schmitt triggers



Multivibrators - simple questions
input buffers - operation of input
buffers.
skew



peak detectors

DC restore



