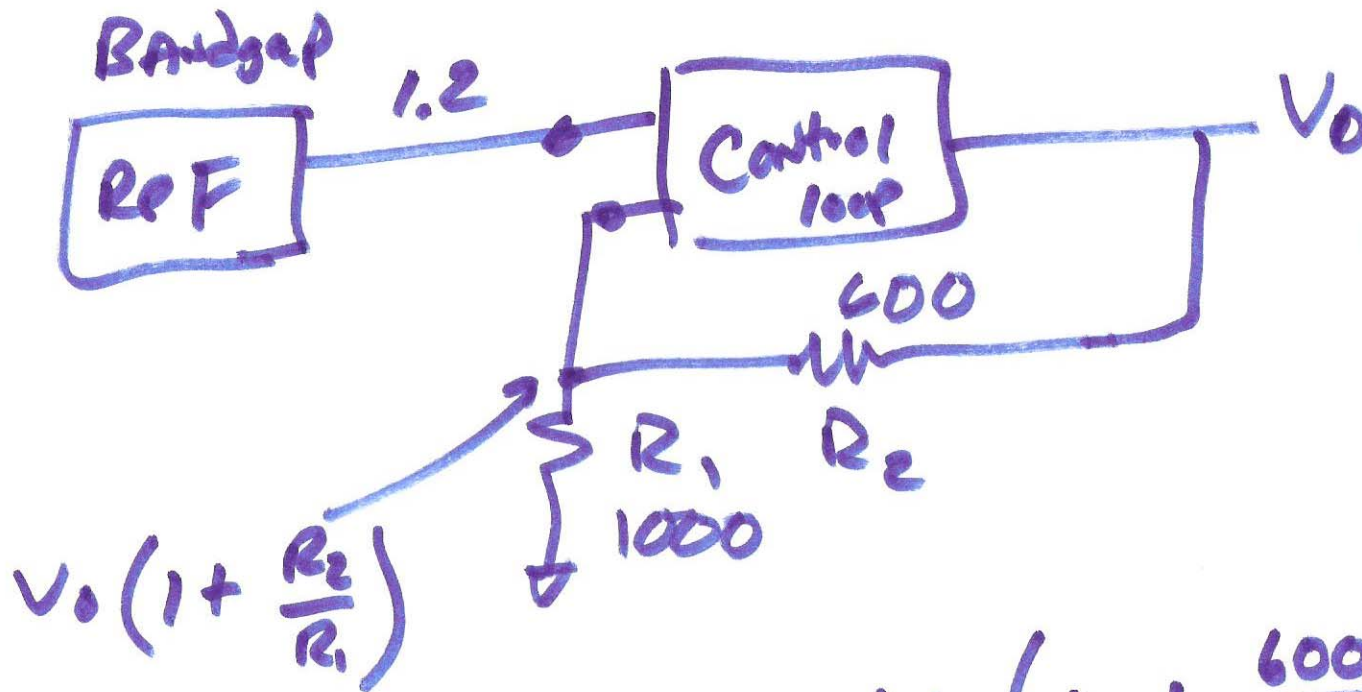


Lecture 13, October 6, 2011



$$V_T = \frac{kT}{q}$$

$$T \uparrow \quad V_T \uparrow$$

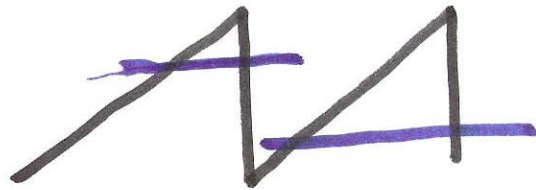
B.G.

$$T \uparrow \quad E_g \downarrow$$

$$1.2 = V_o \left(1 + \frac{600}{1000} \right)$$

$$V_o = 1.6 \times 1.2 \approx 2V$$

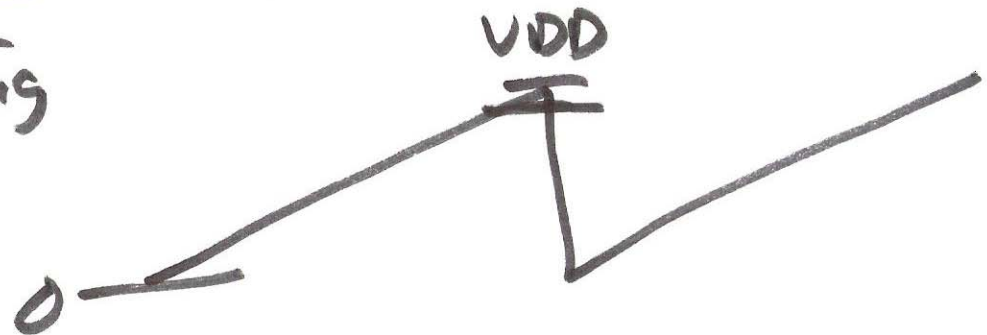
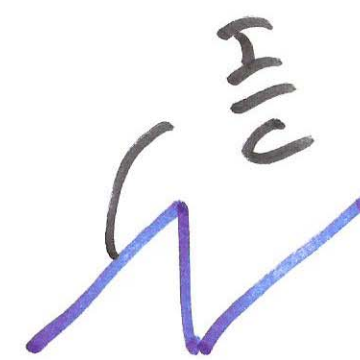
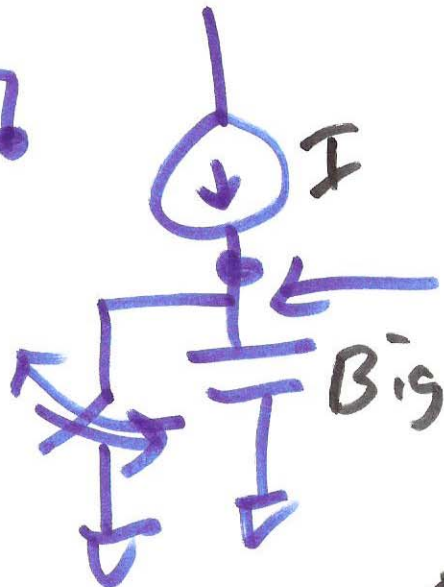
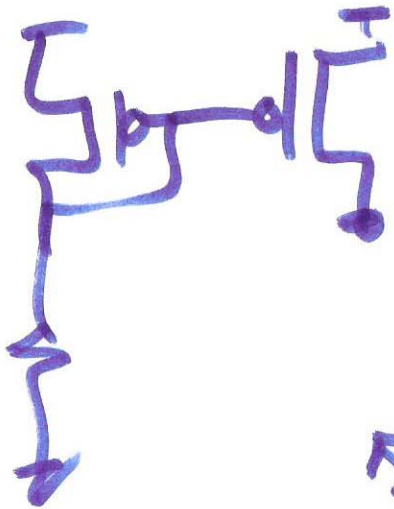
11



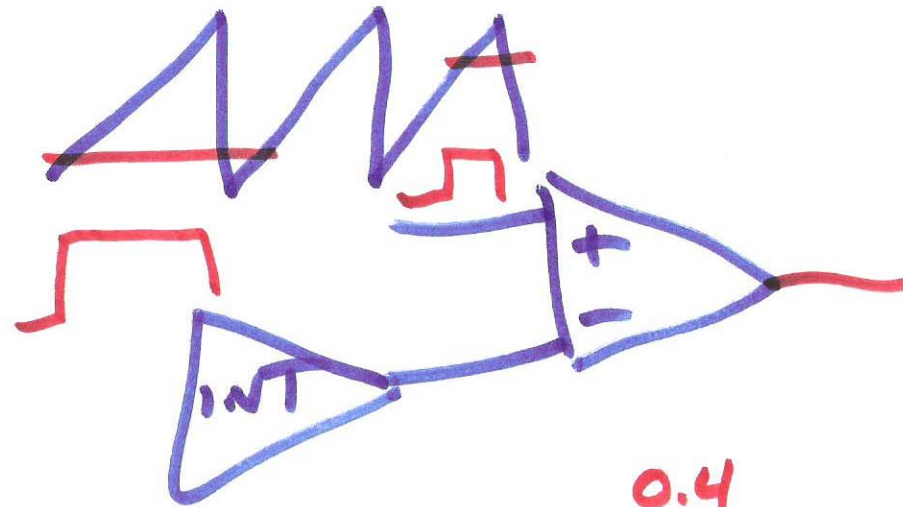
PWM

SMPS
WOOD
HCP
HCP
W
P
Y

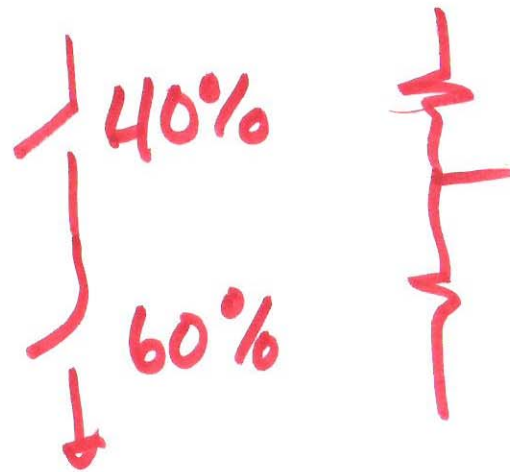
Switchers



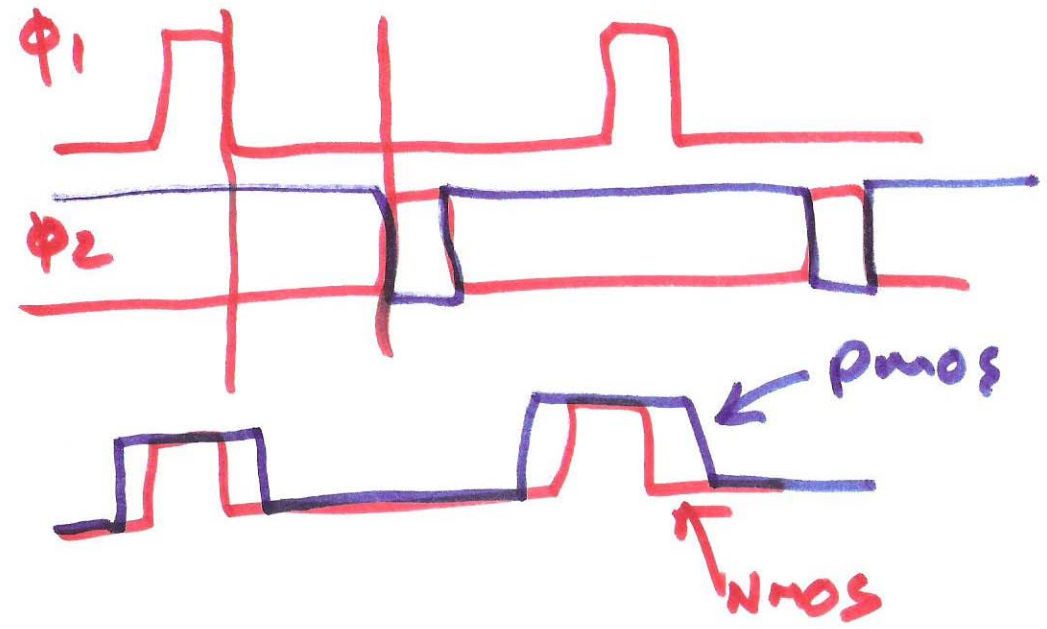
2)



$$V_o = D \cdot V_s = 5 \cdot D^{0.4} = 2V$$



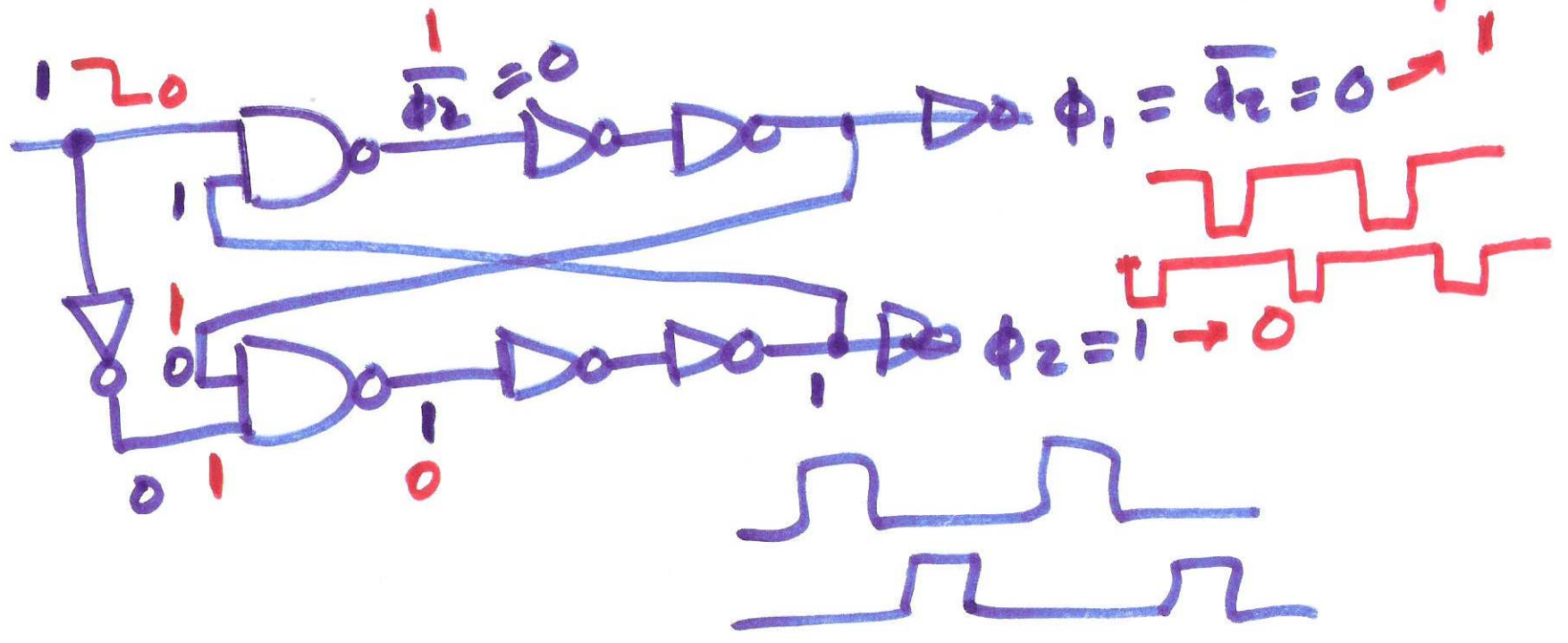
3)



$\phi_1 \cdot \phi_2 = 0$

$\phi_1 \rightarrow 1$

$\phi_2 \rightarrow 1$



4)