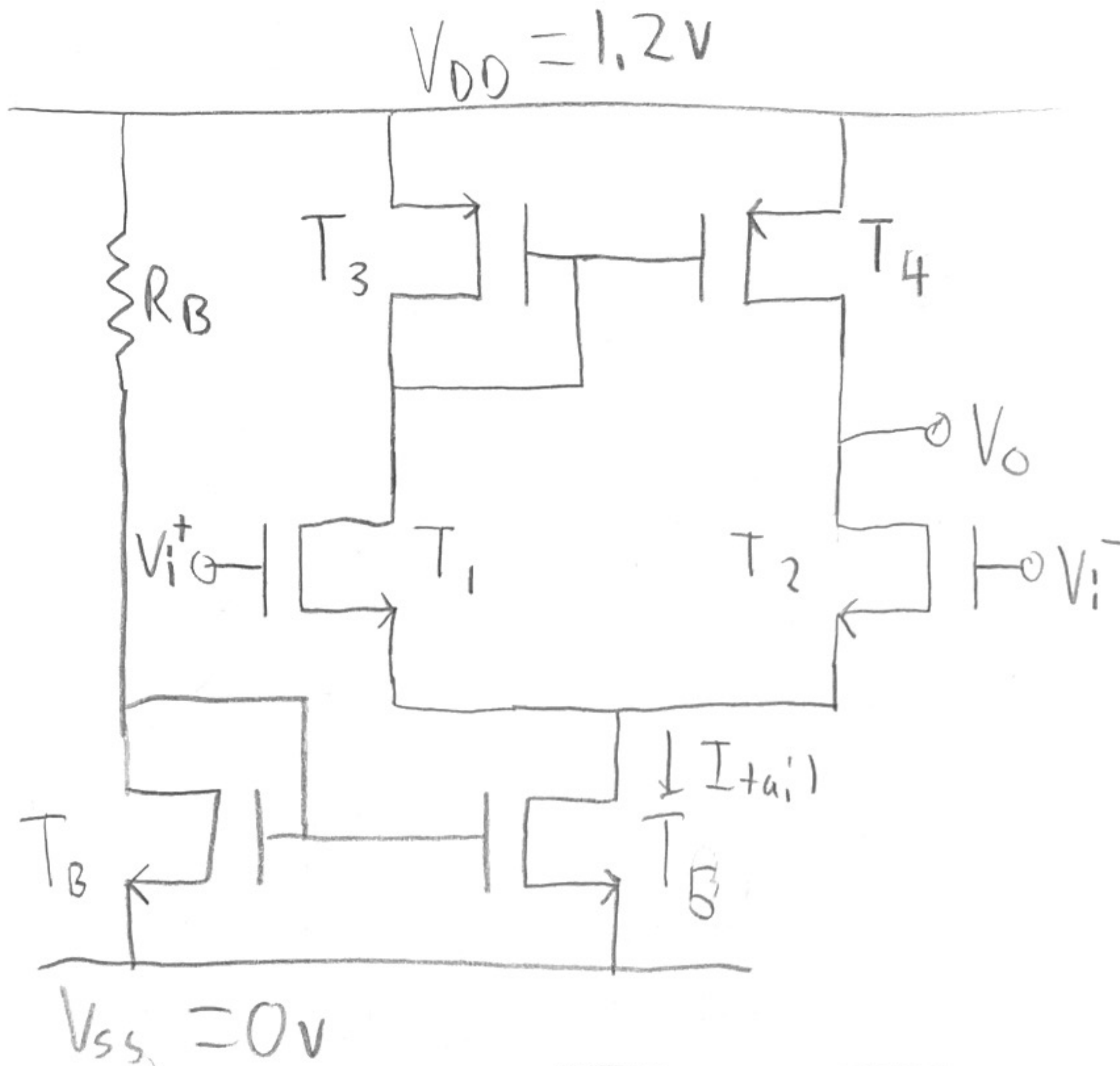


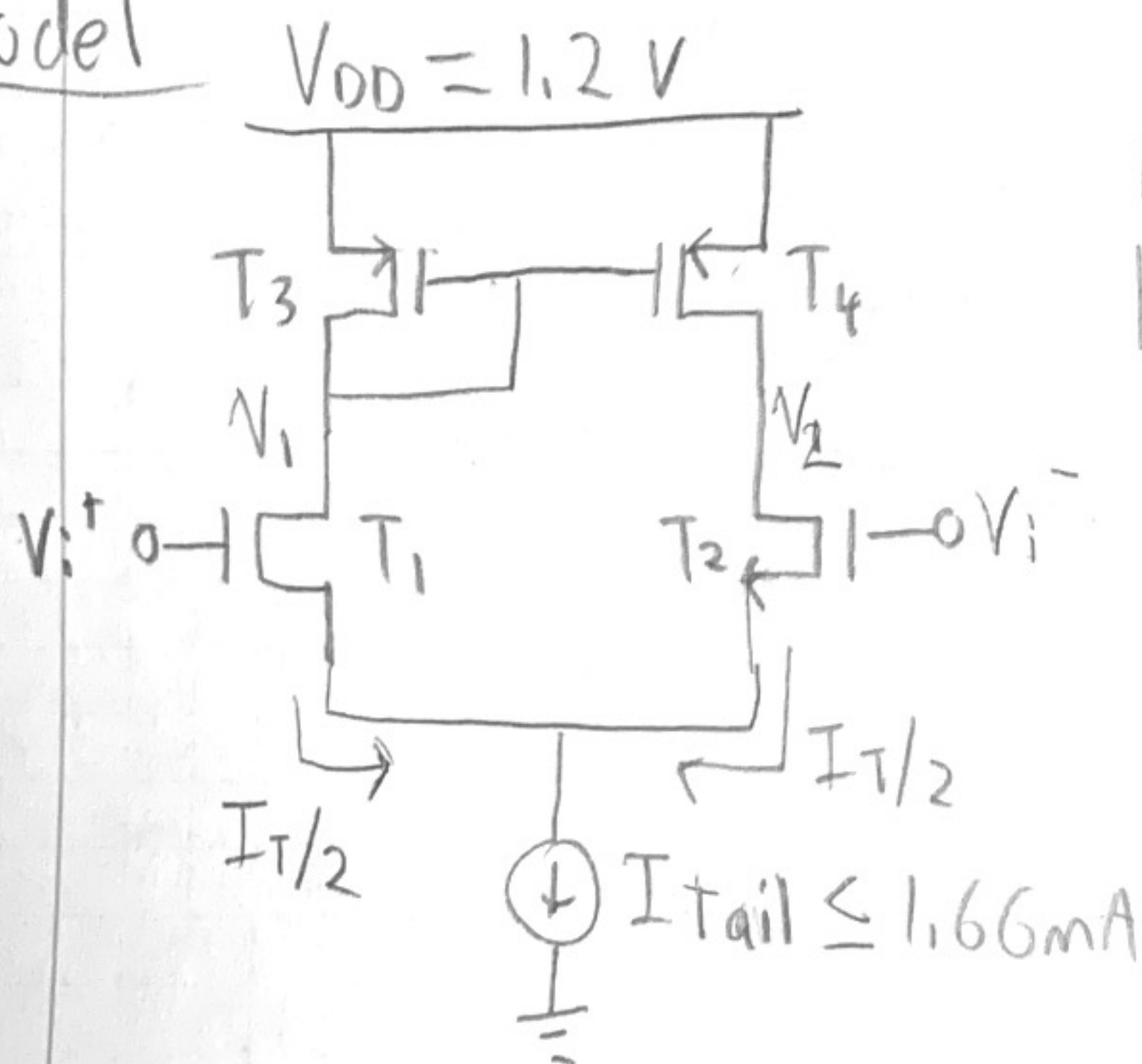
# Full model



max Power =  $I V = (V_{DD} - V_{SS}) I_{Tail} \leq 2mW$

$2mW = 1.2V (I_{tail}) \rightarrow 1.66mA \leq I_{tail}$

## $I_T$ model



$|V_{GS}| = .6V$

$|V_{DS}| = .6V$

$\rightarrow V_1 = V_2 = .6V$

# Resistor model

$$V_{OS} = .6V$$

$$V_3 = 120mV$$

$$V_1 = V_2 = V_{OS} + V_3 = .72V$$

$$I_{D1} = I_{D2} = \frac{I_{tail}}{2} = .8333mA$$

$$I_{D1} = \frac{V_{DD} - V_1}{R_1}$$

$$\frac{1.2V - .72V}{.833mA} = R_1 = R_2$$

$$576\Omega = R_1 = R_2$$

