

PICCOLI SEGNALE



$$V_{out} = -R_L // R_{D2} \cdot g_{m2} \cdot V_{GS2}$$

$$V_{GS2} = -g_{m1} V_{GS1} \cdot R_{D1}$$

$$V_{out} = (-R_L // R_{D2}) \cdot g_{m2} \cdot (-g_{m1} \cdot V_{IN} \cdot R_{D1})$$

$$V_{out} = \frac{2/2}{2/2} \cdot 2 \cdot 2 \cdot \frac{V_{IN}}{1} \cdot 1 \Rightarrow \frac{V_{out}}{V_{IN}} = 4 \Rightarrow A_V = 4$$