Basic CMOS Op-Amps
Analog Electronics | Dr.Ali Fotowat

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Circuit (1) Schematic
Start-up turn-on/off
Circuit (2) Schematic

Bias circuitry

Differential-input first stage

Common-source second stage

Output buffer
\[(W/L)_{16} = 1\text{u}/1.6\text{u}\]
\[(W/L)_{16} = 50\mu m/1.6\mu m\]
\((W/L)_{16}=400\mu m/1.6\mu m\)
\((W/L)_{16} = \frac{10000\mu}{1.6\mu}\)
$R_b=500$, Gate Connected to 5V
$R_b=5k$, Gate Connected to 5V
\( R_b = 100k \), Gate Connected to 5V