Name: Theja Voora Roll no. : 150070052

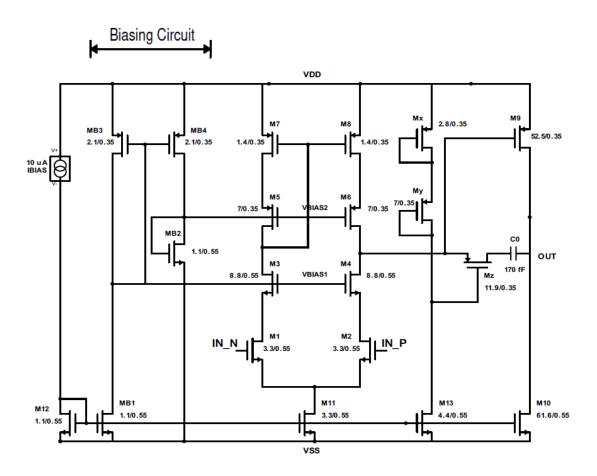


Figure 1: Operational Amplifier Schematic

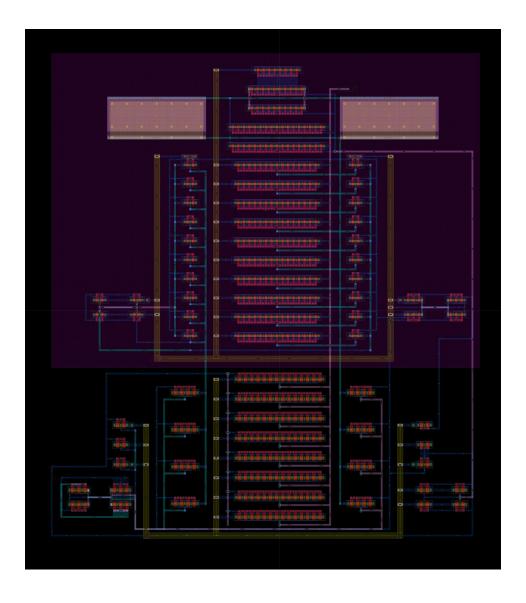


Figure 2: Layout of Operational Amplifier

Table 1: The Operational Amplifier Specifications

Parameter	Schematic	Layout
DC Gain	100.287 dB	98.5745 dB
Unity Gain Frequency	152.99 MHz	106.2 MHz
Phase Margin	62.926°	60.036°
Slew Rate	140 V/μs	124 V/μs
Input Referred Thermal Noise	18.0282 nV/√ <i>Hz</i>	18.7849 nV/√ <i>Hz</i>
Settling Time	7.22088 ns	10.8387 ns
Common Mode Gain	-12.093 dB	-35.7374 dB
Output Swing	1.06 V	1 V
PSRR <sub>VDD</sub>	100.19 dB	102.042 dB
PSRR <sub>VSS</sub>	106.094 dB	108.202 dB
CMRR	112.38 dB	134.311 dB
Input Common Mode Range	[709 mV, 1.225 V]	[689 mV, 1.024 V]
Power	1.188 mW	1.191 mW
Area		75 μm × 85 μm = 6375 μm²