

# Appendix B - Physical Design (Color)

Kannan Sockalingam and Rick Thibodeau

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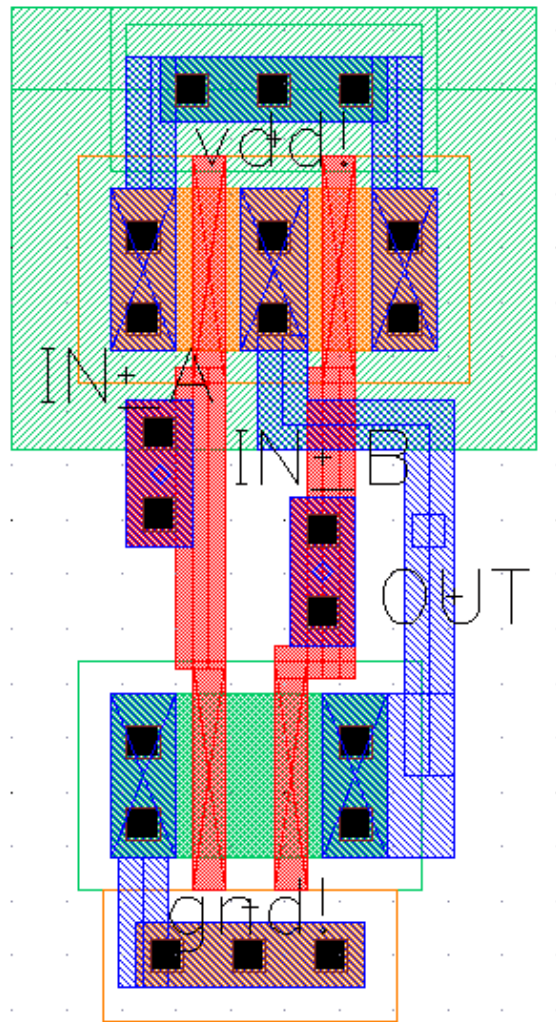


Figure 1: 2 Input NAND Gate.

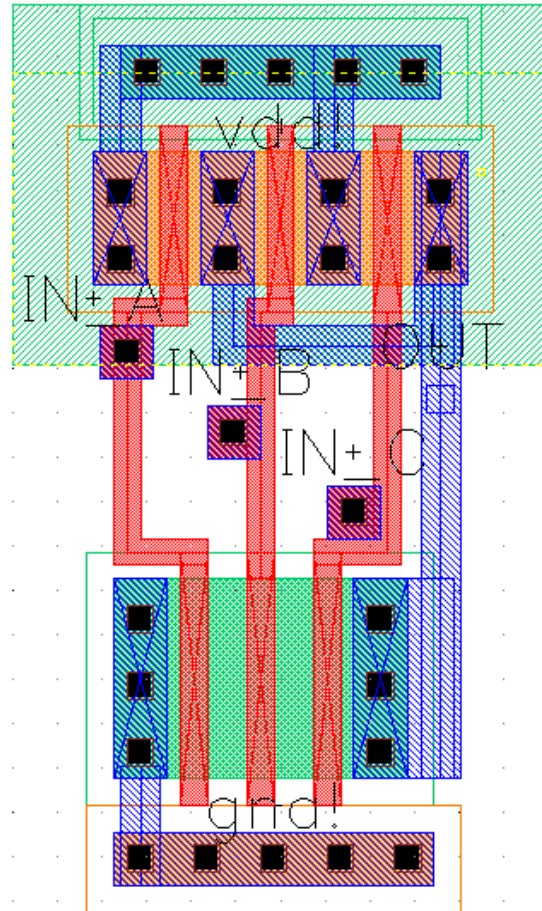


Figure 2: 3 Input NAND Gate.

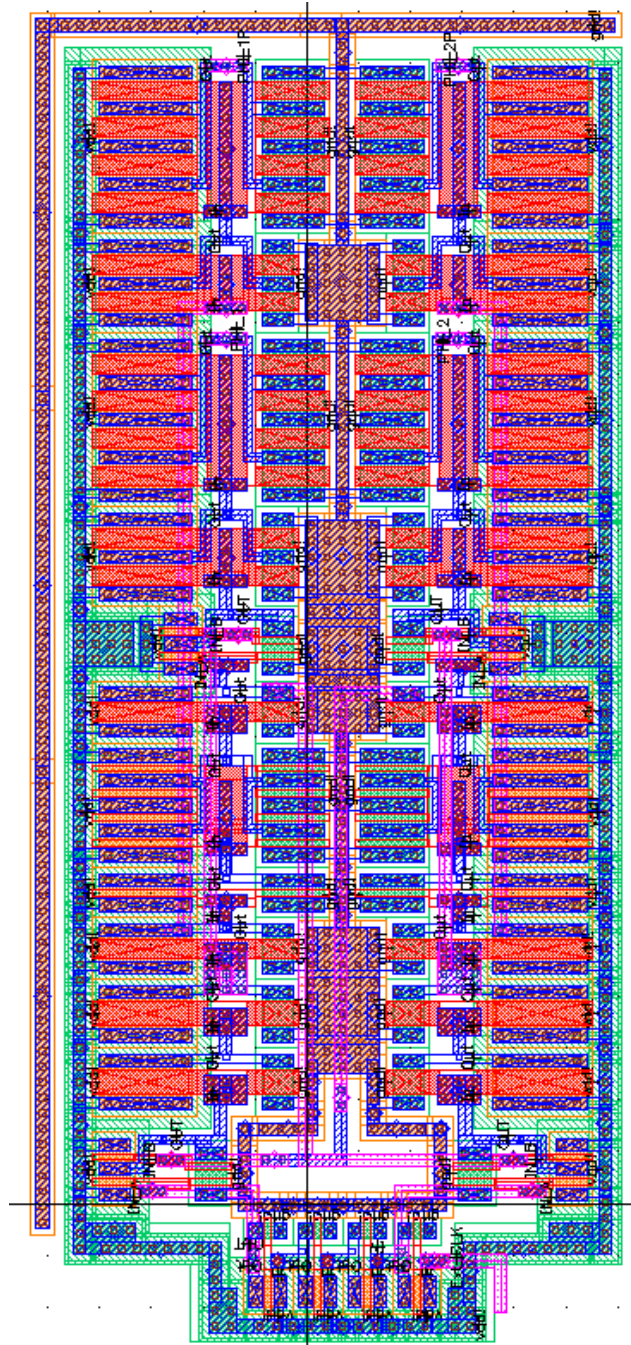


Figure 3: 2 Phase Non-Overlapping Clock.

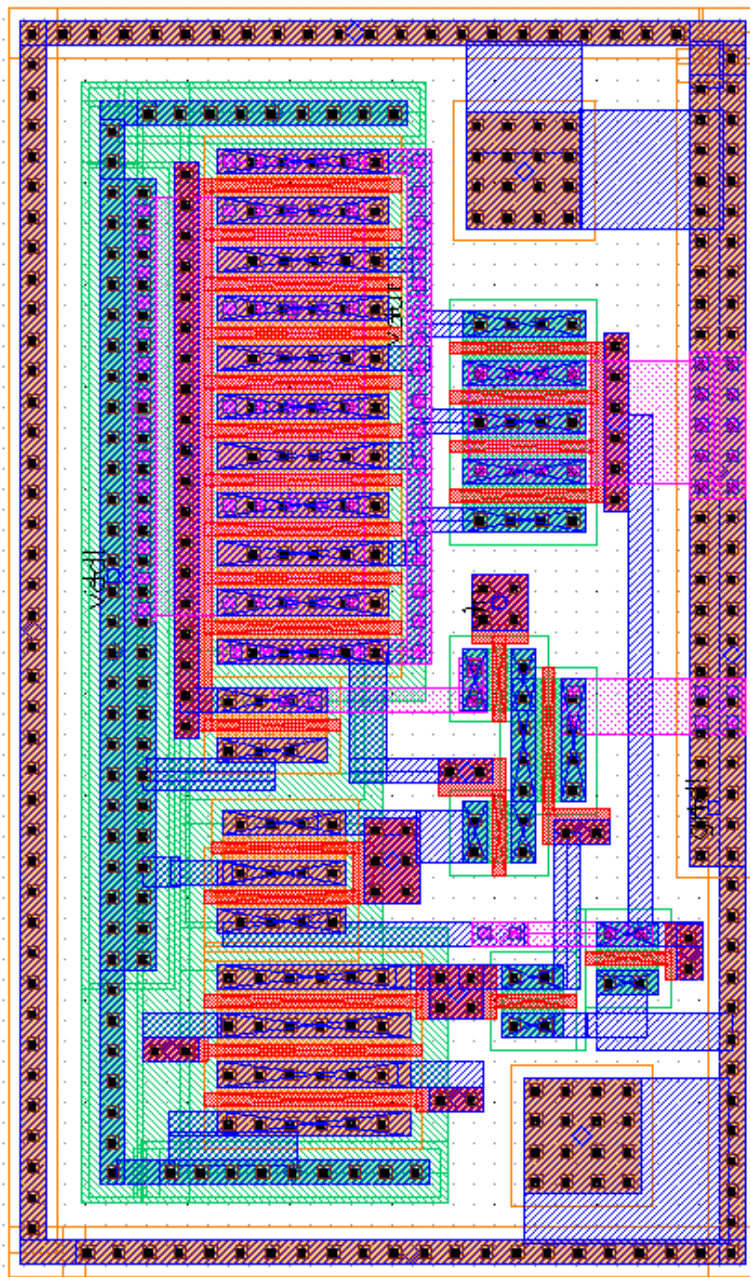


Figure 4: Analog Buffer.

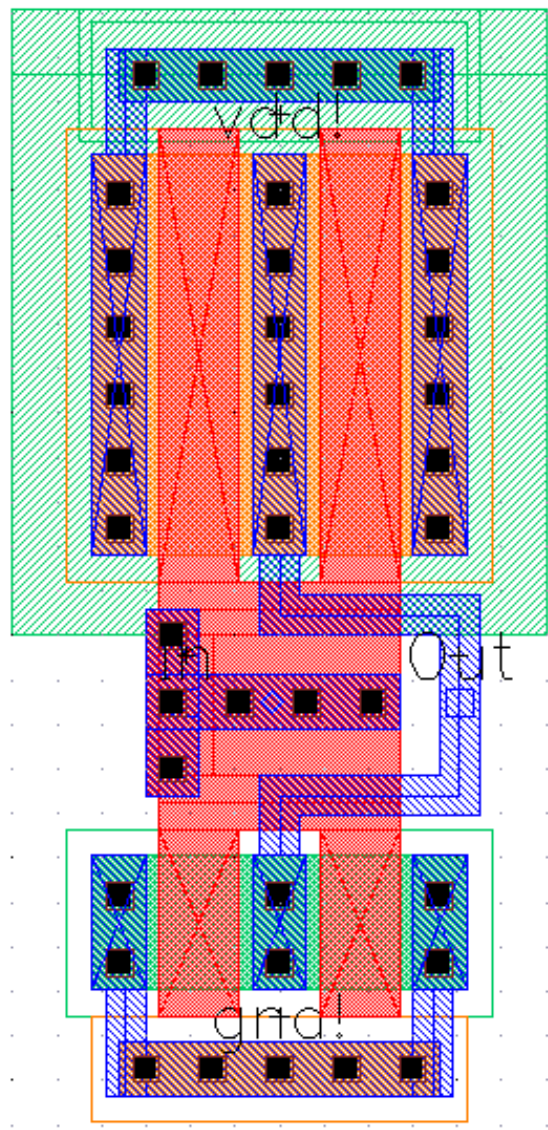


Figure 5: Buffer BUFF\_1.

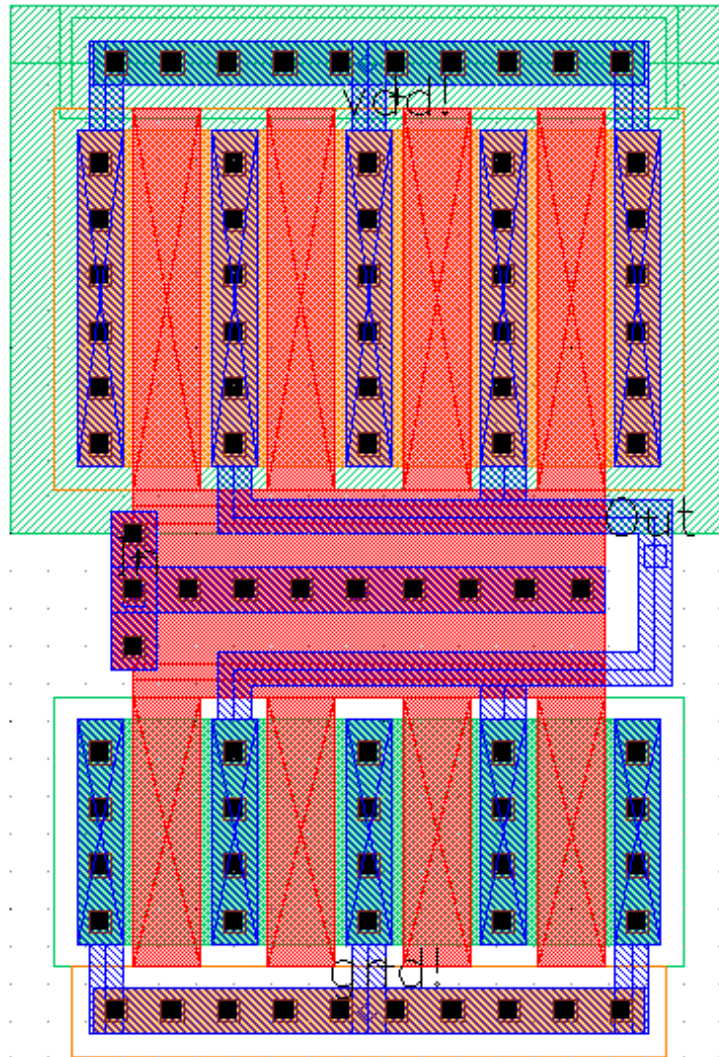


Figure 6: Buffer BUFF\_2.

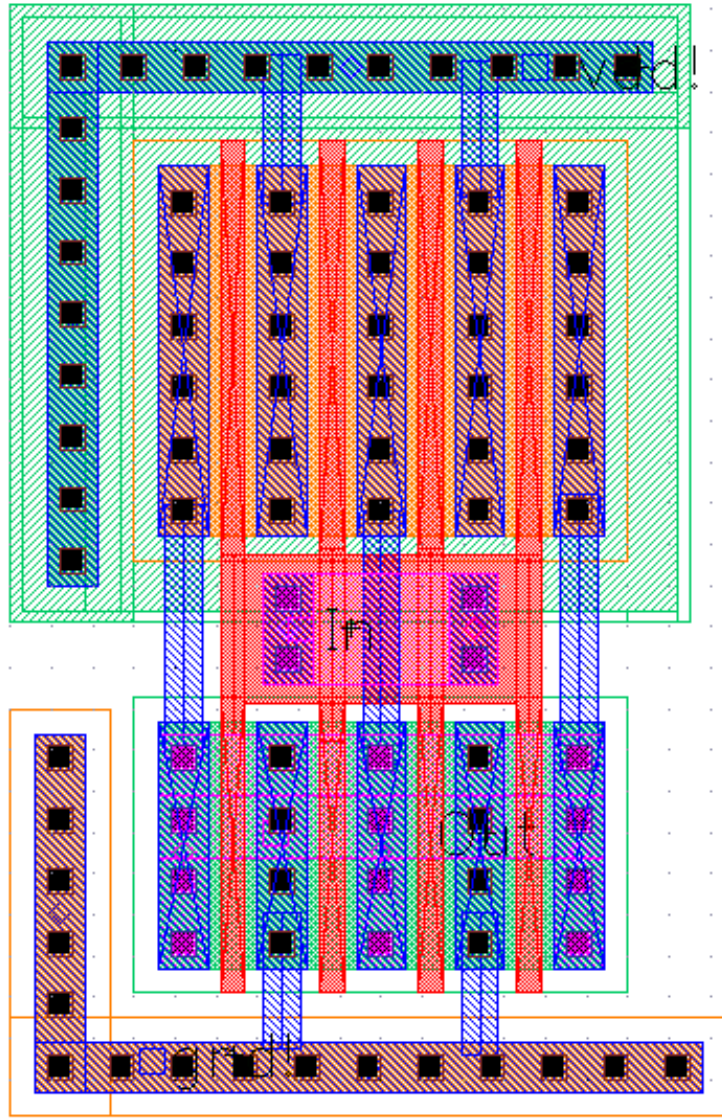


Figure 7: Buffer BUFF\_3.



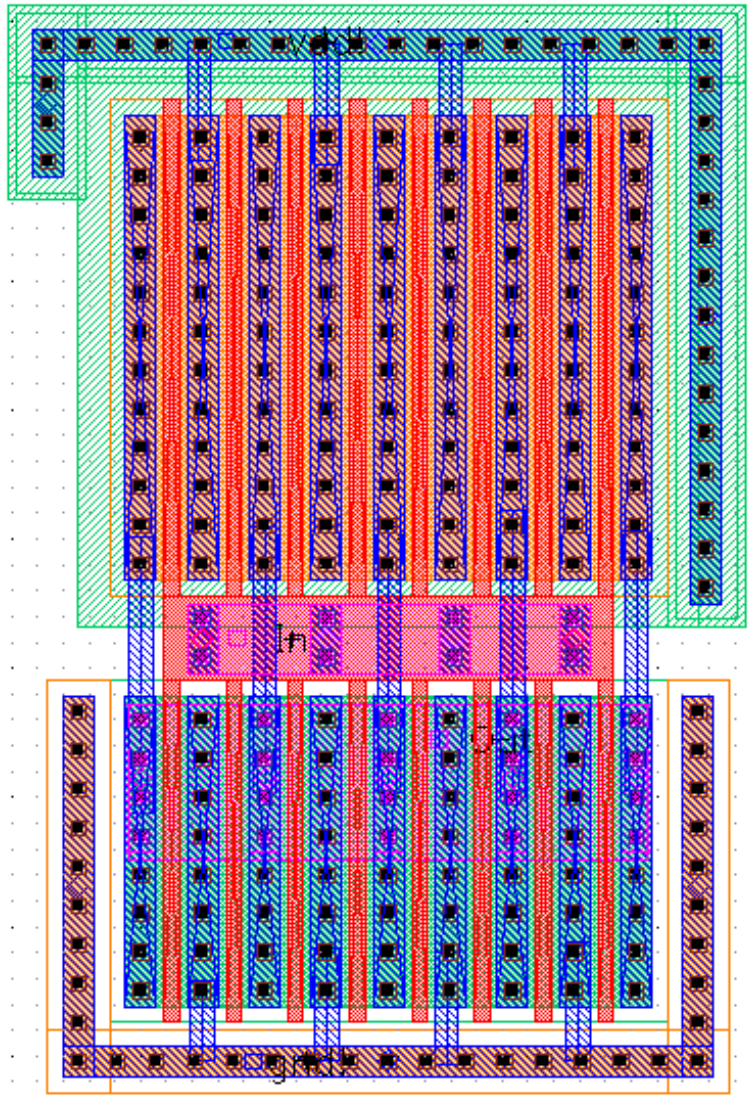


Figure 8: Buffer BUFF\_4.

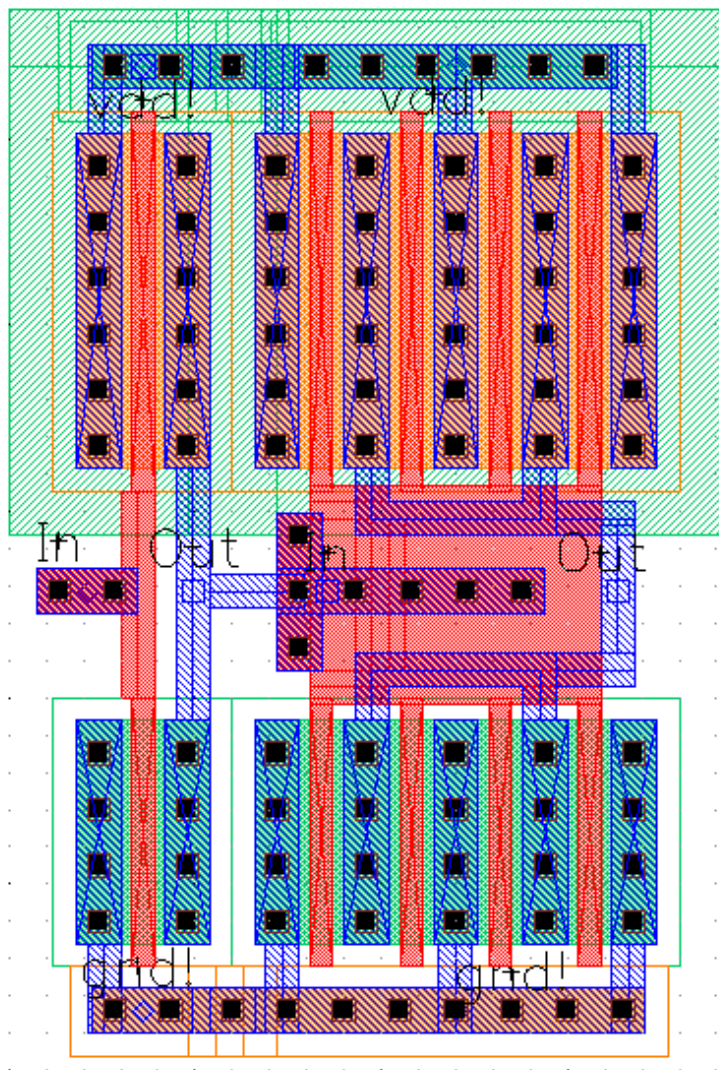


Figure 9: Buffer BUFF.

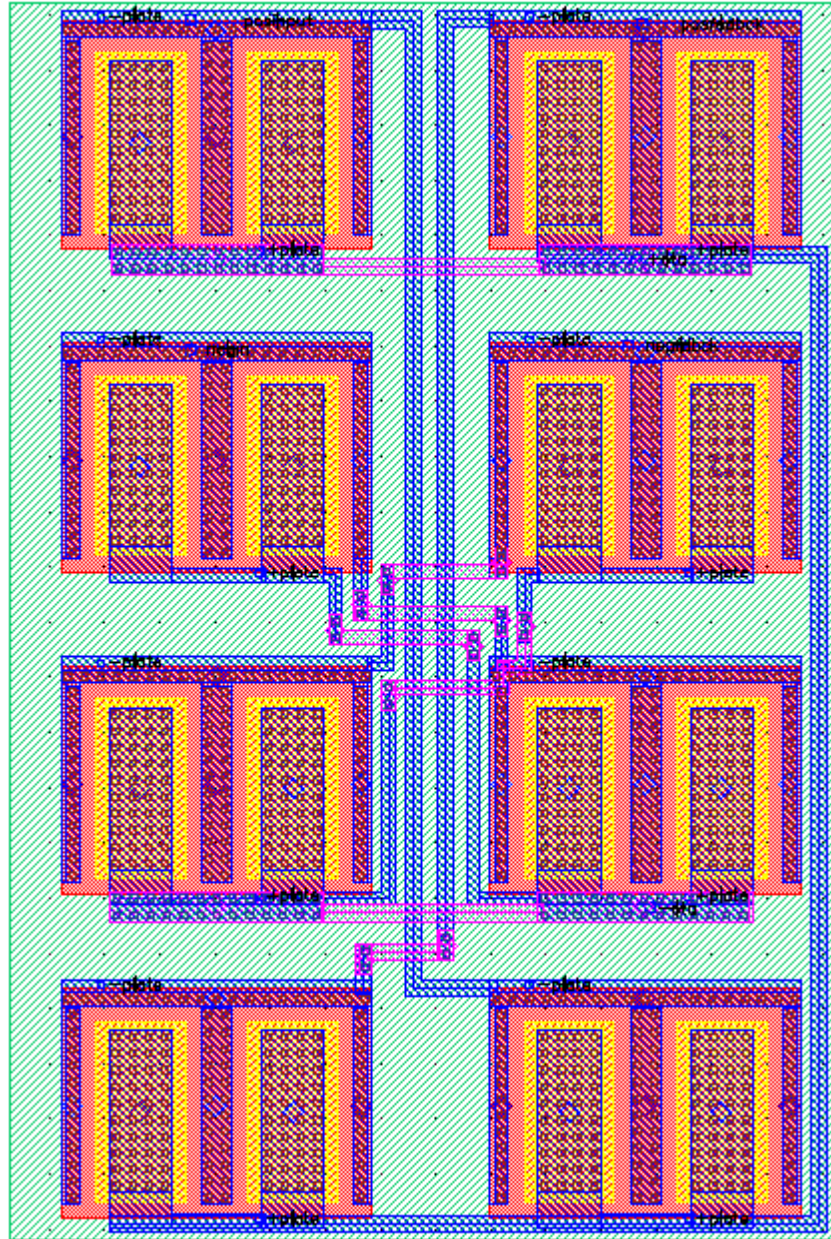


Figure 10: Common-centroid Capacitor Array.

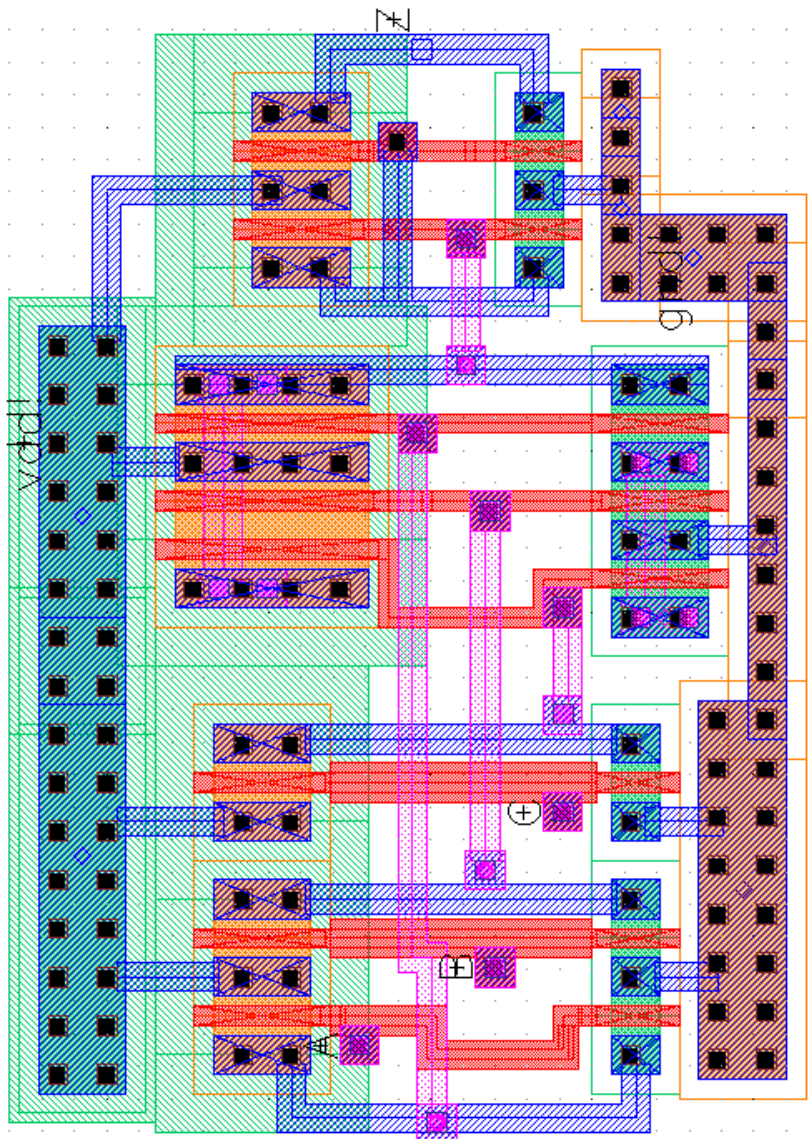


Figure 11: Carry Bit.

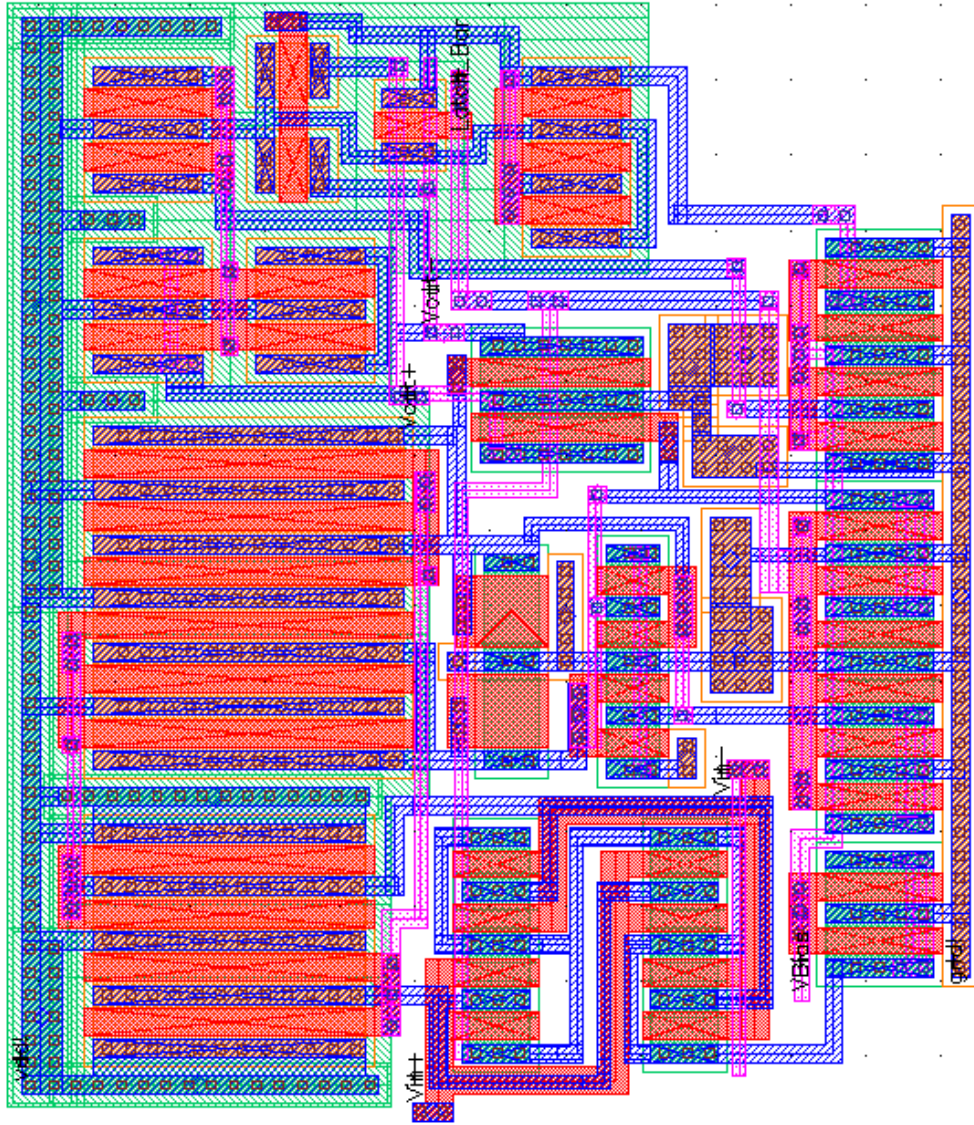


Figure 12: Clocked Comparator.

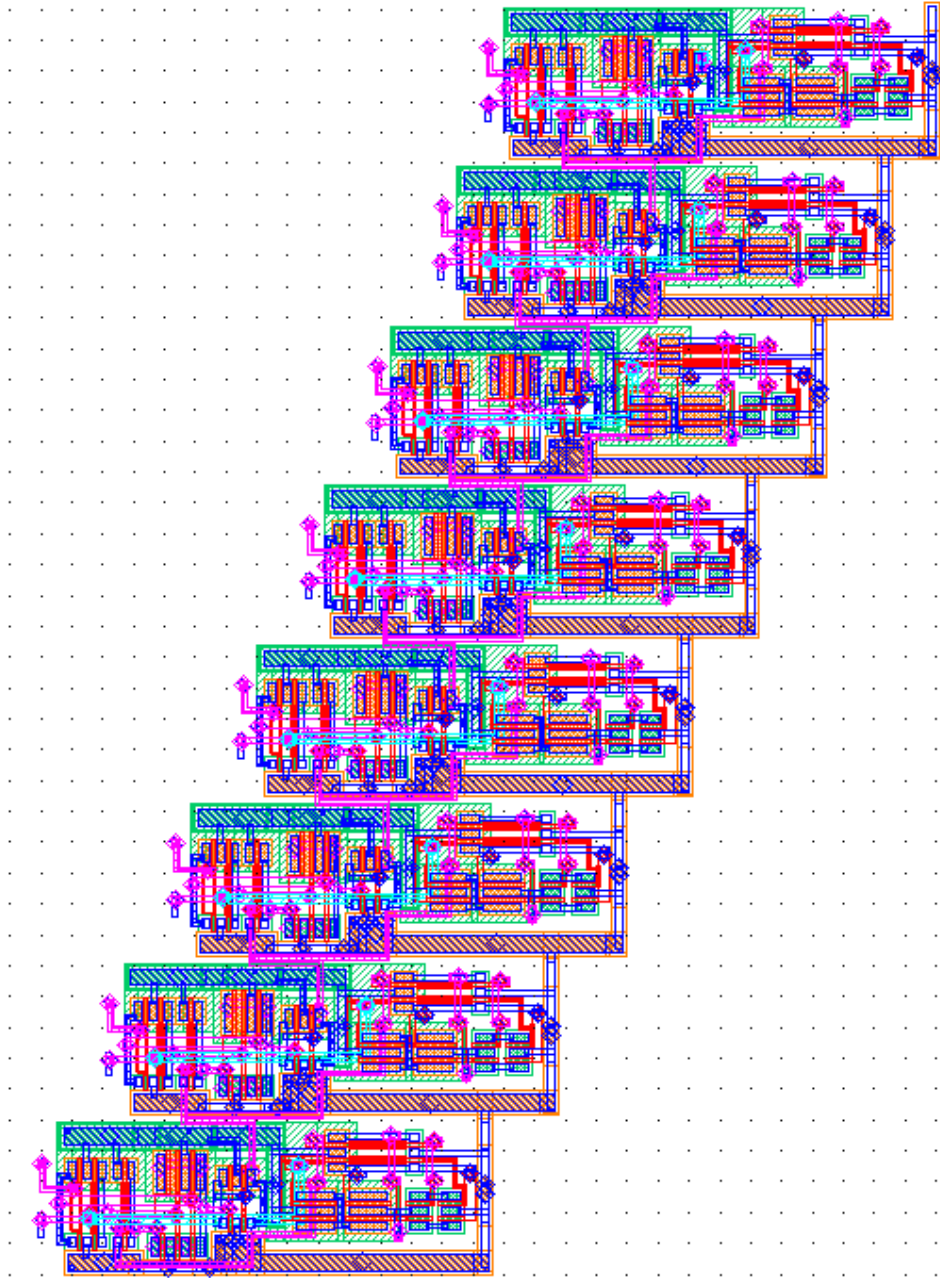


Figure 13: Correction Logic.

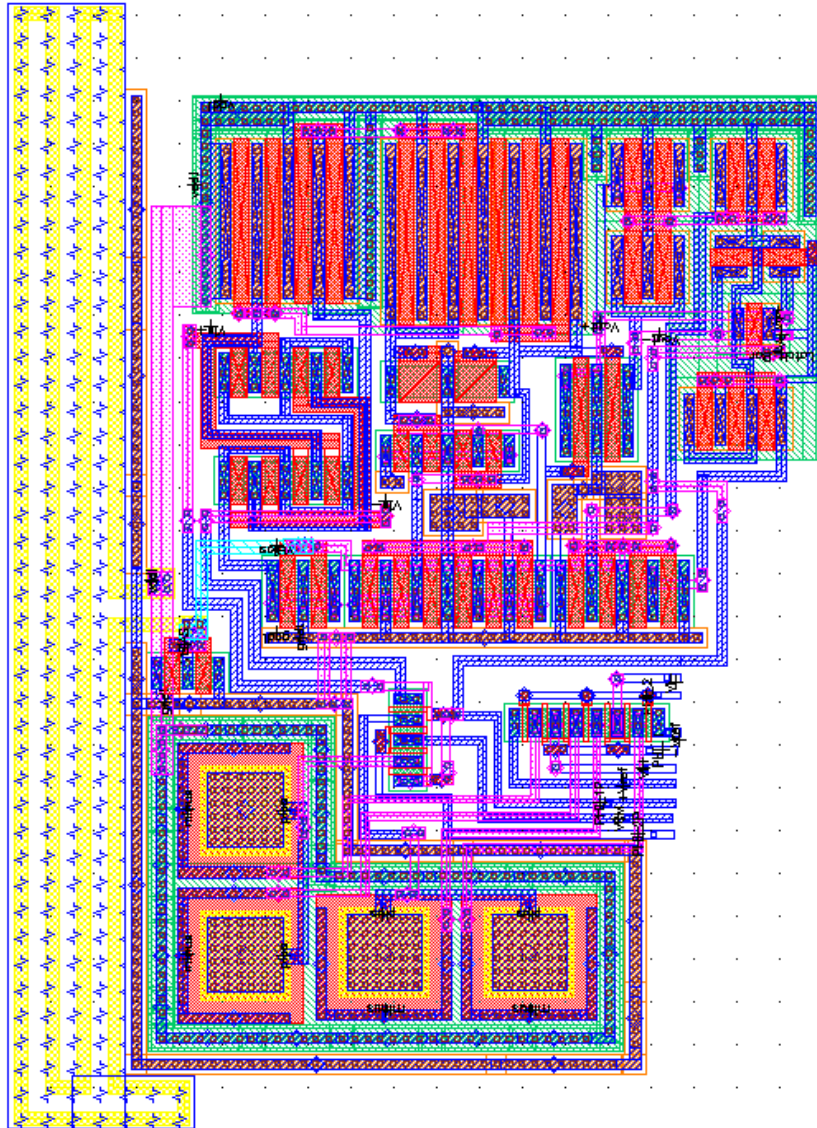


Figure 14: Last Stage Differential Comparator.

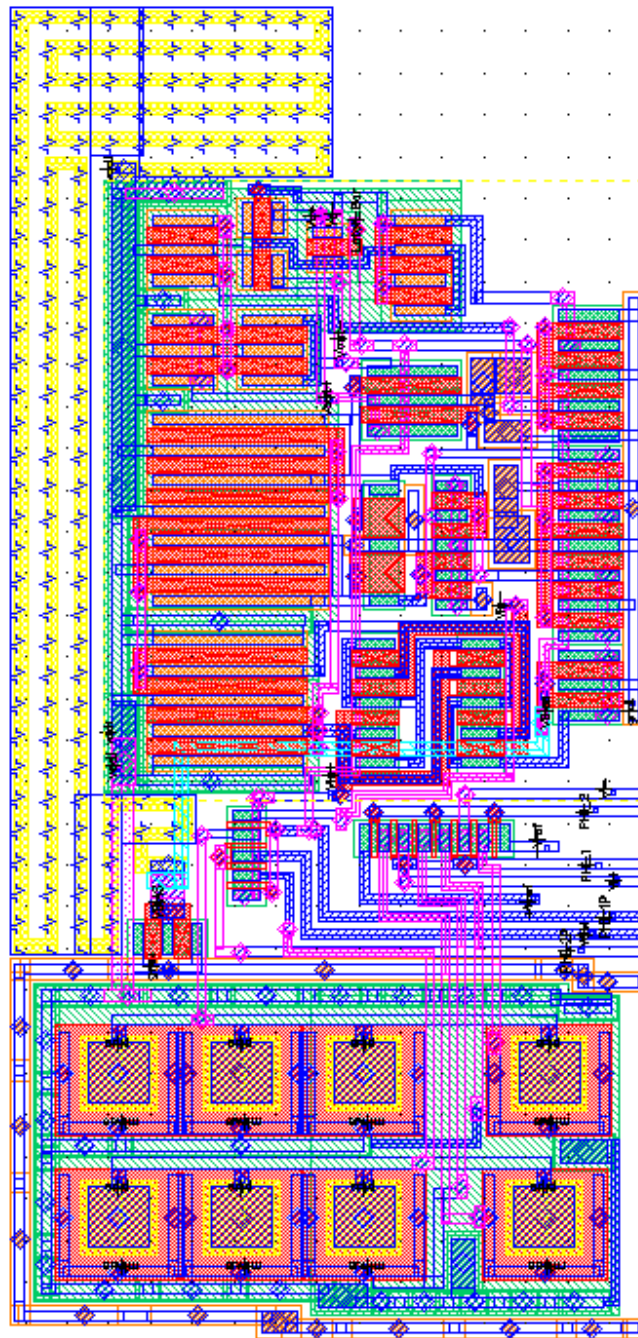


Figure 15: Differential Comparator.



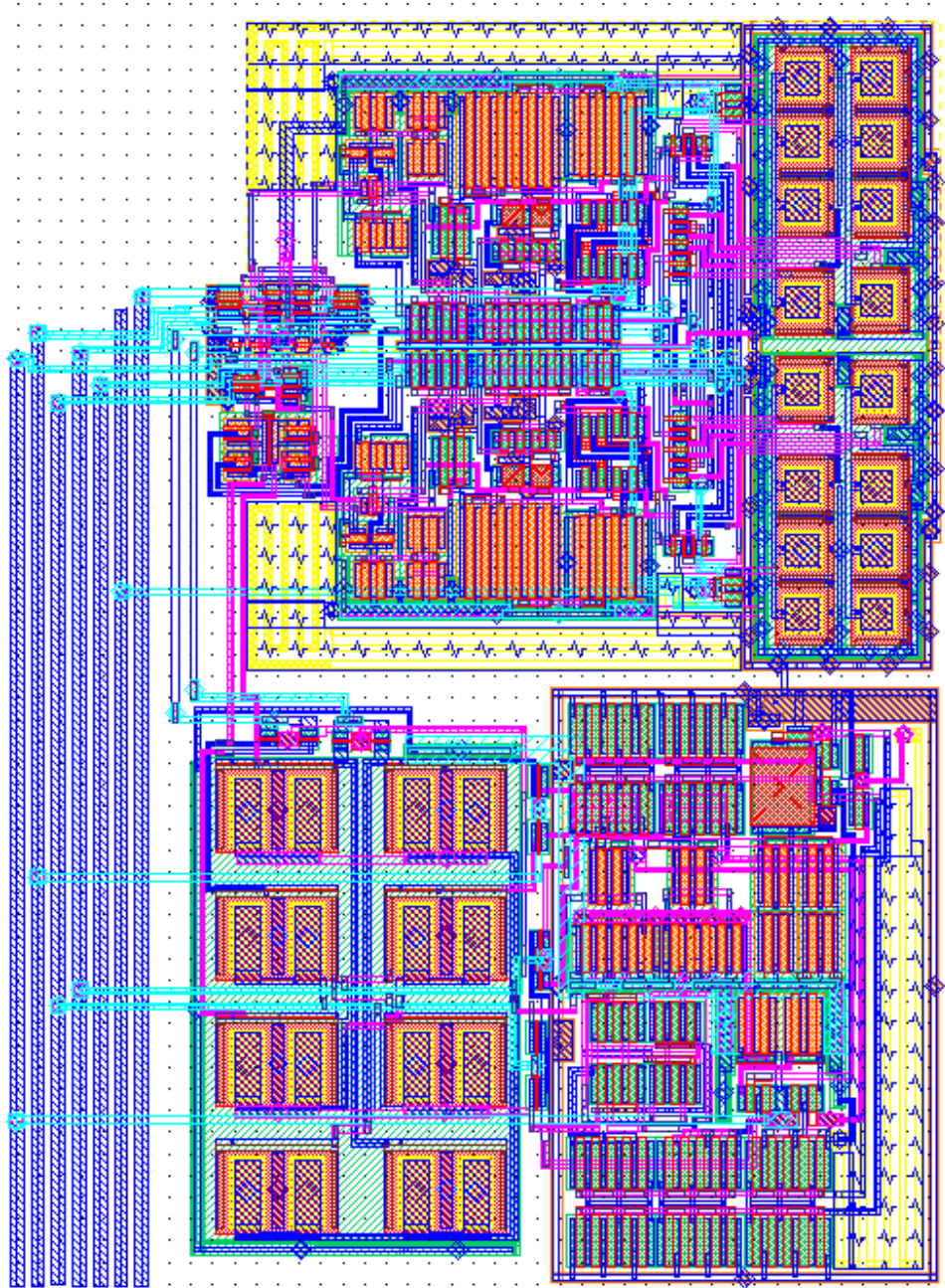


Figure 16: Even Stage.

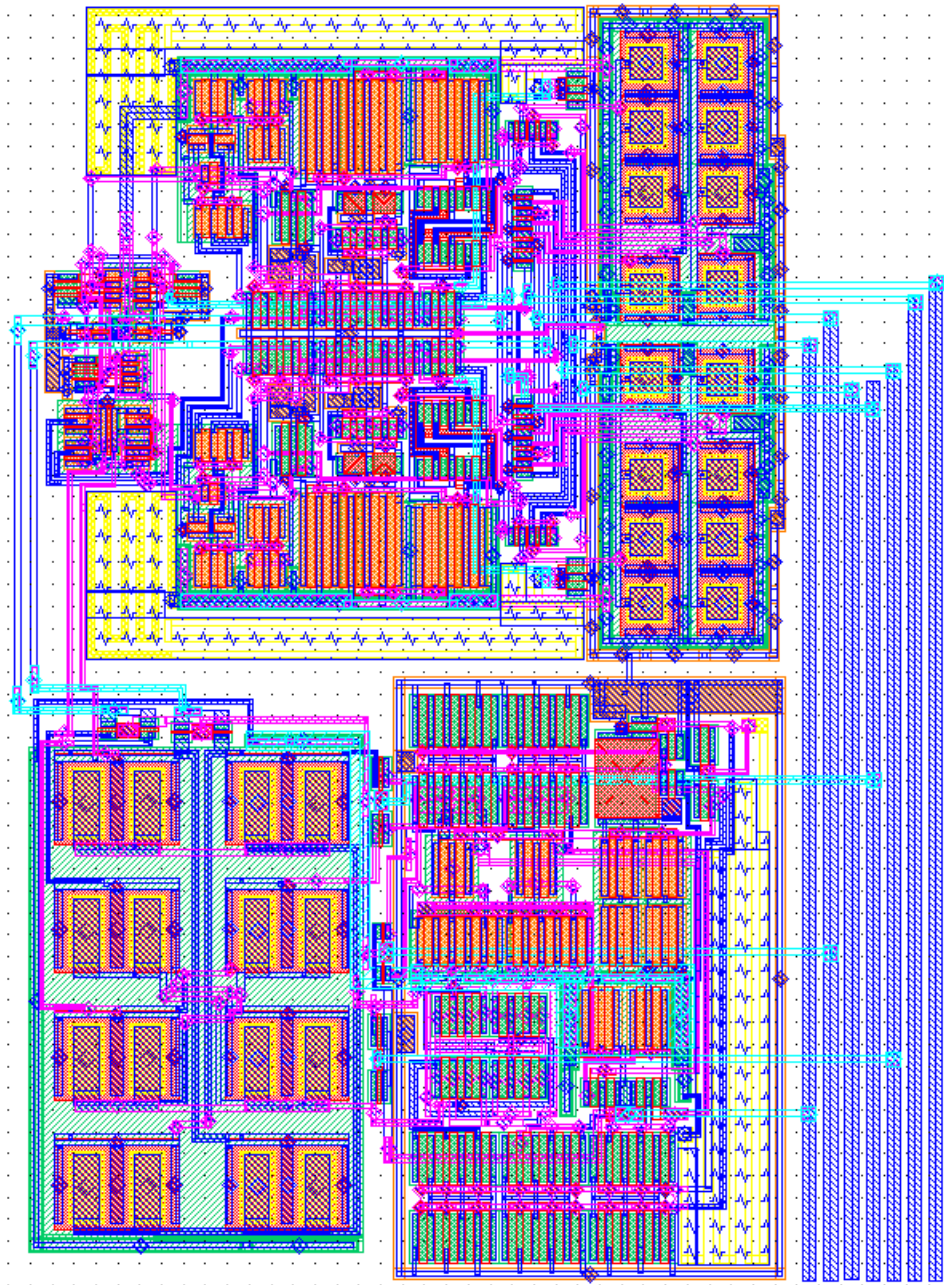


Figure 17: Odd Stage.

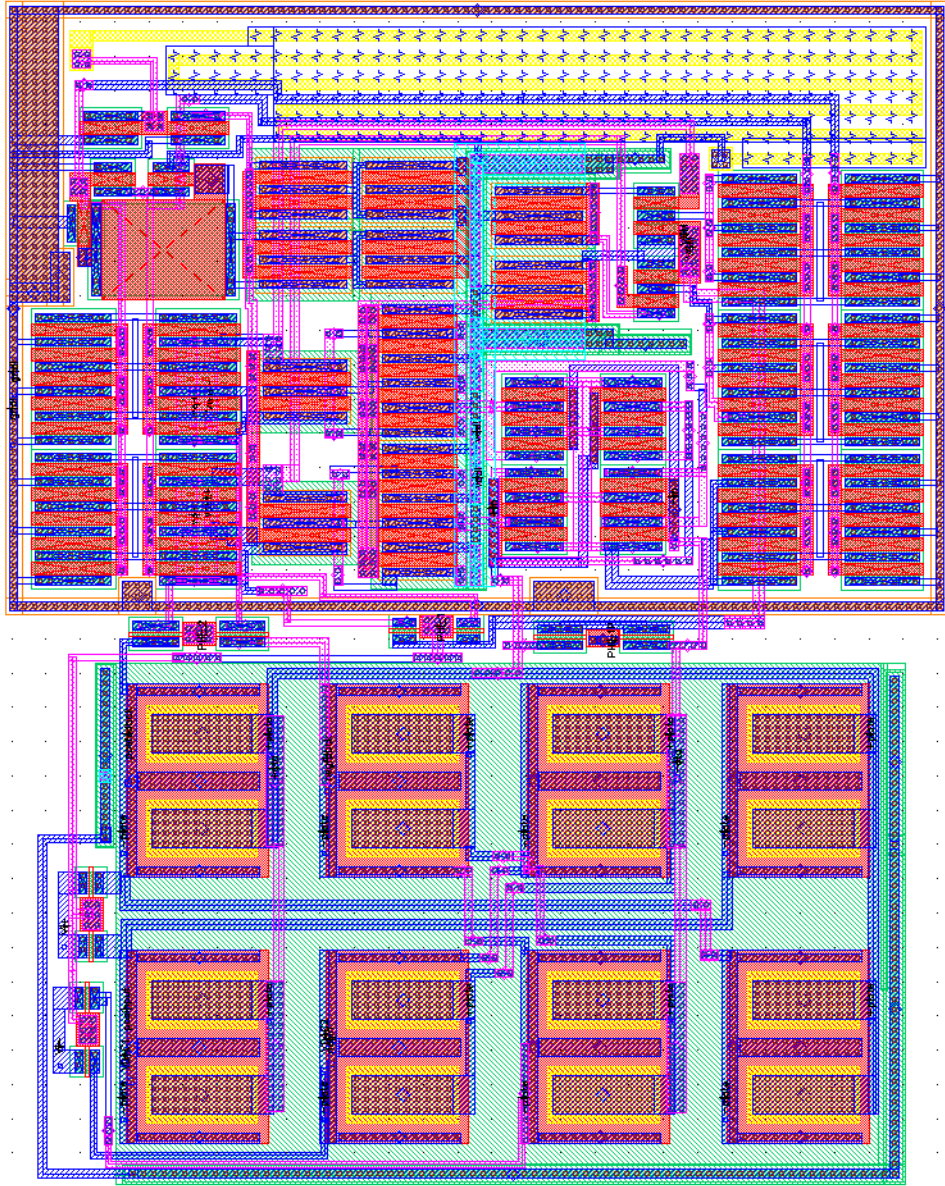


Figure 18: Gainstage.

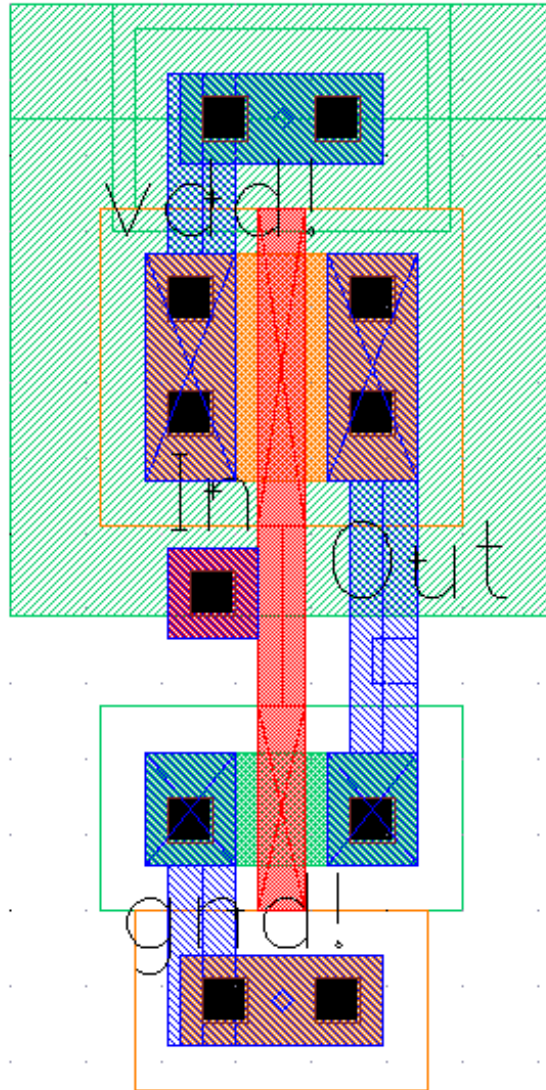


Figure 19: Basic Inverter.

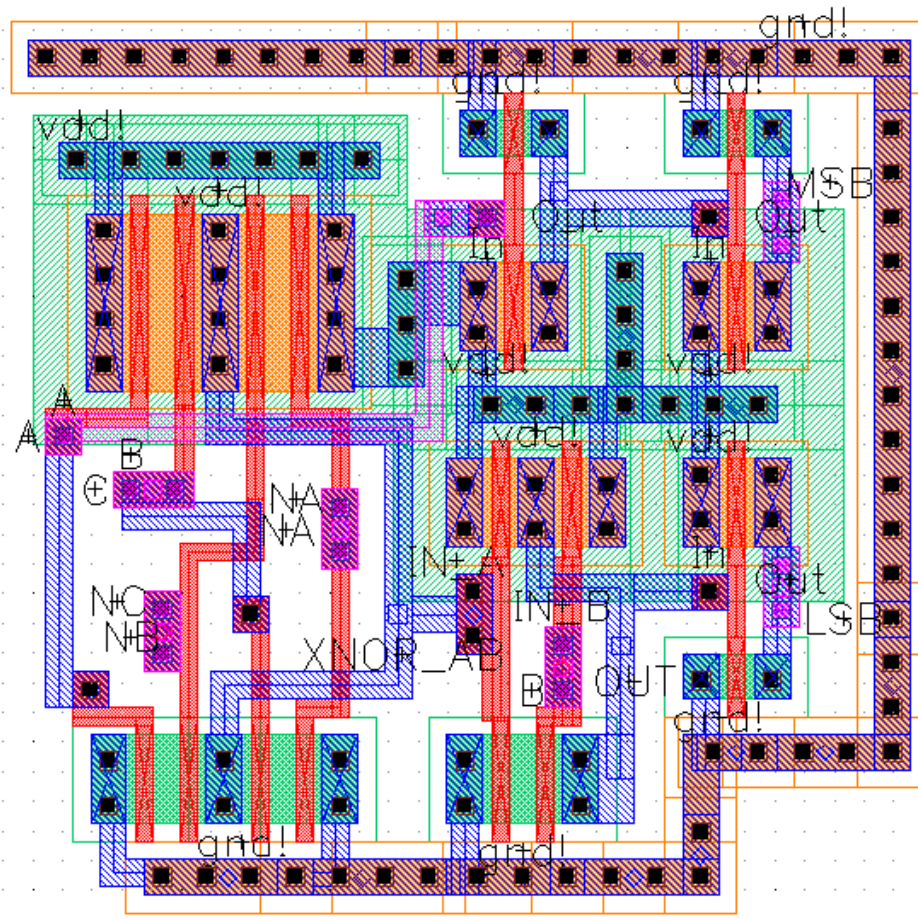


Figure 20: Last Stage ADC.

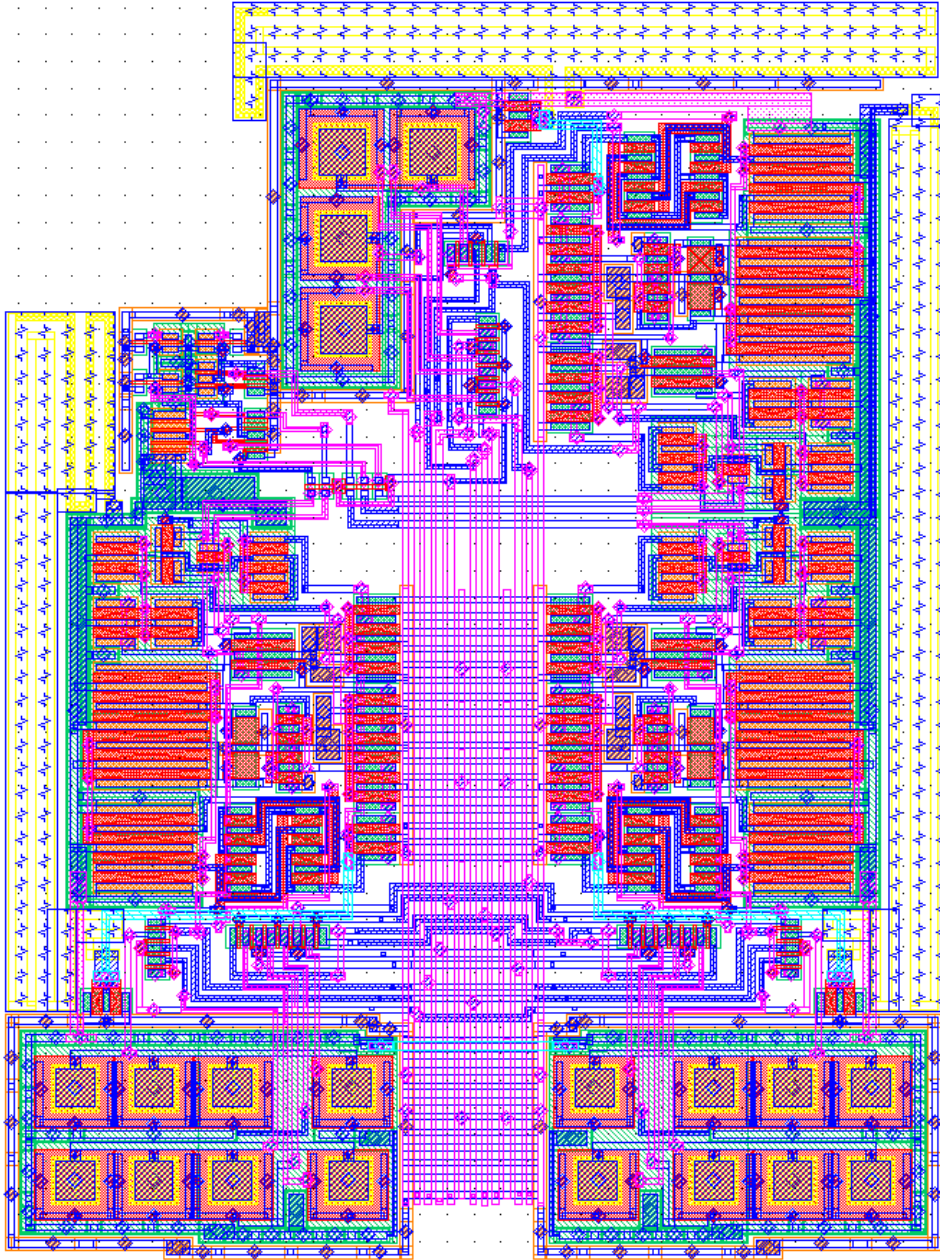


Figure 21: Last Stage.

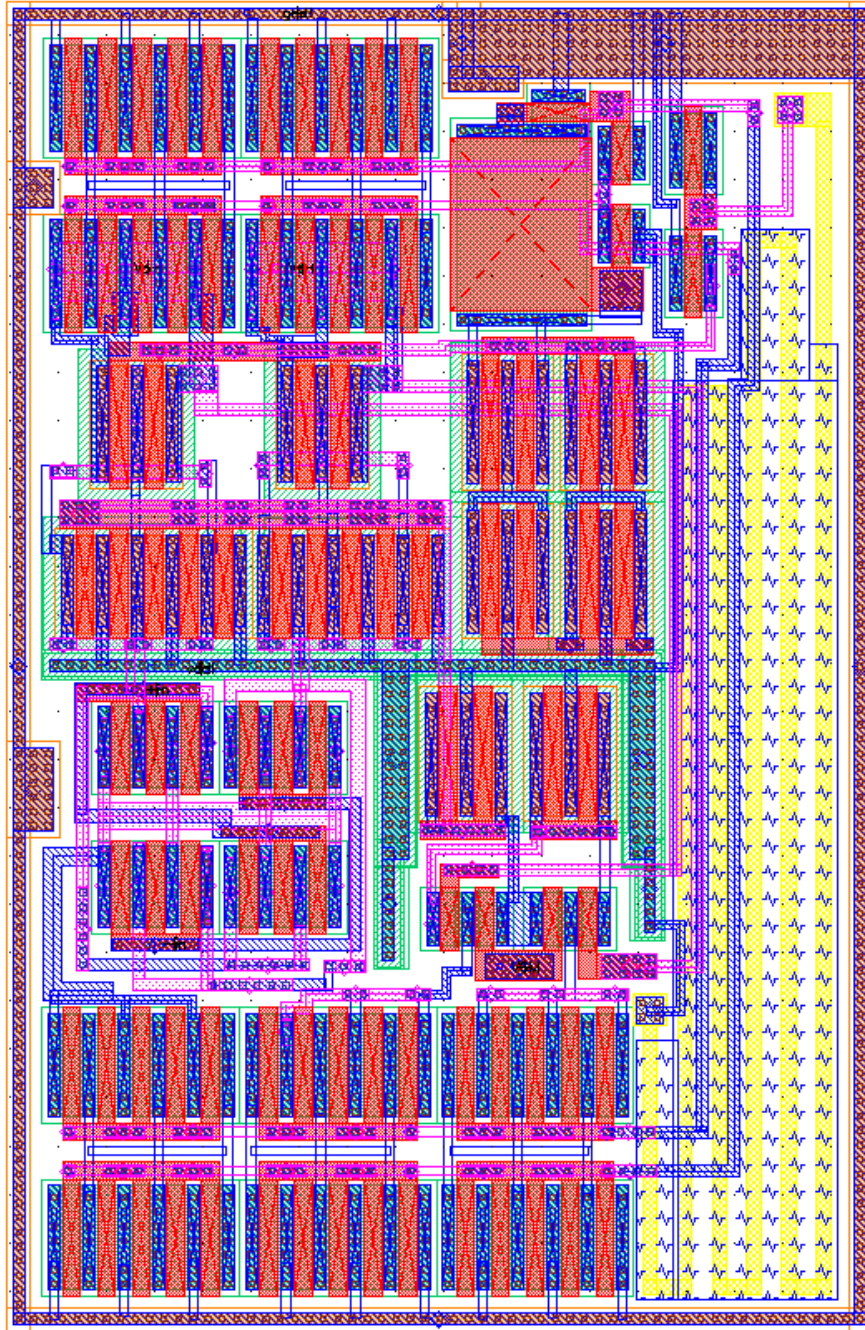


Figure 22: Operational Transconductance Amplifier.

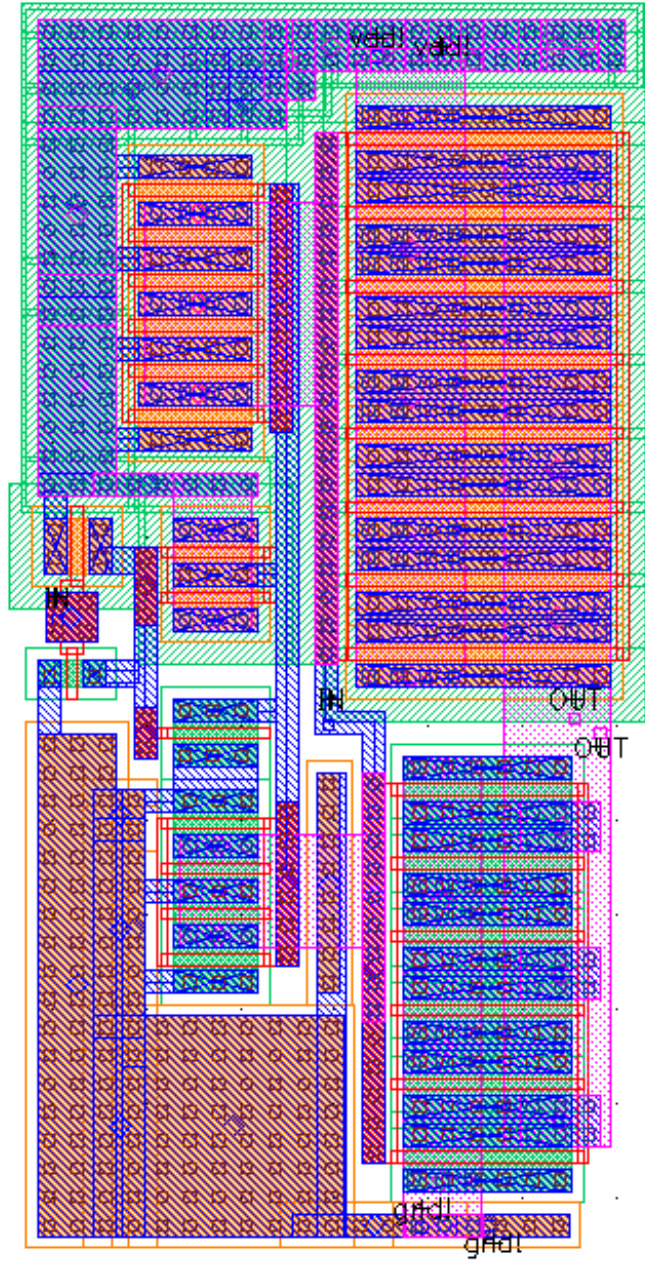


Figure 23: Output Driver.



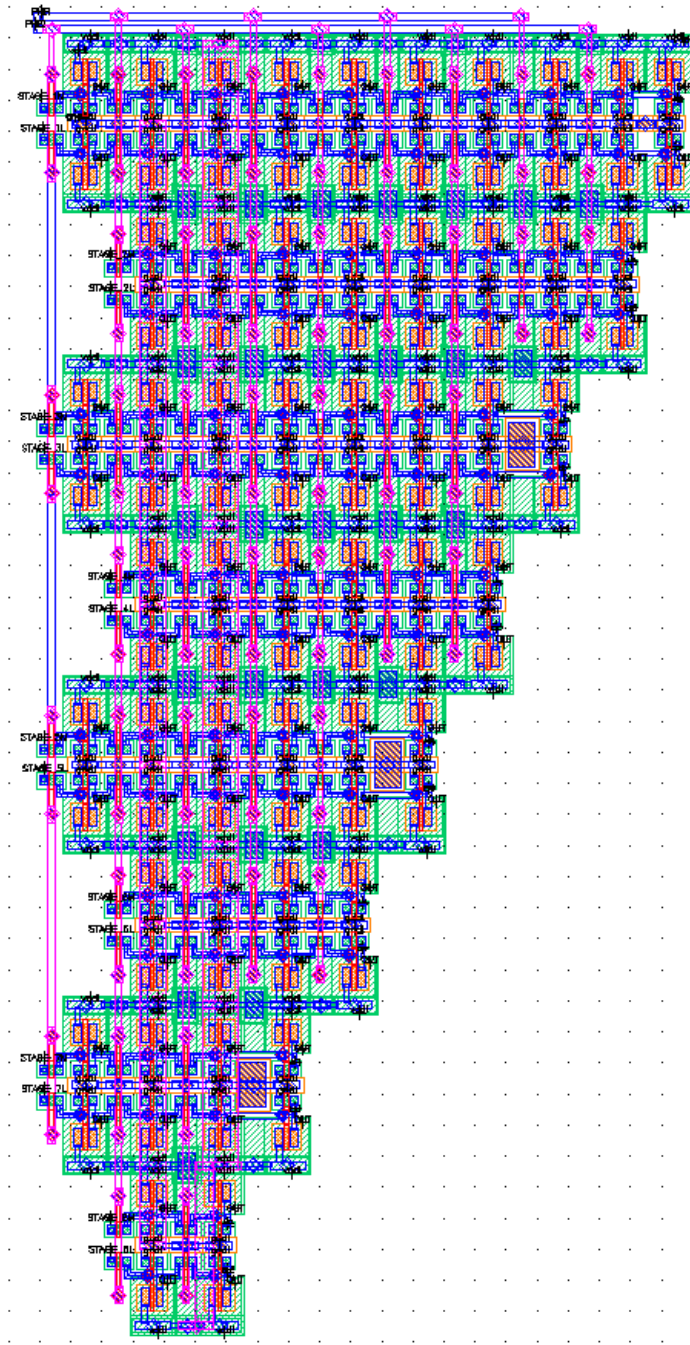


Figure 24: Shift Register.

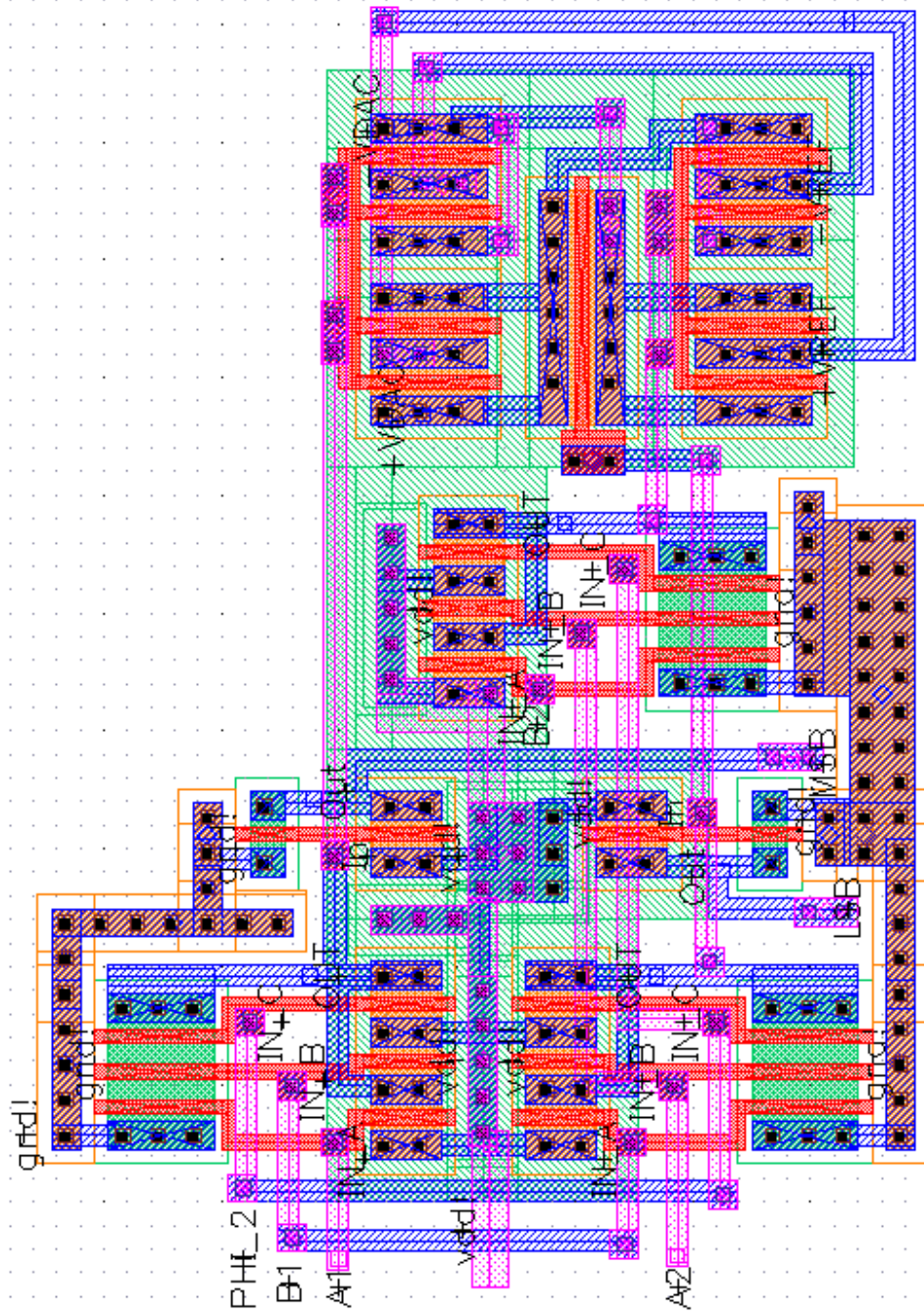


Figure 25: Sub-DAC.

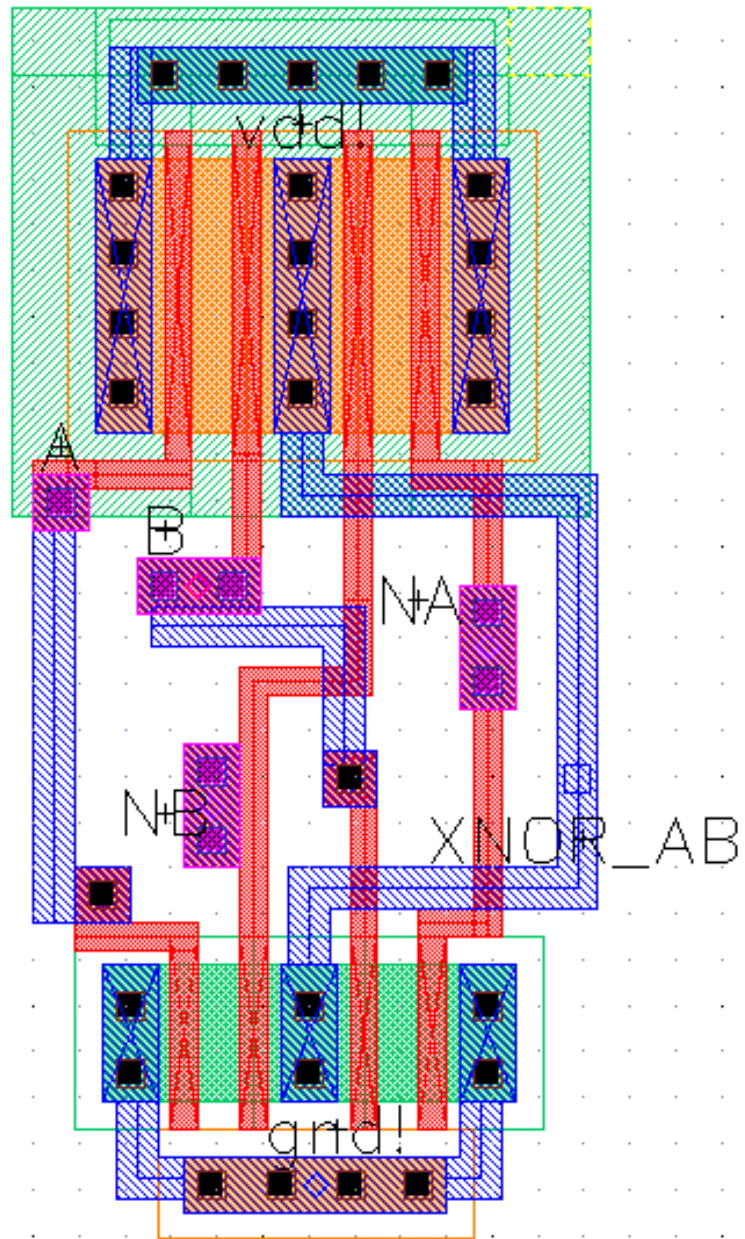


Figure 26: XNOR.

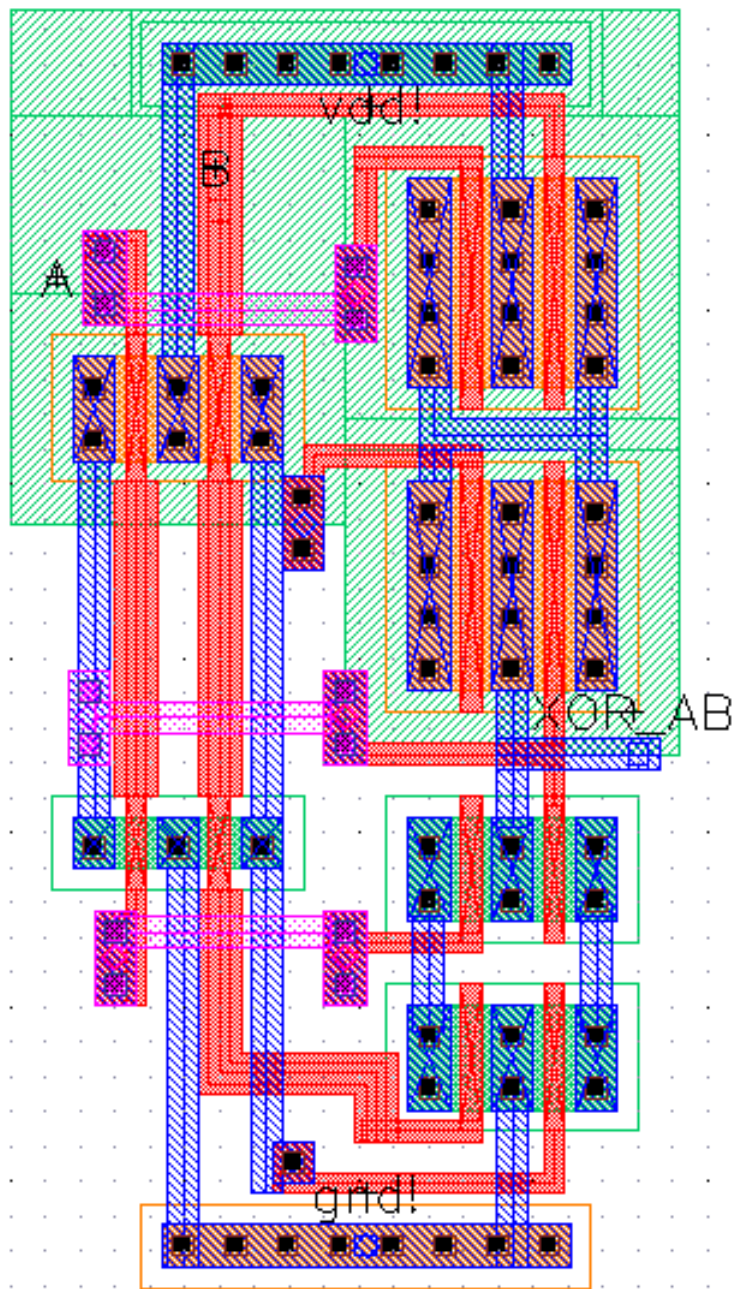


Figure 27: XOR.

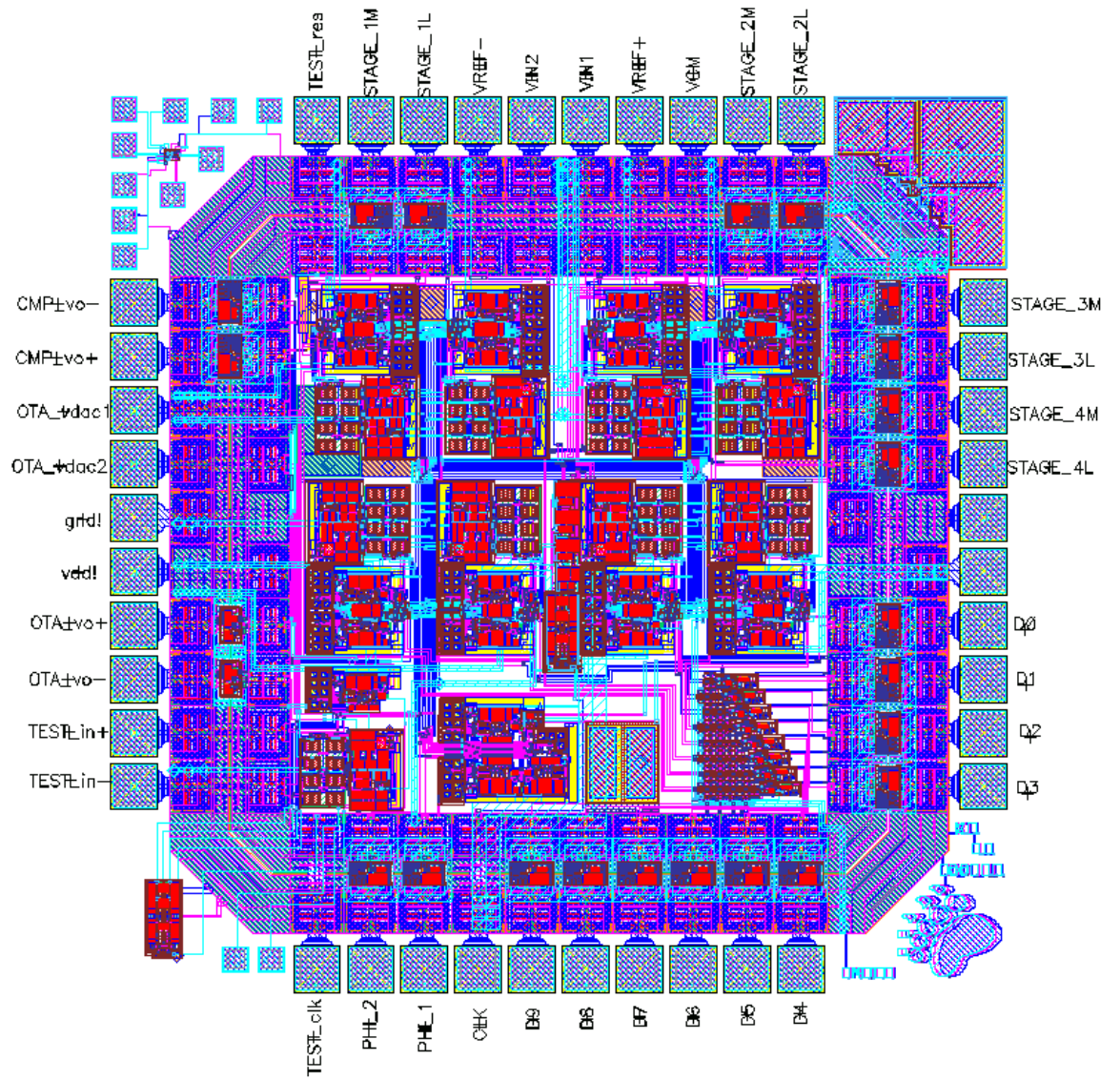


Figure 28: Final Chip Layout.