

# Miniproject 3: 7-Bit DAC

Drew Pang

27 October, 2025

- Output as a current source or sink that:
- changes by no more than  $0.5\%/V$  over 80% of the power supply voltage
- DNL of no more than 2 LSBs, INL of no more than 4 LSBs with no mismatch
- DNL of no more than 8 LSBs, INL of no more than 8 LSBs with mismatch
- May use a single external resistor to bias the DAC
- Assume DAC digital inputs are ideal

## Appendix D: Git Repository

All schematics, symbols, simulation, and layout can be found at <https://github.com/drewnotdrew/madvlsi>. Relevant DAC files are in the dac directory, though some common files are in lib/digital.