Meng. Thesis Summary

Design of Optoelectronic Activation Functions for COIN Co-processor

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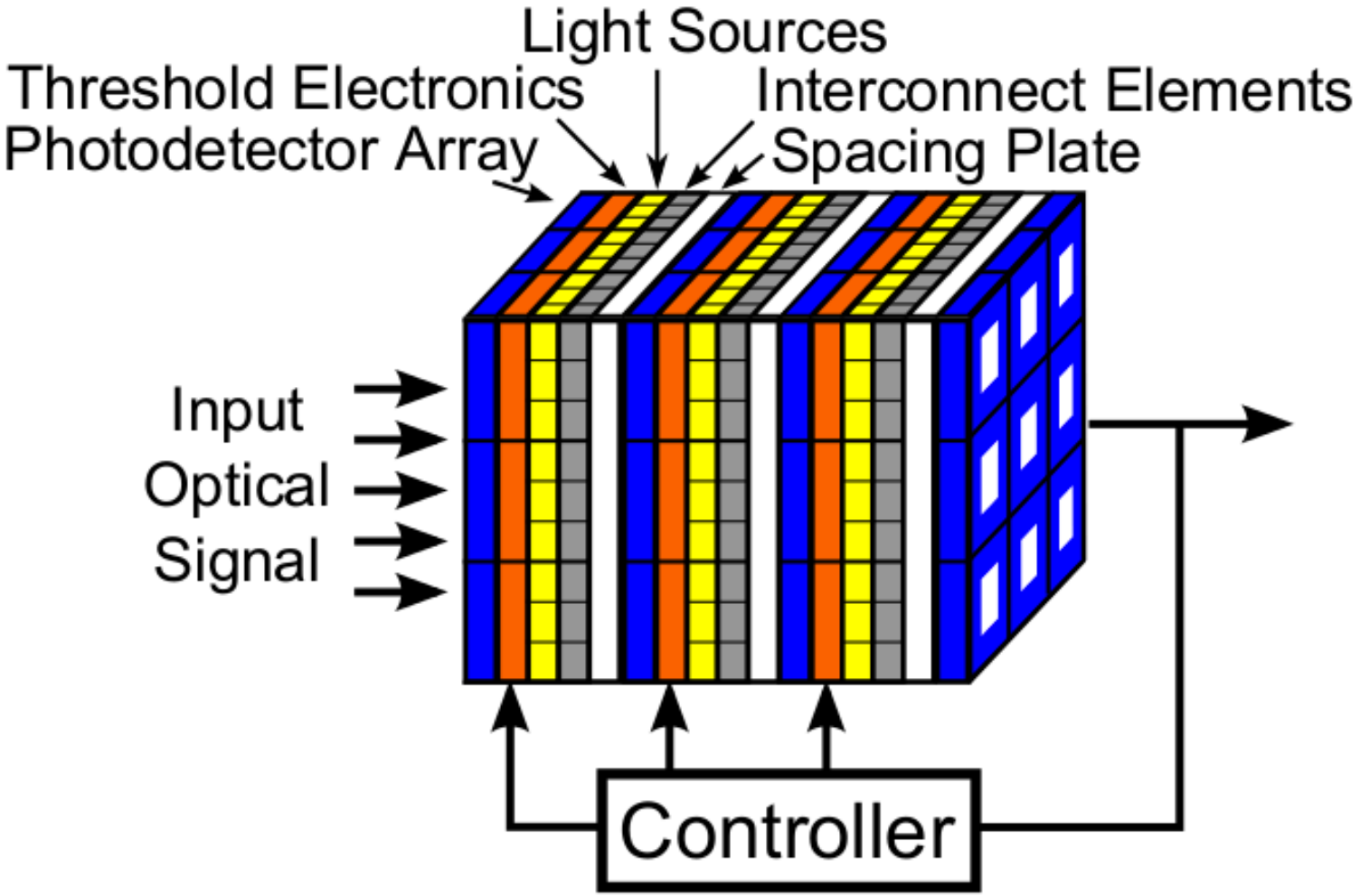
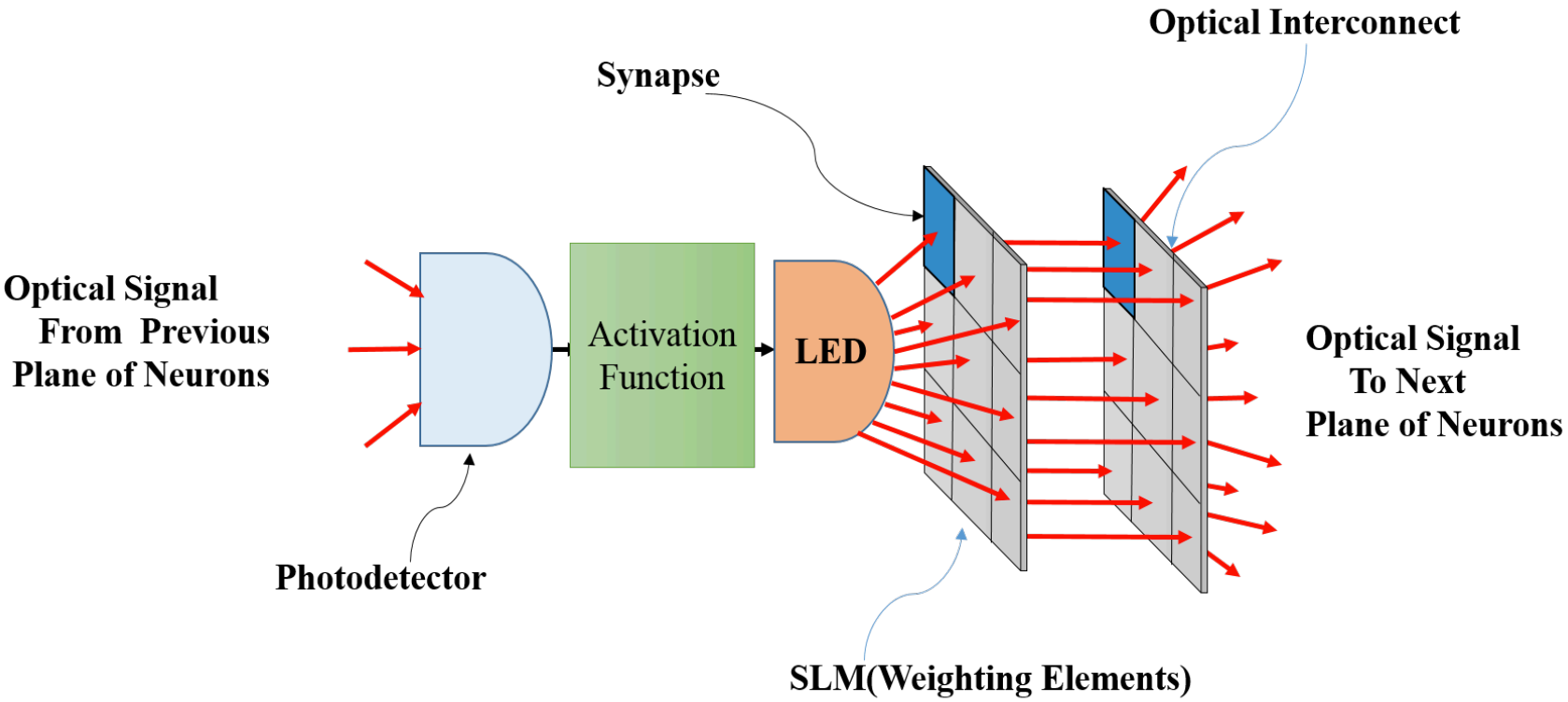
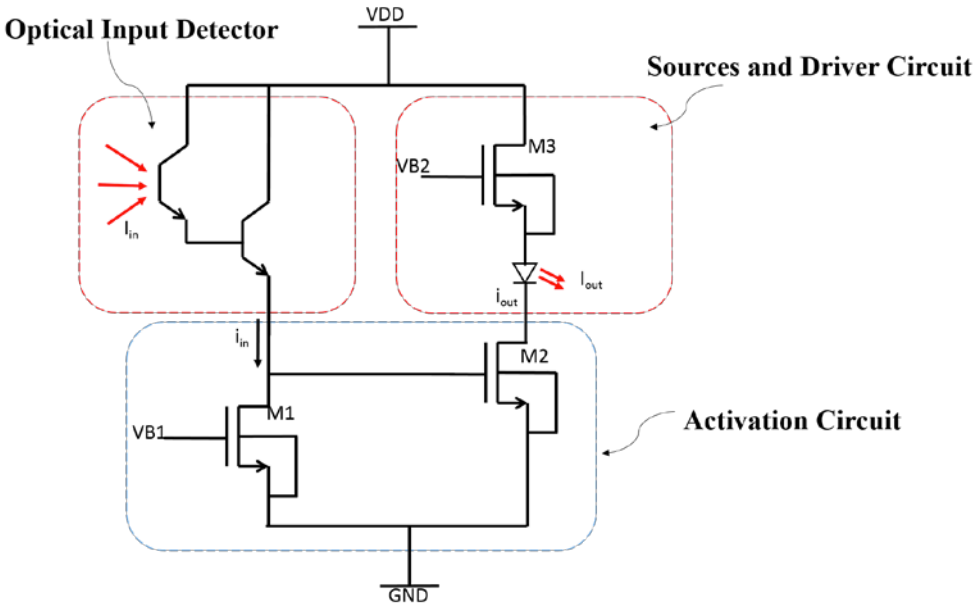
COIN Architecture



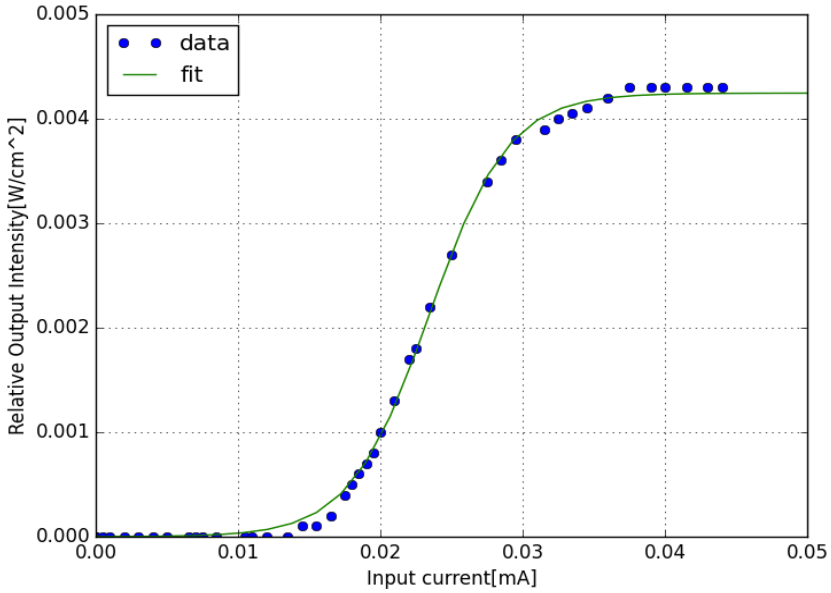
Pixel of COIN Model for Version-I Activation Function



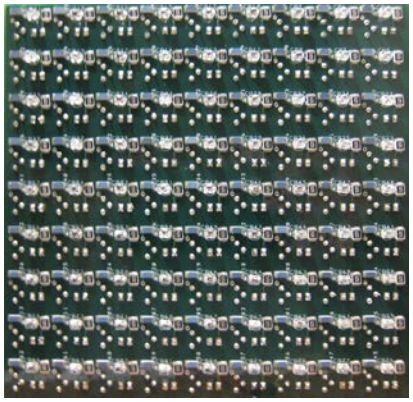
Version-I: Activation Function and Proof of Concept PCB



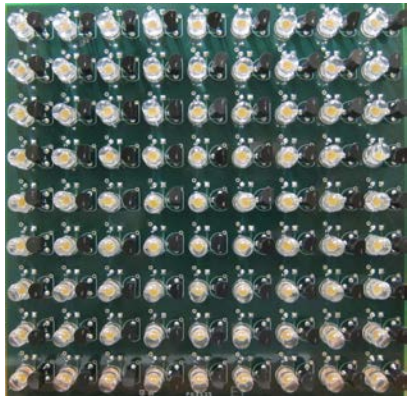
Circuit Model



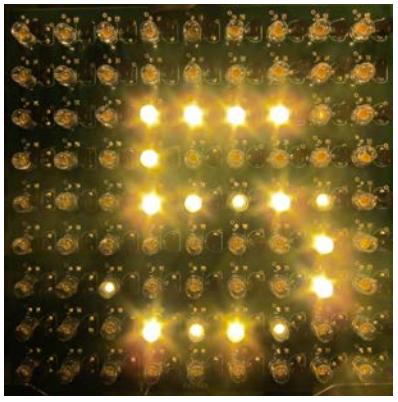
Transfer Function



Back of 9x9 array

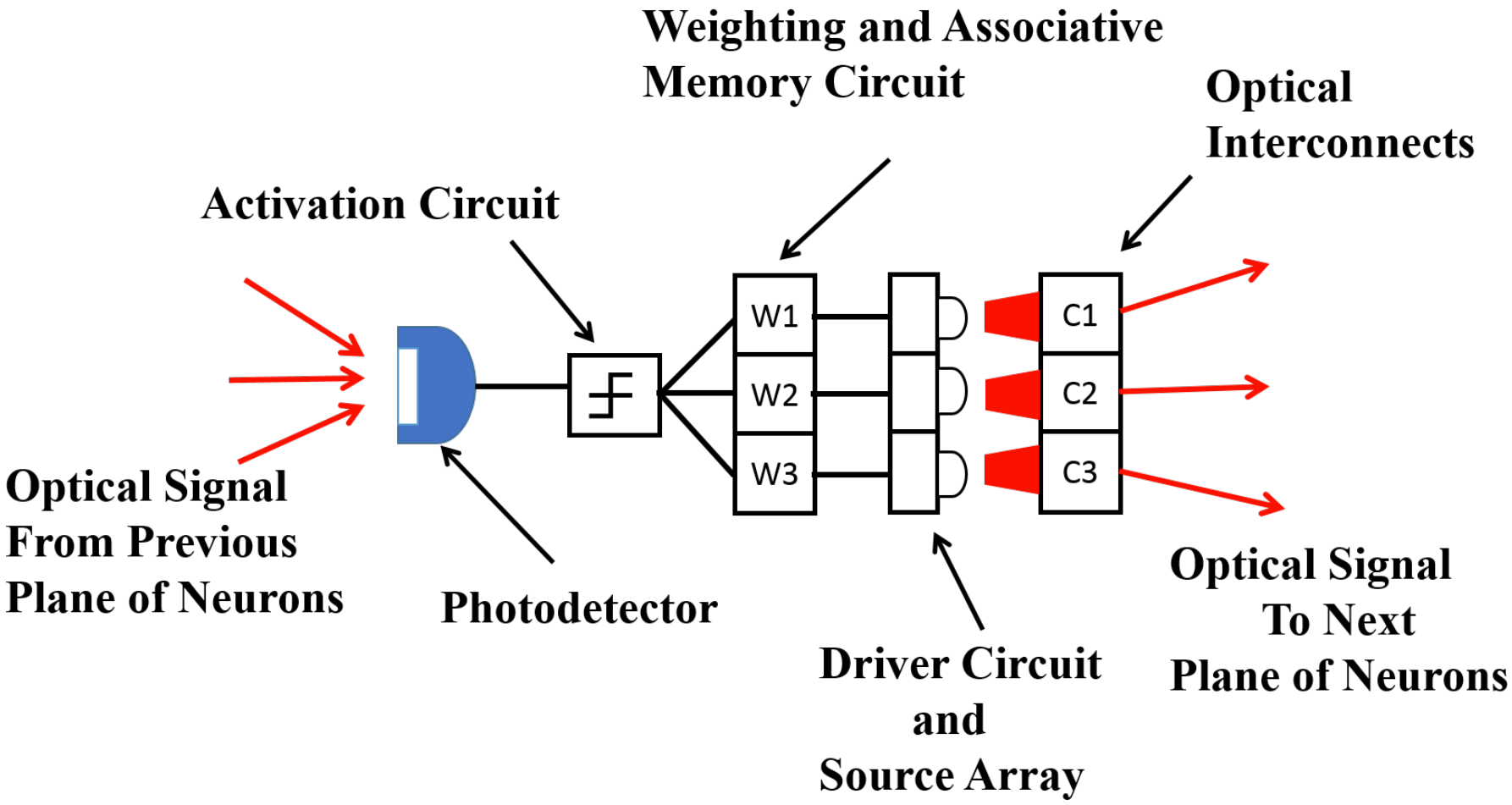


Front of 9x9 array

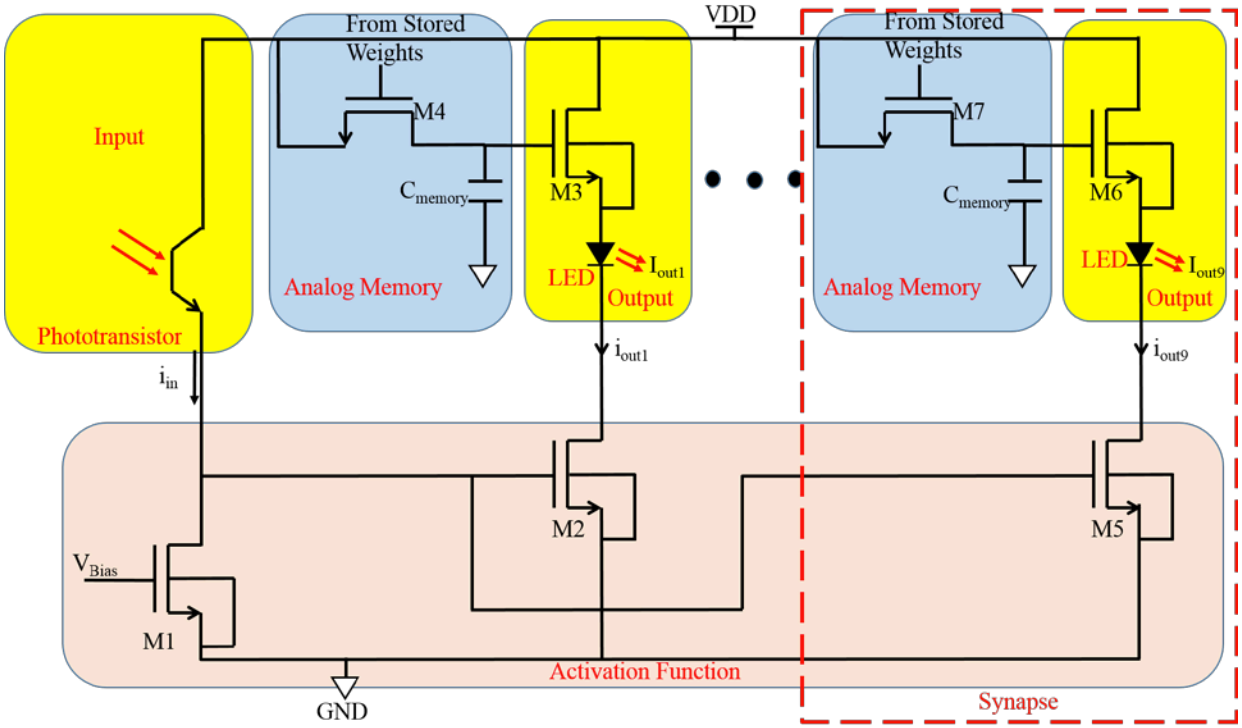


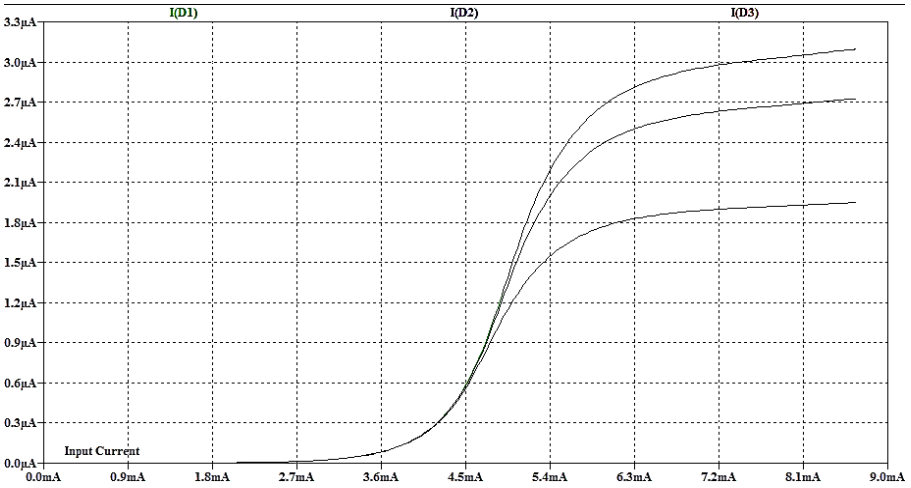
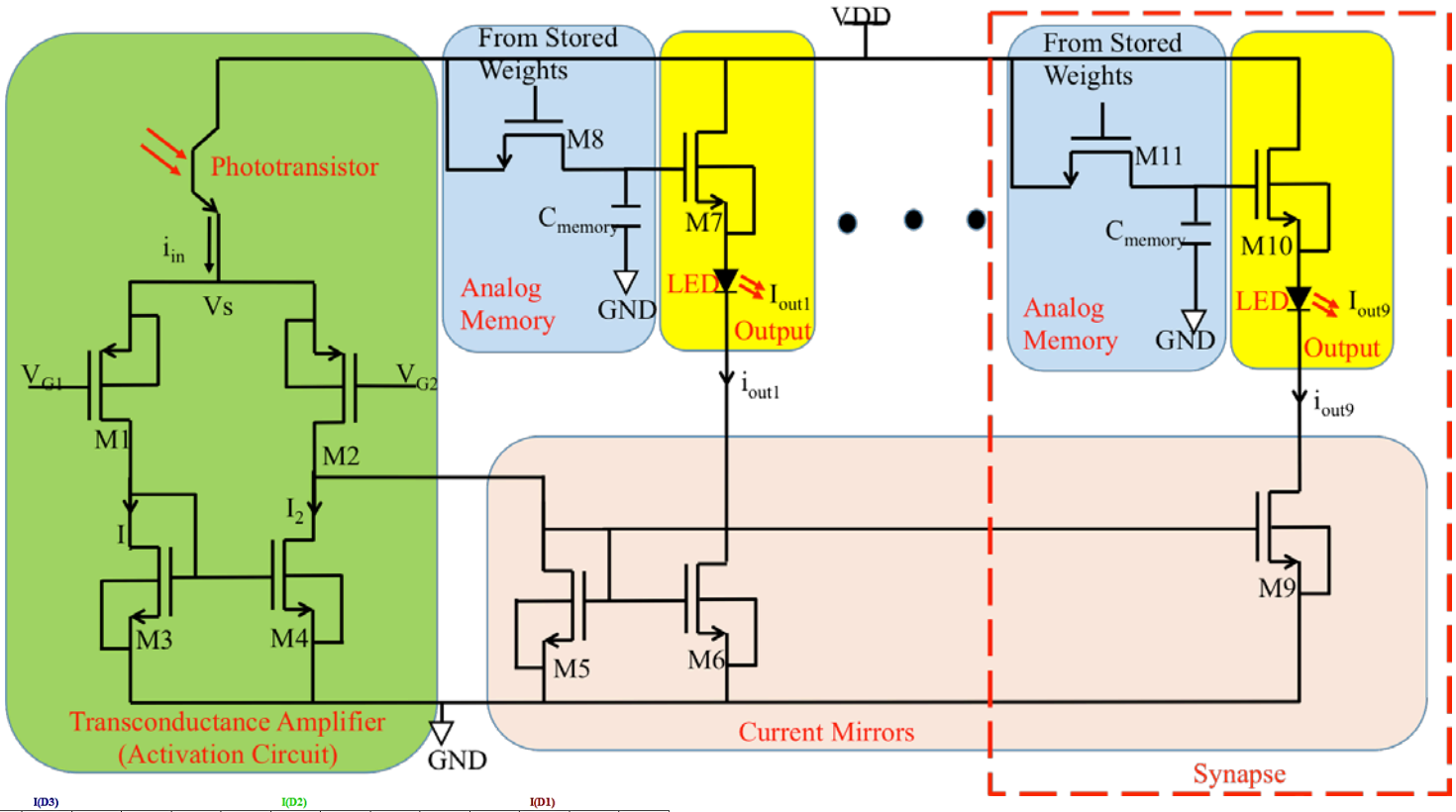
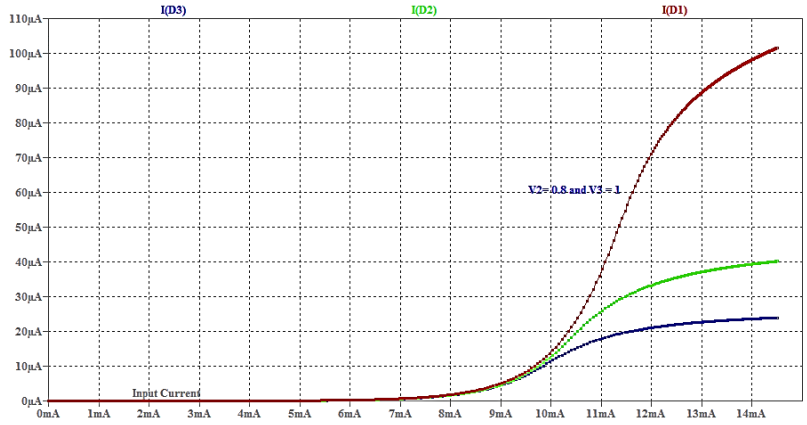
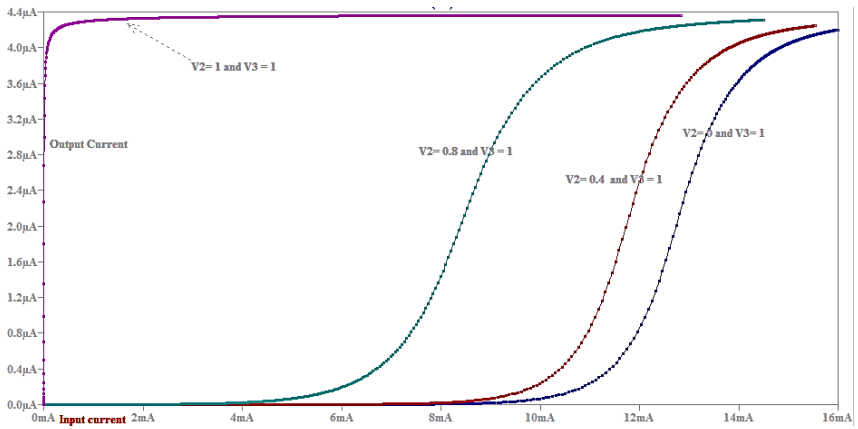
Projection of ‘5’ onto the back of the PCB and the threshholded output

Pixel of COIN Model for Versions-II and III Activation Functions



Version-II: Activation Function Implementation and SPICE Simulation





Version-III: Activation Function Implementation and SPICE Simulation