

Massachusetts Institute of Technology  
Department of Electrical Engineering and Computer Science  
6.111 - Introductory Digital Systems Laboratory

**Final Project Check Off Sheet**

Project Title: Hand-Drawn Circuit Recognition

Student Name: Ravi Palakodety, Vijay Shah

TA Name: Jenny Lee

TA Signature/Date:

**Design**

State transition diagrams, Block Diagrams, Code for Recognition Major FSM and Chooser, Image, and Text minor FSMs (Ravi)

State transition diagrams, Block Diagrams, Code for Video Major FSM and Analysis, Raw Display, Ideal Display, and SPICE Display minor FSMs (Vijay)

**Functionality**

Demonstrate loading a bitmap of a circuit and recognition of the components in that circuit. (Ravi) (If time permits, load bitmap over the serial line)

Demonstrate display of the raw circuit bitmap and Ideal/SPICE display of components stored in the results RAM (Vijay)

Demonstrate the smooth process of going from a sheet of paper with a hand-drawn circuit to recognized & analyzed Ideal and SPICE output.

**Discussion**

How does the recognition process work? How does node assignment work? How accurate is the system?