

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

Final Project Check Off Sheet

Project Title: Fingerprint Identification
Student Names: Kevin Amendt, David Friend
TA Name: Theodoros Konstantakopoulos
TA Signature/Date:

Design

- Overall block diagram
- State transition diagrams, Block Diagrams, Code for Kevin
- State transition diagrams, Block Diagrams, Code for David

Pre-Implementation

- Possession of a Fingerprint Scanner (David)
- Prove fingerprint matching algorithm (David)
- Find center, take horizontal/vertical slices, FT those slices and compare

Functionality

- Support circuitry for scanner IC (Kevin)
- FPGA/Labkit interface from user I/O pins to scanner using a Serial or Parallel connection (Kevin)
- Memory interface: For storing FFT representation of fingerprint image (Kevin)
- FSM to convert image from 8 bit/pixel to 1 bit/pixel (Kevin & David)
- Control module to interface with memory, pattern matching module, and scanner interface (David & Kevin)
- Pattern matching module (David & Kevin)
- Visual Output (Kevin)

Post Implementation

- Integrate with real world application (doorlock?) (David & Kevin)