

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

Final Project Check Off Sheet

Project Title: 2-D Mapping with Sonar

Student Names: Leon Fay, Miranda Ha, Vinith Misra (*a.k.a. Tunafish Team*)

TA Name: Jae Lee

TA Signature/Date:

Design

State transition diagrams, Block Diagrams, Code

Hardware Communication

Produce 40 kHz transmission pulse (view on scope for verification)

Sample and digitize incoming data (RS232 for verification) (Leon)

Data Processing

Working processor/post-processor algorithm (Matlab for verification) (Vinith)

Functioning use of double buffering, multi access BRAMs

Display

A consistent interpretation of data appears on display

Ability to display data in multiple modes (front-view, top-view)

Color-coding corresponds to distance in front-view mode (Miranda)

Display resembles top view of environment in top-view mode