MIE438 – Microprocessors and Embedded Microcontrollers

Laboratory Experiment 7

Deliverable

Spring 2018

Department of Mechanical and Industrial Engineering

University of Toronto

Notes:

Practical Section:

Last Name, First Name	Student Number

Q1. What happens when you send a message with the wrong recipient? Are you able to do anything at all? If you are able to, what happens if you send a second message?

Q2. What happens when you send one or a few messages with incorrect recipients in the larger loop? How is this different from what happened in Q1?

Q3. Code listing of modifications to program.

Q4. Show how the program handles **keypad** input to type a message by drawing a diagram that represents the program flow (exclude communication tasks). You do not need to follow any particular format, but you should try to show what you think are distinct program states and the transitions between them (including what causes these transitions). We will learn more about this process in class when we formally study state machines.

Q5. Draw a timing diagram showing the three lines (SDA, SCL, and ACK) for a complete message being sent. The message should be short (one or two bytes).

Use the following pages for Q4 and Q5; they will probably take about one page each. You may copy and paste an image. Or upload attached graphic files, along with this report, to the portal.

Q4. You may copy and paste an image here:

Submitted in a separate file by Mitra, Rahul Anthony

Q5. You may copy and paste an image here:

Submitted in a separate file by Sidhanth Moolayil