

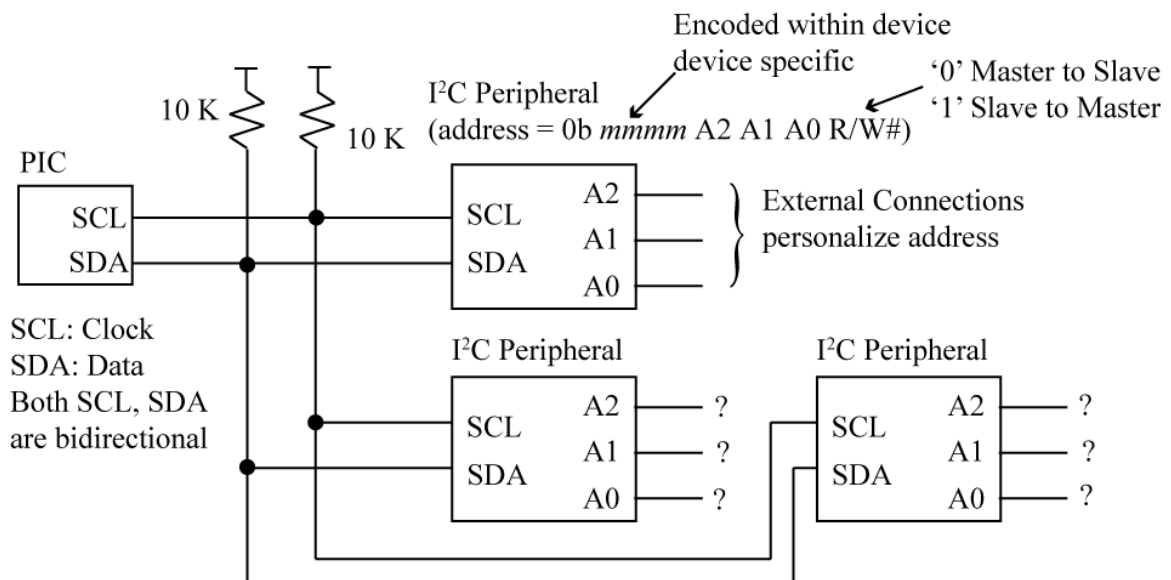
ECE 3724/CS 3124 Quiz #6 Reese NAME: _____

Answer each of the following questions (you can use a calculator)

- a. (5 pts) Write a sequence of functions calls using `i2c_start()`, `i2c_get(char ackbit)`, `i2c_put(char byte)`, `i2c_stop()`, `i2c_rstart()` that will implement a random WRITE of the value 0xC5 to location 0x910A within the 24LC515 serial EEPROM. Assume pin A1 is tied high, and pin A0 is tied high.

```
i2c_start()
i2c_put(0xAE); // 1010 1 11 0
i2c_put(0x91); // MSB of address
i2c_put(0x0A); // LSB of address
i2c_put(0xC5); // value to write
i2c_stop();
```

- b. (2 pts) Draw a simple schematic that shows two I2C devices connected to the I2C interface of the PIC18.



- c. (2 pts) What does 'polling for end of write' mean in the 24LC515 serial EEPROM? How is this accomplished?

Start a write transaction to the 24LC515; if the EEPROM responds with a NAK after the command byte, then it is still busy with the last write. This is 'polling for end of write'.