EE 308 – Homework 7

For all problems below assume your are using a MCS12DP256 chip with a 24 MHz bus clock and a 8 MHz oscillator clock.

1. Write a C function `unsigned char iic_receive(void)` which receives all but the last two bytes of a read sequence three or more bytes long, and returns the character read from the slave device.

2. Write a C function `unsigned char iic_receive_m1(void)` which receives the next to the last byte of a read sequence two or more bytes long, and returns the character read from the slave device.

3. Write a C function `unsigned char iic_receive_last(void)` which receives the last byte of a read sequence two or more bytes long, and returns the character read from the slave device.

4. Write a C function `void iic_swrcv(void)` which switches the I2 C bus from transmit to receive, and starts the serial clock for the reception of the first byte from the slave.