
Proj_1G_LED_dimmer A TEST ROUTINE FOR THE DISPLAY BRIGHTNESS CONTROL.

A repeat of Proj_1A with an Interrupt on key press that toggles the brightness control.

IT INTRODUCES

1. Project subroutine I2C_Tx(). This transmits data to the PCB 111000_1 Atmega 328 over the I2C bus.

2. Pointers: Look at the ISR: The following statement: I2C_Tx(1, 'Q', &Dimmer_control); is used to call subroutine I2C_Tx();

The -&- before the variable Dimmer_control means that the subroutine I2C_Tx() expects the calling routine to provide the data memory location of the variable (i.e. its address). It uses and possibly modifies whatever data it finds in that memory location.

In this case Proj_1G defines a memory location and calls it "Dimmer_control". The subroutine call hands the address of Dimmer_control to the subroutine rather than the actual value.

3. Subroutine void I2C_Tx(char num_bytes, char mode, char* s){}.

This is the subroutine being called by the statement I2C_Tx(1, 'Q', &Dimmer_control);

It provides memory locations num_bytes and mode for the 1 and Q. The -* signifies that it does not provide memory for variable -s- but expects the calling routine to provide it.

Note: Q is the mini-OS mode that toggles the display brightness.

The pointer is used because I2C_Tx() is also used to send arrays of data (to be considered later).