
PIC18F45K22 Hack Documentation

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PROJECTS:

| | | |
|----------|-----------------------------|----------|
| 1 | 1 Push to LED | 3 |
| 2 | 2 Multiplt Push LEDS | 5 |
| 3 | Indices and tables | 9 |

This project gives you an idea of how to hack into PIC18F45K22 Microcontroller. You can use my template projects to create your own programs.

This documentation explains all the necessary information to set up your hardware up to speed.



Fig. 1: *PIC18F56K22 DIP Package*

- Package Used: PDIP PIC18F45K22 (DigiKey Partnumber: PIC18F45K22-I/P-ND)
- Data Sheet for PIC18F45K22
- Debugger: PICKit3 Userguide
- Debugger Connection Schematics
- MPLAB C18 Compiler Library Userguide

Install MPLAB IDE/C18 Compiler:

- First Install MPLAB IDE.
- Download and Install [C18 Lite Compiler](#). You will have to register first.

1 PUSH TO LED

Source code folder: source/1_push_to_led

This project demonstrates IO functionality of PIC18F45K22 micro-controller.

What is expected:

- A push button NO (Normally Open) shall be attached to an IO pin.
- LED is connected to another IO pin.
- If the user pushes the Button, LED should lite up.

Download Schematics.

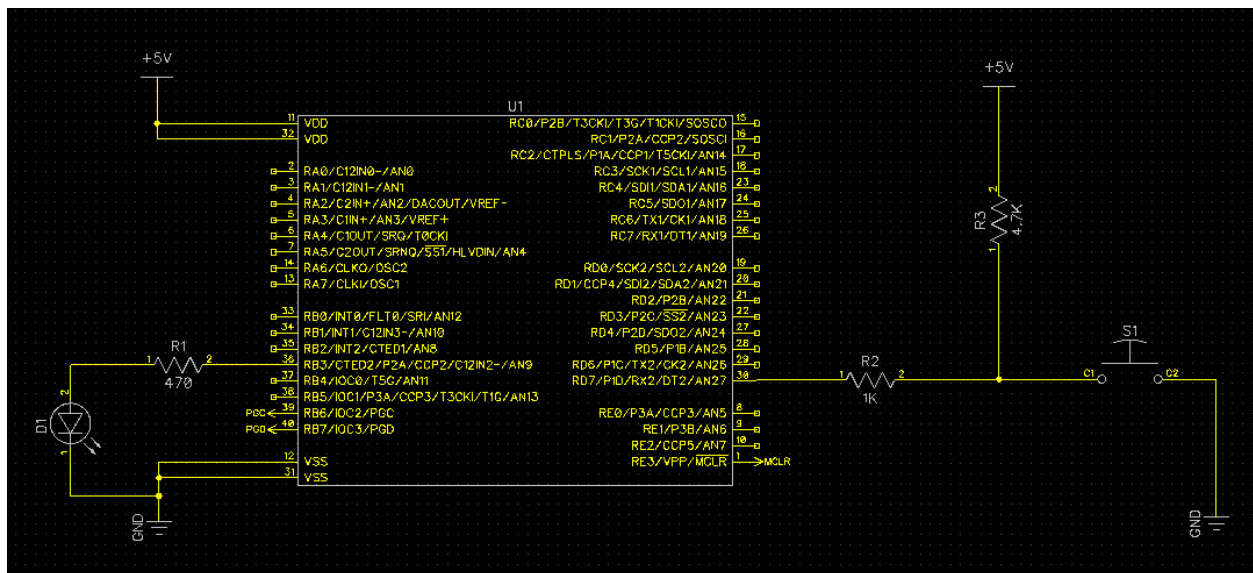


Fig. 1: Push Buttons and LED Connection to PIC uC

2 MULTIPLT PUSH LEDS

Source code folder: `source/2_mult_push_leds`

Another project demonstrating IO functionality of PIC18F45K22 micro-controller.

What is expected:

- 4 push buttons (Normally Open) shall be attached to 4 IO pins.
- 4 LEDs is connected to 4 IO pins.
- Each LEDs are assigned to a Push button.
- If the user pushes any Button the assigned LED should lite up.

Download Schematics.

In the source code Push buttons are assigned LED as listed below:

- Push Button S1 is assigned to LED D1.
- Push Button S2 is assigned to LED D2.
- Push Button S3 is assigned to LED D3.
- Push Button S4 is assigned to LED D4.

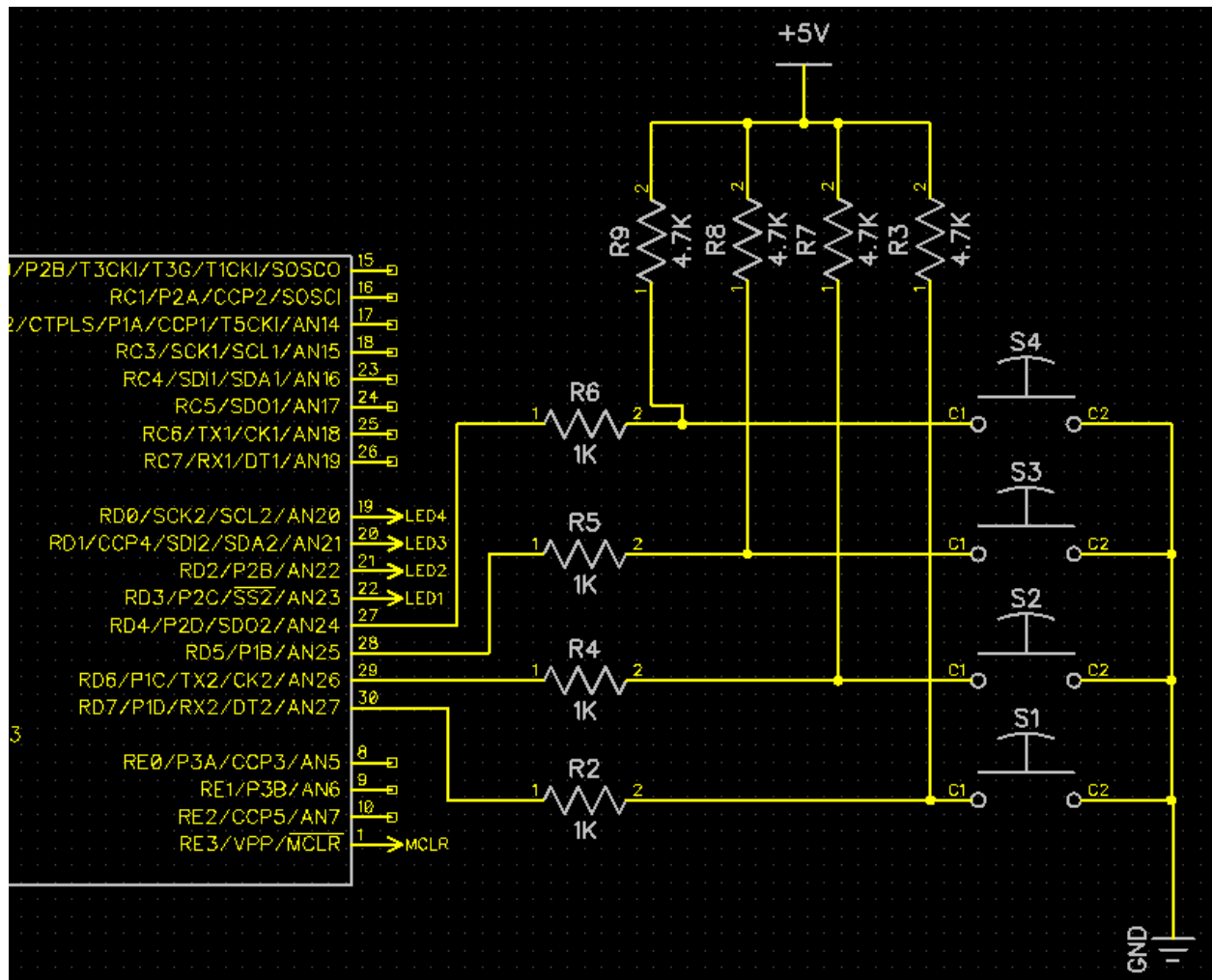


Fig. 1: Push Buttons connection to PIC uC

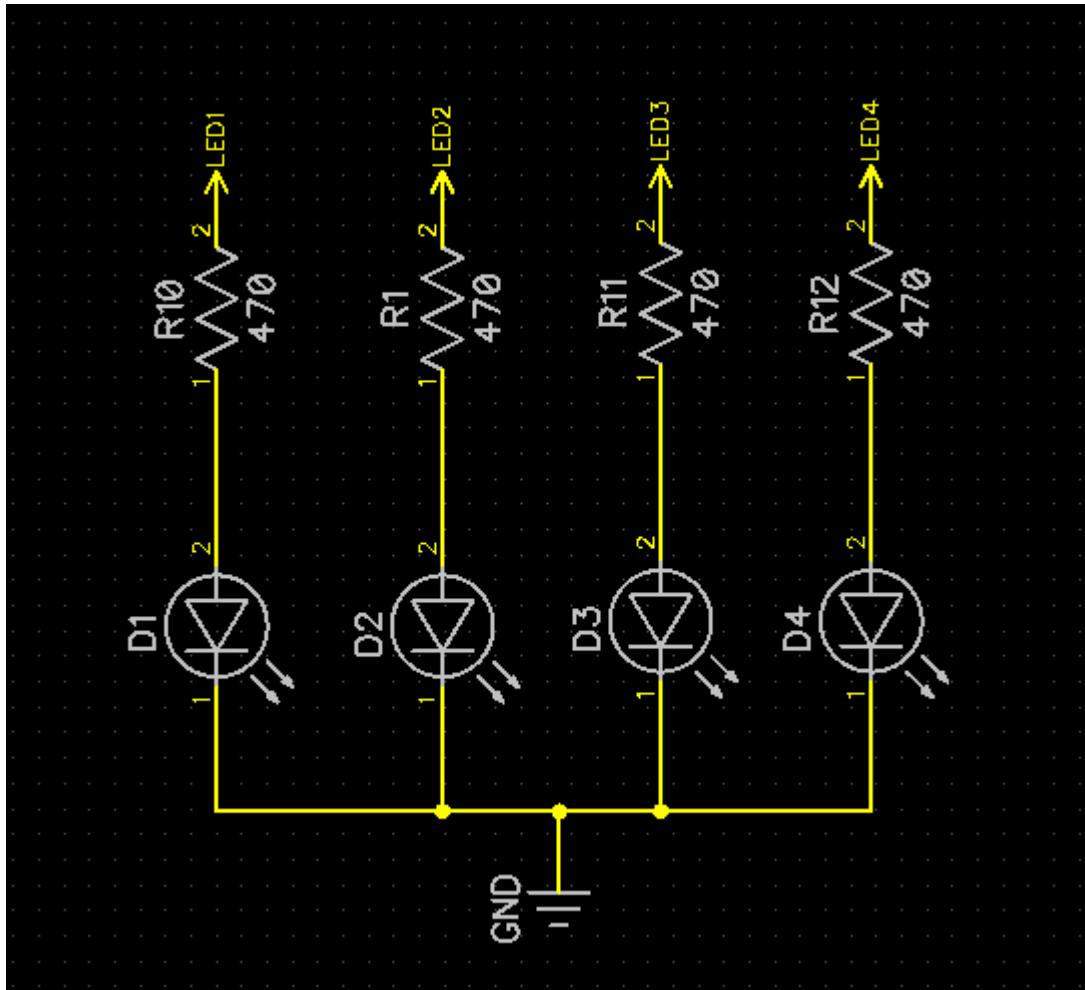


Fig. 2: LEDs connection to PIC uC

INDICES AND TABLES

- `genindex`
- `modindex`
- `search`