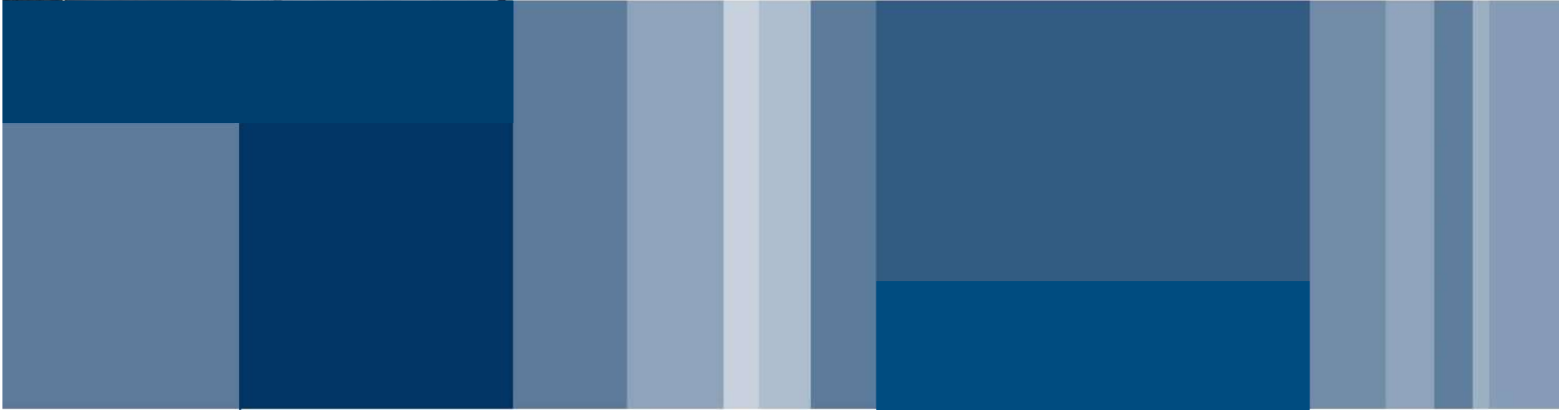




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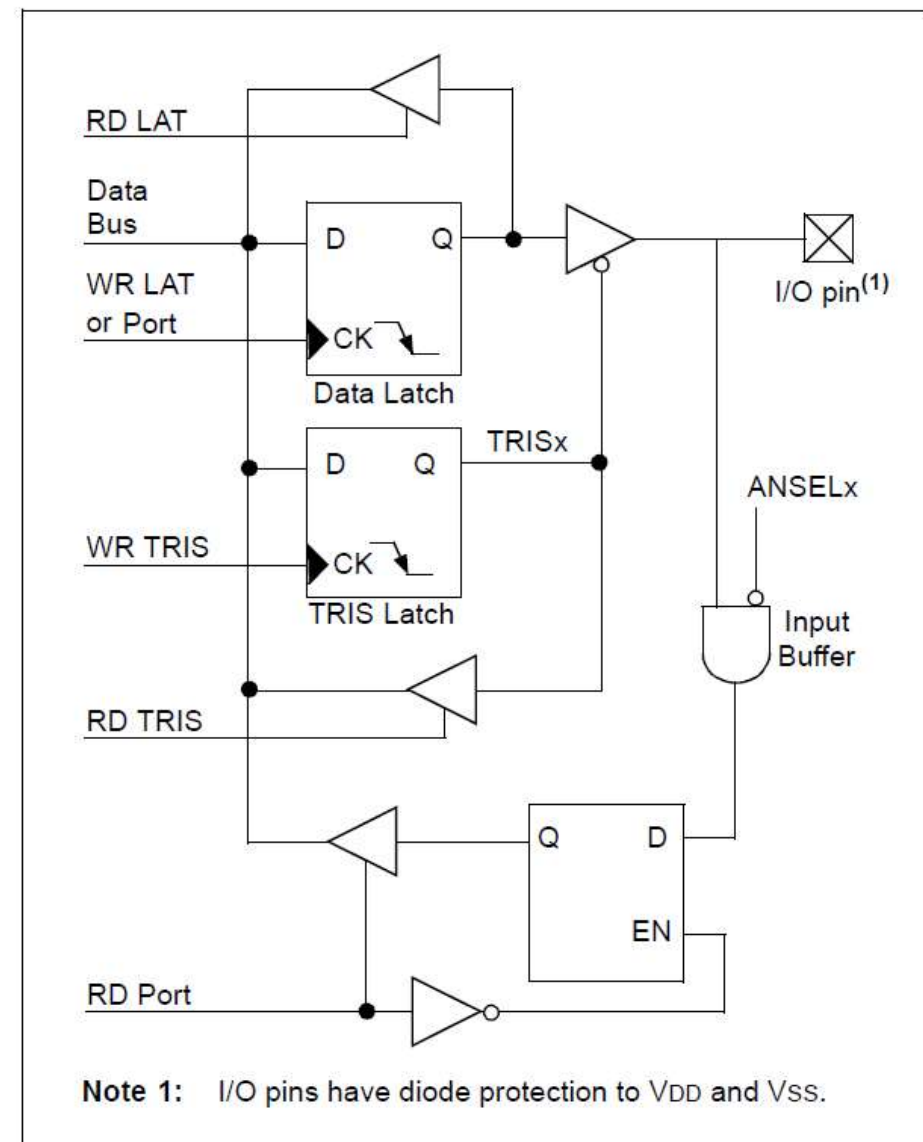
MICROCONTROLLERS
LAB - GPIO



Important I/O REGISTERS

- **ANSELx**: Set Digital (0) or Analog (1) behavior of input stage
- **TRISx**: Set Output (0) or Input (1) direction of the pin
- **PORTx**: Read/Write buffer register
- **LATx**: Output latch register

x=port name (A to E)





INPUT PIN (TRISx high):

- You must use PORT

OUTPUT PIN (TRISx low):

- If you want to know what you have written to -> use LAT
- If you want to know the actual state at the pin -> use PORT



EasyPIC v7 Input stage

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Every I/O pin have a LED, a pull UP/DOWN switch, a push button, and a button logic voltage level selector.

Our default setting is:

- Pull Down mode enabled
- Push button logic level High

Check that the jumper
J24 is NOT shorted

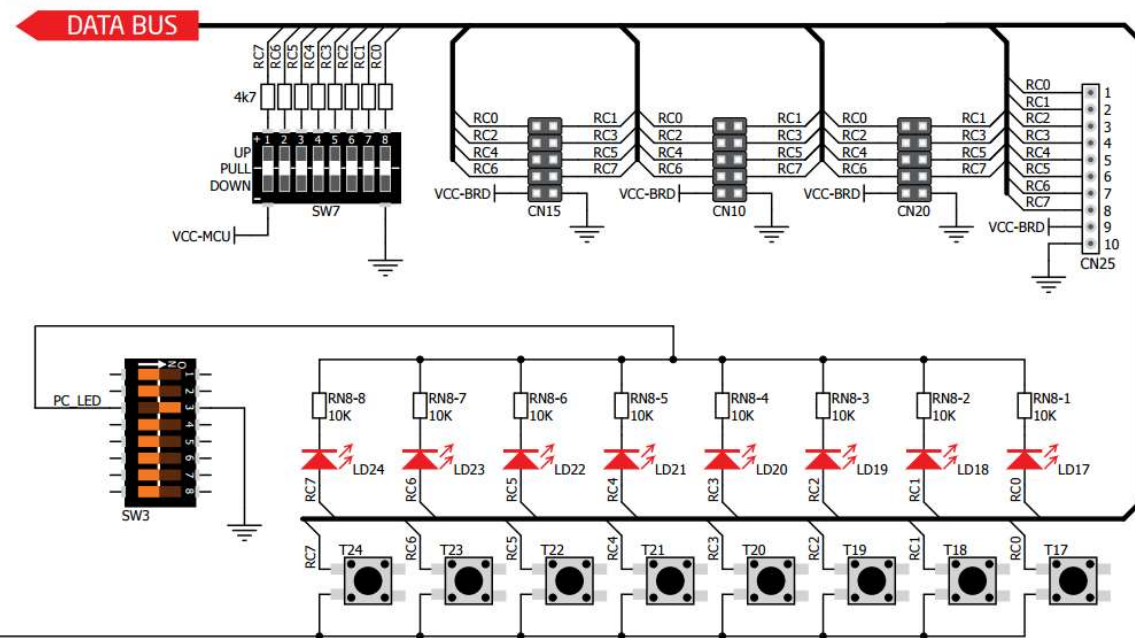
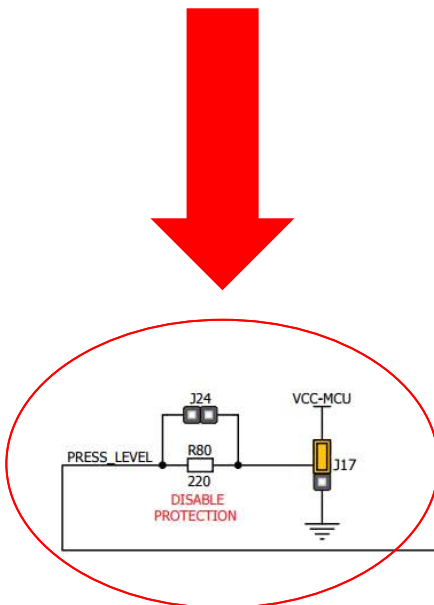
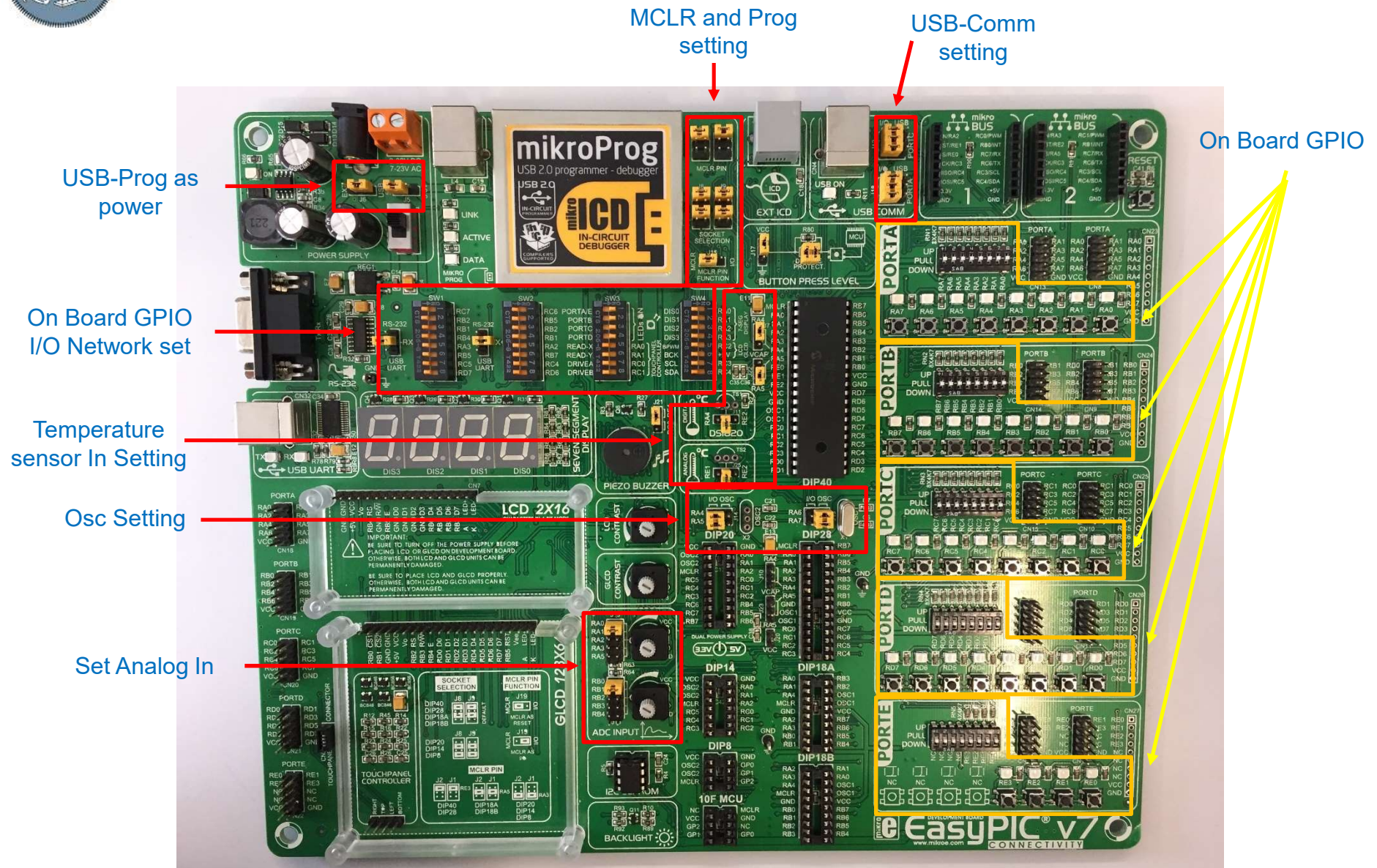


Figure 10-3: Schematic of the single I/O group connected to microcontroller PORTC



EasyPIC v7 default configuration

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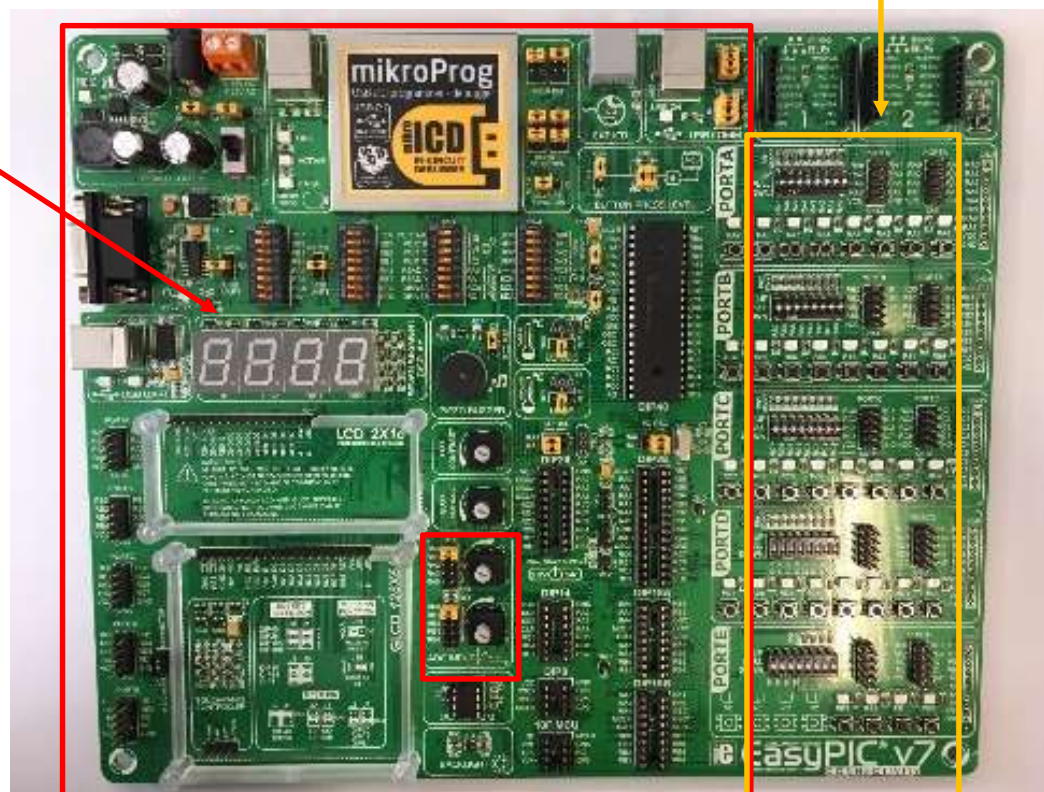
EasyPIC v7 default configuration

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DON'T TOUCH

Not available PINs:

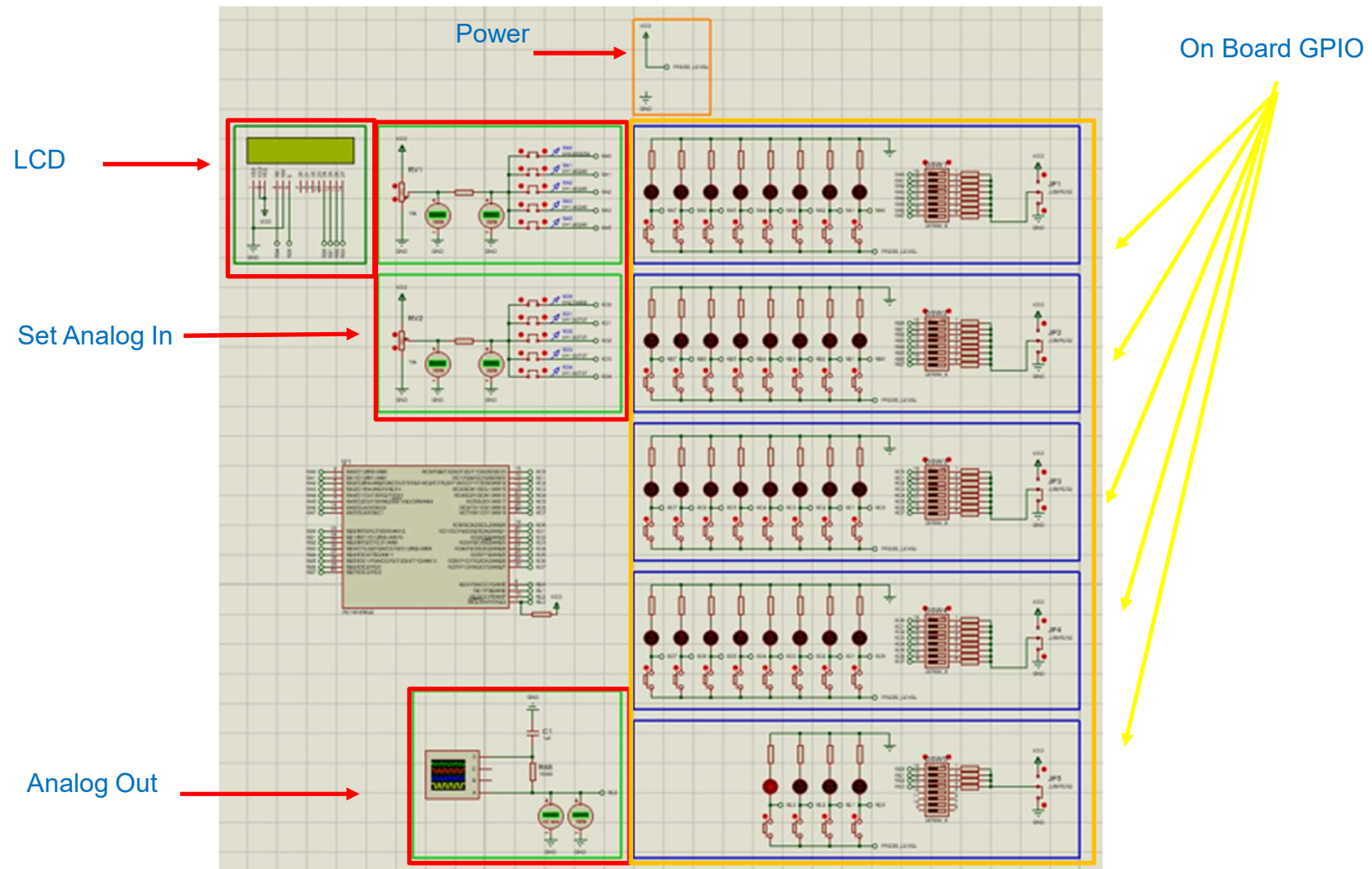
- RA6/RA7 OSC connected.
- RB6/RB7 Not available in debug mode.
- RE3 set to MCLR





Proteus default configuration

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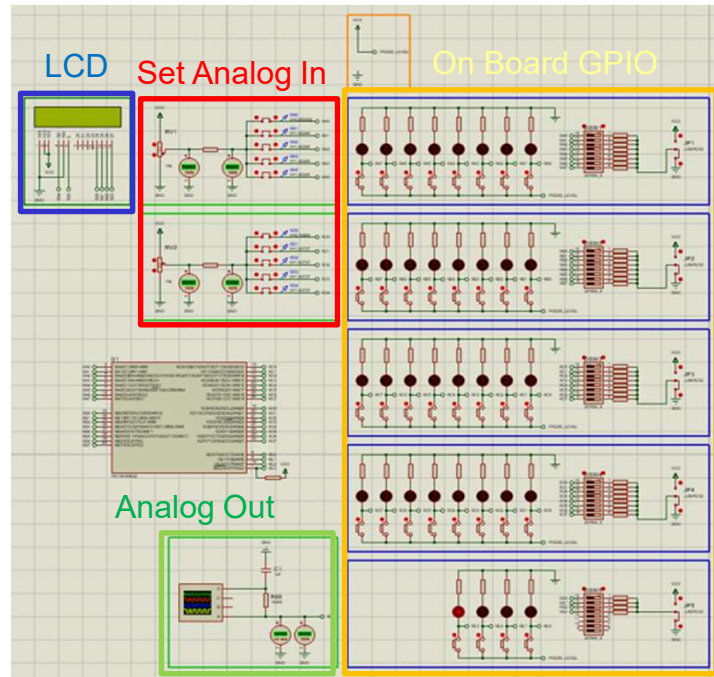




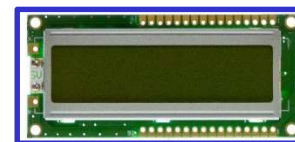
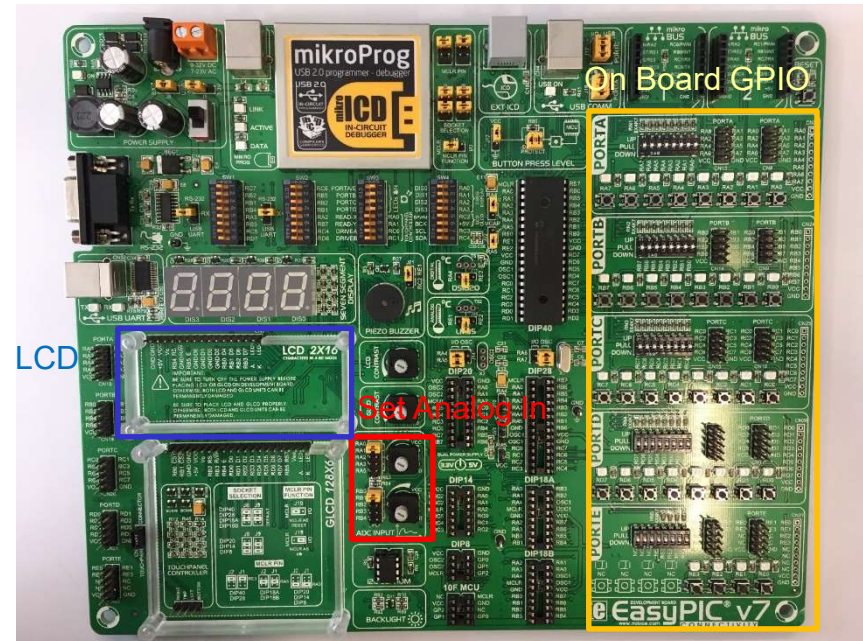
EasyPIC == Proteus

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Proteus



EsyPIC



LCD



Analog Out