## PICkit 3 Manual:

For this project we are using PICkit 3 to program the PICs.



## Figure: PICkit 2 MCU Programmer/Debugger

- Connect PICkit 3 to the PC using the supplied USB cable.
- Pin 1 Marker designates the location of Pin 1.
- Programming connector (6-pin) connects to the target device.
- Status LEDs-
  - 1. Power(green)- power is supplied to the PICkit 3.
  - 2. Active(Blue)- PICkit 3 has connection to the PC USB port and the communication link is active.
  - 3. Status- Busy(yellow)- usually programming Error(red)- error encountered.



Connections are made to the appropriate pins on the target device .

Figure: PICkit 3 Programmer connector pin out

\*\*\*We turn off low voltage programming (LVP) so no connection is made to Pin 6.

The diagram shows the wiring from the connector to the target device. A pull-up resistor (around  $10K\Omega$ ) is connected from  $V_{PP}/MCLR$  line to  $V_{DD}$  so that the line may be strobed low to reset the device.



## Loading Hex file into the PIC using PICkit 3

Open PICkit3.exe. PICkit 3 can be downloaded from :

## **Step 1**: Selecting the device.

Click on Device Family and select Midrange 1.8 V min.

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**Step 2**: Click on File and select Import Hex.

**Step 3**: Browse to the folder containing the hex file.



**Step 4**: Check the box on, and MCLR on the right hand side. Set the V<sub>DD</sub> to be 3.3V.(Only needed when the PIC is powered from the PICkit 3. If using external power source, there is no need to do this step)

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**Step 5**: Click on Write. On successful completion , the following screen should be displayed.

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