

## Appendix A

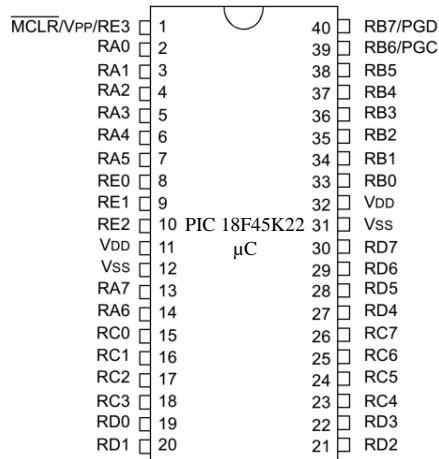


Fig. a. Pin-out diagram PIC 18F45k22 Microcontroller.

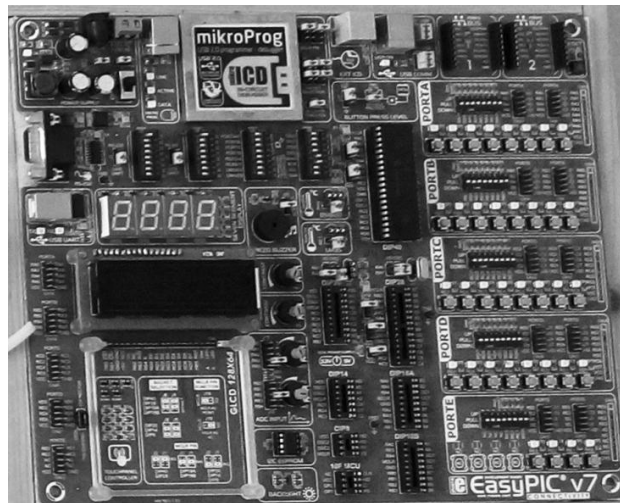


Fig. b. EasyPIC v7 development board.

EasyPIC v7 development board consists of various on-board modules like LCD, GLCD, 7-segment, LED's, etc. Moreover it contains USBUART, USB memory IC's also. The main attractive feature on this board is the In-circuit debugger (mikroProg) which is the gateway for fast programming. For each of the five ports of the microcontroller four different connection provisions are available. Therefore interfacing different modules and circuits becomes easy. It supports almost all the microcontrollers of PIC 10-series to PIC 18-series, with a total of 387 microcontrollers. The input supply to the board has provision for microcontrollers operating at both 3.3 V and 5 V. It also contains provision for directly interfacing temperature sensor LM 35, a buzzer is on-board and various other plug-and-play modules can be connected directly.