

Development of a universal PIC programmer

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Unlike other electronic components, a microcontroller has to be programmed to carry out a given task. Programming of most microcontrollers has to be done through external hardware connected to the microcontroller. For different families of microcontrollers the programming technique and the programming hardware are different. Even within the same family of microcontrollers programming technique can be different and the hardware setup can be different. In this project a universal programmer was designed and constructed for the family of Peripheral Interface Controller (PIC) microcontrollers. The programmer, which consists of software and hardware components, is capable of recognizing and programming all available members of the PIC family. The programmer can be modified to recognize and program any new member of the PIC family. The programmer can be controlled by an IBM compatible computer with Windows NT/2000/XP operating systems. In order to prohibit any unauthorized use of the programmer a security system is also introduced.