

DEVELOPMENT OF A COMPUTER

KEYBOARD INTERFACE

FOR A MICROCONTROLLER

Project Report Submitted by

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SUMMARY

DEVELOPMENT OF A COMPUTER KEYBOARD INTERFACE FOR A MICROCONTROLLER

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The objective of this project is to develop an interface which will allow one way communication between a Personal Computer Keyboard and a microcontroller which uses a Z-80 microprocessor.

The first step of the work was to create a program for the existing MPF-1P microcontroller which allowed the recognition of signals sent by a personal computer keyboard to the microprocessor. This process facilitated the programming of the Z-80 microprocessor to establish the communication with the keyboard.

The Liquid Crystal Display connected to the Z-80 microprocessor provides solid confirmation that the transmitted from the keyboard information is received correctly by the microprocessor.

The whole process of the work revealed the following conclusions:

- (a) It is quite important to recognize all information concerning the transmitter and receiver in order to create a communication interface.
- (b) The confirmation that the receiver received the transmitted information without errors is an important issue when a communication link has to be established.
- (c) The stage of developing the hardware revealed the difficulties of materializing the theory of electronics.

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