

ABSTRACT

Information about the condition of a microcontroller is needed to assess the state of microcontroller is still good or defective. Often we use a microcontroller without knowing the condition of the microcontroller, so when it is used then we found out that the microcontroller is corrupt. This is certainly less effective when working with microcontroller.

In this occasion, writer makes a realization of a system to check the condition of the microcontroller is still good or not. The type of microcontroller used is the MCS-51 namely AT89S51. It consist of three blocks minimum system. The first block is a tested microcontroller. Second block is a microcontroller tester, and the last is a microcontroller to control the LCD. where in the LCD will display the result of the checking.

Workings of this tool is to read the voltage output of the microcontroller ports tested. According to the characteristics of the microcontroller that is both logic '1' if given ration voltage. So if the detected logic '0' on the port being tested, it indicates that the microcontroller is corrupt. Thus the condition of microcontroller can be known before it is used so that more effective.

Keywords: microcontroller, MCS-51, minimum system, LCD