

ABSTRACT

MEDIA LEARNING COMPONENTS SYMBOL ELECTRONIC BASED ON MICROCONTROLLER ATmega 16 for CHILD TO SCHOOL LEVEL JUNIOR

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Final project aims to design, create and determine the performance of the tool Learning Media Symbols Microcontroller Based Electronic Components ATmega 16 for Junior Level School Children. This tool helps the learning process at school or in other places so that children remember and understand what is being taught by their teachers.

This tool was developed in several stages, namely, (1) Identification of Needs, (2) Needs Analysis, (3) Design System, (4) Hardware Design, (5) Design Software, (6) Technical Operations, and (7) testing Tool. Design tool is realized by combining multiple systems is a series of power supply, circuit Minimum System, Keyboard, dotmatriks series Liquid Crystal Display (LED), and Light Emitting Diode (LCD) with a 16x2 character. Power supply circuit in this instrument issued by the 5V voltage is supplied to a series of LED and LCD. In the series there is a minimum system ATmega microcontroller 16 which serves as a unit process. Input from the keyboard to microcontroller ATmega 16 was as a command to display the texts on LCD while the LED and LCD on the device functioned as an output. Software design was as a control program on the microcontroller ATmega 16 using the C programming language and compiler software CVAVR as his.