

Abstract

In this project, I am going to design an alarm clock based on a micro-processor. I will be using different hardware peripherals to implement my design and make it a user-friendly device. To display a time, I will be using a seven-segment displays and LEDs to separate the time, and display AM or PM. I would also be using push buttons for the user to select/de-select options, and a keypad for user to enter the time. The hardware would be organized using the Advanced Microcontroller Bus Architecture(AMBA) interface. The micro-processor used in this project would me ATmega328p.