DIGITAL CLOCK USING DS1307 AND ATMEGA8535

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ABSTRACT

Time is vital in one's routine life. With an excellent time management, people are trained to be more discipline and focus in running their daily life events. The importance of time has initiated the idea of creating a digital clock with alarm using DS1307 and ATmega8535. This report is a proposal regarding the project. The aim of the project is to produce a quality product, which can depict an accurate time besides of having an attractive time display. The project comprises a digital clock with alarm using DS1307 and ATmega8535 which can be used by people of ages and very flexible to be utilized everywhere and anywhere.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

There is an old phrase saying, "time is gold", to describe the value of time. In fact, it is undeniably true that time is very crucial in human life. Human utilizes time in managing their daily routine. However, in order to produce the best in time management, human need supplementary aids such as clocks and organizers to help them to keep track of the latest and important matters.

As time goes by along with high technology, there are numerous types of clock available in stores. Some of the most used clocks include digital and analog clocks. The exact definition of clock can be defined as a tool, which has its own value of time in hours, minutes and seconds, that displays and maintains it precisely relative to when the time was last reset. In this document, a "conventional clock" means such a clockwork or electric device in the real world; while "clock" means a computer operating system function that returns at least an absolute or elapsed time as measured by the operating system.

A clock is normally set with an alarm. This alarm is specially designed as a reminder for the user. In more precise words, alarm clock is a device, which is a conventional clock with an additional time value setting and an attached alarm bell. When the clock time reaches the exact time of the "alarm setting", it will ring the bell. In this specification, "alarm clock" means the software application that imitates many of the functions of a conventional clock with an alarm.