MOVING LED MESSAGE BY ARDUINO

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ABSTRACT

In today's world LED-based moving-message displays are becoming popular for transmitting information to large groups of people quickly. These can be used indoors or outdoors. We can find such displays in areas like rail-way platforms, banks, public offices, hotels, training institutes, nightclubs, and shops. Compared to light emitting diodes (LED s), liquid-crystal displays (LCD s) are easy to interface with a micro controller for displaying information as these have many built-in functions. In this project we have used the Arduino ATMEGA328P microcontroller along with a memory. If the user wants to change the message it needs to be done using a computer and hence the person needs to be present at the location of the display board. It means the message cannot be changed from wherever or whenever. Also the display board cannot be placed anywhere because of complex and delicate wiring.

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CHAPTER 1

INTRODUCTION

This chapter will represent the major part of the project. It will include our background study, problem statement, objectives, scope of study and project contribution.

1.1 Introduction

The scrolling message display will allow the user to type in any alphanumeric message and see it displayed through an array of red LED's (Light Emitting Diodes). A block diagram illustrating this process is depicted. This project will be an embedded system, so the display will be able to scroll messages anywhere there is a wall outlet. It will be dependent on a PC for user input. Messages can be created and saved on the display's microcomputer by use of a terminal program on a PC. The PC and microcomputer will communicate via serial port. After the message is created and saved, the display can be detached from the PC and then plugged in elsewhere to