

# SMART LETTER BOX

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## ABSTRACT

Nowadays, people communicate every day. People speak, write and draw to let others know what they thinking and feelings. When those people respond, the communication become interactive or two-way. We make decision to build a project Smart Letterbox. The main objective of this project to study requirement and procedure needed for Smart Letterbox, to develop mechanical and electronic part in order to improve the current letterbox system, and lastly to study and utilize the necessary component to fabricate the project. It is about combination of hardware part and programming part with Liquid crystal display(LCD), and buzzer using Programmable Interface controller(PIC). The sensor be able to notice the present of letter through LCD and buzzer. For this project, we make circuit for the sensor to detect the letter. Then, interface it with PIC. MP LAB X software include for this project to program the PIC and proteus to run the whole project. Expected result is to make sure the LCD is used to display the information and buzzer to alert the user. In a nutshell, this Smart Letterbox can ease and help people receive the information smoothly.

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### **CHAPTER 1**

### **INTRODUCTION**

Communication is a process in which ideas, information or feelings are exchanged to the maximum benefit of all parties. People communicate every day. People speak, write and draw to let others know what they thinking and feelings. When those people respond, the communication becomes interactive or two-way. All communication involves a sender, a medium (such as voice, image or print), and a receiver. Communication Technologies make it easy to talk to a friend next door or around the world by call them on the phone, e-mail them or put up information on the web pages as well as receive information daily through a variety of sources. People listen to the radio, watch television, and read magazines for both information and entertainment. Businesses agency use communication technologies to advertise their products and services. In fact, Communication Technology can become a business for the agency. Even though there is an increasing in communication delivering information, letter is still being used as a communicate technologies in technique.

There are some advantage of letter that keep it still being used that is no special device needed almost everybody has a residence or other place at which he or she can receive mail. A mailbox is all that the intended recipient needs unlike e-mail or phone calls, where the intended recipient needs access to a computer and an e-mail account or a telephone respectively. Letter is presented in physical record; important messages that need to be retained can be kept relatively easily and securely.