CHEQUE DEPOSIT BOX

Project Report is presented in partial of fulfillment for the award of the Bachelor of Electrical Engineering (Hons)

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ABSTRACT

This work describes the design of Cheque Deposit Box (CDB). A description of this work covers the hardware and software part, but this work focused in software designing. The CDB is divided into three parts i.e. the input devices, microcontroller, and output devices. Input devices consist of Barcode Reader and switches, while output devices are serial printer, LEDs, and latch. CDB uses Atmel AT89S53 as a microcontroller. The microcontroller is also connected with external memory, I2C EEPROM, and RTC, for clock system. In term of software development, the C Programming Language is used for the microcontroller. Other software such as SDCC, C Compiler, is used for compiling the source code to generate file which microcontroller can understand.

KEYWORDS: CDB, Barcode Reader, AT89S53 Microcontroller, RTC, 24LC128 EEPROM, Serial RS232.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

As we know, the cheque deposit machine (CDM) is a machine that uses for deposit cheques without queuing at the counter and time saving. The procedures are simple and can be done just in a minute. Furthermore, this is a safe and easy way to bank in cheques and even after working hours the cheque can be bank in via CDB [1].

However, the existing cheque deposit machines are very expensive machines; make it only available at some places. The main objective of this project is to build a cheque deposit machine which has less cost and easy to operate. By simplifying the operational in term of software part, it will more easily to use, and human technology. Compared to the machine that available today, this machine is simpler and energy saving. It has a simple structure, and circuitry, will reduced the operational cost and to build it. Due to this every financial branch can have it, also can be place in other public area like at offices and residential areas. As a result, public as bank's customers can be easily make cheque deposited simply at their office anywhere CDB available.

1.2 Problem Statements

There are some problems which are considered as reasons for developing this project. The problems are:

- The cost of existing Cheque Deposit Machine is very high. The maintenance costs also high because of the complexity.
- This machine only available at big town. It is very hard for people in small town to deposit their cheque after office hours.