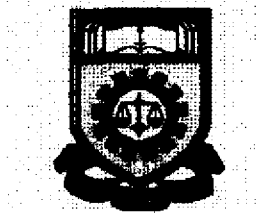


**ALARM SYSTEM USING PROGRAMMABLE INTERFACE
CONTROLLER (PIC)**

This thesis is presented in partial fulfillment for the award of the
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ABSTRACT

This project involves the design and development of an alarm system using PIC - (Programmable Interface Controller) microcontroller. The system consists of a controlling unit (CU) using PIC16F84 with EPROM (M27C256), a sensor unit (SU) and display unit (DU). Once detection is made the controller initiates software routines that will give a running display of the alarm triggered. The software for the system was developed on MPLAB package software for PIC and EPROM Data I/O programmer was used.

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CHAPTER 1

1.0 INTRODUCTION

An alarm is a device that is set to operate automatically as a warning of trouble or danger, or as a reminder. There are many types of alarm systems used in industry and home. In industry, alarm systems are used to warn or alert certain contingencies e.g. intruder, fire and system malfunction. Domestic applications include, burglar alarm, smoke alarm, clock alarm etc.

Most of the alarm systems are designed with only sound or signal of incoming intruder or danger. However, recent trends have produced systems which are more sophisticated, complex and cheap.

This is to make people more alert and react immediately to what is happening around them, especially in emergencies. In the present project, an alarm system was designed and developed which produces a running display of the situation or contingencies when triggered. The system so produced is cheap and incorporates the use of Programmable Interface Controller (PIC16F84) which functions as the main unit of the system.

The PIC (Programmable Interface Controller) was originally designed in 1978 with an NMOS process by General Instruments as a device to up external functions for their larger microprocessor.[1]