A MULTI-SENSOR SECURITY SYSTEM BASED ON COMPLEX PROGRAMMABLE LOGIC DEVICES WITH REMOTE TELEPHONE REPORTING

BY

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CHAPTER 1

INTRODUCTION

1.0 General

This research study covers the design and implementation of a multi-sensor security system that is based on a Complex Programmable Logic Device (CPLD). The system basically detects the presence of a security incident on any one of the sensors and provides, on a conveniently located control panel, an indication of the exact source of the fault. In addition, the system automatically dials to a predetermined telephone terminal to alert the attendant there about the incident. A simple diagram of system configuration is shown in Fig 1.1.

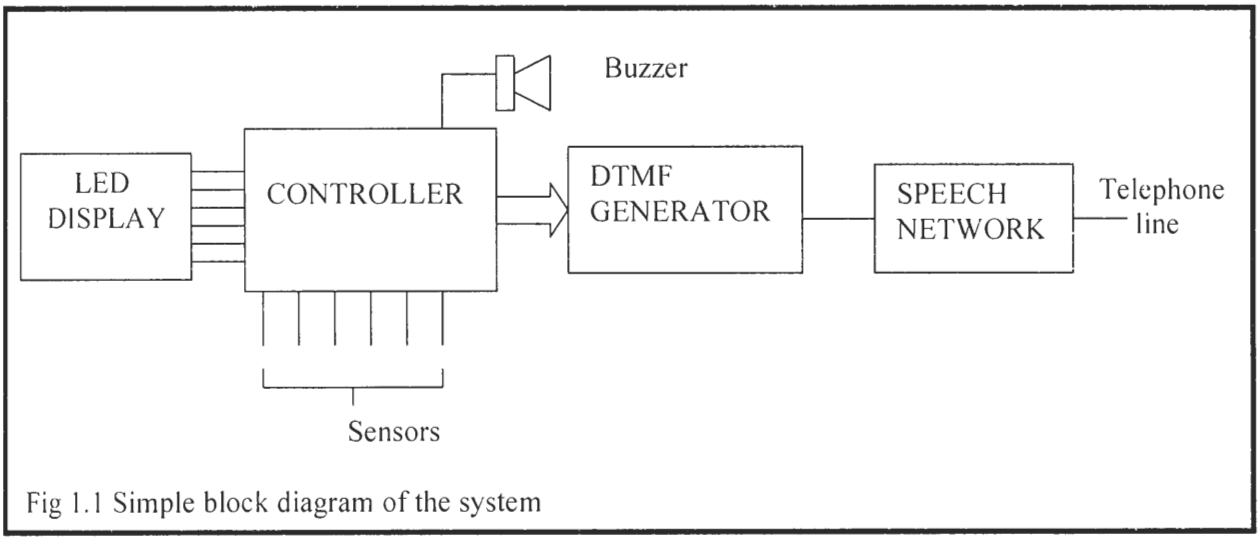

Fig 1.1 Simple block diagram of the system

The software design was effected on a Computer Aided Design (CAD) Xilinx software package called Integrated Software Environment (ISE) version 6.2 **[1]** in conjunction with a ModelTech Simulator called ModelSim XE II 5.7g. **[1]**