

CALLER-ID COMPUTER INTERFACE

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ABSTRACT

This thesis describe the development of a Computer Caller-ID interface. The Caller-ID is one of the part of Custom Local Area Signalling (CLASS) that offered by local telephone companies. There are two types of Caller-ID information, Calling Number Delivery (CND) and Calling Name Delivery (CNAM).

The work views how a Caller-ID interface can be developed in order to create the program that can import and use the data by directly links to computer. This Caller-ID interface consists of four circuits. : Caller-ID receiver, microcontroller, power supply and serial EPROM.

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1. INTRODUCTION

1.1 Background

Extremely rapid progress has been taking place in the telecommunication industry in term of increasing diversity of service demanded by subscribers and also the engineering capability of network system to provide variety of service.

Since 1990's telephone accessories have been appearing on the market that, when plugged into the phone line, will display the number or name of the calling party of each incoming call. Those Caller-ID devices tap into stream sent down the phone line and use it to identify the origin of the call. However, such units only provide information who is calling and that's about it.

This project is to develop a computer interface device. It directly link the computer to Caller-ID information, and enables to create programs that can import and use the data. The computer can keep a running log of all incoming calls. Automatically retrieve information from a database related to a caller or verify a caller's name and phone number.

All decoding and processing of the Caller-ID data is handled by the data on-board microcontroller. The chip , that converts the data to a one-line , formatted ASCII string that can be imported by PC with a short programming.

The serial communication interface used in the Caller-ID was specifically designed to share the same RS-232 port . Multiple units can be piggybacked on the same port and plugged into different phone line, thus allowing one computer to manage calls received from several telephones.