HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DEVELOPMENT OF A MICROPROCESSOR BASED SEMICONDUCTOR'S PINS IDENTIFIER

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DEVELOPMENT OF A MICROPROCESSOR BASED SEMICONDUCTOR'S PINS IDENTIFIER.

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INTRODUCTION

Nowdays there are instruments for almost any type of measurements.Oscilloscopes and multimeters can be found quite easily but finding an instrument able to identify the pin configuration of a transistor is very difficult.For this kind of job databooks and catalogues are used making this procedure quite tiring.

This project gives a solution to this problem since it identifies the pin configuration of a transistor or a diode without the use and aid of a catalogue or a databook.Another plus of this system is the limitation of errors since there are various types of transistors that can be easily confused and lead to a false conclusion.

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SUMMARY

The idea of developing a device that makes possible the identification of a semiconductor's pin layout was a result of thinking how to overcome the tiring process of having to look in data-books and catalogs whenever I wanted to find the pin configuration of a transistor.

A microprocessor is used because in my opinion is the most easy and efficient way to control the input and output voltages to the pins of the semiconductor(explained in more detail in the following chapters) and furthermore is more reliable than ordinary analogue equipment.

In the chapters to follow there will be theory and technical information for both the design and development of this project along with appendices and tables concerning the various parts (IC's,etc).