DESIGN CONSTRUCTION AND TESTING OF A FLASH ANALOG TO DIGITAL CONVERTER

Project report submitted by STAVROU STAVROS CHRISTOU

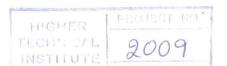
to

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ABSTRACT

TITLE : FLASH CONVERTER WRITER : Stavrou Stavros

The purpose of this project is to design, construct and test a flash type A/D (analog to digital) converter.

This project also explains the principle of operation of digital to analog conversion, introduces some digital to analog converters as well some other analog to digital converters.

Based on the block diagram of the flash converter and its principle of operation the appropriate circuit was designed , constructed and tested according to some conditions which must be fulfilled.

These conditions are as follows:

- 1. THE PURPOSE OF THE PROJECT IS TO DEMONSTRATE THE PRINCIPLE OF OPERATION (GOOD ACCURACY IS NOT NEEDED)
 - 2. THE CONVERTER WILL USE AT LEAST 10 COMPARATORS
- 3.AN EPROM WILL BE USED TO CONVERT THE OUTPUTS OF THE COMPARATORS INT BCD NUMBERS
 - 4. THE CONVERTER WILL UTILIZE 7-SEGMENT DISPLAY

The circuit was designed by examining each block separately according to its operation and requirements, and can perform an A/D conversion from 0 - 9 volts.

CONTENTS

		page
ACKNOWLED	GMENTS	I
CONTENTS.		II
ABSTRACT.		IV
INTRODUCT	ION	V
CHAPTER 1	: CONVERTERS (page 1-7)	
1.1	CONVERSION METHODS	1
CHAPTER 2	: BLOCK DIAGRAM (page 8-11)	
2.1	PRINCIPLE OF OPERATION	8
2.2	BLOCK DIAGRAM OF THE FLASH CONVERTER.	9
2.3	OPERATION	10
CHAPTER 3	: CIRCUIT DIAGRAM AND DESIGN (p.12-26)	
3.1	DESIGN AND DETAILED EXPLANATION OF	
	EACH BLOCK	12
3.2	COMPARATOR AND VOLTAGE DIVIDER	
	CIRCUIT	12
3.3	EPROM	16
3.4	BCD TO 7-SEGMENT DECODER/DRIVER AND	
	DISPLAY CIRCUITS	18
3.5	POWER SUPPLY CIRCUIT	23
3.6	COMPLETE CIRCUIT DIAGRAM OF THE	
	FLASH CONVERTER	25
CHAPTER 4	: TESTING - TROUBLESHOOTING (p.27-29)	
4.1	ABOUT CONSTRUCTION	27
4.2	TESTING - TROUBLESHOOTING	27

CHAPTER 5: CONCLUSIONS - IMPROVEMENTS (page 30-36)

APPENDICES

REFERENCES