

**DESIGN AND CONSTRUCTION OF AN
EXPERIMENTAL LOGIC BOARD**

Project report submitted by

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INTRODUCTION
FAMILIRIZATION WITH THE EXPERIMENTAL
LOGIC BOARD.

In cases that we are experiment with logic circuits we need some signals, voltages and indicators which are very usefull. The experimental logic board is an electronic construction that contains that basic signals, voltages and indicators.

The experimental logic board is very usefull when someone is experiment with logic circuits because he doesn't have to use many separate constructions but using the experimental logic board he has everything has needs in one construction.

A good Experimental Logic Board must contains the 5V dc supply for the TTL IC's and also the $\pm 12V$ dc for the CMOS IC's. A Square ware oscillator is needed for the clock and it must have variable frequency. A very low frequency (few Hz) in order to see what happens in the indicators and a high frequency (KH_z) in order to see the results in the oscilloscope. Some logic indicator which can be driven from small signals (TTL outputs) to show the logic "0" and logic "1". Seven Segmend displays in order to see the output in the decimal form. Debounce swiches and terminals and sockets for the componets of the logic designs.

The operation of the experimental logic board must be easy to operate. Care must be taken with the supply voltage of the IC's and also the polarity of the supply voltage in order not to destroy them.

CONTENTS

	Page
ACKNOWLEDGEMENTS	I
CONTENTS	II
INTRODUCTION	1
CHAPTER 1	
1.0 Power supply	3
1.1 5V power supply	3
1.2 \pm 12V Power supply	3
1.3 Circuit	3
1.3.1 Operation	4
1.3.2 Printed circuit board	4
CHAPTER 2	
2.0 Square wave generator	5
2.1 Using Programmable UST (PUT)	5
2.2 Using Schmitt trigger	6
2.3 The astable multivibrator	8
2.4 555 timer	10
2.5 The square wave generator of the Experimental logic board	11

CHAPTER 3

3.0 Seven segment display unit	15
3.1 Binary coaded decimal decoder driver	15
3.2 Seven segment displays	16
3.3 Circuit diagram	17
3.4 Printed circuit board	17

CHAPTER 4

4.0 Logic indicators	18
4.1 Uses of Logic indicators	18
4.2 Operation	18
4.3 Circuit diagram	18
4.4 Printed Circuit board	19

CHAPTER 5

5.0 Debounce switches	20
5.1 Why debounce switches are needed	20
5.2 Debouncing on the switches of the experimental logic board	21
5.3 Circuit diagram	22
5.4 Printed Circuit Board	22

CHAPTER 6

6.0 Construction	23
6.1 Printed Circuit Board	23
6.2 Soltering	25
6.3 Testing	25

CHAPTER 7

7.0 Circuit diagram of the experimental Logic Board	26
7.1 Printed circuit board of the experimental Logic Board.	27

CHAPTER 8

8.0 Working with the experimental logic board.	28
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APPENDICES