

STUDY OF UNIVERSAL LOGIC GATES & APPLICATIONS

OMEGATYPE LTB-822

OMEGA TYPE LTB-822 Computer Logic Training Board has been designed specifically to study Universal Logic Gates and Applications. This Training Board is designed to verify the truth table of various logic functions, to prove De-Morgan's theorem, Half adder and Full adder by using universal logic gates. The board is absolutely self contained and requires no other apparatus.

Practical experience on this board carries great educative value for Science and Engineering Students.

OBJECT

- 01 To study the operation and characteristics of a TTL NAND gate.
- 02 To study the operation and characteristics of a TTLNOR gate.
- 03 To prove the De-Morgan's Theorem by using NOR & NAND gates.
- 04 To perform various logic functions using NAND Gate

4.1 OR 4.2 AND 4.3 NOT

4.4 NOR 4.5 EX-OR 4.6 EX-NOR

05 To perform various logic functions using NOR Gates

5.1 OR 5.2 AND 5.3 NOT

5.4 NAND 5.5 EX-OR 5.6 EX-NOR

06 To Realize the Adder and Subtractor using NAND Gate

6.1 HalfAdder 6.2 Full adder

6.3 Half Subtractor 6.4 Full Subtractor.

07 To Realize the Adder and Subtractor using NOR Gate

7.1 HalfAdder 7.2 Full adder

7.3 Half Subtractor 7.4 Full Subtractor.



FEATURES

The board consists of the following built-in parts:

- 01 +5V D.C. at 100mA, IC Regulated Power Supply internally connected.
- 02 Ten, 2-input NAND gates.
- 03 Sixteen, 2-input NOR gates.
- 04 Switches for logic selection.
- 05 LED's for visual indication of status.
- 06 Adequate no. of other Electronic Components.
- 07 Mains ON/OFF switch, Fuse and Jewel light.
- 08 The unit is operative on 230V ±10% at 50Hz Mains.
- 09 Adequate no. of patch cords stackable 2mm spring loaded plug length 50cm.
- 10 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections / observation of waveforms.

11 Weight : 3.700 Kg Approx.

12 Dimension : W340 X H125 X D210.

LIST OF ACCESSORIES:

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS