

OMEGA TYPE LTB-817 Computer Logic Training Board has been designed specifically for the study of Digital IC Circuits. Digital IC Trainer is a completely self contained, most versatile, sophisticated and economical. 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.

SPECIFICATIONS

- 01 + 5V DC at 1Amp, IC Regulated Power Supply.
- 02 Fourteen , two position toggle switches prewired to give binary logic input states.
- 03 Fourteen , LED logic indicators with transistor drivers.
- 04 3 digit Seven Segment Displays with decoder driver and provision to take-out output for monitoring.
- 05 Clock Generators Fixed : (a) 1Hz (b) 1KHz. (C) 1MHz (Simultaneous independent outputs).
- 06 Single pulse from mono pulser.
- 07 IC BASE16 Pin 3 No.and 28Pin 1No. gold plated Zero Insertion Force (ZIF) dual in line Package (DIP) on Front Panel.
- 08 Components Provided :
ICs-555/1, 4001/1,4008/1, 4011/1, 4013/1, 4018/1, 4027/1, 4045/1, 4098/1, 7400/1, 7402/1, 7404/1, 7407/1, 7408/1,7411/1, 7432/1, 7472/1, 7473/2, 7480/1, 7486/1, 7489/1, 7490/3, 7493/1, 7496/1, 74121/1 74181/1, 74194/1 total = 30
- 09 Accessories : Mains cord, Operating and Experimental manual, Red & Black patch cords 18 each
10. Instruction manual : Strongly supported by detailed operating instructions.
- 11 Wiring of all types of experiments become simple and less time consuming.
- 12 Adequate no. of other Electronic Components.
- 13 The unit is operative on 230V ±10% at 50Hz A.C. Mains.
- 14 Weight : 4.700 Kg. (Approx.)
- 15 Dimension : W415 x H165 x D 315.

THE TRAINER COVER THE FOLLOWING EXPERIMENT LOGIC GATES

- 01 AND GATE (DIODE & TTL LOGIC)
- 02 OR GATE (DIODE LOGIC)
- 03 NAND GATE (TTL)
- 04 NOR GATE (TTL)
- 05 NOT GATE (TTL)
- 06 EXCLUSIVE - OR GATE (TTL)

BOOLEAN ALGEBRA

- 07 TO PROVE BOOLEAN THEOREMS $A + = 1$
- 08 TO PROVE BOOLEAN THEOREMA $+A . B = A$

TO PROVE DEMORGAN'S THEOREMS

- 09 $\overline{A + B} = \overline{A} \cdot \overline{B}$
- 10 $\overline{A \cdot B} = \overline{A} + \overline{B}$

MONOSTABLE (TTL)

- 11 NEGATIVE EDGE TRIGGERED MONOSTABLE
- 12 SCHMITT TRIGGER



FLIP FLOP (TTL)

- 13 RS FLIP FLOP
- 14 CLOCKED RS FLIP FLOP
- 15 J. K. FLIP-FLOP

BINARY COUNTERS (TTL)

- 16 BINARY RIPPLE COUNTER
- 17 SYNCHRONOUS COUNTER

DIVIDE BY N COUNTER

- 18 DIVIDE BY 6 COUNTER USING 7493 IC
- 19 DIVIDE BY 60 COUNTER USING 7493 AND 7490 IC'S
- 20 RING COUNTER

FULL & HALF ADDERS (TTL)

- 21 HALF ADDER
- 22 FULL ADDER

SUBTRACTORS & ARITHMETIC LOGIC UNIT (TTL)

- 23 HALF & FULL SUBTRACTOR
- 24 ARITHMETIC LOGIC UNIT

REGISTERS (TTL)

- 25 SHIFT REGISTER CONSTRUCTED FROM MASTER SLAVE JK FF
- 26 5 BIT REGISTER (USING 7496)
- 27 UNIVERSAL SHIFT REGISTER

MEMORIES (TTL)

- 28 ORGANISATION OF RAM / IC 7489 - RAM
- 29 ROM (READ ONLY MEMORY)

EXPERIMENT OF CMOS DEVICES

- 30 NAND CMOS
- 31 NOR CMOS
- 32 BOOLEAN ALGEBRA (CMOS)
- 33 ASTABLE MULTIVIBRATOR & SCHMITT TRIGGER WITH ADJUSTABLE TRIGGERING (CMOS)
- 34 MONOSTABLE MULTIVIBRATOR (CMOS)
- 35 FLIP FLOPS (CMOS)
- 36 HALF & FULL ADDER (CMOS)
- 37 PRESETTABLE DEVIDE-BY-N COUNTER (CMOS)
- 38 BINARY TO DECIMAL CONVERSION
- 39 3 DIGIT STROKE COUNTER USING IC 7490
- 40 ACCURATE TIMER USING BEL CD 4045 & CD 4013
- 41 MONOSTABLE OPERATION USING IC 555 TIMER
- 42 ASTABLE OPERATION USING IC 555 TIMER
- 43 FREQUENCY MODULATION USING IC 555 TIMER
- 44 SQUARE WAVE GENERATOR USING IC 555 TIMER

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

OMEGA ELECTRONICS