Embedded Systems Design Series

Digital Logic Trainers

DL-010 Combinational Logic Trainer



Features:

- 72-page professionally written lab manual authored by university professor, Enoch Hwang, PhD.
- 11 hands-on labs correlated to an introductory digital logic course.
- Sturdy blow molded carrying case making the entire lab lightweight and portable.
- Attractive and easy to use system draws students in to the beauty of digital logic and embedded systems design.
- Complete kit with 9V wall adapter and 100 machined pin hookup wires. No need to buy anything else.
- All gate elements are pre-mounted and fully integrated.
- Expandable breadboard allows the system to grow as students' knowledge increases.
- Perform experiments using standard TTL logic.
- Well regulated 5V power (Vcc) and ground (GND) points.
- Each gate element is presented in its easy to visualize graphic form.

Global Specialties' DL-010 is first in its series of embedded systems design trainers. The DL-010 teaches students the basics of combinational digital logic design, which is the foundation of microprocessor and microcontroller designs.

With the DL-010, all necessary logic components are included and pre-mounted for fast, easy implementation of combinational logic circuits, which are used as the building blocks of microprocessors. These circuits include multiplexers, decoders, encoders, full adders, adders/subtractors, comparators, and ALU's.

Global Specialties' logic trainer simplifies the teaching process by eliminating the need to discretely wire IC's as all gate elements are premounted, de-coupled and de-bounced, ready for immediate classroom use. Students can spend their time directly on logic training.

Most importantly, the trainer includes a 72-page professionally written training manual featuring an overview of digital logic and 11 hands-on labs enhancing any textbook currently in use.

The DL-010 is a complete and ruggedly packed trainer that will provide a solid learning platform to individuals and classroom students.

Some of the logic circuits that can be implemented with this trainer include:

2-to-4 decoder with and without enable

3-to-8 decoder with and without enable

2-to-1 multiplexer

4-to-1 multiplexer

8-to-1 multiplexer

Full adder

4-bit adder

4-bit adder/subtractor

4-bit carry-look-ahead

2-bit ALU

8-to-3 Encoder

Comparator

Shifter

4-bit BCD to 7-segment decoder

Any custom combinational circuit as derived from a truth table with up to four inputs

Many custom combinational circuits with more than four inputs

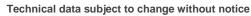


Digital Logic Trainers

Combinational Logic Trainer

Specifications

Model DL-010	
Not gate	12
2-Input AND gate	12
4-Input AND gate	8
2-Input OR gate	8
4-Input OR gate	8
2-Input XOR gate	12
LEDs	8
7-Segment LED display	1
Slide switch	8
Push Button switch	1
270 tie point Bread Board	yes
Vcc & GND tie points	yes
Hook up wire, 100pcs	yes
9V wall adaptor	yes
Regulated 5V supply	yes
DL-010 Manual	yes
Width	13.5 in
Length	8.5 in
Height	3.5 in
Weight	3.40 lbs
Technical data subject to change without notice	





globalspecialties.com



Chapter 1: Combinational Logic Design Trainer

Model DL-010

Chapter 2: Microprocessors

Introduction to Microprocessors Combinational and Sequential Circuit Analogy

Chapter 3: Digital Logic Circuits Basic Logic Gates

Digital Circuits

Identifying Combinational Circuits Analysis of Combinational Circuits

Boolean Algebra

Simplifying Combinational Circuits Synthesis of Combinational Circuits

Chapter 4: Labs

Basic Gates, Lights and Action! NAND, NOR, XOR, AND XNOR Gates **Designing Combinational Circuits**

Multiplexers

Decoders

Comparators Full Adder

4-bit Adder

4-bit Adder/Subtractor

2-bit Arithmetic and Logic Unit (ALU)

BCD to 7-Segment LED Decoder





ПОСТАВКА ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г. Москва, ул. Щербаковская д. 3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru moschip.ru_6 moschip.ru 4 moschip.ru 9