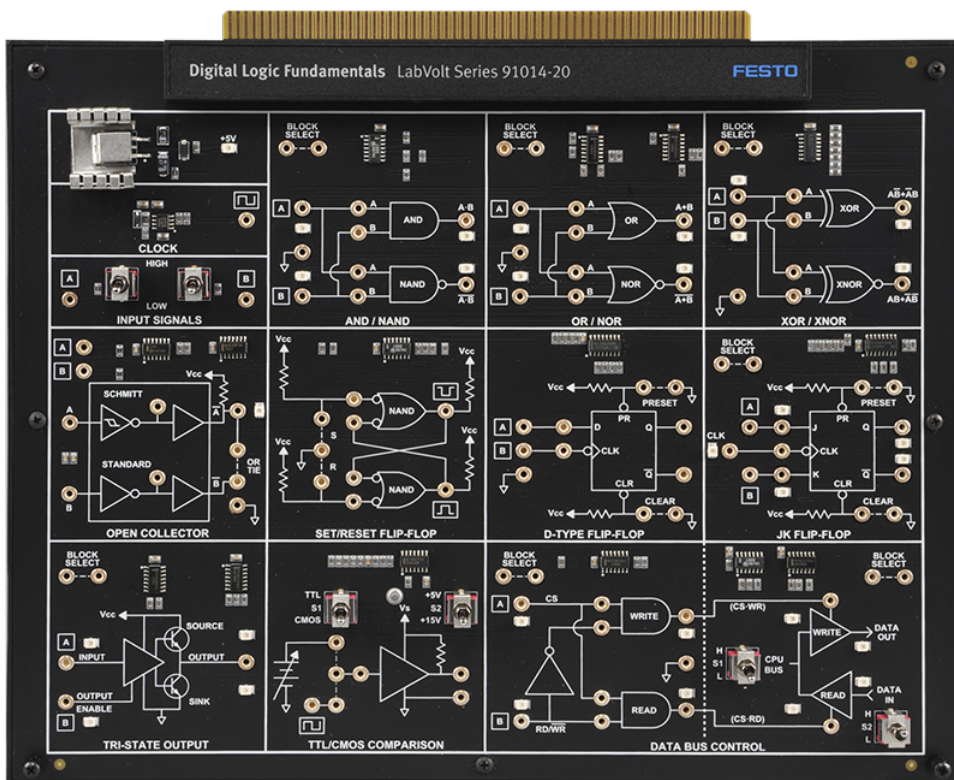


# Digital Logic Fundamentals FACET Board 581033 (91014-20)



LabVolt Series

Datasheet



Festo Didactic

en

10/2024

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## General Description

The Digital Logic Fundamentals module enables students to perform practical exercises that demonstrate concepts and fundamentals of digital logic circuits.

The circuit board contains the following circuits:

- Clock
- Input Signals
- Open Collector
- Tri-State Output
- AND/NAND
- Set/Reset Flip-Flop
- TTL/CMOS Comparison OR/NOR
- D-type Flip-Flop
- Data Bus Control
- JK Flip-Flop and XOR/XNOR circuit blocks for students to understand and troubleshoot

## Topic Coverage

- Component Location and Identification
- Operation of General Circuits and IC Package Fundamentals
- Logic Functions: AND, NAND, OR, NOR, Exclusive OR, NOR Gates
- Dynamic Response of XOR/XNOR Logic Gates
- DC Operation of a NOT and an OR-TIE
- Transfer Characteristics of a Schmitt and a Standard LS TTL Gate
- Flip-Flops: Set/Reset, D-Type, Static JK, Dynamic Operation
- Tri-State Gate: Output Enable Control, Sink and Source Control
- TTL and CMOS: Static Trigger Levels, Dynamic Transfer Characteristics
- Static and Dynamic Control of a Data Bus
- Troubleshooting Basics and Troubleshooting Digital Circuits

## Features & Benefits

- +5 V regulated supply
- Built-in clock circuit
- Manual input signal control

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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