

Sciencetech 2611 Digital Circuits Development Platform is designed to fulfill requirement of performing experiments of digital electronics in a single platform. This makes it easy to design, experiment with, and test circuitry without soldering. Students can explore a wide variety of electronic concepts simply by sticking components into the breadboard. All connections and controls are clearly marked and conveniently located. It is very useful in digital electronics laboratories for performing digital experiments. It is also useful to build and test circuits as well as making projects related to digital electronics or when learning the subject.

Features

- Self contained & easy to operate
- Functional blocks indicated on board mimic
- Solderless breadboard
- On board DC Power Supplies
- On board Pulse Generator with TTL/CMOS mode
- Pulser switches and 8 bit Data switches
- Bicolor 8 bit LED display
- BCD to Seven segment display and Logic probe
- CMOS/TTL output
- Free e-learning course

Digital Circuits Development Platform comprises of following blocks:

- | | |
|--------------------------|-------------------------|
| • DC Power Supplies | • Pulse Generator |
| • Pulser Switches | • 8 bit Data Switches |
| • Logic Probe | • Seven Segment Display |
| • TTL/CMOS Mode Selector | • 8 bit LED Display |

Scope of Learning

- Study the operation of all Logic gates
- Binary addition Half adder, Full adder, 2 bit Binary parallel adder
- Binary subtraction
- Binary to Gray code conversion
- Gray code to Binary conversion
- Binary to Excess-3 code conversion
- Binary to Excess-3 code conversion
- Study of Flip-flops
- Study of Crystal oscillator
- 4 bit Binary up-down counter
- Study of Johnson Counter
- Study of Shift Register
- Study of 8 to 3 line Encoder
- Multiplexer and De-multiplexer Circuits
- Study of Pulse Stretcher Circuit
- Study of CMOS-TTL Interfacing

Technical Specifications

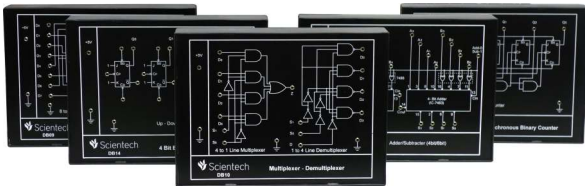
- Size of Breadboard** : 172.5 mm x 128.5 mm
- Tie Points on Breadboard** : 1685 nos (solderless)
- DC Power Supplies** : 5V, 1A; -5V, 500 mA (fixed) +3V to +15V, 500 mA (variable)
-3V to -15V, 500 mA (variable)
- Pulse Generator** : 1Hz to 1MHz in 6 steps (Variable in between the steps)
- Amplitude** : +3V to +15V (CMOS), 5V (TTL)
- Duty Cycle** : 50 %, TTL/CMOS output
- Pulser Switches** : 2 nos (Push to 'On')
- Data Switches** : 8 nos (Toggle switches) (TTL/CMOS output)
- Bicolor LED Display** : 8 nos (TTL/CMOS input)
- BCD to Seven Segment Display** : 2 nos
- Logic Probe** : Logic level indicator (H/L) for TTL/CMOS mode (7segment display)
- Weight** : 3 kgs approximately
- Dimensions (mm)** : W 326 x D 252 x H 52
- Mains Supply** : 110-220V ±10%, 50/60Hz
- Product Tutorial** : Online (on www.SciencetechLearning.com)

Included Accessories :

- Breadboards (solderless) : 2 nos
- Connecting wires : 20 nos
- 2mm to 1mm patch cords : 8 nos
- 2mm to 2mm patch cords : 8 nos
- Mains cord : 1 no

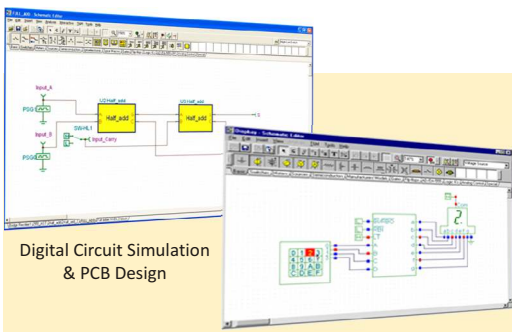
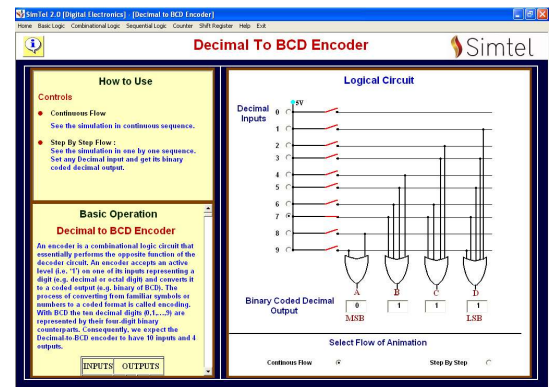
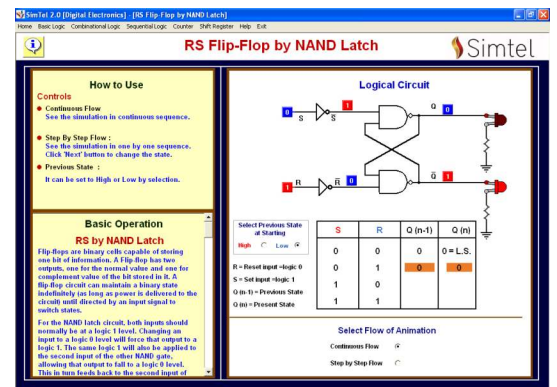
Experimental boards DB Series (optional):

Ready to use Digital Experiment Boards (covering device characteristics and study of various logic circuits) with wired components and schematic drawn on top, compatible to use with Sciencetech 2611.



Sciencetech 2611

Screen shots of Simtel Digital Electronics (optional)



Tina Design Software (optional)

Enhance your Analysis with Tina Design Suite

Analyze circuit through more than 20 different analysis modes including DC Analysis, AC Analysis, Transient Analysis, Digital step by step analysis, Symbolic Analysis, Network Analysis, Noise Analysis, Tolerance Analysis, Optimization, etc.