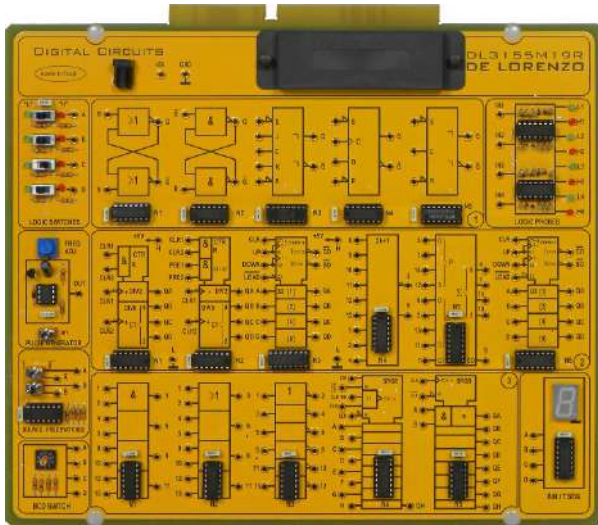# DIGITAL CIRCUITS

DL 3155M19R

The design and construction of electronic circuits to solve practical problems is an essential technique in the fields of electronic engineering and computer engineering.

With this card the students can study the sequential logic circuits including the family of the flip-flops, the counters, the parity generators, the adders and the shift registers.

THEORETICAL TOPICS

- Flip-flop S-R, with NOR and NAND operators
- Flip-flop J-K
- Flip-flop J-K Master-Slave
- Flip-flop T and D
- Synchronous and asynchronous 4 bit binary counter
- Synchronous and asynchronous decimal counter
- Parity generator
- Adders
- Definition, classification and operating principle of the most common shift registers
- Fault simulation

CIRCUIT BLOCKS

- Flip-flops
- Counters
- Shift registers

Complete with theoretical and practical manual.

Dimensions of the board: 297x260mm

CAI SOFTWARE:
Each board of the TIME system can be supplied complete with a Student Navigator software that allows students to perform their learning activities through a Personal Computer, without the need for any other documentation.
Ordering code: please add SW after the code of the board (i.e. DL 3155M19RSW)

Required:
POWER SUPPLY NOT INCLUDED
Base frame with power supply (completed with connecting cables):
➢ **DL 3155AL3** - Base frame with power supply and interface to pc and virtual instrumentation
➢ **DL 3155AL2** - Base frame with power supply and interface to pc

Basic power supply (connecting cables not included):
➢ **DL 2555ALG** - DC power supply ±5 ±15 Vdc, 1A
➢ **TL 3155AL2** - Connecting cables
Choosing this power supply, for the execution of the experiments, it is normally required the use of an oscilloscope and two multimeters.