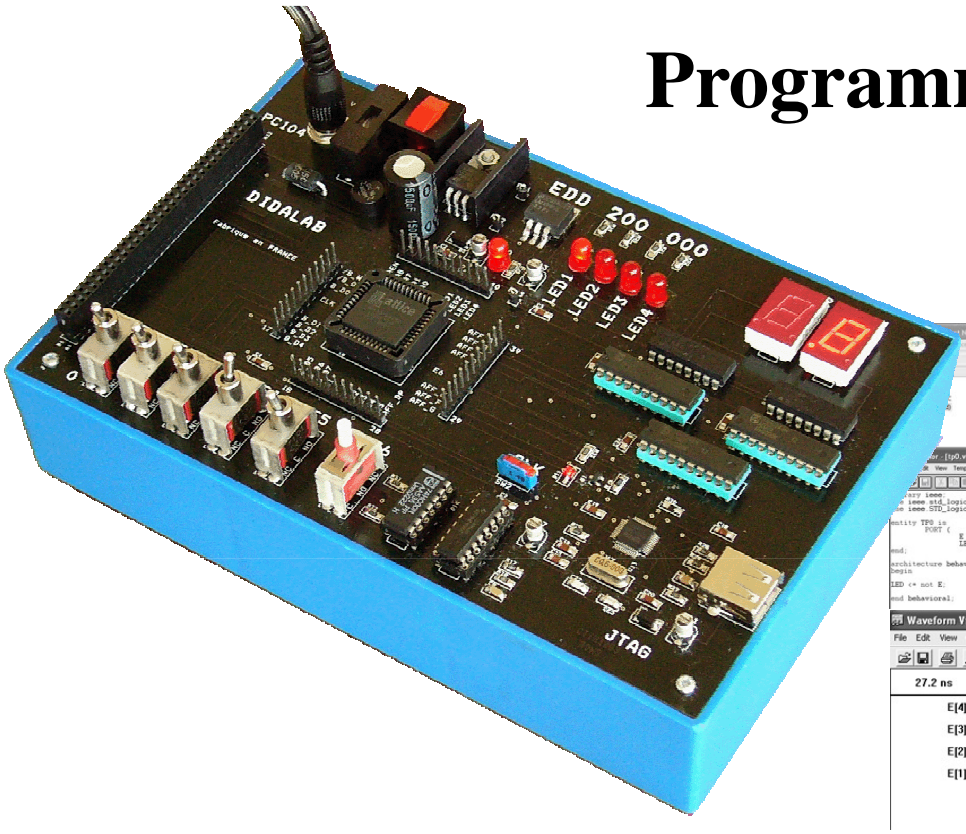
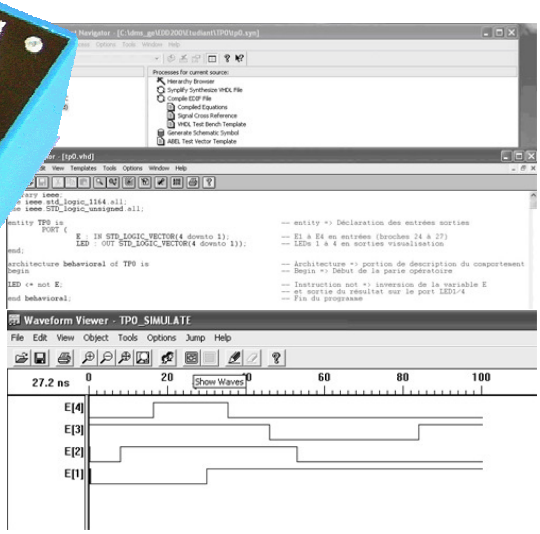
EDD

Digital Electronics

Programmable Logic

EDD – 200





GENERAL CHARACTERISTICS :

The **EDD 200** pack is composed of the **EDD 200 000** basic board with its ancillaries. It enables the study of EPLD-range programmable logic circuits, as well as learning and running VDHL language. It belongs to our full range of digital training systems :

♦ The **EDD 100** series, enabling the introduction to the basic wired logic systems (combinatory, flip-flop, counter, ALU circuits …).

♦ The **EID 100** series, microprocessors and microcontrollers of 8 bits Motorola ® and Intel ® ranges.

♦ The **EID 210** series, microprocessors and microcontrollers of 16 bits and 32 bits Motorola and Intel ranges.

In the digital techniques training process, it ensures the link between the basic logic and the microprocessor systems.

The 8 bits PC 104 bus enables the student to carry out experiments very closely to the industrial reality.

Example : Achievement of a PIA interface connected to PC104 Bus (4 bits input port, 4 bits output on LEDs and 2 * 7 segments multiplexed display).

TOPICS :

The **EDD 200** pack enables the study of programmable logic functions.

The EDD 200 040 Trainer's Manual and EDD 200 050 Student's Manual, deal with the basic logic circuits :

♦ Inverter,
♦ AND, OR,
♦ RS, JK Flip-Flops,
♦ 4 bits programmable Counter / Decounter ,
♦ Multiplexer,
♦ 7 segments Decoder ,

Outcoming of :

♦ PC 104 bus interfacing,
♦ Achievement of a P.I.A interface on PC 104 bus, 4 bits input, 4 bits output on LED,
♦ Achievement of a PC 104 bus interface with interrupt control, and 7 segments transcoding.

AREAS OF APPLICATION :

♦ **Professionnal Training & Technical Colleges**,

♦ **Military Schools & Universities.**

SPECIFICATIONS :

The **EDD 200** pack is based on a circuit 44 pins EPLD MACH4 circuit of the LATTICE ® range, it is provided together with one VHDL editing and downloading program.

It includes :

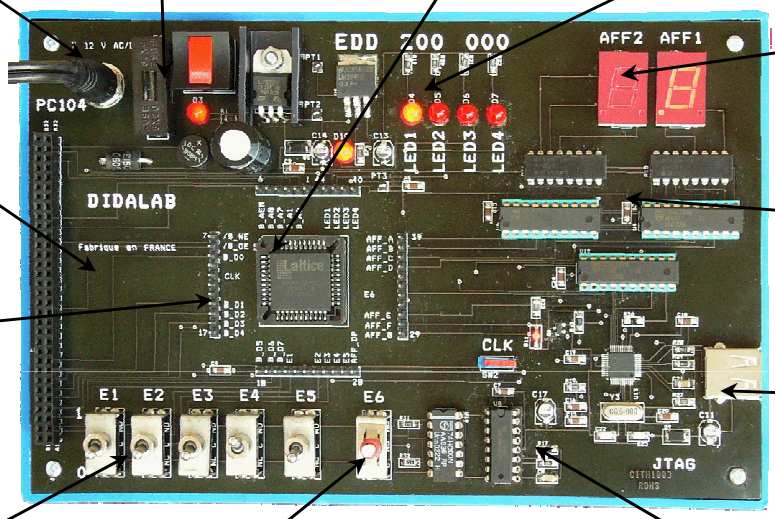
♦ 5 * level generation keys (4 counter inputs, 1 programming input)
♦ 1 bounce-free push-button (JK clock, counters),
♦ 4 display LEDs,
♦ 2 * 7 segments multiplexed displays,
♦ 1 PC104 standard connector, enabling the study of this interface, either on EID series board, or on any other board,
♦ 1 USB connector, JTAG standard ,
¨ 1 * 2 Hz/ 2 kHz switchable clock ,
♦ 1 external Power Supply.

Packing

Weight : 2 kg
Dimensions : 300 x 250 x 100 mm

DIDALAB Range

EDD200000 Programmable logic Board. Technical Specifications



5 Vdc Power Supply.

EPLD MACH4 Circuit on PLCC44 Socket.

4 display LED.

External Power Supply input: 7 to 12 VAC/DC.

2 * 7 segments multiplexed display.

8 bits PC104 bus standard connector.

2 memory circuits for 7 segments display.

44 display test points for all connections on EPLD circuit.

JTAG Connector for USB port downloading.

5 logic level generation keys.

bounce-free push-button (for Practicals on JK clock, counters…)

2 Hz /2 kHz switchable clock (pour TP d'horloge compteurs, registres…)

Practicals :

EDD 200 040 : Trainer's Manual,

EDD 200 050 : Student's Manual, topics:

Introduction to the EDD 200 :
- Software installation ,
- Hardware installation,
- Achievement of a NOT function on 4 bits.

Flip-Flops :
- RS, D, JK.

ALU :
- Addition,
- Subtraction,
- logic AND.

Combinatory logic :
- Achievement of: AND, NOR, exOR functions.
- 7 segments decoder.

Counters / decounters :
- BCD binary counter / decounter ,
- Programmable BCD binary counter / decounter ,
- Offset register.

Complete functions :
- Electronic sequencer ,
- Chronometer,
- PIT-type interface on PC104 Bus.

Accessories :

USB lead,
Power Supply : 8 V AC, 2 Amp,
VHDL compiler, fitting, simulation.

---

didalab
ENSEIGNEMENT SUPERIEUR

Z.A. La Clef St Pierre - 5, rue du Groupe Manoukian 78990 ELANCOURT France
Tél. : 33 (0)1 30 66 08 88 - Télécopieur : 33 (0)1 30 66 72 20
e-mail : ge@didalab.fr - Web : www.didalab.fr