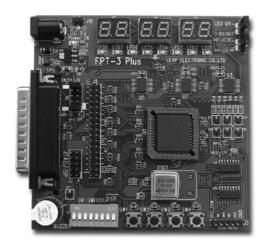
# CPLD/FPGA SIMPLE LOGIC CIRCUIT DESIGN BOARD



**FPT-3 Plus** 

FPT-3 Plus offers complete interface about CPLD/FPGA circuit and design. The user is able to integrate the logical circuit design into his product easily. With utilizing the simulation and design of the products, it is easily to examine out the problems of the circuit designs. There are several learning units on the product. Through this product, the user not only can experience how to establish the technique of the circuit by the basic component, but also can utilize the auxiliary design and simulation to achieve the result in studying.

### **Features**

- Exploit CPLD / FPGA hardware / software development system to learn the newest design of logical IC to instead of the complex hardware design of TTL/CMOS.
- Capable to use Circuit Graphic and VHDL to develop hardware circuit. Directly download the designed program from the development system to CPLD via printer port to operate independently.

### **Input Unit**

- 1. 8 logic DIP switch
- 2. 4 sets of negative pulse press button

### **Output Unit**

- 1. 8 SMD LED (low voltage drove)
- 2. 6 digits 7 segment display (Common anode: low voltage drove)
- 3. Buzzer x 1

# **Specifications**

- Support Altera CPLD MAX7000S devices series
  - 1. EPM7064SLC44-10
  - 2. PLD on EEPROM structure
  - 3. 5V working voltage
  - 4. Support 1250 logic gates and 64 LCs
  - 5. 32 I/O availably
- · System clock: 4.000MHz
- · JTAG/ISP programming interface
- Dimension: 100 x 115 x 21.8 mm
- · Weight: 500 g
- Input: 9V DC Adaptor

## **Optional Accessories**

- DC 9V/500mA Adaptor
- · Print-Cable (25 pin)

# **Experiment Content**

- Basic logic
  - 1. Logic experiment (DIP SW + LED)
  - 2. Relationship experiment (DIP SW + LED)
  - 3. Complier/Decoder
- Arithmetic logic circuit
- 1. Adder
- 2. Subtracter
- 3. Multiplexer
- · Frequency divide and count
- 1. 6 digits 7 segment display (Binary to Decimalism)
- 2. 8 LED (Binary to Decimalism)
- 3. Frequency divide test (LED)
- 4. All I/O test
- 5. Upward counter
- 6. Traffic light display
- 7. Simple electric piano
- 8. Hour-Minute-Second (H-M-S) timepiece
- 9. Motor Driver Controller

