

FPT-3 CPLD/FPGA Simple Logic Circuit Design Board



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.

Specifications

- Support Altera CPLD MAX7000S devices series
 1. EPM7064/32SLC44-10 (alternative)
 2. PLD on EEPROM structure

3. 5V working voltage
 4. Support 1250 logic gates and 64 LCs
 5. 32 I/O available
- System clock: 1.8432MHz
 - ISP programming interface

Hardware

- Dimension: 100 x 115 x 21.8 mm
- Weight: 500 g
- Input: 5V DC

Input Unit

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

Output Unit

1. 8 LED (low voltage drove)
2. Buzzer x 1

3. 2 digits 7 segment display (Common cathode: low voltage drove)

Experiment Content

- Basic logic
 1. Logic experiment (DIP SW + LED)
 2. Relationship experiment (DIP SW + LED)
 3. Compiler/Decoder
- Arithmetic logic circuit
 1. Adder
 2. Subtractor
 3. Multiplexer
- Frequency divide and count
 1. 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

Optional

- ALTERA EPM7064SLC44-10
- ALTERA EPM7032SLC44-10