

FPT-3 Plus

CPLD/FPGA Simple Logic Circuit Design Board

Introduction

The FPT-3 Plus offers a complete interface to study CPLD circuit interface. It lets the users load the logical circuits to the FPT-3 Plus easily. Utilizing the characteristics of this product, users can examine if the designed circuits are problematic. The FPT-3 Plus comes with a manual containing several units for studying.



Standard Accessories

FPT-3 Plus Main board.....x1

Optional Accessories

- DC 9V/500mA power adaptor
- 25-pin printer cable
- ALTERA EPM7064SLC44-10
- ALTERA EPM7032SLC44-10
- VHDL and Graphic circuit design the teaching material

Features

- Utilize CPLD/FPGA hardware/software development system to learn the newest design of logical IC instead of the complex hardware designs of TTL/CMOS.
- Capable in using Circuit Graphic and digital hardware descriptive syntax (VHDL, ABEL, and AHDL) to develop circuits, and directly download from original IC vendor's software via printer port.
- Able to download the designed software to the CPLD, thus FPT-3 Plus can operate in stand-alone mode.

Specification

Support Altera CPLD MAX7000S	EPM7064/32SLC44-10 (alternative)
Devices series	PLD on EEPROM structure
	5V working voltage
	Support 1,250 logic gates and 64 LCs
System clock	32 I/O available
Programming interface	4.000MHz
	JTAG/ISP
Power	DC 9V/500mA
Dimension	10cm x 11.5cm x 2.2cm
Weight	500g

Other Specification

Input Unit	1. Logic DIP switch 8 x 1
	2. Negative pulse press button x 4 sets
Output Unit	1. 8 LED (low voltage drove) x 1 set
	2. 6 digits 7 segment display (Common cathode: low voltage drove)
	3. Buzzer x 1 set

PC System Requirement

Operating System	Windows 98/2000/XP/Vista/32
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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
8. Hour, minute and second timer control
9. Step motor control