

LP-2900S

CPLD/FPGA Simple Digital Logic Circuit Design Experiment Board

Introduction

Nowadays, CPLD and FPGA have been the first-choice components for the designers. It is suitable for the designers on application for communication, industrial automation, intelligent instrument, image processing, extensive engine control, etc. In order to allow users have excellent experimental platforms, LEAP series has provided platforms based on Altera or XILINX. Enabling engineers to realize the designs of logical circuit from experimental units.

Test Content Combined logic design, simulation and test

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|-------------------|------------------|
| 1. Basic logic | 6. Multiplexer |
| 2. Deducter | 7. Adder |
| 3. Decoder | 8. Compiler |
| 4. Combined logic | 9. Demultiplexer |
| 5. Comparator | |

Sequential logic circuit design, simulation and test

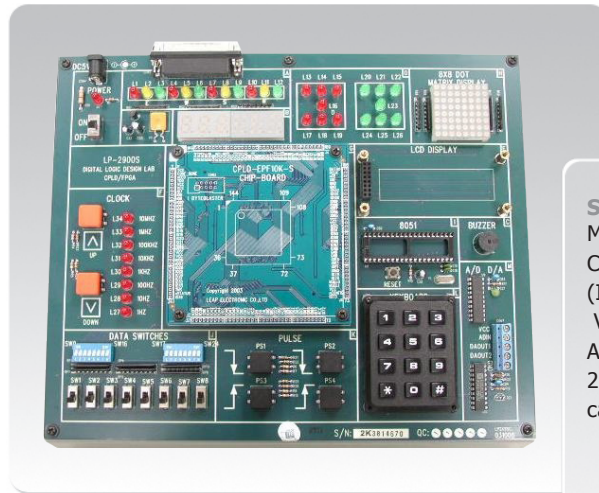
1. Flip-flop device
2. Shift register
3. Shift counter register
4. Synchronized counter
5. Non- Synchronized counter

Analog logic circuit design, simulation and test

1. A/D converter
2. D/A converter

Thematic Application Test

1. 8 × 8 dual color spot array LED control test.
2. Digital clock
3. Counter
4. Electronic alarm clock
5. Traffic light control
6. Electronic dice
7. Keyboard scan
8. LCD display control test
9. A/D, D/A converter test
10. Easy CPU design
11. VHDL/AHDL voice design
12. Matching 8051 thematic test



Standard Accessories
 Main unit.....x1
 CD.....x1
 (Including Altera Baseline V9.23 driver)
 AC power cord.....x1
 25-pin printer cable or USB cable.....x1

Specification

Communication	USB or Printer Port	Weight	3.5Kg
Power	100V AC~240V AC	Operating Altitude	up to 5000m
Frequency Range	50/60 Hz	Operating Humidity	90% (non-condensing)
Dimension	32cm x 22.6cm x 3.0/8.5cm	Temperature	+5°C ~ +45°C

Other Specifications

Chip Supported	ALTERA FLEX10K 10A (TQFP-144)		
Signal Generation Unit	1. Programmable frequency generator 2. Standard frequency 1K/10K/ 100K/1M/10MHz		
Logic Input Switch	1. 8 × 1 logic input original press point with light 2. 8 × 2 logic input Dip switch 3. 4 impulse press button generator (2 positive pulse; 2 negative pulse) 4. 3 × 4 array keyboard		
Output Unit	1. 8 × 8 dual color point array LCD display. 2. LCD 16 × 2 monitor 3. 6 digits 7 nodes monitor 4. 3 × 4 LED output 5. Buzzer output x 1 set		
Linear Unit	1. 8bit D/A converter x 2 sets 2. 8bit A/D converter x 1 set		
MPU unit	8051 and CPLD/FPGA match circuit test		

PC System Requirement

Operating System	Windows 98/2000/XP
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Application Program Range

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| 1. Fundamental logic program | 5. VLSI design program |
| 2. Digital circuit design program | 6. CPLD/FPGA chip design program |
| 3. Digital system design circuit program | 7. 8051 single chip program |
| 4. Micro processor principle program | 8. Thematic preparation |