

# CPE-MP300

## Micro Controller Training Kit



### FEATURES

- Equipped with various types of input switch and output display
- Basic to advanced level learning courses on the microprocessor
- Supports a broader range of hands-on practice by the external I/O extension interface
- Enables high speed downloading through the ISP cable, part of the CPE-MP300 accessories
- Convenient communication practices by the USB and RS-232C interfaces
- Remote control practice based on IR communication

### INTRODUCTION

The CPE-MP300 Micro Controller Training Kit does not require a separate ROM writer. It is fully capable of downloading a written computer program to the built-in flash memory. The Micro Controller Training Kit covers basic principles of AT89S52 MCU hardware and methods of address control. The user can learn both C programming language and assembly language through the course of writing computer programs and performing actual control practices. They can enjoy great educational effects through various control practices: display, I/O, IR communication, PS2 type keyboard, SRAM and EEPROM.

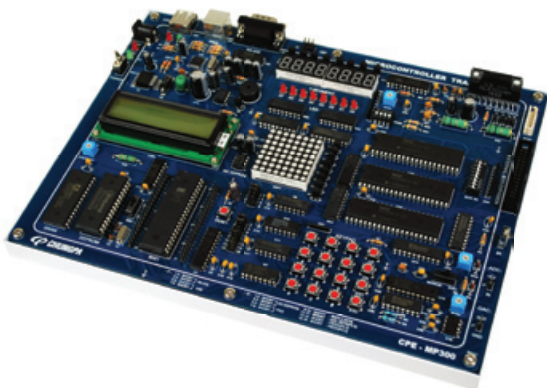
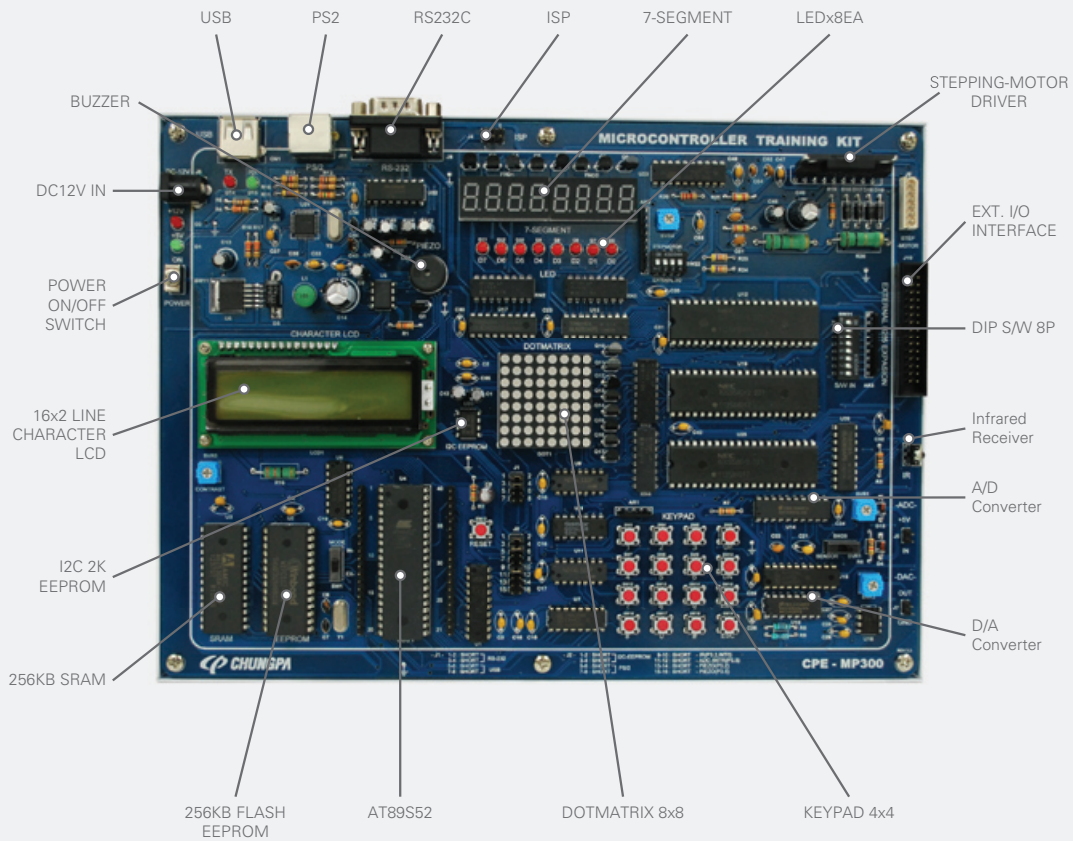
### EXPERIMENTAL CONTENTS

- Address BUS control
- 8255 control practices
- I/O port practices using LED
- 8 x 8 dot matrix display
- 7-segment and character LCD control
- 4 x 4 tact switch control
- 8255 input control with DIP switch
- Stepping motor control with the stepping motor driver
- EEPROM and SRAM
- EEPROM control by the I2C method
- PS2 keyboard control
- Sound practices with Piezo
- A/D converter and D/A converter
- Remote control by the infrared lamp
- Serial port communications (RS232 and USB)

### SPECIFICATIONS

• MP300 Master Unit	
MCU	AT89S52
Memory	SRAM (256KB) Flash EEPROM (256KB) I2C EEPROM
LED	5PIE & red color (8ea)
7-segment	8-digit & red color
Dot matrix	8 × 8 size & red color
Character LCD	16 characters × 2 lines (backlight)
A/D converter	12-bit resolution, MCP3202
D/C converter	8-bit resolution, DAC0800
Keypad	4 × 4
Stepping motor driver	1ea
DIP S/W	8-pole: 1ea
Buzzer	Piezo : 1ea
Communication	RS232C (1ea), USB (1ea), PS2 (1ea) and ISP (1ea)
IR receiver	1ea
Ext. I/O interface	26-pin connector :1ea
Power source	DC 12V adapter

## • Key Components of MP300 Master Unit



## STANDARD ACCESSORIES

- DC adapter : 1ea
- ISP cable : 1ea
- USB cable : 1ea
- RS-232C cable (PC interface) : 1ea
- Stepping motor : 1ea
- Application Software CD : 1ea
- IR remote control : 1ea
- Aluminum carrying case: 1ea
- User's guide & experimental manual: 1ea