

# WICE-SPI

## SPI Flash In System Programmer /Provided ISP and on socket two way programming/

### Introduction

As SPI Flash Memory provides the characteristics of high capacity, small size, low cost and easy to use, it becomes the main Serial Memory Device for the most of the applications on the market. To accompany with the increasing memory size, the users face the problem of programming and emulating SPI because of lacking a high efficiency and low cost tools.

Now, the WICE-SPI integrates the emulating and programming functions, no matter for development or production, it must be the best in-circuit and off-line solution for SPI Flash Memory.

### Features

- Provides two operation modes :
  1. Programmer :Possessing all functions of programmer and provide many kind of connected way. Users can easily finish the developing or production with the high flexibility and performance.
  2. Emulator : The WICE-SPI can be connected to the circuit board and emulate the SPI directly. The most important, it provides the "WATCH" function :After users compiling the loading file, the WICE-SPI will automatically program the BIOS and reset the circuit board.
- Special design protected function for wrong insertion. If the insertion wrong, the WICE-SPI will not act.
- Tiny, portable, personalized design, via USB for power supply, no environment limit.
- For small production, it able to be clustered 4 sets of WICE-SPI on a PC at the same time.

### Applications

- IC design house.
- Field application engineer.
- R&D for debugging and development.
- Factory for small production.
- Components distributor / retail store, for provide repair and small quantity programming service.



### Standard Accessories

- Main unit.....x1
- Socket board with DIP28 socket.....x1
- 2.54mm 11-pin ISP split cable.....x1
- Mini USB cable .....x1
- CD (Included driver and user's manual) .....x1

### Specification

Communication	USB2.0
Power	By USB
Dimension	8.9cm X 5.0cm X 1.6cm
Weight	60g
Operating Altitude	up to 5000m
Operating Humidity	90% (non-condensing)
Temperature	+5°C ~ 45°C

### PC System Requirement

Operating System	Windows XP / Vista 32
Processor	Pentium VI and above
Memory	512MB RAM and above
Hard Disk	30MB and above

### Vendor Supported

AMIC, ATMEL, APLUS, cFeon (EON), ESMT, EXCELESEMI, GIGADEVICE, MXIC, INTEL, NUMONYX, pFLASH , ST, SST, SPANSION, WINBOND, TSI etc.

### Performance

Density	4Mb	8Mb	16Mb	32Mb	64Mb	128Mb
Program	3.77s	4.81s	7.98s	16.59s	35.77s	66.86s
Verify	0.81s	1.58s	3.11s	6.20s	12.36s	24.70s
Program+Verify	4.58s	6.39s	11.09s	22.79s	48.13s	91.56s

### Optional Accessories

1. Adaptor LP-SOP-16PIN, 150mil
2. Adaptor LP-SOP-8PIN-B, 207mil
3. Adaptor LP-SOP-28PIN-B, 300mil
4. Adaptor LP-WSON8-5X6, 8pin, size 5x6
5. Adaptor LP-WSON8-6X8, 8pin, size 6x8
6. ISP SOP16 testclip
7. 1.27mm 2x4 SMT male header-10pieces
8. 1.27mm 2x8 cable with female header
9. 2.00mm 11-pin ISP split cable
10. ISP SOP8 test clip