

# K110

## SPI NOR/SPI NAND, and EEPROM IC Programmer

K110 is an engineering IC programmer that supports the majority Flash ICs on the market. Powered by USB port and does not need external power, also provides Command Line for software redevelopment. Palm size and space saving. It provides online or offline Flash IC programming through different adaptor. K110 offers user the best solution for development and low volume production.



### Features

#### ◆ High speed programming

- Built in high speed processor to achieve high programming speed.
- Programming Speed (P + V):

IC Type	IC P/N	Data Size	P+V Time (sec)	P+V Time (sec)
			Engineering Mode	Standalone Mode
SPI NOR	W25Q64FV	8MB	16	19
	GD25Q128B	16MB	46	52
SPI NAND	GD5F2GQ4UB	128MB	100	113

#### ◆ Support serial bus storage IC and package type.

- SPI NOR Flash, SPI NAND Flash, and EEPROM.
- SOP, WSON, USON, and BGA.

#### ◆ Support Serial Interface Protocol

- SPI, I<sup>2</sup>C, and uWire.

#### ◆ Support a variety of file formats

- Binary, Intel Hex, Motorola, and ROM, etc.

#### ◆ Support Command Line

- Provide Command line for software redevelopment.

#### ◆ Support Stand-alone mode

- IC programming without PC.

#### ◆ ATE Port

- With ISP adaptor, provide Busy/Pass/Error and Start pins for remote control.

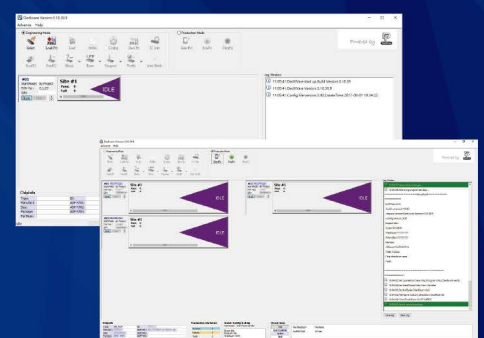
#### ◆ Support 1.2V low voltage IC.

#### ◆ Multiple programmers support to program IC in parallel.

### Command Line

```
Usage: k110 [options]
Options:
  -h, --help            display this help message
  -v, --version          display version information
  -c, --config=FILE     specify the configuration file
  -f, --file=FILE        specify the file to be programmed
  -t, --target=TARGET    specify the target IC
  -m, --mode=MODE        specify the programming mode
  -s, --speed=SPD        specify the programming speed
  -p, --pin=PIN          specify the pin number
  -e, --error=ERR        specify the error code
  -b, --busy=BSY        specify the busy signal
  -r, --remote=REM       specify the remote control pin
  -i, --isp=ISP          specify the ISP adaptor
  -l, --low=LOW          specify the low voltage mode
  -p, --parallel=PAR     specify the parallel programming mode
  -q, --quiet            quiet mode
  -v, --verbose          verbose mode
  -d, --debug            debug mode
  -o, --output=OUT       specify the output file
  -i, --input=IN         specify the input file
  -e, --erase            erase the IC
  -w, --write            write the IC
  -r, --read             read the IC
  -v, --verify           verify the IC
  -t, --test             test the IC
  -h, --help             display this help message
```

### Graphical User Interface



### Hardware

Architecture  
Programming Adaptor  
Programming Protocol  
Communication Interface  
Built-in Buffer  
Operation Interface  
Hardware Protection  
Vcc  
Current Limitation on Vcc

ARM and FPGA architecture  
ISP adaptor or socket adaptor  
SPI, I<sup>2</sup>C, and uWire.  
USB 2.0 in the programmer and ATE port on ISP adaptor.  
256MB  
Busy/Pass/Error LED indicators and Start Button.  
Overcurrent and ESD protection  
1.2~3.6V  
200mA

Supported IC Type

SPI NOR Flash,  
SPI NAND Flash,  
and EEPROM.

### Software

Operation Software  
Supported OS  
Supported File Type  
Programming Functions  
Extra Functions

Dediware  
Windows XP/Vista/7/8/8.1/10  
Binary, Intel Hex, Motorola, ROM.  
Erase, Blank Check, Program, Verify, Option/Protection.  
a. IC programming with multiple K110 programmers.  
b. Serial number programming (PC is required)  
c. Unique key file programming (PC is required)  
d. Log data output to file automatically (PC is required)

### Power

USB 5V or DC 5V

### Dimension

108mm\*67mm\*20mm

### Weight

70g

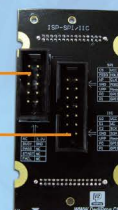
### Standard Accessories

1. K110 IC Programmer \*1
2. USB Cable \*1
3. AC 100~240V to DC 5V/1A Power Adaptor \*1
4. SPI/IIC ISP Adaptor with ISP Cable
5. CD-ROM (Include Dediware and User Manual) \*1

### Recommended Accessories

1. SPI/IIC DIP ISP Adaptor
2. uWire ISP Adaptor
3. EE100 10-Pin ISP Split Cable (2.00mm)
4. EE100 10-Pin ISP Split Cable (2.54mm)
5. EE100 ISP Cable
6. EE100 ISP Testclip(SO8)

ATE Port  
ISP



ISP Adaptor



IC Socket Adaptor

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