



WizPro200ST8 MCU Programmer User Manual

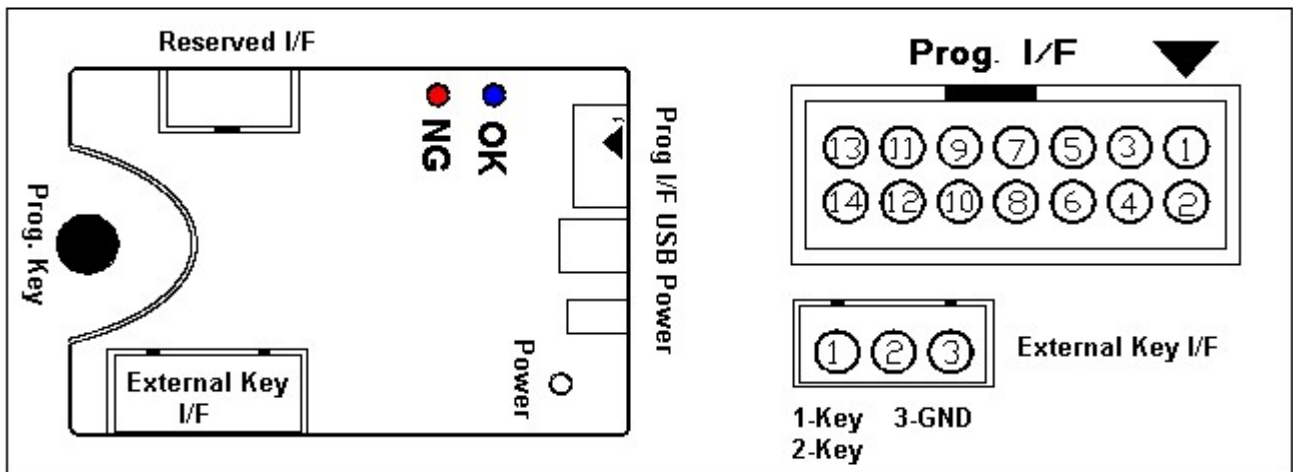
(For STM8xx,STM32xx series MCU V3.0)

1 Support Chips: STM8xxx/STM32xxx Series Flash MCUs.

2 Features:

- 2.1 Support STM8Sxxx, STM8Axxx, STM8Lxxx, STM32F0xxx, STM32F1xxx, STM32F2xxx, STM32F3xxx, STM32F4xxx, STM32Lxxx series Flash MCUs.
- 2.2 Support 3.3V or 5.0V Interface Voltage.
- 2.3 Support Chip Programming (Use socket), In-Circuit-Programming and On-Board-Programming.
- 2.4 Support PC On-Line and Off-Line Programming,
- 2.5 USB communication interface.
- 2.6 Automatic programming optimized, fast programming.
- 2.7 Support the Serial No. Programming, the address and initial S/N can be preset by user.
- 2.8 Support programming Quantities control, that is, user can configure the programmer to program preset quantities, during the off-line programming, the programmer will stop work if the programmable number is arrived. This function is very usefully for Solution Provider.
- 2.9 Easy to use, LED and Buzzer indicator to indicate the NG or OK.
- 2.10 USB online firmware upgrade.
- 2.11 Can be integrated into automatic equipment platform for the mass production.

3 Outline:



4 LED and Buzzer:

- 4.1 Power LED: When power On, this LED will be light.
- 4.2 Status LED(Red and Blue LED) :
 - 4.2.1 When Programmer has built the link with PC application, the red and blue led will turn on and buzzer will be long beep twice.
 - 4.2.2 During power On and with code in programmer:
 - The red and blue LEDs will blink alternatively during the internal data verification;
 - If error found during the internal data verification, the red LED will be on and 2 long beeps will be given out.
 - If internal data verification is successful, the blue led will be on and a long beep will be given out.
 - If only one long beep is given out, means the firmware need to be upgraded, you can download



the firmware from our website: www.maxwiz.com.cn

4.2.3 During programming:

- Red and blue LED blink alternatively, means programming is busy.
- Red LED on and buzzer give 3 short beeps, means programming is error.
- Blue LED on and buzzer gives one long beep, means programming is successful.

5 Key and Interface Description:

5.1 White key: Programming Key, press to start the programming.

5.2 Power Connector: Connect to 9~12V DC Adapter.

5.3 USB: Use to link to PC.

5.4 Programming Interface: SWIM or SWD Interface to connect to STM8x or STM32x chip.

6 Signal description for Prog. I/F:

6.1 For STM8x MCU (Use SWIM I/F)-14Pin Interface.

| | | | | | | | |
|---------|------|-----|-------|------|-----|--------|--------|
| Signal | GND | GND | GND | VOUT | NIL | LED_NG | NIL |
| Pin No. | 1 | 3 | 5 | 7 | 9 | 11 | 13 |
| Pin No. | 2 | 4 | 6 | 8 | 10 | 12 | 14 |
| Signal | SWIM | NIL | RESET | IND1 | GND | NIL | LED_OK |

6.2 For STM32x MCU (Use SWD I/F) .

| | | | | | | | |
|---------|-------|-------|-------|------|-----|--------|--------|
| Signal | GND | GND | GND | VOUT | NIL | LED_NG | NIL |
| Pin No. | 1 | 3 | 5 | 7 | 9 | 11 | 13 |
| Pin No. | 2 | 4 | 6 | 8 | 10 | 12 | 14 |
| Signal | SWDIO | SWCLK | RESET | IND1 | GND | NIL | LED_OK |

6.3 For STM8x、STM32x MCU (Use SWIM/SWD)-16Pin Interface

| | | | | | | | | | |
|---------|------------|-----------|-------|--|------|------|--------|--------|-----|
| Signal | GND | NIL | NIL | | VOUT | IND2 | LED_OK | LED_NG | NIL |
| Pin No. | 1 | 3 | 5 | | 7 | 9 | 11 | 13 | 15 |
| Pin No. | 2 | 4 | 6 | | 8 | 10 | 12 | 14 | 16 |
| Signal | SWIM/SWDIO | NIL/SWCLK | RESET | | NIL | NIL | NIL | Key IN | NIL |

Note:

1. Pin 2: SWIM signal for STM8x or SWDIO signal for STM32xx.



2. Pin 4: SWCLK signal for STM32x only.
3. Pin 11: NG LED indicator output.
4. Pin 14: OK Led indicator output.
5. Pin 1,3,5,10: GND Signal.
6. Pin 6: Reset signal output for STM8x, for STM32x, it is not necessary.
7. Pin 7: VDD Output, 3.3V or 5.0V is selectable by PC application.
8. Other Pins: Do not connect anything.

7 Off-line Programming:

- 7.1 Connect the Programmer to PC with USB.
- 7.2 Start WizPro200STM8 PC Application, select STM8x or STM32x, then select the chip name, upload the object binary file(default is .s19 format).
- 7.3 If necessary, preset the Option Byte and corresponding configuration (such as Serial No., Programming Quantity and so on).
- 7.4 Click "Download" button to download all data and setup to programmer.
- 7.5 Disconnect the programmer from the PC and Re-Power on the programmer, if all data is ok, one short beep is heard and blue LED is on.
- 7.6 Connect programmer to target board or IC socket with programming cable.
- 7.7 Press white key to start program, if program successfully, the red LED off and blue LED on and buzzer will give one short beep; If program failed, the red LED on and blue LED off and the buzzer will give three short beeps;
- 7.8 If serial No. function is enabled, the programmer will write the serial No. data to the specified chip memory address.
- 7.9 If Programming quantities function is enabled, the programmer will not response to the key press when the preset quantity is arrived and the blue LED and red LED will blink alternatively and buzzer will give two short beeps.
- 7.10 Note: Only one object file can be downloaded each time.

8 On-Line Programming with PC:

- 8.1 Connect the Programmer in USB to PC.
- 8.2 Start WizPro200ST8 PC Application, select STM8x or STM32x, then select the chip name, upload the object binary file(default is .s19 format).
- 8.3 Setup the option Byte according to your design.
- 8.4 Click on-line button to do the Blank check (STM32x Only), Erase (Stm32x Only), Programming, Verify and Option Byte Write.

9 External Key I/F Description:

- 9.1 External Key is useful for the mass production, you can use the external key with an external line instead of press the white programming key.
- 9.2 The programmer can be integrated into MULTIPLE IN ONE platform[see example PIC 1] for the mass production, one operator can operate multiple programmer at the same time;



- 9.3 For the on-board programming, the programming key can be extend to the location for the operator's convenience, the programmer can be integrated into the general mass production platform with 2 LED signal and PIN 3 and PIN 4 connect to the rack ,

10 Special Remarks:

- 10.1 If you use the 5V Voltage for the on-line programming, please use the external power to the destination board;
- 10.2 If you use the 3.3 Voltage for the In-Circuit-Programming, the external power is no need.

11 Package List:

- 11.1 WizPro200ST8 Programmer: 1Set.
- 11.2 9V AC-DC adapter: 1 PCS.
- 11.3 USB cable: 1 PCS.
- 11.4 14-Pin Programming Cable: 1PCS.
- 11.5 WizPro200ST8 User Manual: 1 Unit.
- 11.6 CDROM: 1PCS.

12 Characteristic;

- 12.1 Input Voltage: DC 9~15V.
- 12.2 USB1.2or above.
- 12.3 Output voltage: 3.3V or 5.0V $\pm 0.3V$.
- 12.4 Max output Current: 300mA.
- 12.5 Working Temperature: -20°C ~ 70 °C.
- 12.6 Internal Flash Erase : Endurance 100,000 Cycles;
- 12.7 Internal Flash Data Retention: More than 10years.