

# ISP2ZIF Programming adapter



#### **Reference Manual**

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## 1 ISP2ZIF

### 1.1 Introduction

ISP2ZIF is an adapter for programming of all types of devices with in-circuit serial programming (ISP) in a DIP socket, especially with the PRESTO and FORTE programmers (by ASIX s.r.o.). The adapter is provided with the zero insertion socket (ZIF).

#### 1.2 Usage

Insert a device to be programmed into the ZIF socket. Use any of two programming connectors of the adapter to connect the PRESTO or FORTE programmer via ICSPCAB8 cable provided with the programmer.

Connect programming signals to corresponding pins of the device by plugging jumpers to appropriate positions in the pin array. Any of seven signals of the ISP interface (VPP, VDD, GND, DATA, CLK, MISO and LVP) can be connected to any of pins of the device. Device pins are DIP40-like numbered and ISP signals are labeled on the PCB. Connection is crossed, i.e. layout of the signals of device pins and ISP signals are routed in lines and columns, respectively.

Selected pin is connected to desired signal by plugging a jumper to the corresponding position.

**Caution:** Incorrect jumper settings can cause damage to the programmer and the device.

### 1.3 Examples of settings

Examples are intended for user guidance only (for understanding how the pin array works). User's connection must always correspond to the device datasheet.

#### 1.3.1 PIC microcontrollers



Fig. 1: 40-pin PIC microcontroller



Fig. 2: 28-pin PIC microcontroller



Fig. 3: 18-pin PIC microcontroller



Fig. 4: 8-pin PIC12 or PIC16

#### 1.3.2 AVR microcontroller

**Note:** When there is no other clock signal connected to the AVR MCU, only devices with internal oscillator set can be programmed.



Fig. 5: ATtiny2313, ATtiny4313



Fig. 6: ATtiny26, ATtiny261, ATtiny461, ATtiny861



Fig. 7: ATtiny12, ATtiny13, ATtiny15, ATtiny25, ATtiny45, ATtiny85



Fig. 9: ATmega8, ATmega88, ATmega168, ATmega328



Fig. 10: ATmega16, ATmega32, ATmega164, ATmega324, ATmega644



Fig. 11: ATmega162, ATmega8515, ATmega8535, AT90S8515, AT90S8535, AT90S4414

Thanks for AVR examples and coloring of the pictures belong to Miroslav Lízner.

#### 1.3.3 ISP2ZIF templates







## **Document history**

| Document<br>revision | Modifications made                           |
|----------------------|--|
| 2015-06-10           | Initial revision.                            |
| 2020-12-29           | Address updated.                             |
| 2023-03-13           | 8pin PIC picture description has been fixed. |