

# FlashPro4 Device Programmer Quick Start Card

## Kit Content

This guickstart card applies only to the FlashPro4 device programmer.

### **Table 1. Kit Content**

Quantity	Description	
1	FlashPro4 programmer standalone unit	
1	USB A to mini-B USB cable	
1	FlashPro4 10-pin ribbon cable	

### **Software Installation**

If you are already using Microchip Libero<sup>®</sup> Integrated Design Environment (IDE), you have the FlashPro or FlashPro Express software installed as part of Libero IDE. If you are using the FlashPro4 device programmer for standalone programming or on a dedicated machine, download and install the latest release of the FlashPro and FlashPro Express software from the Microchip website. The installation will guide you through the setup. Complete the software installation before connecting the FlashPro4 device programmer to your PC.

Software releases: www.microsemi.com/product-directory/programming-and-debug/4977-flashpro#software.

### Notes:

- 1. Libero IDE v8.6 SP1 or FlashPro v8.6 SP1 are the minimum versions required to run FlashPro4.
- 2. The last version of the FlashPro programming software is FlashPro v11.9. Starting from Libero SoC v12.0 release, Microchip is supporting FlashPro Express programming software only.

## **Hardware Installation**

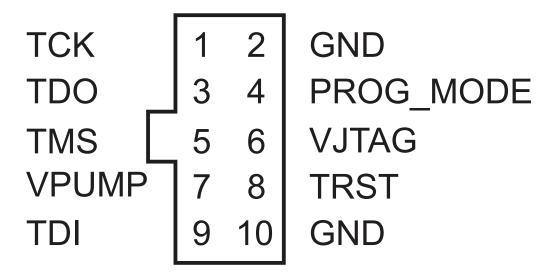
After installing the software successfully, connect one end of the USB cable to the FlashPro4 device programmer and the other end to your PC's USB port. The Found Hardware Wizard will open twice. Use the wizard to install the driver automatically (recommended). If the Found Hardware Wizard cannot find the drivers automatically, then ensure you have properly installed the FlashPro or FlashPro Express software prior to installing the hardware. If the drivers still cannot be installed automatically, then install them from a list or specific location (advanced).

If FlashPro or FlashPro Express was installed as part of the Libero IDE default installation, the drivers are located at C:/Libero/Designer/Drivers/Manual. For a standalone FlashPro default installation, the drivers are located at C:/Actel/FlashPro/Drivers/Manual. Microchip recommends the automatic driver installation.

### Note

FlashPro4 uses pin 4 of the JTAG connector whereas FlashPro3 had no connection to this pin. FlashPro4 pin 4 of the JTAG header is a PROG\_MODE output drive signal. PROG\_MODE toggles between programming and normal operation. The PROG\_MODE signal is intended to drive an N or P Channel MOSFET to control the output of a voltage regulator between the programming voltage of 1.5V and normal operation voltage of 1.2V. This is required for ProASIC®3L, IGLOO® V2, and IGLOO PLUS V2 devices because, although they can operate at 1.2V, they must be programmed with a VCC core voltage of 1.5V. Please refer to the FlashPro4 Backward Compatibility with FlashPro3 and Using FlashPro4 PROG\_MODE for 1.5V Programming of ProASIC3L, IGLOOV2, and IGLOO PLUS V2 Devices application brief for more information.





Pin 4 on FlashPro4 programmers MUST NOT be connected or used for anything other than its intended purpose.

# **Common Issues**

If the On LED does not light up after FlashPro4 driver installation, the driver might not be installed correctly and you must troubleshoot the installation. For more information, refer to the FlashPro Software and Hardware Installation Guide and the "Known Issues and Workarounds" section of the FlashPro software release notes: www.microsemi.com/product-directory/programming-and-debug/4977-flashpro#software. FlashPro4 may not operate correctly if pin 4 of the JTAG connector is improperly used. See the above note.

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