

# FlashPro4 Device Programmer Quickstart Card

### Kit Contents

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

## 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 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 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:/Microsemi/FlashPro/Drivers/Manual. Microsemi 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 1.5 V and normal operation voltage of 1.2 V. This is required for ProASIC®3L, IGLOO® V2, and IGLOO PLUS V2 devices because, although they can operate at 1.2 V, they must be programmed with a VCC core voltage of 1.5 V. For all other devices, leave this pin (PIN4 - PROG\_MODE) unconnected (NC). For more information, see FlashPro4 Backward Compatibility with FlashPro3.



Pin 4 on FlashPro4 programmers must not be connected or used for other than their intended purpose.

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#### 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, see the FlashPro Software and Hardware Installation Guide and the "Known Issues and Workarounds" section of the FlashPro Software Release Notes.

FlashPro4 may not operate correctly if pin 4 of the JTAG connector is improperly used. See the previous note.

# Software and Licensing

Libero® SoC Design Suite offers high productivity with its comprehensive, easy-to-learn, easy-to-adopt development tools for designing with Microsemi's low power Flash FPGAs and SoC. The suite integrates industry standard Synopsys Synplify Pro® synthesis and Mentor Graphics ModelSim® simulation with best-in-class constraints management and debug capabilities.

Download the latest Libero SoC release

www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-soc#downloads

Generate a Libero Silver license for your kit

www.microsemi.com/products/fpga-soc/design-resources/licensing

# **Documentation Resources**

For more information about the FlashPro4 Device Programmer, see the documentation at www.microsemi.com/product-directory/programming/4977-flashpro#documents

# Support

Technical support is available online at www.microsemi.com/soc/support and by email at soc\_tech@microsemi.com

Microsemi sales offices, including representatives and distributors, are located worldwide. To find your local representative, go to http://www.microsemi.com/salescontacts



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