

ChipPro FPGA Device Programmer Quick Start Guide

Americas

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 Boston - 774-760-0087
 Chicago - 630-285-0071
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Europe

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 Denmark - Copenhagen - 45-4485-5910
 Finland - Espoo - 358-9-4520-820
 France - Paris - 33-1-69-53-63-20
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 Germany - Haan - 49-2129-3766400
 Germany - Heilbronn - 49-7131-72400
 Germany - Karlsruhe - 49-721-625370
 Germany - Munich - 49-89-627-144-0
 Germany - Rosenheim - 49-8031-354-560
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 Italy - Milan - 39-0331-742611
 Italy - Padova - 39-049-7625286
 Netherlands - Drunen - 31-416-690399
 Norway - Trondheim - 47-7288-4388
 Poland - Warsaw - 48-22-3325737
 Romania - Bucharest - 40-21-407-87-50
 Spain - Madrid - 34-91-708-08-90
 Sweden - Gothenberg - 46-31-704-60-40
 Sweden - Stockholm - 46-8-5090-4654
 UK - Wokingham - 44-118-921-5800

Asia/Pacific

Australia - Sydney - 61-2-9868-6733
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 Malaysia - Penang - 60-4-227-8870
 Philippines - Manila - 63-2-634-9065
 Singapore - 65-6334-8870
 Taiwan - Hsin Chu - 886-3-577-8366
 Taiwan - Kaohsiung - 886-7-213-7830
 Taiwan - Taipei - 886-2-2508-8600
 Thailand - Bangkok - 66-2-694-1351
 Vietnam - Ho Chi Minh - 84-28-5448-2100

TABLE 1: KIT CONTENTS—CHIPPRO BASEBOARD (CP-PROG-BASE)

Quantity	Description
1	ChipPro Programming baseboard
1	FlashPro 6 Programmer (FLASHPRO6)
1	12V, 5A AC power adapter and cord
1	Quick start card

TABLE 2: KIT CONTENTS—CHIPPRO SOM (CPSOM-MPFXXXX-XXXXXX)

Quantity	Description
1	ChipPro SoM for MPFXXXX-XXXXXX

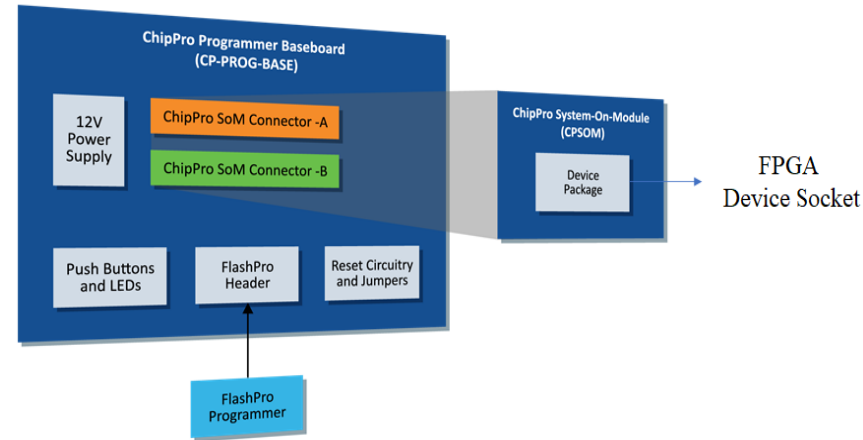
Overview

ChipPro is a quick and easy device programming solution for Microchip's FPGA devices. The ChipPro programmer baseboard hosts a connector to plug into the FlashPro6, our newest programmer that supports Linux and Windows platforms, in conjunction with Libero® SoC, FlashPro Express, and SmartDebug software.

FlashPro supports all the FPGA devices in PolarFire® SoC, PolarFire, SmartFusion®2, IGLOO®2 and RTG4™, and RT PolarFire series.

System on modules (SoM) corresponding to each package size and type in Microchip's portfolio of FPGAs can also be connected to the baseboard to program the FPGA package.

FIGURE 1: MICROCHIP CHIPPRO-FPGA DEVICE PROGRAMMER



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Jumper Settings

The ChipPro FPGA device programmer comes with the following default jumper settings.

TABLE 3: JUMPER SETTINGS

Jumper	Pin	Factory Default
J6, J7	2-3	Short 1-2: Indicates that FPGA device is not loaded on to the ChipPro SoM, recommended only for board bring-up (without Silicon) Short 2-3: Indicates that an FPGA device is loaded on to the socket of the ChipPro SOM board
J26	1-2	Open
J17, J18, J19, J20	1-2	Short 1-2: Enables the SPI programming header Short 2-3: Enables the SPI Flash DB connector
J21	1-2	Enables SPI
	1-2	Configures I/O
J23	1-2	Reserved

Running the Demo

Refer to the following documents to familiarize with the FlashPro programmers and the corresponding device support before getting started with ChipPro.

TABLE 4: DOCUMENT

Documents	Path
FlashPro Express device support	https://www.microsemi.com/product-directory/programming-and-debug/4977-flashpro#device-support
FlashPro Express User Guides	https://www.microsemi.com/product-directory/programming-and-debug/4977-flashpro#documents

To run the demo, follow these steps.

1. Connect the socketed ChipPro SoM board (for the device and package type of your project) to the baseboard (align with J3 and J4 Connectors on the ChipPro baseboard).
2. Insert the FPGA device (must correspond to the ChipPro SoM mentioned in the previous step), to be programmed, into the socket on the ChipPro SoM. Ensure that the polarity of the FPGA device and the socket matches.
3. Connect the 12V power supply to J5.
4. Connect the USB port, on the FlashPro6 programmer, to a PC using the USB cable provided with the programmer.
5. Connect the JTAG port, on the FlashPro6 programmer, to the ChipPro base-

board using the J27 FlashPro header on the baseboard.

6. Turn ON the **SW1** switch by sliding.
7. Open FlashPro Express programming software on the PC, navigate and select the appropriate programming file to program the device.



Software and Licensing

Starting from Libero SoC v11.5 release, FlashPro Express is also installed as part of [Libero SoC](#). Libero SoC requires a license to create and program the device.

FlashPro Express Standalone is also available as part of the [Programming and Debug](#) tools. No additional Licensees are required for the FlashPro Express standalone software.

Documentation Resources

For more information about the ChipPro, visit: <https://www.microsemi.com/existing-parts/parts/152642>

Support

Request technical support at <https://soc.microsemi.com/Portal/Default.aspx>