# mikroProg<sup>™</sup> for PSoC®5LP

mikroProg<sup>™</sup> is a fast USB programmer and debugger. Smart engineering allows mikroProg<sup>™</sup> to support all PSoC<sup>®</sup> 5LP microcontroller family.











## TO OUR VALUED CUSTOMERS

I want to express my thanks to you for being interested in our products and for having confidence in MikroFlektronika.

The primary aim of our company is to design and produce high quality electronic products and to constantly improve the performance thereof in order to better suit your needs.

Nebojsa Matic General Manager

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## Introduction to mikroProg<sup>™</sup>



mikroProg<sup>®</sup> for PSoC<sup>®</sup> is a fast programmer and hardware debugger. It's a great tool for programming the Cypress<sup>®</sup> PSoC<sup>®</sup> 5LP microcontroller family. Outstanding performance, easy operation, elegant design and affordable price are its top features.

# Key Features

## What you see

- 01 Flat cable
- USB MINI-B connector
- DATA transfer indication LED
- 04 ACTIVE indication LED
- 05 LINK indication LED
- 06 POWER indication LED



## 1. Installing Drivers and Programming Software

Before you start working with mikroProg<sup>®</sup> for PSoC<sup>®</sup> 5LP, you'll need to download PSoC<sup>®</sup> Programmer<sup>®</sup>, a programming application with the necessary drivers included. Download it from Cypress' website (registration required):

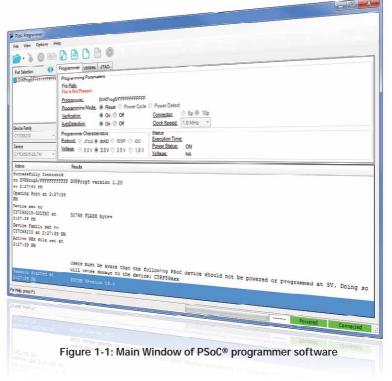


http://www.cypress.com/?rID=38050

Make sure to disconnect mikroProg before installing drivers. Double click on the setup file to begin installation of the programming software.



After the installation is complete, you can connect the programmer to your PC using the USB cable provided in the package.



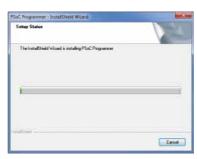
### Software installation wizard



Start Installation



O4 Accept license agreement



2 Setup



05 Installation in progress



Installation type



06 Finish installation

## 2. Connecting to the Target Device



mikroProg connects to the target device through a IDC10 JTAG connector, as shown in Figure 2-1. To ensure a proper connection, pay attention to the IDC10 connector pinout. Every pin has a different purpose, and the IDC10 connector is marked with a small knob and incision between pins number 9 and 7, Figure 3-1.

## 3. Connector Pinout

- 01 VCC-3.3V MCU power supply
- OB GND Ground
- 05 GND Ground
- 07 GND Ground
- GND Ground
- O2 SWDIO SWD data I/O
- 04 SWDCK SWD clock
- 06 SWO Serial wire output
- OB NC Not connected
- 10 XRES System Reset

Programming/ debugging lines

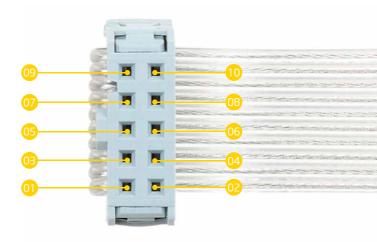


Figure 3-1: Female connector pinout

## 4. Connection Schematic Example

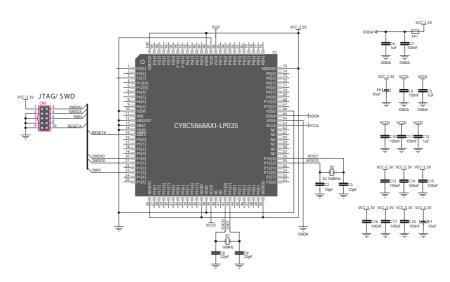


Figure 4-1: Connection schematic for 100-pin CY8C5868AXI-LP035 MCU via 2x5 male headers

This example demonstrates connections with one of the most popular supported microcontrollers CY8C5868AXI-LPO35. MCU uses SWDIO, SWDCK, TWO and RESET lines for SWD programming.

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