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## SIMXXXXX PRECISION32™ MCU DEVELOPMENT KIT QUICK-START GUIDE FOR KITS FEATURING THE UNIFIED DEVELOPMENT PLATFORM (UDP)

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### Kit Contents

There are four varieties of general purpose UDP development kits. The content of these kits is listed below:

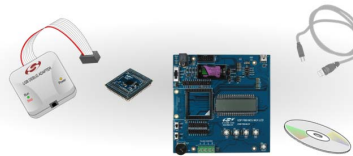
#### Development Kit

- UDP MCU card.
- Silicon Laboratories USB Debug Adapter.
- Supporting cables.
- SiMxxxxx DK Quick Start Guide (this document).



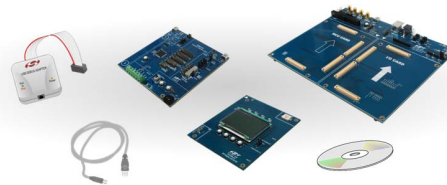
#### Development Kit with Pico Board

- UPPI Pico Board for the MCU.
- UDP MCU card.
- Silicon Laboratories USB Debug Adapter.
- Supporting cables.
- SiMxxxxx DK Quick Start Guide (this document).



#### Enhanced Development Kit

- UDP MCU card.
- UDP Motherboard.
- UDP I/O card(s).
- Silicon Laboratories USB Debug Adapter.
- Supporting cables.
- SiMxxxxx DK Quick Start Guide (this document).



#### Enhanced Development Kit with Pico Board

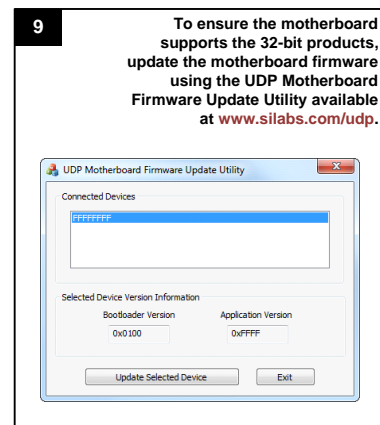
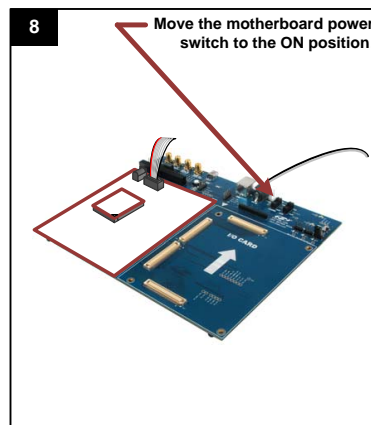
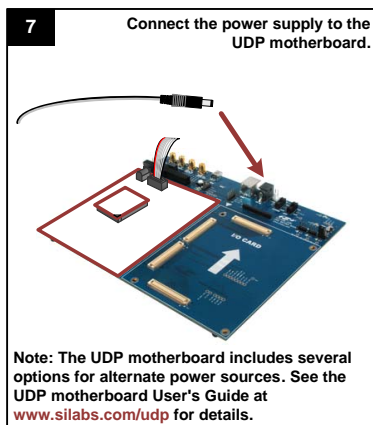
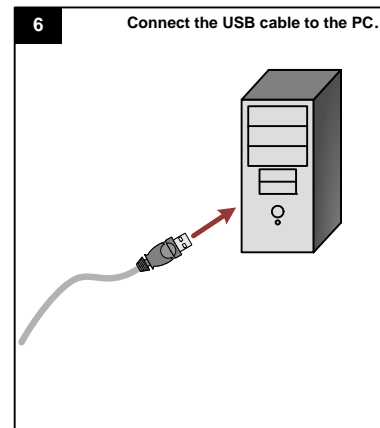
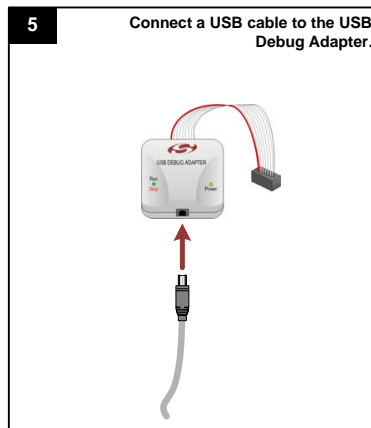
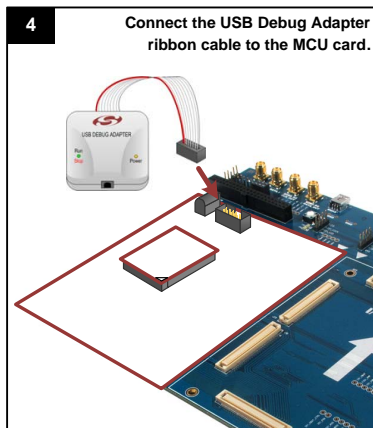
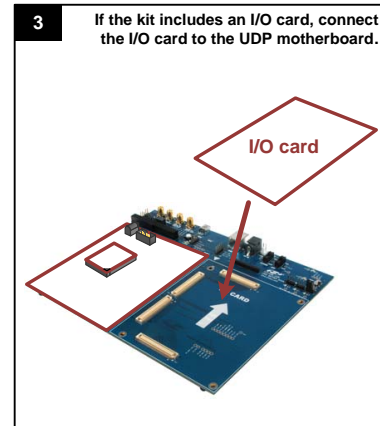
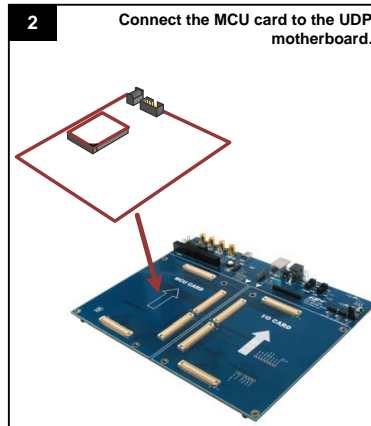
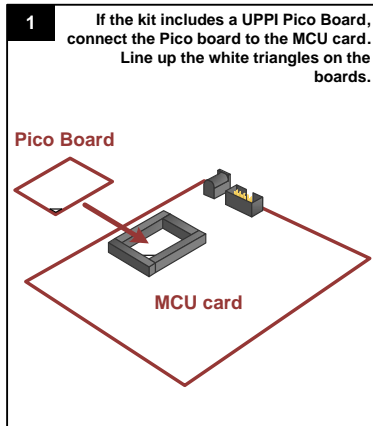
- UPPI Pico Board for the MCU.
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Download all Precision32™ 32-bit microcontroller software, documentation, and resources at

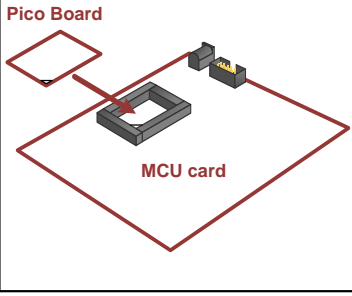
[www.silabs.com/32bit-mcu](http://www.silabs.com/32bit-mcu)  
[www.silabs.com/32bit-software](http://www.silabs.com/32bit-software)

## Hardware Setup with the UDP Motherboard

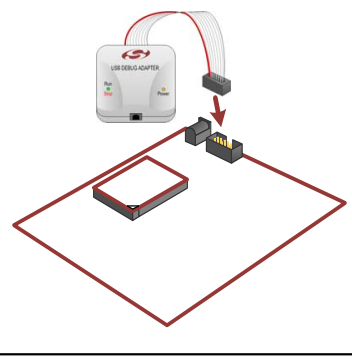


## Hardware Setup with the MCU Card Alone

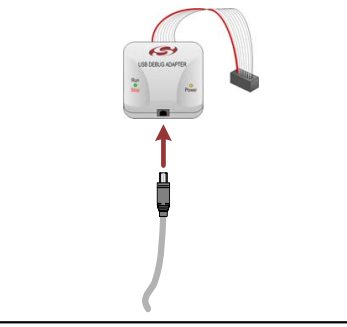
**1** If the kit includes a UPPI Pico Board, connect the Pico board to the MCU card. The white triangles on the boards should line up.



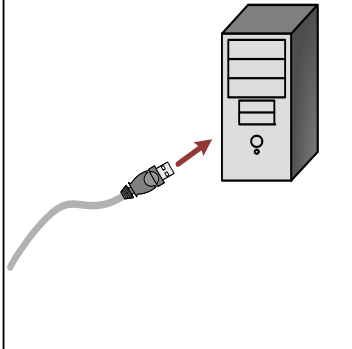
**2** Connect the USB Debug Adapter ribbon cable to the MCU card.



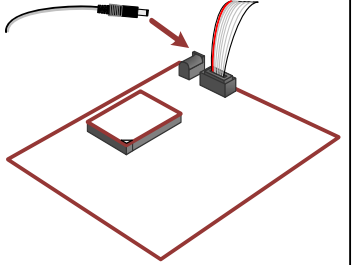
**3** Connect a USB cable to the USB Debug Adapter.



**4** Connect the USB cable to the PC.



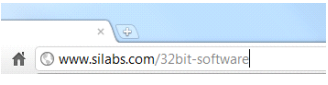
**5** Connect the power supply to the MCU card.



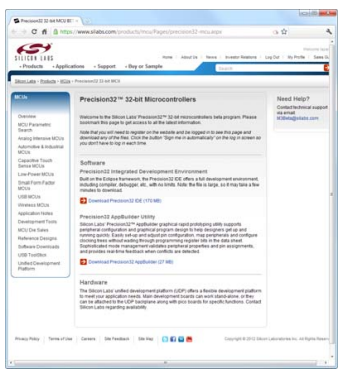
**Note:** Some MCU cards include options for alternate power sources. See the UDP MCU card User's Guide at [www.silabs.com/udp](http://www.silabs.com/udp) for details.

## Software Installation

**1** Navigate to the Precision32 software download website: [www.silabs.com/32bit-software](http://www.silabs.com/32bit-software)

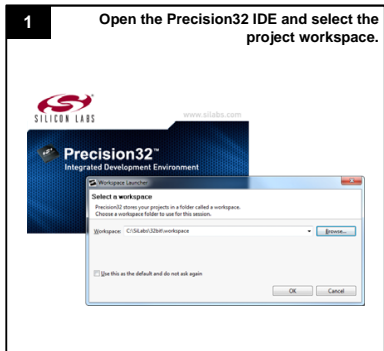


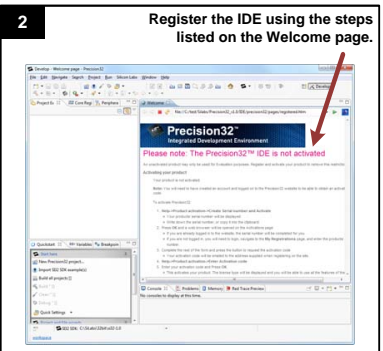
**2** Download and install the Precision32 IDE and AppBuilder programs.

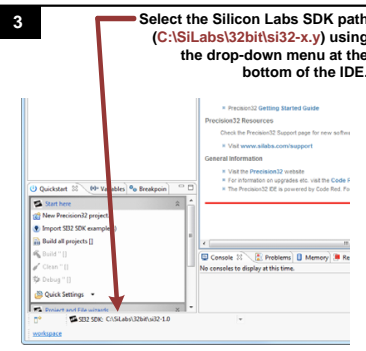


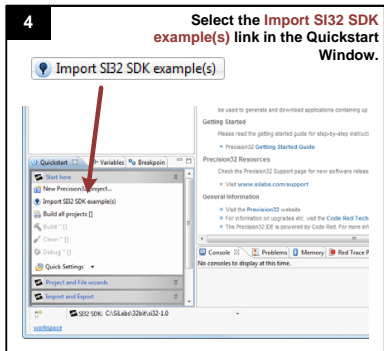
## Using the Precision32 IDE

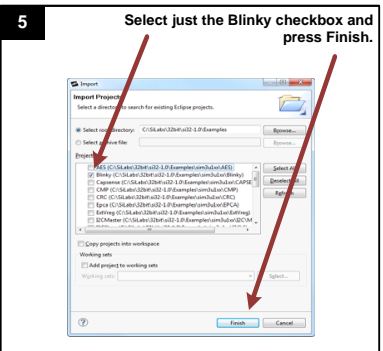
- 1** Open the Precision32 IDE and select the project workspace.

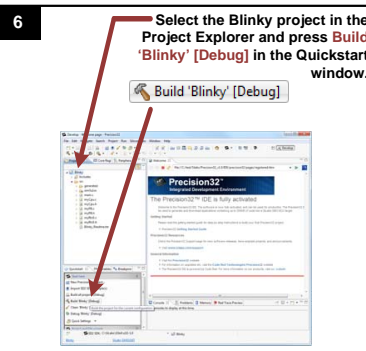

- 2** Register the IDE using the steps listed on the Welcome page.

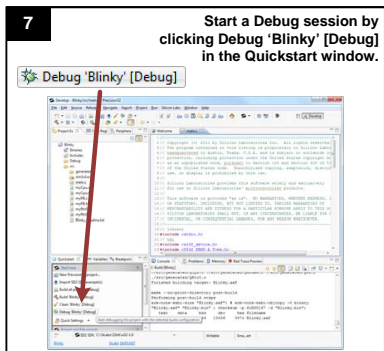

- 3** Select the Silicon Labs SDK path (C:\Silabs\32bit\sls32-x.y) using the drop-down menu at the bottom of the IDE.

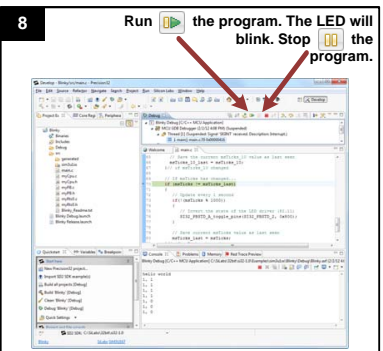

- 4** Select the **Import SI32 SDK example(s)** link in the Quickstart Window.

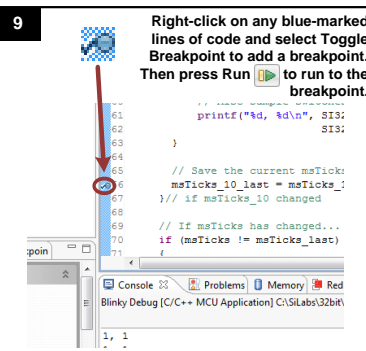

- 5** Select just the Blinky checkbox and press Finish.

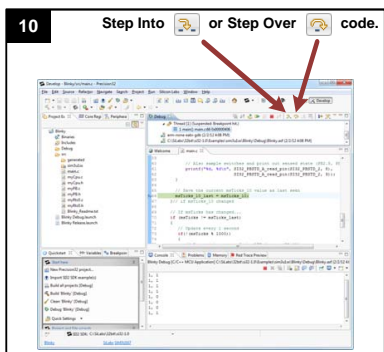

- 6** Select the Blinky project in the Project Explorer and press **Build 'Blinky' [Debug]** in the Quickstart window.

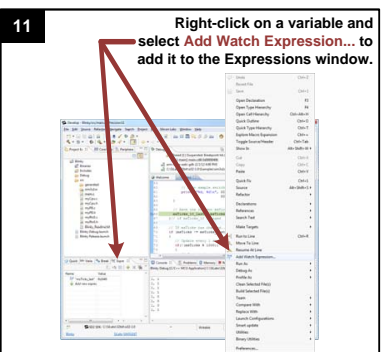

- 7** Start a Debug session by clicking **Debug 'Blinky' [Debug]** in the Quickstart window.

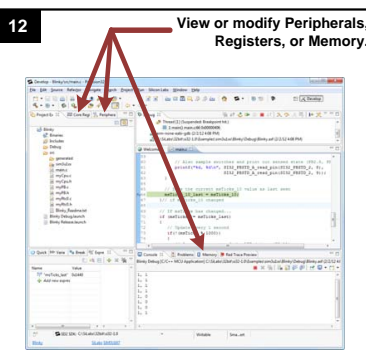

- 8** Run the program. The LED will blink. Stop the program.


- 9** Right-click on any blue-marked lines of code and select **Toggle Breakpoint** to add a breakpoint. Then press **Run** to run to the breakpoint.


- 10** Step Into or Step Over code.


- 11** Right-click on a variable and select **Add Watch Expression...** to add it to the Expressions window.


- 12** View or modify Peripherals, Registers, or Memory.



If you are having trouble installing and/or using the development kit, please use the following support resources:

- All Precision32 software and resources are downloadable at [www.silabs.com/32bit-mcu](http://www.silabs.com/32bit-mcu) and [www.silabs.com/32bit-software](http://www.silabs.com/32bit-software)
- UDP Motherboard, MCU card, Pico Board, and I/O card User's Guides ([www.silabs.com/udp](http://www.silabs.com/udp))
- Application Note "AN667: Getting Started with the Silicon Labs Precision32 IDE" (contains instructions to register the Precision32 IDE)
- Latest versions of 32-bit Application Notes are available at [www.silabs.com/32bit-mcu](http://www.silabs.com/32bit-mcu)
- MCU Knowledgebase (available at [www.silabs.com](http://www.silabs.com) → SUPPORT)
- Contact an Applications Engineer using the online information request form (available at [www.silabs.com](http://www.silabs.com) → SUPPORT).