

TI C2000 Toolbox First-time setup

This document describes how to install the package and configure the TI C2000 settings. Once all required software is installed, setup is done with several clicks.

It is recommended to perform this before using any peripheral component.

Hardware requirements

Currently supported TI C2000 devices:

- LaunchPad devices:
 - [F28379D](#),
 - [F28069M](#),
 - [F28P650](#)(DK9),
 - [F280049C](#),
 - [F280039C](#),
 - [F280025C](#),
 - [F2800137](#);
- ControlCard devices:
 - [F28379D](#)
 - [F28335](#).

Software requirements

TI C2000 Toolbox requires following software:

1. Typhoon HIL Control Center version 2026.2 or newer
2. Software provided by [Texas Instruments](#):
 - Code Composer Studio™(CCS) – version 11.0.0.00012 or newer – [download](#)
 - C2000Ware for C2000 MCUs – version 4.0.0.0 or newer – [download](#)

Configure root paths

In order to compile the generated code, TI C2000 Toolbox relies on MCU vendor-provided software:

- Compiler in use, located in CCS installation folder,
- Flash algorithm resources, located in CCS installation folder,
- Bitfields and registers definitions, located in device support files in C2000Ware

Paths to these folders are provided using [TI C2000 Setup](#) component. When loading a that contains [TI C2000 Setup](#) component **for the first time after installing the toolbox**. For this reason, **model load time will be longer for the first time**. If, for some reason, component fails to detect these paths, user should configure the CCS *root path* and C2000Ware *root path*, as shown in **Figure 2**.

If default folder naming is used, CCS root path should end with 'ccs<x>' folder, x being the version of CCS installed. If default naming is used, C2000Ware root path ends with 'C2000Ware_<y>', y being the name of C2000Ware version installed.

Therefore, for CCS version 11.0.0 and C2000Ware 5.0.0.0 and default installation paths, property values should be set to:

- **CCS root path** – C:\ti\ccs1100
- **C2000Ware root path** – C:\ti\c2000\C2000Ware_5_00_00_00

Paths are displayed in *Settings* tab of [TI C2000 Setup](#) component, if user wants to check them.

Write settings

In order to write settings, an example model can be used. Example models are accessible through [Example Explorer](#) (Figure 1). In **Blinky** project example, [TI C2000 Setup](#) component can be double-clicked and used to provide the paths, as explained in previous section.

Upon package installation, these paths are not written yet. Double-clicking on the [TI C2000 Setup](#) component will trigger a mechanism that checks if the paths are written, and a specialized window will appear if they are not (Figure 2). User is offered to browse through PC to find the required paths, as described in '[Configure root paths](#)' section. Once settings are written, they affect all models. Once user drags-and-drops new [TI C2000 Setup](#) component, last written settings **will be automatically written** on the corresponding properties. This means that, **unless user changes the installed version of software in use, there is no need to write the settings again. It is recommended to reload a model WITHOUT saving it after writing the settings paths for the first time.**

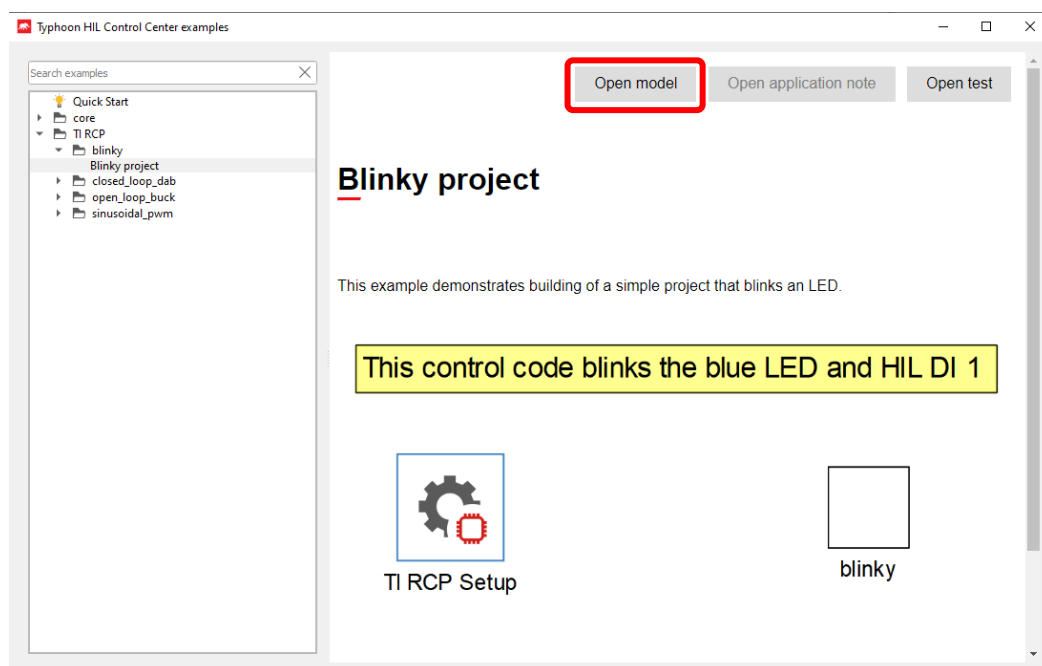


Figure 1. Blinky project example in Example Explorer

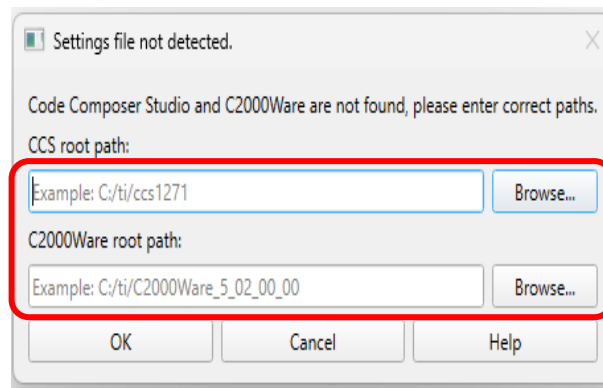


Figure 2. TI C2000 Setup component dialog – settings not found.

Configure development board

Before deploying a TI C2000 development board with *TI C2000 Toolbox*, ensure it is correctly configured. This involves enabling power supply, enabling the on-board XDS emulator, routing the correct SCI/UART pins to the virtual COM port, selecting the correct boot mode, etc. This is done by configuring certain jumpers and DIP switches (Figure 3). The recommended HW settings differ based on device and can be found in [this guide](#).

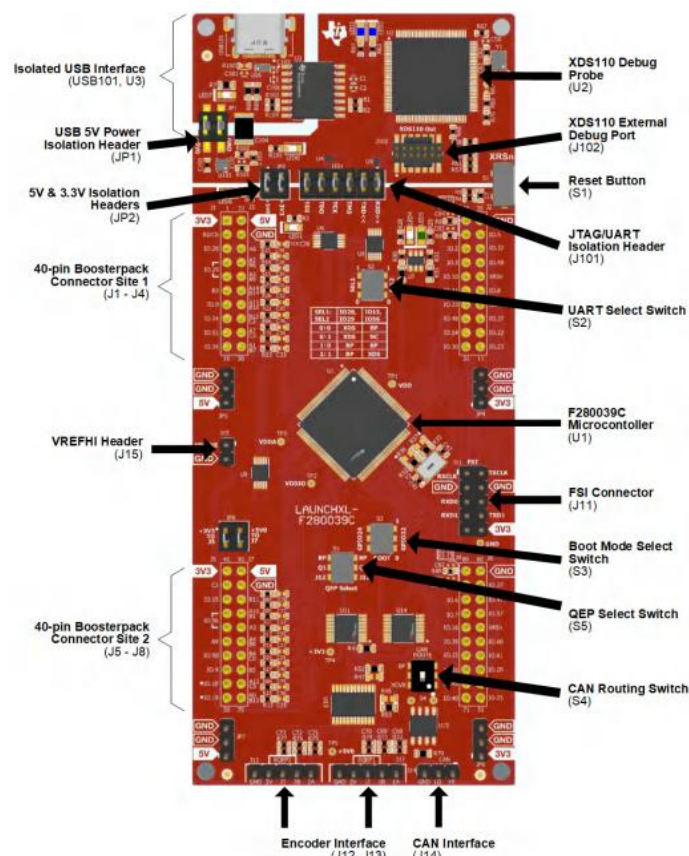


Figure 3. Typical LaunchPad Development Board Overview