

TI C2000 Toolbox Examples

This document describes examples directory of TI C200 Toolbox.

NOTE: Before diving deeper into examples, make sure to do the steps described in [First-time setup](#).

Short description

TI C2000 Toolbox package provides several example models, as well as the tests for each example. Examples and tests can be found in [Example explorer](#). Upon package installation, new example category named *TI C2000 Toolbox* will appear, as shown in Figure 1.

To open desired example model, click on *Open model* button, as shown in Figure 1.

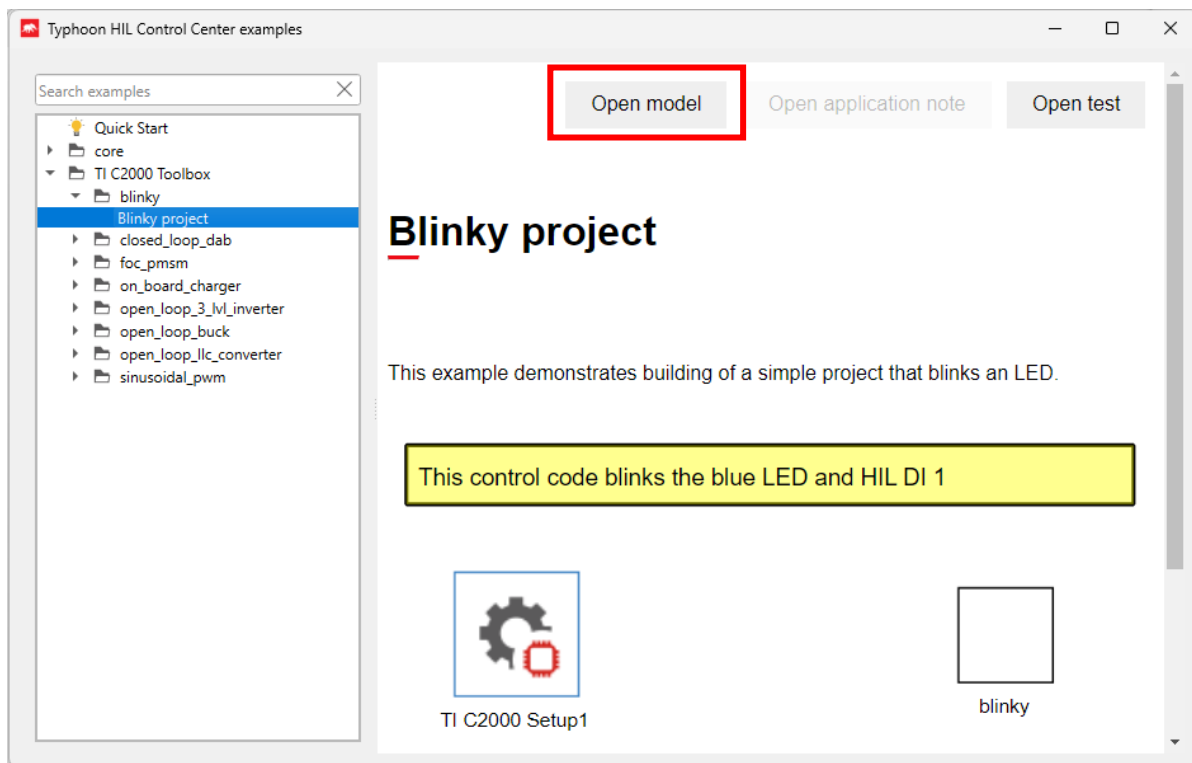


Figure 1. Example explorer – Blinky project example.

Basic workflow with *blinky* example is described in [How to blink an LED?](#).

As said earlier, for every example model there is a dedicated test script. Tests should briefly describe the process of configuring components through schematic API functions, generating controller code and flashing it to selected device, as well as to show expected model behaviour when controlled from external C2000 device. To open an example test script, click on *Open test* button, as shown in Figure 2.

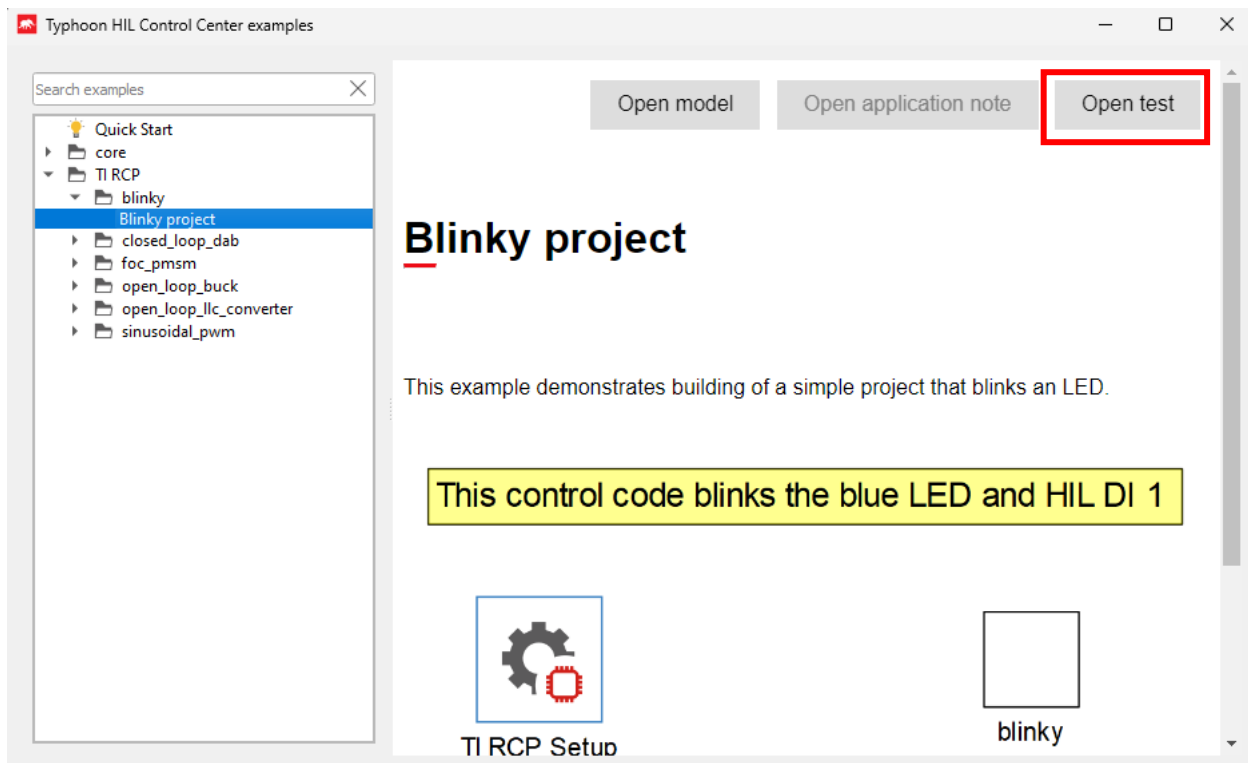


Figure 2. Blinky project example – open test.

By clicking on *Open test* button, python test script will be opened in [TyphoonTest IDE](#).

Tests are fully automated, meaning that they are suitable for several different hardware setups (different [interface boards](#) and C2000 devices).

Currently supported interface boards:

- [HIL TI Launchpad Interface](#),
- [HIL TI uGrid Launchpad Interface](#),
- [HIL DSP 180 Interface](#) and
- [HIL DSP Interface](#).

As mentioned in [First-time setup](#), currently supported TI C2000 devices:

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

- [F28335](#).

NOTE: Before running a test session, it is required to specify interface board and C2000 device with two arguments in ‘*additional options*’ tab in toolbar section of [TyphoonTest IDE](#), as shown on Figure 3.

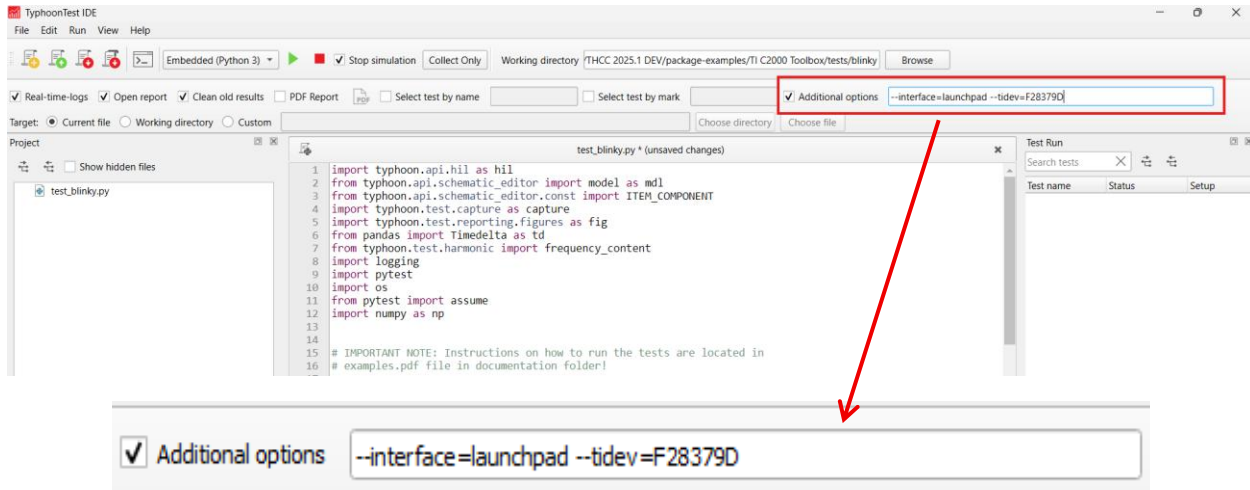


Figure 2. Additional options.

Available options:

- For interface type, command ‘**--interface**’ is used:
 - --interface=launchpad - [HIL TI Launchpad Interface](#),
 - --interface=ugrid - [HIL TI uGrid Launchpad Interface](#) (automated only for slot 1),
 - --interface=180 - [HIL DSP 180 Interface](#),
 - --interface=100 - [HIL DSP Interface](#).
- For device, command ‘**--tidev**’ is used:
 - Available values for --tidev argument: F28379D, F28069M, F28P650, F280049C, F280039C, F280025C, F2800137 and F28335.

Once everything is set, click on play button to start the test. When script is completed, test report will be generated and opened.

NOTE: Changing the original example model and saving it might cause different behaviour and test failures. For best practice, save a copy of the original model and modify it if needed.