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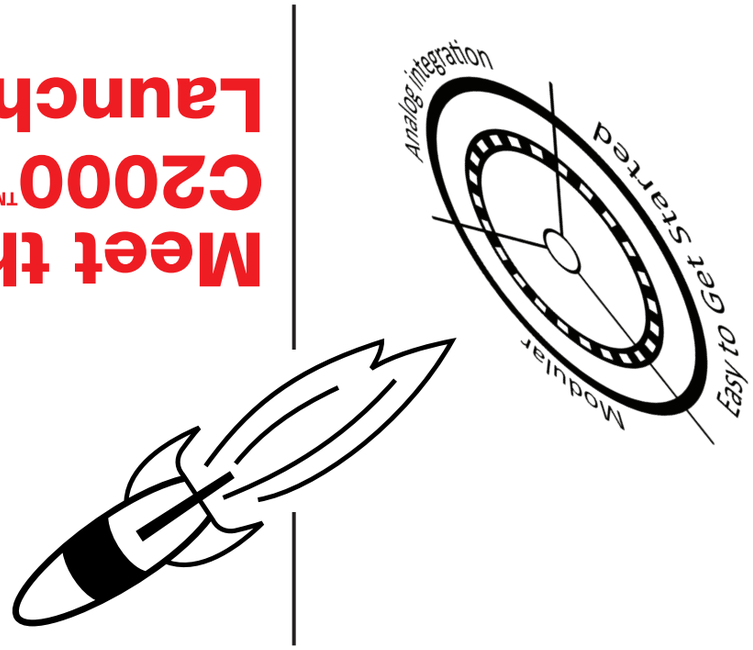
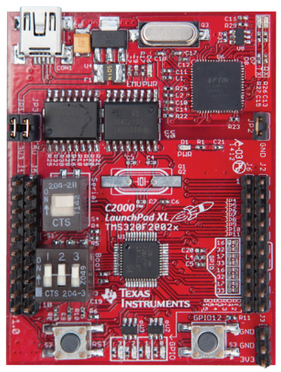
Meet the C2000™ Piccolo™ LaunchPad





- Everything needed to get started in one package
- Rapid prototyping with double-sided headers, buttons, LEDs, and much more
- On-board isolated JTAG emulation
- Software examples in controlSUITE software

Additional resources @
www.ti.com/c2000-launchpad

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C2000™ Piccolo™ LaunchPad Quick Start Guide: LAUNCHXL-F28027

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Meet the C2000 Piccolo LaunchPad evaluation kit based on the F28027 device. The LaunchPad is a complete USB-based evaluation kit and educational tool providing everything you need to start your system evaluation and development.

1. Software and driver installation

Go to **www.ti.com/c2000-launchpad**. Here, you can download a free version of TI's integrated development environment: Code Composer Studio™ (CCS) IDE version 5. Installing CCS will install the necessary drivers for the LaunchPad. You will also need to download the controlSUITE™ software package for the LaunchPad which is available here as well.

2. Connecting the hardware

Connect the C2000 Piccolo LaunchPad using the included USB cable to your PC. If prompted to install driver, let the driver install wizard complete with the default settings. After the drivers have been installed, ensure that jumpers are placed on JP1, JP2 and JP3.

3. The demo application – internal temperature measurement

The C2000 Piccolo LaunchPad has a pre-programmed Piccolo F28027 device. When S1 (Boot selection switch) is configured Up-Up-Down, the board will automatically boot from flash memory and start an LED toggle sequence. Pressing S3 will start the internal temperature measurement mode.

When this mode is entered, the device's internal temperature sensor is sampled to establish a reference temperature and GPIO3 LED is lit in the nibble wide LED display (8 in hexadecimal). Any increase or decrease in temperature is displayed as an increment or decrement of this binary display. In addition to this binary LED display, the temperature information is also sent to the PC via the XDS100's integrated USB<->UART channel. To view the serial data, ensure that S4 is in the up position and open a terminal to the LaunchPad COM port at 115200 baud and 8 bits, no parity, and 1 stop bit. The serial information looks best when viewed with Putty, but any serial terminal application will work.

IMPORTANT NOTE: If S1 position 3 is left down, the emulator will not connect to the target device. To resolve simply flip this switch to the up position and reconnect.

4. Try out an example application

The controlSUITE software package for the C2000 LaunchPad contains peripheral drivers as well as numerous code examples for the LaunchPad and supported BoosterPacks. controlSUITE is accessible through CCS v5's resource explorer. Navigate to the controlSUITE within resource explorer and expand this entry. Under the kits section, look for the C2000 Launchpad: LAUNCHXL-F28027 and expand this. There you will find examples and documentation for the C2000 LaunchPad. Select a project and follow the steps presented to import, build, and debug your code on the C2000 LaunchPad. You can download the latest version of controlSUITE at **www.ti.com/c2000-launchpad**.

5. Develop your own application and change the world!

The possible applications of this kit are only limited by your imagination, so brew some coffee or tea and get to creating the next big "thing". Make a copy of an example project and modify it until your application is developed. Support for the C2000 Piccolo LaunchPad is available through TI's e2e forums: **www.ti.com/e2e**

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