

A closer look at your new LaunchPad development kit

Featured microcontroller: CC2340R5

This LaunchPad is great for...

- Battery-operated wireless applications operating in the 2.4GHz ISM RF band
- Add RF capabilities to your product using one of the supported protocols: Bluetooth® 5.3 Low Energy, Zigbee®, SimpleLink™ 15.4 stack and proprietary protocols

What comes in the box?

LP-EM-CC2340R5 LaunchPad

CC2340R5 Microcontroller

- 48 MHz CPU
- 512 kB Flash, 36 kB RAM
- Programmable radio supporting various protocols and up to +5 dBm at 2.4 GHz
- Low power consumption

QSG
This Quick Start Guide

10-pin Debug Cable

2-wire Power Cable

- One 24-bit and three 16-bit timers
- ADC with 12 channels, 12 bits and up to 1.2M samples/s
- Serial communications: UART, SPI, I²C
- One comparator
- Real-time clock

LP-EM-CC2340R5 Overview

LP-EM debug connector
Together with a LP-XDS110 or LP-XDS110ET, allows:
- Debugging and programming
- Communicating to the host via UART
- Powering the microcontroller

10-pin debug connector
Allows using an external JTAG Debug Probe to debug/program the device

Button/Switch
BTN-1 (DIO10)

Button/Switch
BTN-2 (DIO9)

20-pin BoosterPack plug-in module connector
(J1, J2, J3 & J4)

User LEDs
Red (DIO14)
Green (DIO15)

CC2340R52E0RKP Wireless Microcontroller

Antenna

Hardware setup

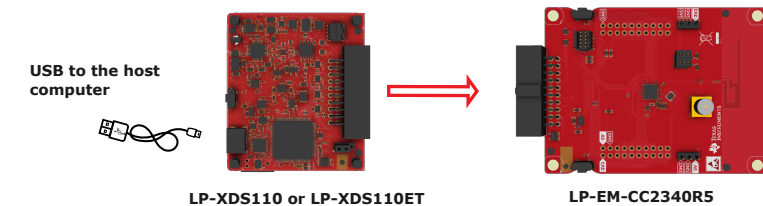
What do you need?

To use your new LaunchPad, you need to connect an external debug probe to either the 20-pin LP-EM debug connector on the edge of the board or to the 10-pin debug connector and supply power separately.

Option 1: Using the LP-EM debug connector

This is the easiest way to setup the hardware. It requires either an **LP-XDS110** or **LP-XDS110ET** debug probe (sold separately).

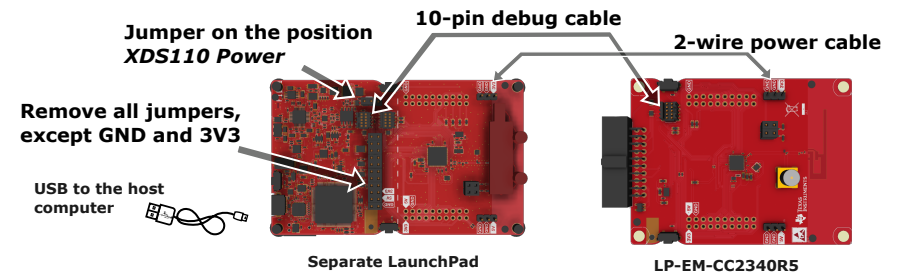
Simply connect the connector at the edge of the debug probe to its counterpart on the LaunchPad and connect the USB port of the debug probe to the host computer. A secondary UART communications channel will also be available and power to the LaunchPad will be provided directly.



Option 2: Using the 10-pin debug connector

Either a standalone debug probe or a separate LaunchPad with a built-in debug probe can be used.

Connect the two boards as shown in the picture below:



For additional details, consult dev.ti.com/?id=LP-EM-CC2340R5

When using the 10-pin debug connector, the UART communications channel must be wired separately (this connector does not carry UART signals).

If using a standalone debug probe, consult its documentation to see if it supports the ARM Cortex-M 10-pin standard.

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