



# Welcome to the Hercules™ LaunchPad



Additional resources at:  
[www.ti.com/launchpad](http://www.ti.com/launchpad)



## Hercules RM42x LaunchPad Quick Start Guide

Welcome to the Hercules RM42x LaunchPad Evaluation Kit. The Hercules LaunchPad is a USB-based evaluation platform that provides everything you need to start evaluation and development with Hercules MCUs.

### 1. Software and Driver Installation

Go to [www.ti.com/launchpad](http://www.ti.com/launchpad). Select Launchpads tab and then select Hercules. Here you can download and install Code Composer Studio™ (CCS). This will install the necessary drivers for LaunchPad. If you choose the custom install option of CCS, select 'Cortex-R4F MCUs' support at a minimum. Select 'Free CCS License – For use with XDS100 emulators'. **Note:** Complete the CCS installation before connecting the board.

Additional software and documentation can be found on the Hercules LaunchPad wiki page:

[http://processors.wiki.ti.com/index.php/Hercules\\_LaunchPad](http://processors.wiki.ti.com/index.php/Hercules_LaunchPad)

### 2. Connecting the Hardware

Connect the LaunchPad using the included USB cable to a Windows PC (XP or 7). The board will be powered via the PC's USB port. If prompted, allow Windows to automatically install the driver software for the on-board XDS100v2 JTAG emulator and the Virtual COM Port.

### 3. Quick Start Application

The MCU on the Hercules LaunchPad comes pre-programmed with the Hercules Safety MCU Demo Software. This software can be used stand alone on the LaunchPad or in conjunction with the PC application shown in section 4 of this guide. When the board is powered on via the USB port the demo software will show a startup blinking sequence on the GIOA2 and NHET08 LEDs. The demo also lets you toggle the GIOA2 LED through the push button GIOA7.

You can start learning about the Hercules MCU's built-in safety features right out of the box. Inject an Oscillator fault by connecting OSCIN to GND (close jumper JP1).

Upon detecting the fault, on-board Hercules MCU will respond by asserting the error pin (nERROR) low, indicated by the red LED on the bottom right corner of the board. **Note:** Open jumper JP1 and reset the board before continuing with other demos.

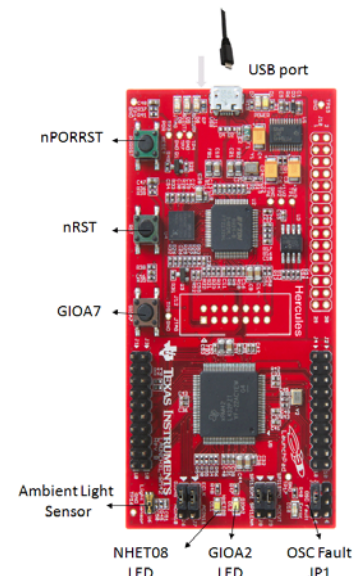
### 4. Hercules Safety MCU Demos

Go to the Hercules LaunchPad wiki page to download and install the Hercules Safety MCU Demos. Once the installation is complete, start the Hercules demo software. The software will be available in 'Start->All Programs->Texas Instruments->Hercules->Hercules Safety MCU Demos'.

It includes a safety features demo and other demos using LEDs and ambient light sensor that let you interact with and learn about features on Hercules MCUs.

### 5. Project 0

When you are ready to take the next step, complete Project 0. For more information go to [www.ti.com/launchpad](http://www.ti.com/launchpad) and click on the Project 0 link for Hercules LaunchPad.



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### Applications

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