

and visit dev.ti.com

Connect your LaunchPad to a computer

LaunchPad™ Debug Probe

Meet the
XDS110ET

XDS110 EnergyTrace™ Technology

The LP-XDS110ET features the EnergyTrace technology.

EnergyTrace implements a new method for measuring MCU current consumption. It uses a DC-DC solution to measure the time density of charge pulses, allowing accuracy on ultra low power measurements. Its high dynamic range (700 nA to 400 mA) and fast sampling rate (256 kSPS) captures the complete operational profile of the wireless MCU.

EnergyTrace Profile

EnergyTrace Profile runtime and energy data for low power modes along with each function run during Active Mode.

Graphical Power Data in Code Composer Studio™

These two tabs of the EnergyTrace Technology window show a graph over time of power and energy.

Find more information at
ti.com/EnergyTrace

LP-XDS110ET Overview

20-pin LP-EM Debug Connector

Together with a LP-EM LaunchPad (sold separately) it allows:

- Debugging and programming
- Communicating to the host via UART
- Powering the LP-EM board

10-pin Debug Connector

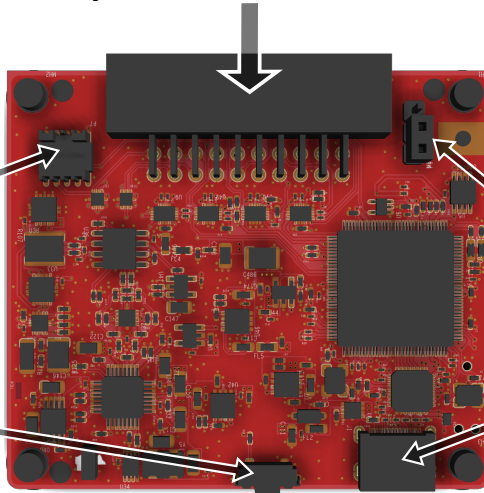
Allows using an external 10-pin JTAG debug cable to debug/program a custom board

Power selection (TGT VDD)

- XDS110
- External

Reset switch

USB Type C port



Hardware setup

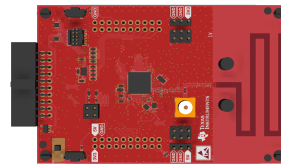
To use your new LP-XDS110ET Debug Probe with an LP-EM LaunchPad (sold separately), you need to connect the 20-pin LP-EM Debug connector to the corresponding header on the LP-EM LaunchPad.

Simply connect the edge connector of the Debug Probe to the edge connector of 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.

USB to the host computer



LP-XDS110ET



LP-EM Launchpad

To use the 10-pin Debug Connector to debug a custom board, you need to purchase the cables separately to allow debugging/programming, UART communications and power. For additional details, consult dev.ti.com/LP-XDS110ET

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2022, Texas Instruments Incorporated