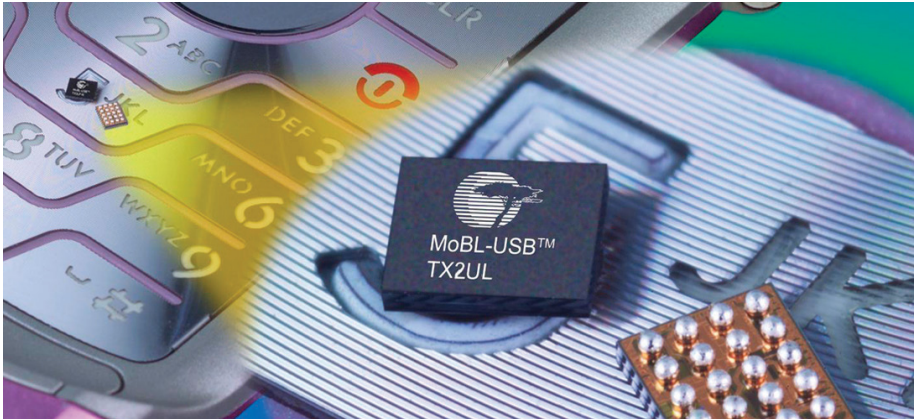


# CY3688 MoBL-USB™ TX2UL Development Kit

## QUICK START GUIDE



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# Getting Started

1. Review Kit Contents
2. CY3688 MoBL-USB TX2UL Board Features
3. Configure the Board

## 1. Review Kit Contents

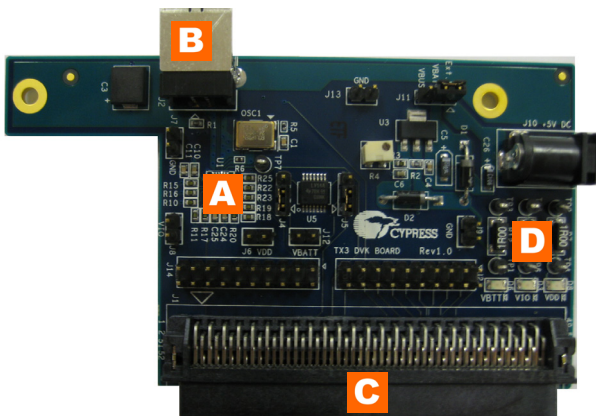
Each CY3688 MoBL-USB TX2UL Development Kit (DVK) contains:

- MoBL-USB TX2UL DVK Board
- Power Supply
- USB A to Mini B cable
- Kit CD/DVD with complete documentation and Hardware design files
- Quick Start Booklet
- Documentation
  - ❑ The MoBL-USB TX2UL DVK Guide: This guide is also located in the Path: <CD/DVD>\Documentation\. This is a complete guide to this kit. It explains the kit components, the interconnection scheme to your development platform in depth.
  - ❑ Application Note: [Initializing TX2UL - AN42266](#)
  - ❑ Application Note: [Interfacing TX2UL to Marvell Monahans LV Applications Processor - AN42416](#)
  - ❑ The MoBL-USB TX2UL Board Documentation DVK board schematic and layout are included in the <CD/DVD>\Hardware.

## 2. CY3688 MoBL-USB TX2UL Board Features

Board documentation is included on the kit CD/DVD in CD/DVD\Hardware Files for Schematic and Layout. The main board components are:

- A** MoBL-USB TX2UL Device
- B** USB Connector
- C** UPLI connector
- D** Three power measurement test points



### 3. Configure the Board

#### VBATT Power Supply

USB power supply VBATT is intended for battery supply input to the MoBL-USB TX2UL with internal regulation. The DVK board is equipped with a jumper (J11) for the configuration of VBATT power source. VBATT can be powered from VBUS or an external power supply.

- Pin 1-2, VBATT powered from external 5 V power supply.
- Pin 2-3, VBATT powered by the bus

VIO the IO power supply and VDD the core power supply are expected to be supplied from the ULPI controller on the T&MT connector.

#### CS\_N and Reset

The MoBL-USB TX2UL uses active low CS and Reset signals. In case the ULPI controller uses active high logic, use J4 and J5 to pass these signals through an inverter.

J4:

- Pin 1-2 non-inverted CS
- Pin 2-3 inverted CS

J5:

- Pin 1-2 non-inverted Reset
- Pin 2-3 inverted Reset

## Design Support and Resources

### MoBL-USB TX2UL DVK:

The Cypress MoBL-USB™ TX2UL answers the need for a ULPI interfaced Hi-Speed USB2.0 transceiver for use with next generation processors. For architectures requiring a standalone transceiver, TX2UL is the industry's smallest solution, thus saving precious board space in today's mobile applications.

- **World's Smallest Hi-Speed USB ULPI Transceiver**
  - 2.2 mm by 1.8 mm 20-pin WLCSP
  - 4 mm by 4 mm 24-pin QFN
- **Ultra-Low Power**
  - 5  $\mu$ A nominal sleep mode
  - 30 mA nominal active hi-speed transfer
- **Multiple Frequency Support**
  - Configurable support for 13, 19.2, 24, or 26 MHz reference

### Design with MoBL-USB TX2UL

The MoBL-USB TX2UL DVK is designed to help kick-start your application development with MoBL-USB TX2UL. Refer to the User Guide included on the CD/DVD to get started right away.

### TX2UL Data Sheets and Application Notes

The kit CD/DVD contains the MoBL-USB TX2UL device datasheet and application notes. For further information please visit <http://www.cypress.com/?id=1943>.

### Online Technical Support

For knowledge base articles, customer forums, and online application support, visit [www.cypress.com/support](http://www.cypress.com/support).

For the latest information on this kit visit  
[www.cypress.com/go/CY3688](http://www.cypress.com/go/CY3688)

