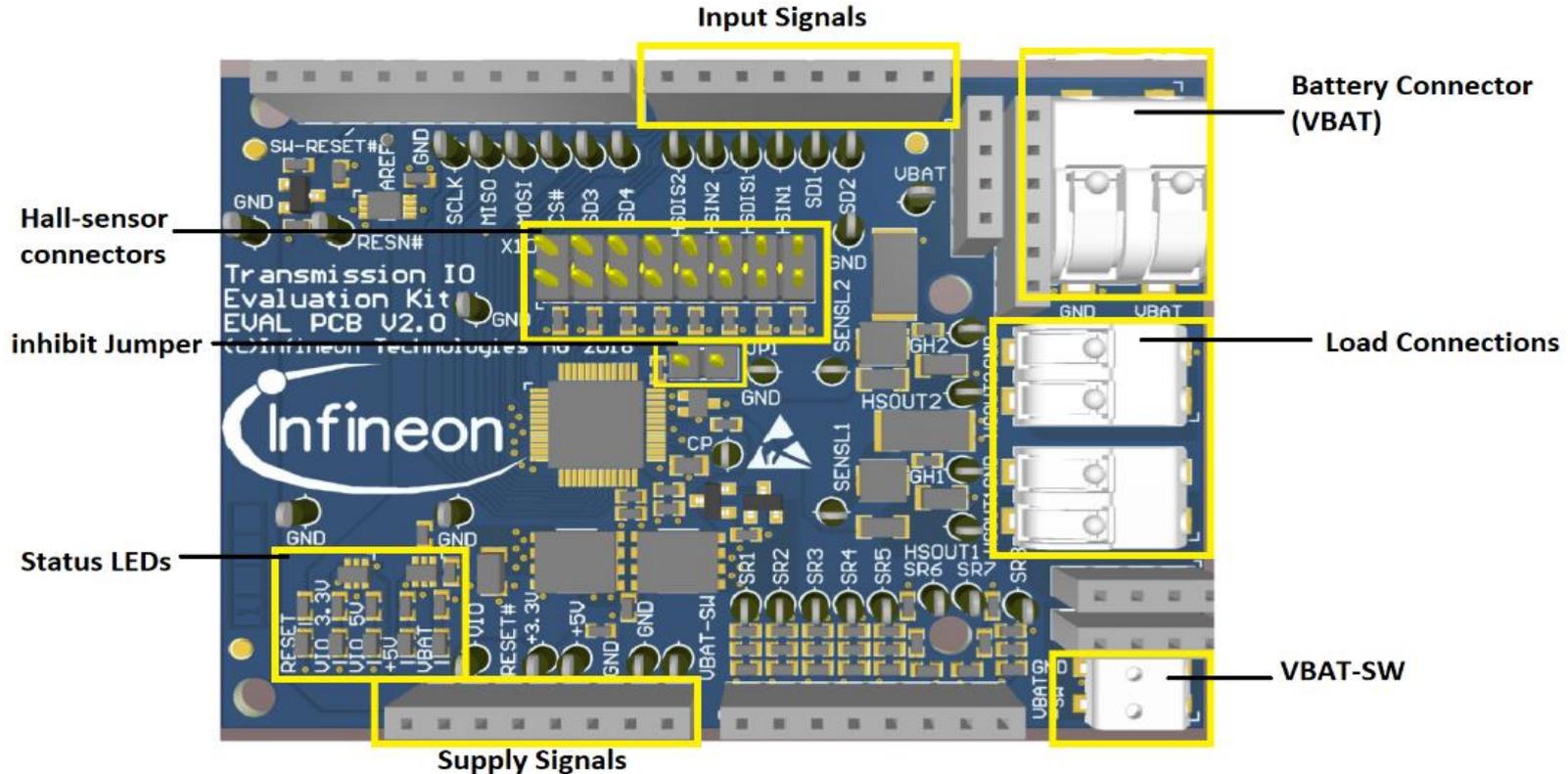


Getting started TLE9241QU-EvalKit Transmission IO IC



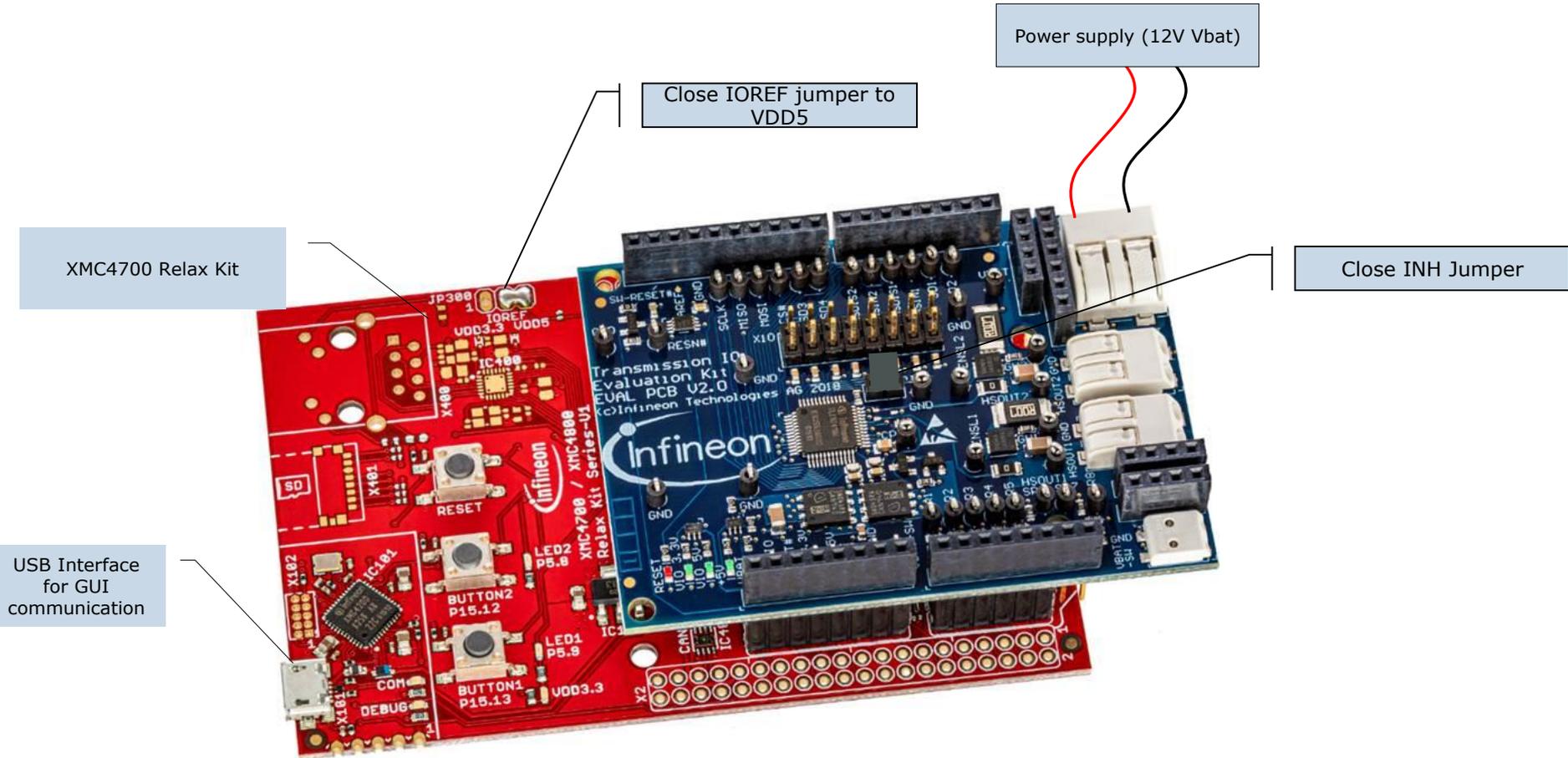
TLE9241QU Evaluation kit Evaluation Board

- > TLE9241QU evaluation board provides a quick pick and place solution for costumers' lab evaluations



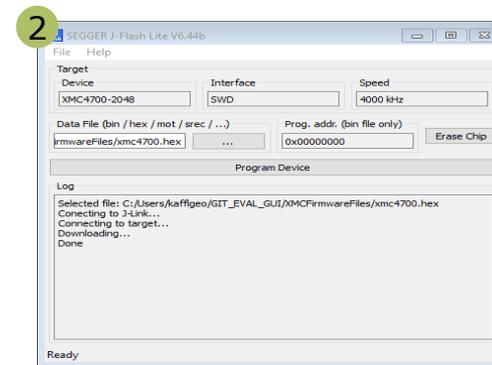
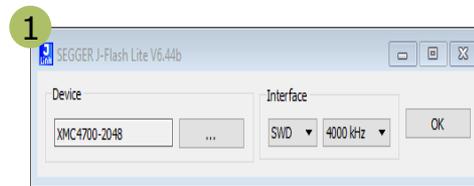
- > For more information about TLE9241QU click [here](#)
- > For more information about the evaluation board click [here](#)

TLE9241QU Evaluation kit XMC setup



First steps for setting up the evaluation board and for using the accompanying graphical user interface

1. Install all necessary Software framework (details see User Manual Chapter "Software")
 - Install SEGGER J-Flash Lite (<https://www.segger.com/products/debug-probes/j-link/technology/flash-download/>)
 - Connect XMC™ Board and flash μ C with according .hex file (located in GUI folder under "XMC firmware files")



2. Setup Hardware (see prior slides)
3. Supply the output stages with Vbat (12V)
4. Start the GUI executable
5. Follow the GUI instructions

GUI start up

> The available GUI is used to interact with the evaluation board.

The screenshot shows the 'Select PCB and Eval-Boards' dialog box. It has a title bar with a question mark and a close button. The main area is titled 'Connection and Slot Selection' and contains a section 'Select Connection-PCB/ Microcontroller Board' with a text prompt 'Please Select Connection-PCB'. Below this are three slots: 'Slot A (Top Right)', 'Slot B (Middle Right)', and 'Slot C (Bottom Right)'. At the bottom are 'OK' and 'Cancel' buttons. A smaller 'Select COM-Port' dialog box is overlaid on top, showing a dropdown menu with 'COM6: (JLink CDC UART Port (COM6))' selected and 'OK' and 'Cancel' buttons. Three callout boxes with numbers 1, 2, and 3 provide instructions: 1. 'Select Evalkit Setup: Version S: XMC1100/XMC4700', 2. 'Select the right COM port (pops up after Connection PCB selection)', and 3. 'Select EvalPCB for Slot x NOTE: XMC™ setup only supports Slot A'.

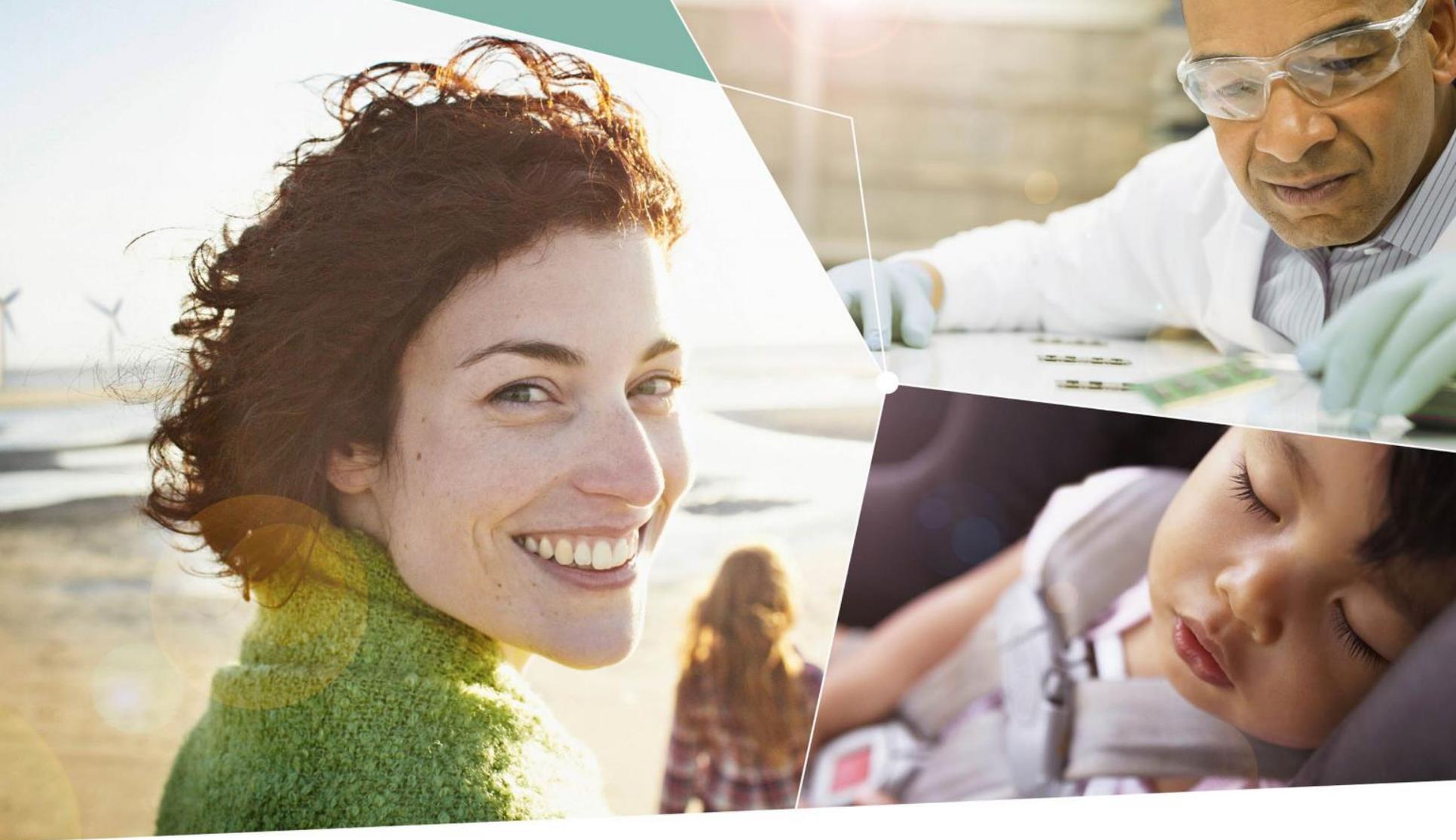
GUI Overview

> The GUI allows configuring the TLE9241QU evaluation kit, specifying signal settings and reading/writing into the IC registers.

The screenshot displays the Infineon GUI interface for configuring the TLE9241QU evaluation kit. The interface is divided into several panels:

- SPI Register Widget:** A table listing various registers with their addresses, decoded values, raw values, and read/write permissions. A green box labeled "SPI registers" points to this table.
- GlobalControl:** A panel for configuring control signals, including checkboxes for RESN, HSDIS1, and HSDIS2. A blue box labeled "TLE9241QU control signals" points to this panel.
- ChannelWidget:** A panel for configuring the channel interface, including digital (SDx) and analog (SRx) settings. A blue box labeled "Read back hall sensor voltages" points to the SRx (analog) section.
- MacroRecorder:** A panel at the bottom for recording and executing SPI sequences. A blue box labeled "Macro recorder to program, execute, save and load SPI sequence" points to this panel.

Name	Addr	Decoded Value	Raw Value	R	W	R(Macro)	W(Macro)	Description
REG_BLOCK								
GLOBAL_STATUS	0x00(0)	N/A	N/A	Read	Write	RM	WM	Global Status Register
HIGHSIDE_DRV_1	0x01(1)	N/A	N/A	Read	Write	RM	WM	High side pre driver 1 configuration register
HIGHSIDE_DRV_2	0x02(2)	N/A	N/A	Read	Write	RM	WM	High side pre driver 2 configuration register
HALL_IF_EN	0x03(3)	N/A	N/A	Read	Write	RM	WM	Hall Sensor Interface Enable Register
HALL_SENS_STAT	0x04(4)	N/A	N/A	Read	Write	RM	WM	Hall Sensor Interface Sensor State Register
HALL_SENS_OT	0x05(5)	N/A	N/A	Read	Write	RM	WM	Hall Sensor Interface Over temperature failure register
SDX_ASSIGN	0x06(6)	N/A	N/A	Read	Write	RM	WM	Digital Hall Sensor Output Assignment
ICVID	0x07(7)	N/A	N/A	Read	Write	RM	WM	Unique ASIC Version Identifier



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