Getting started TLE92464/6ED-EvalKit GUI

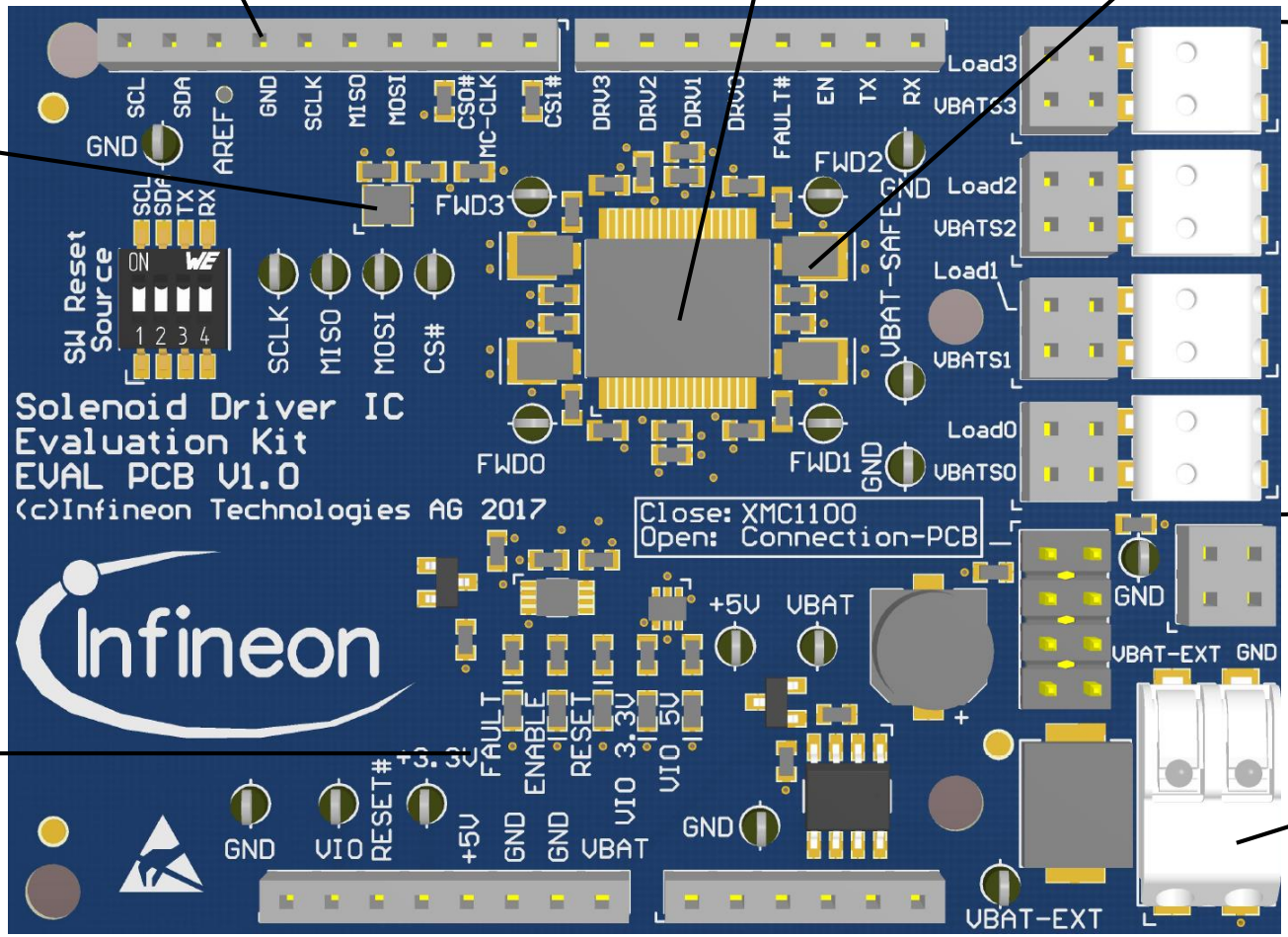
TLE92464ED Evaluation kit
Evaluation Board

Arduino Form Factor

NextGen Solenoid Driver IC

FW-Diodes

Optional external Crystal (frequency accuracy)



4 ICC/PI outputs with a 1% current accuracy

IC-Status LEDs

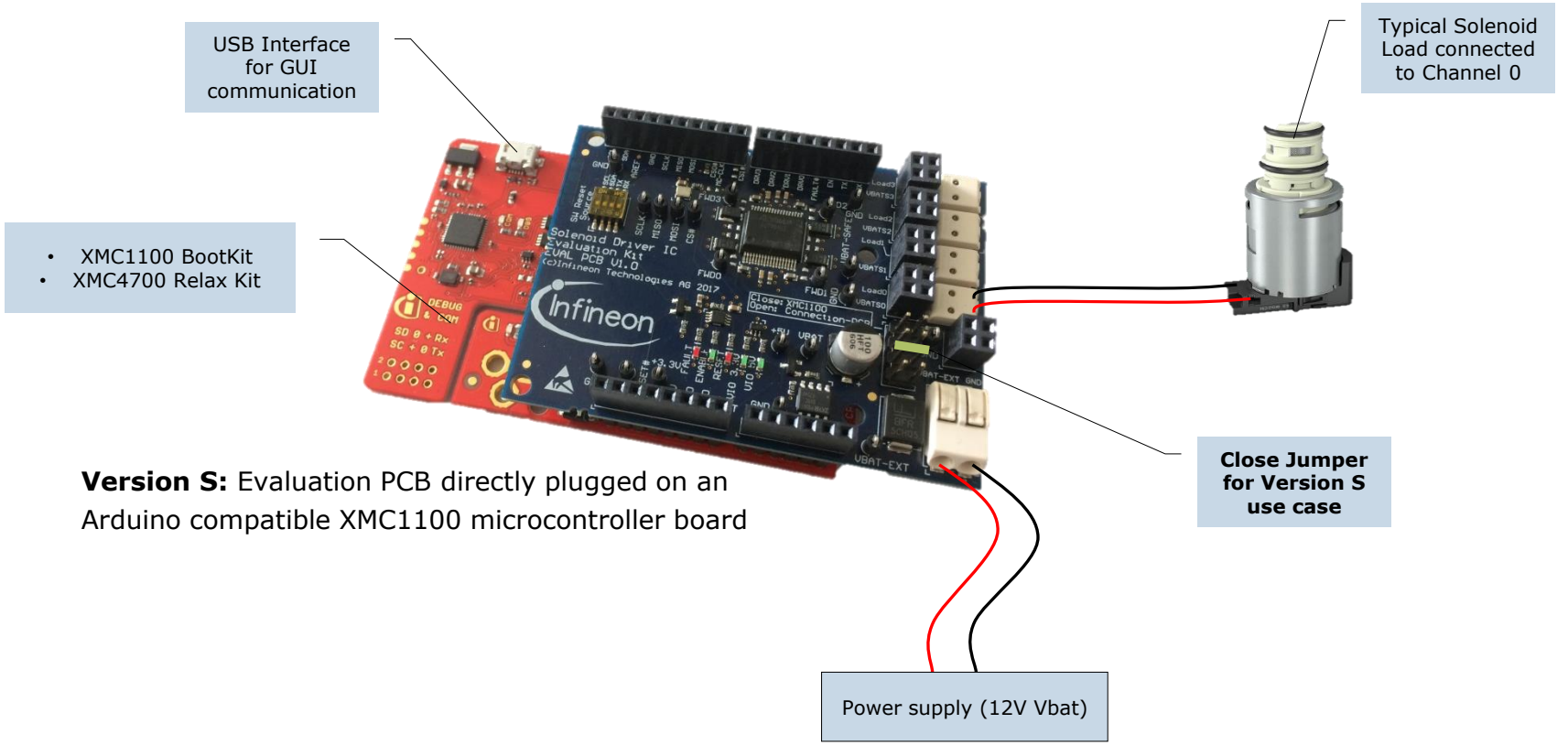
- Enable
- Reset
- Fault

VBAT supply 5-40V

For the overview of TLE92466ED Evaluation board, please see the User Manual

XMC setup

TLE92464ED Evaluation kit
XMC setup (example XMC1100)



Version S: Evaluation PCB directly plugged on an Arduino compatible XMC1100 microcontroller board

TLE92464ED Evaluation Kit
XMC4700 relax kit setup

Close IOREF jumper to VDD5

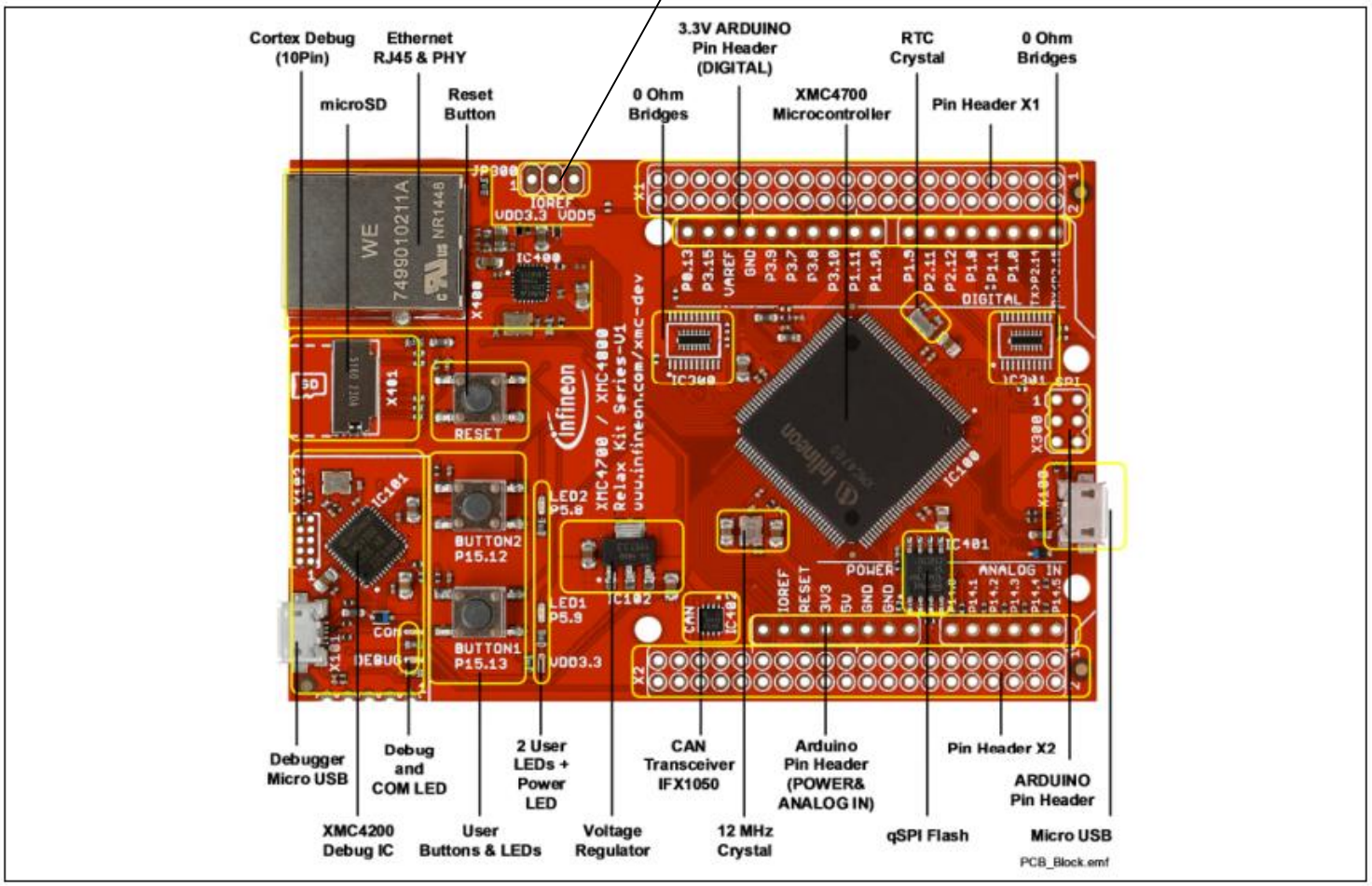
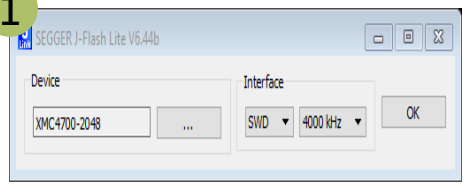


Figure 4 XMC4700 Relax Kit

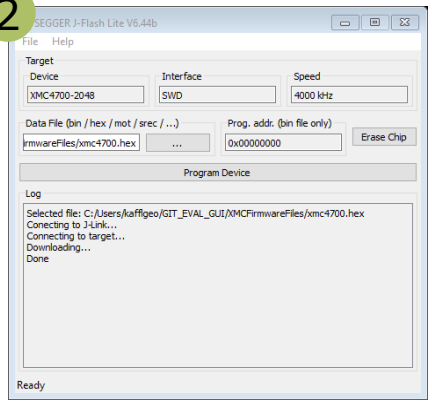
First steps

- 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 µC with according .hex file (located in GUI folder under “XMC firmware files”)

1



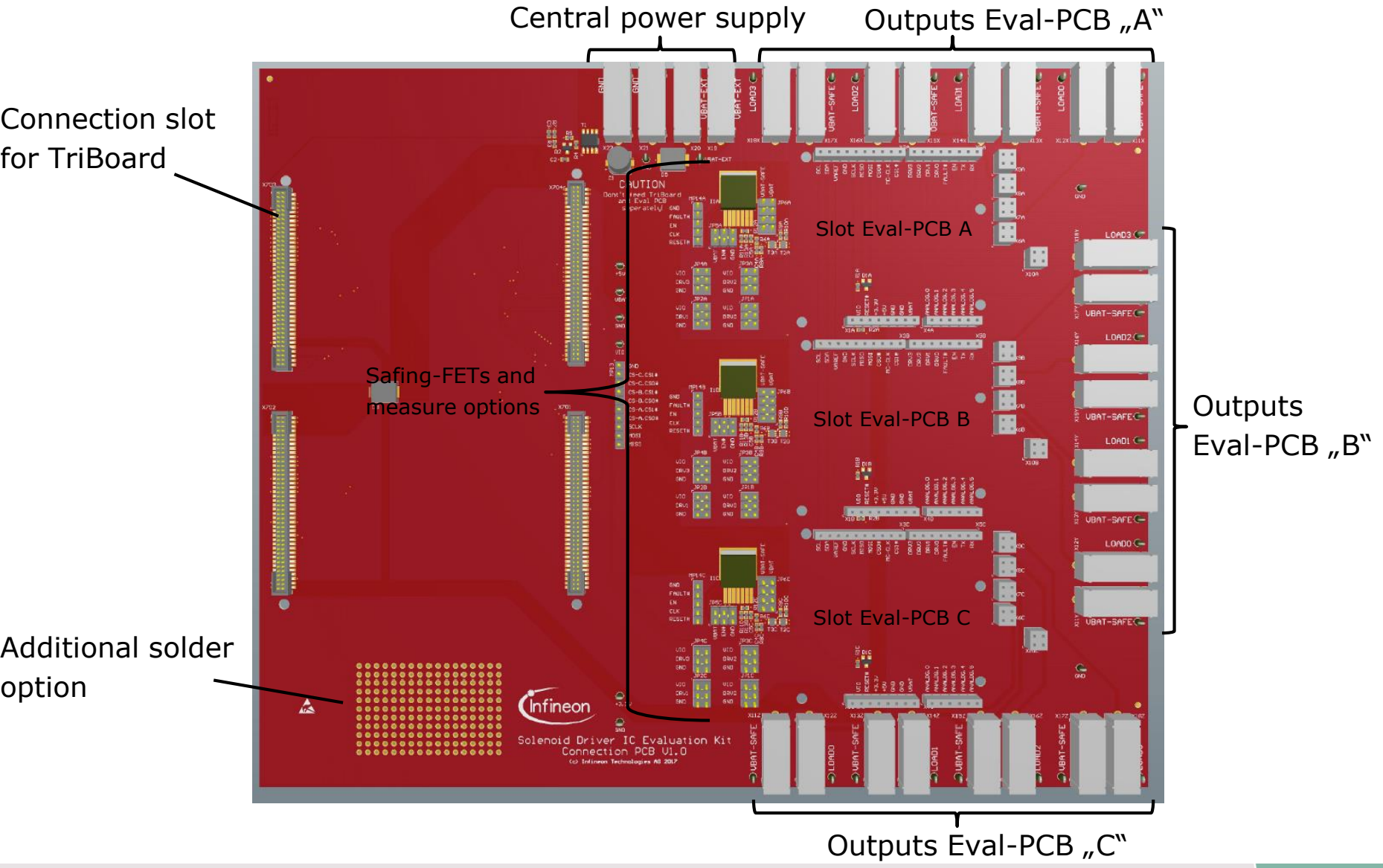
2



- Setup Hardware (see prior slides)
- Supply the output stages with Vbat (12V)
- Start GUI by executing the IFX EvalKit GUI.exe in the “GUI” folder
- Follow the next steps

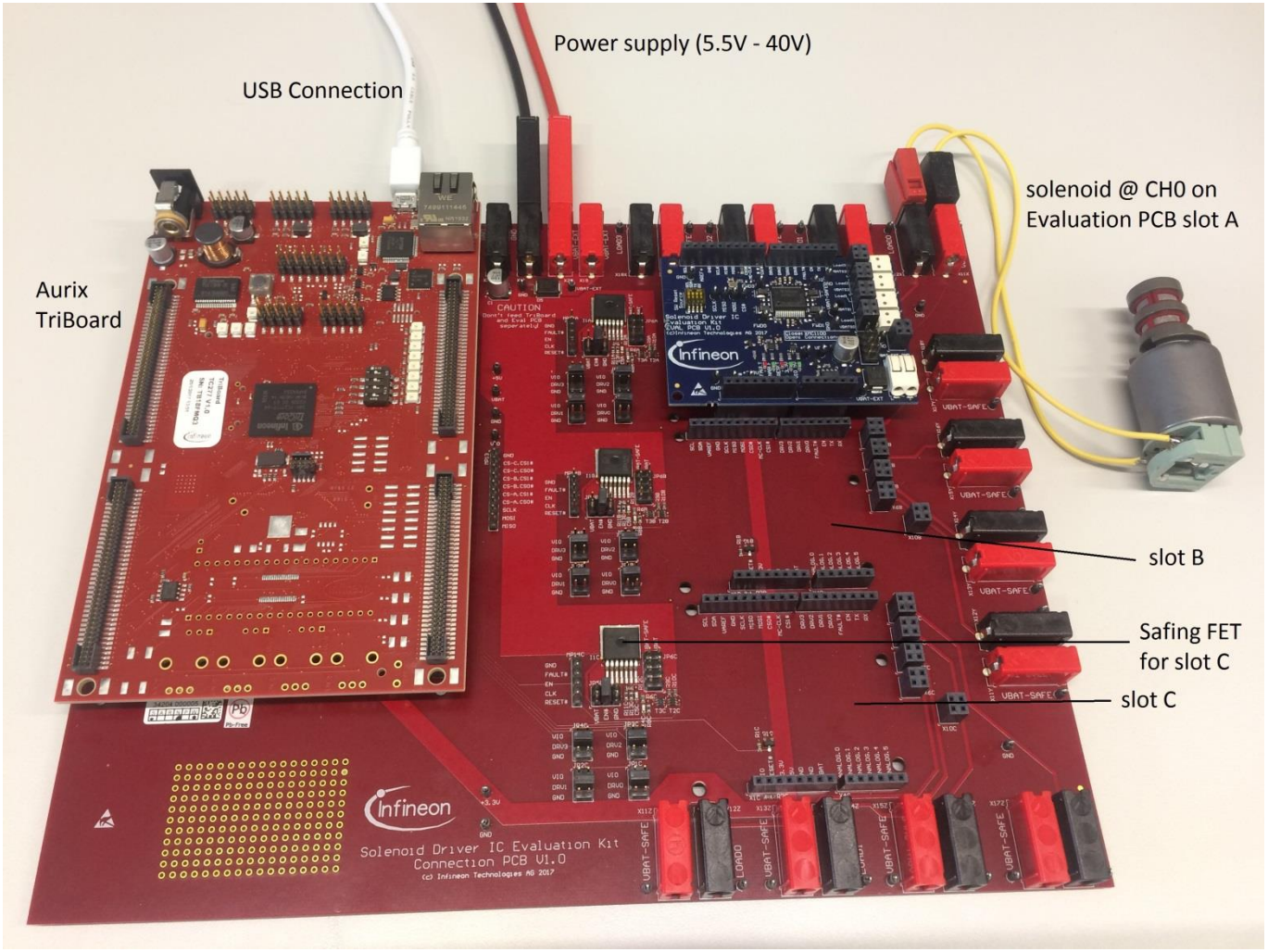
TriBoard TC277 setup

NextGen Solenoid Driver EvalKit
Connection PCB for Version L



NextGen Solenoid Driver EvalKit TriBoard TC277 for Version L

NextGen Solenoid Driver EvalKit Version L Setup

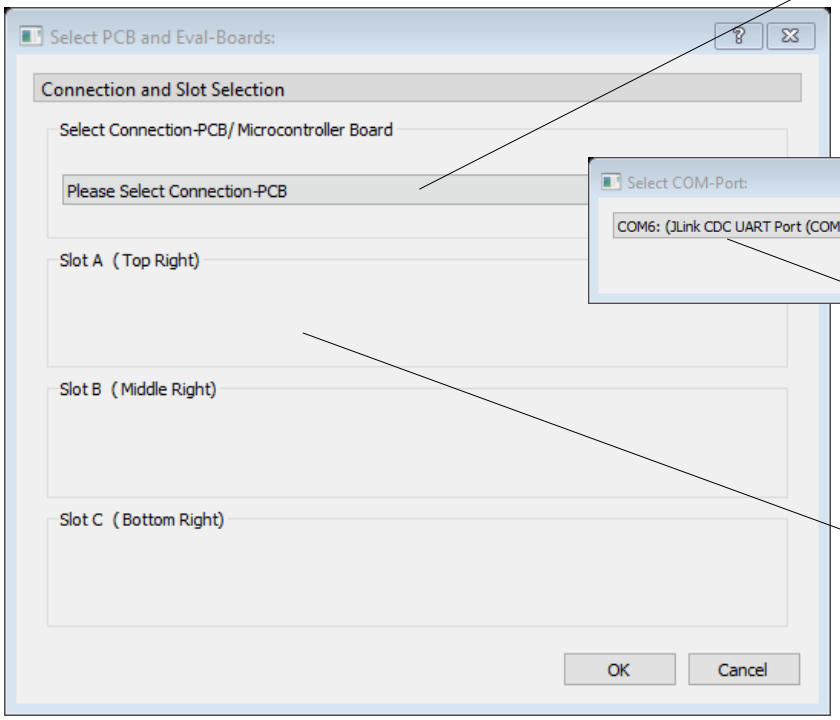


First steps

- Install all necessary Software framework (details see User Manual Chapter “Software”)
  - Install Infineon DAS tool https://www.infineon.com/cms/en/product/promopages/das/
  - Install Infineon Memtool https://www.infineon.com/cms/en/product/microcontroller/32-bit-tricore-microcontroller/#!tools
  - Connect TriBoard and flash µC with according .hex file (located in GUI folder under “XMC firmware files”)
- Setup Hardware according to used Version (see prior slides)
- Supply the Hardware setup with Vbat (12V)
- Start GUI by executing the Solenoid Driver GUI.exe in the “GUI” folder
- Follow the next steps

GUI

GUI start up



1

Select write Setup:
Version S: XMC1100/XMC4700
Version L: NGSD-Connection PCB + TriBoard

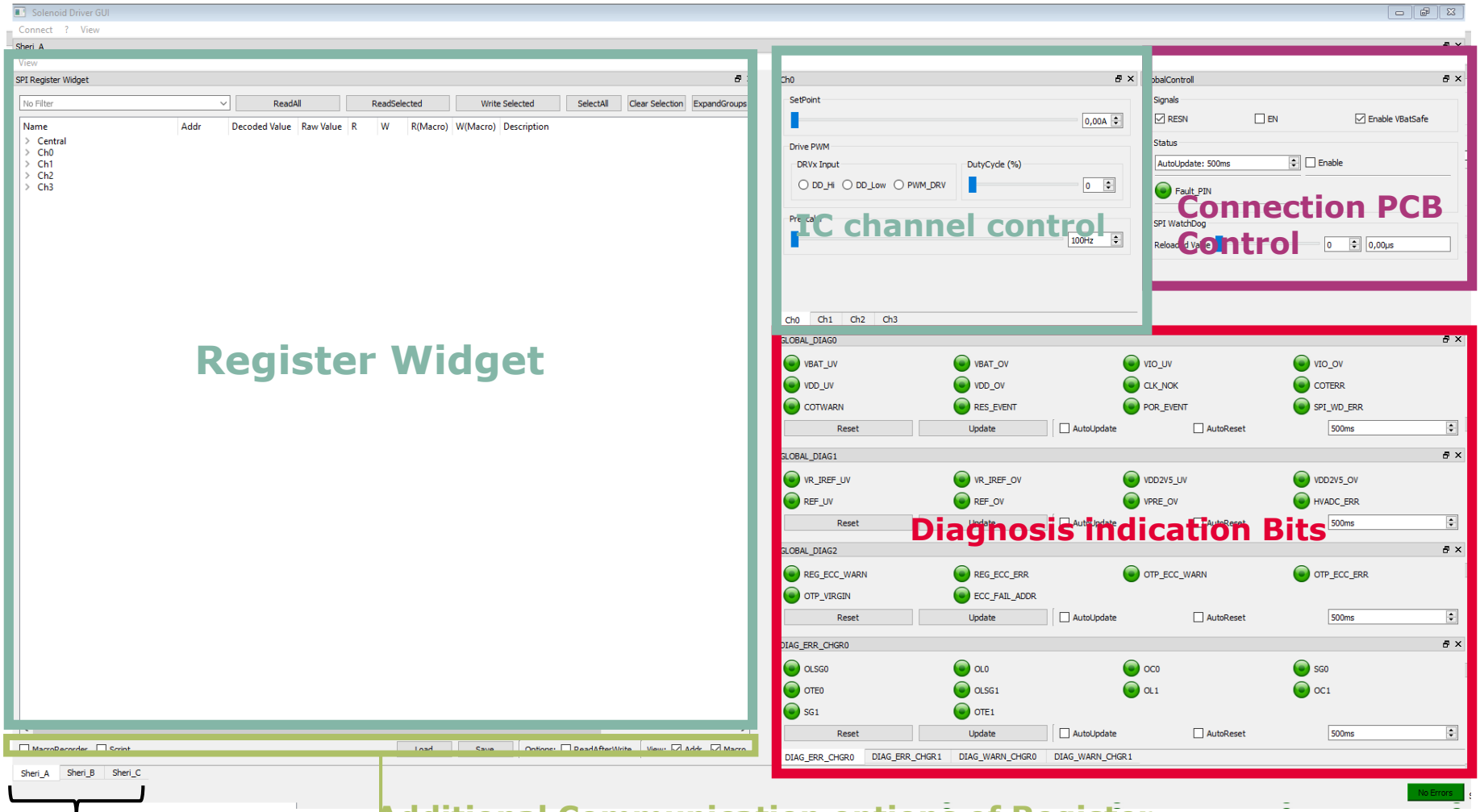
2

Select the right COM port (pops up after Connection PCB selection)

3

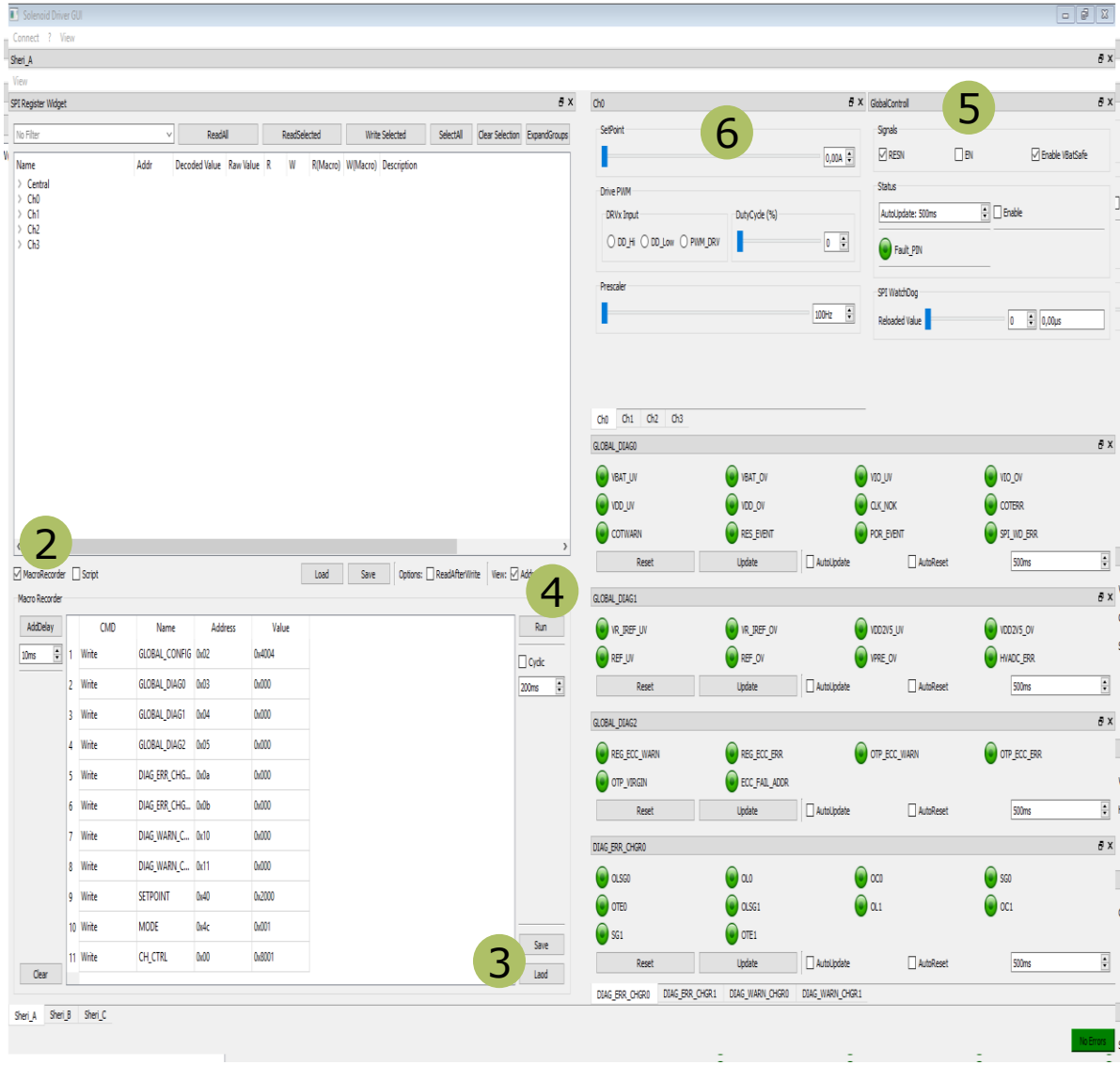
Select EvalPCB for Slot x
NOTE: XMC™ setup only supports Slot A

GUI Overview



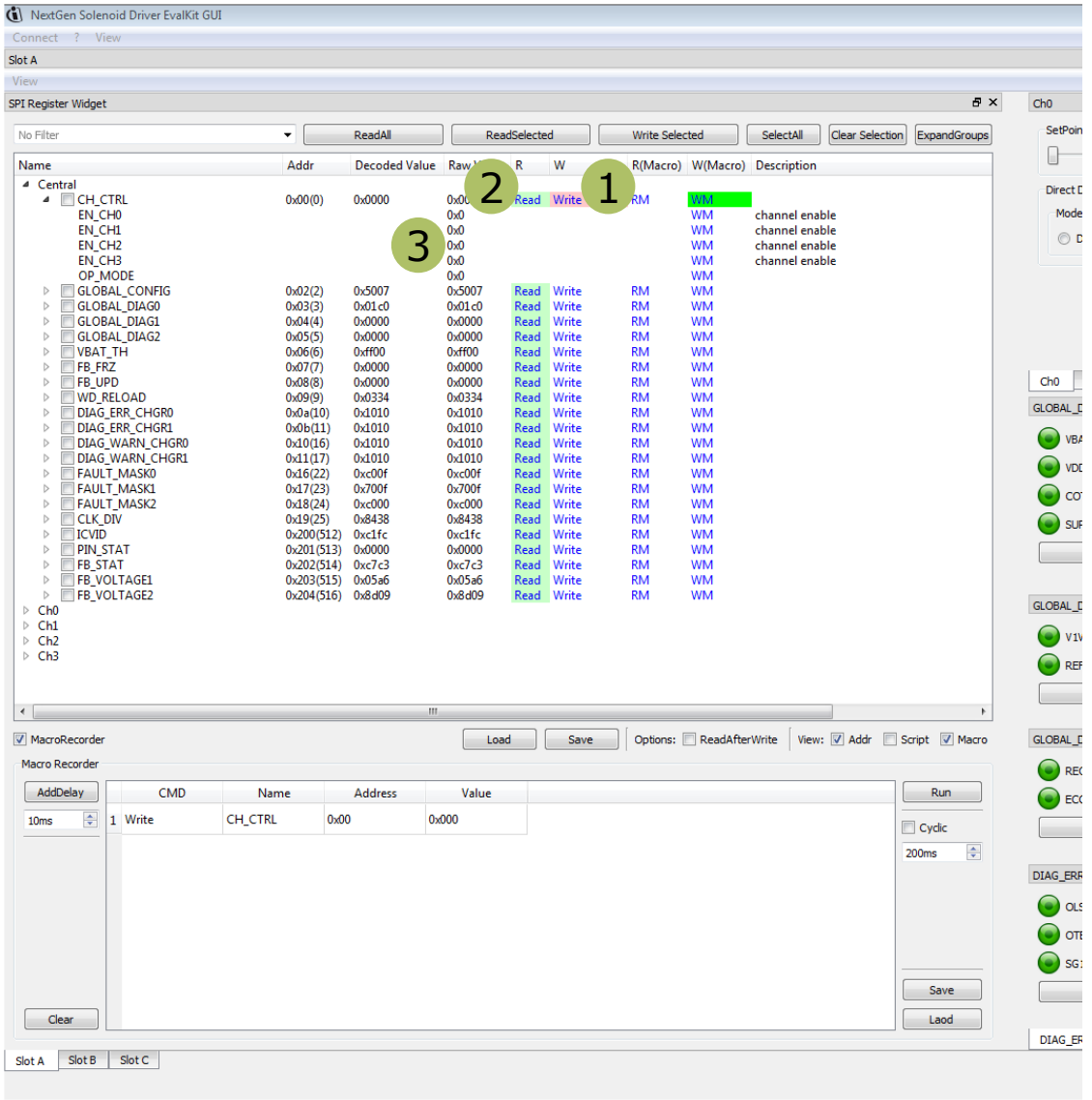
Quickstart
Activate ICC controlling on Channel 0

1. Connect a inductive load to Channel 0
2. Open Macro Recorder
3. Load Macro located in Macro Folder “ICC_CH0_EvalBoard.csv”
4. Run Macro
5. Enable the Powerstages (set EN-pin)
6. Set a Setpoint



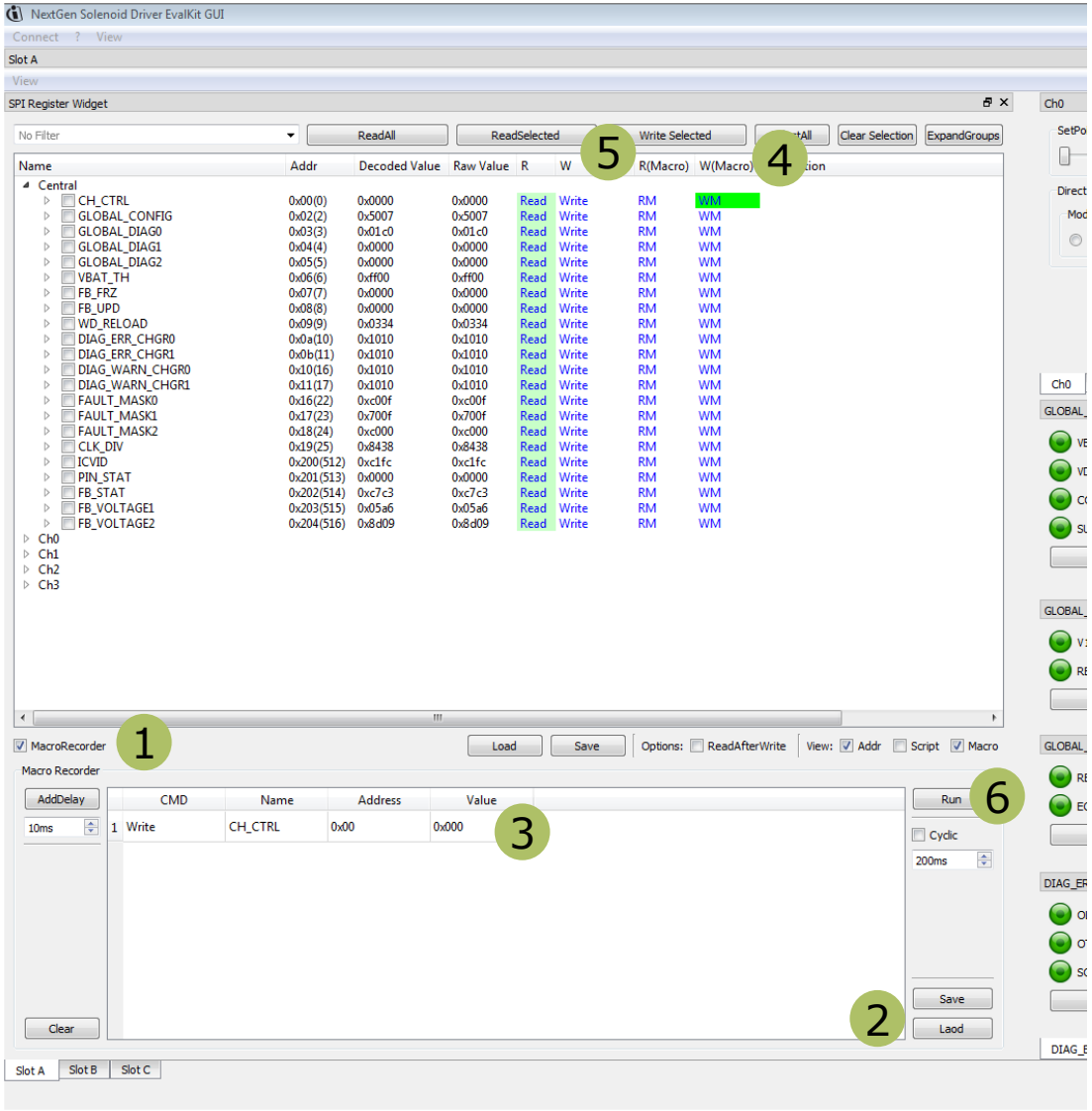
General Handling of SPI Register Widget Read/Write a Register/Bitfield

1. Write Data to Register
2. Read Data from Register
3. Configure Bitfield Data



Write/Save/Load your own SPI sequence Macro Recorder

1. Enable Macro Recorder
2. Load a Macro or
3. Create own Macro with
4. Write or
5. Read commands
6. Execute the commands listed in the Macro Recorder



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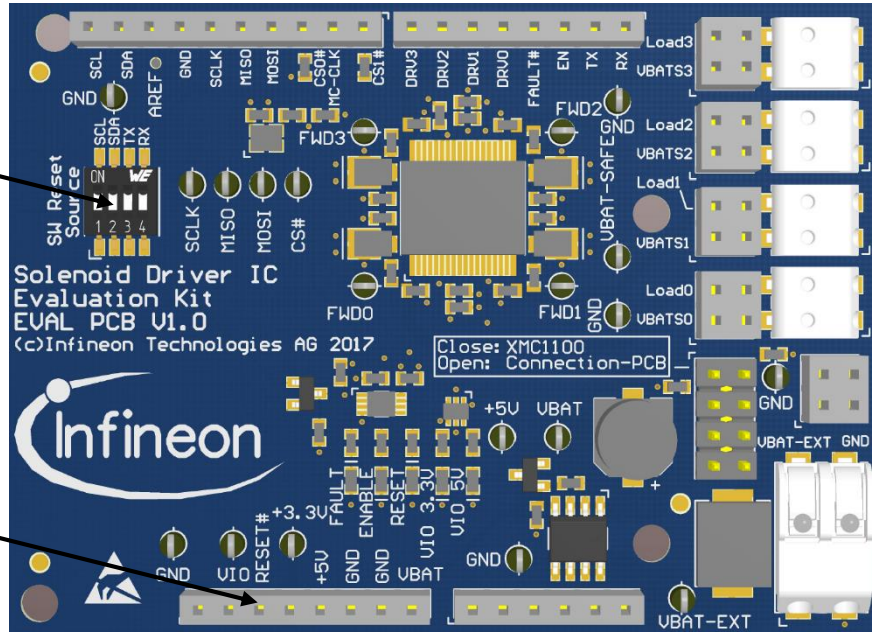
Infineon

Reset behaviour

- A RESET of the microcontroller and TLE92464/6 Evalboard can be triggered by a push on the XMC board reset button (low level on the RESET pin (Pin 3 at X1 Pin header))
- A RESET of the TLE92464/6 Evalboard only, can be triggered by the GUI. Therefore the SW-RESET-Source switch must be selecting the SDA-line as SW-RESET-Source

- Reset signal to reset the TLE92464/6 Evlaboard only
- Switch on slider 2 (SDA-line) to enable a reset via the GUI



- Reset signal to reset both XMC and TLE92464/6 Evlaboard
- trigger by RESET button of XMC board