



# Interface Tool for Alternator Control ICs

Easy and convenient Design-In

Alexis Schindler (IFX ATV PTS MDS AE)

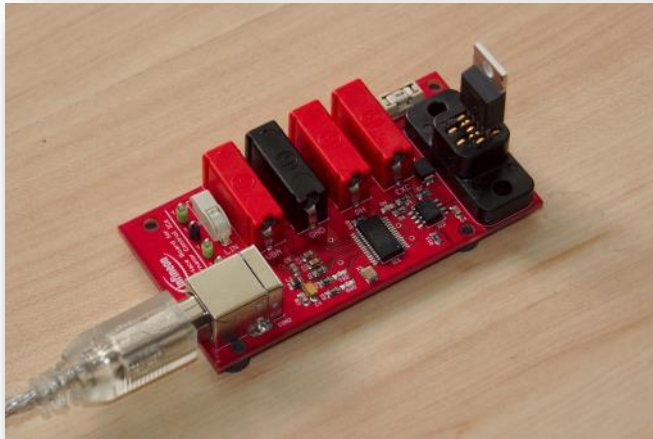


- › IFX decides to provide a reliable and handy programming board to its customers
  - Fast design-in
  - Easy NVM programming
  - Strong customer support
- › The decision to bundle board+software into one tool should lead to *global and fast support*
  - Guarantee no failures of connecting IC interface
  - Avoid mistakes in programming sequence
  - Get in touch with the IC as fast as possible
- › Overall:  
**Quick and convenient workflow to catch the project milestones**

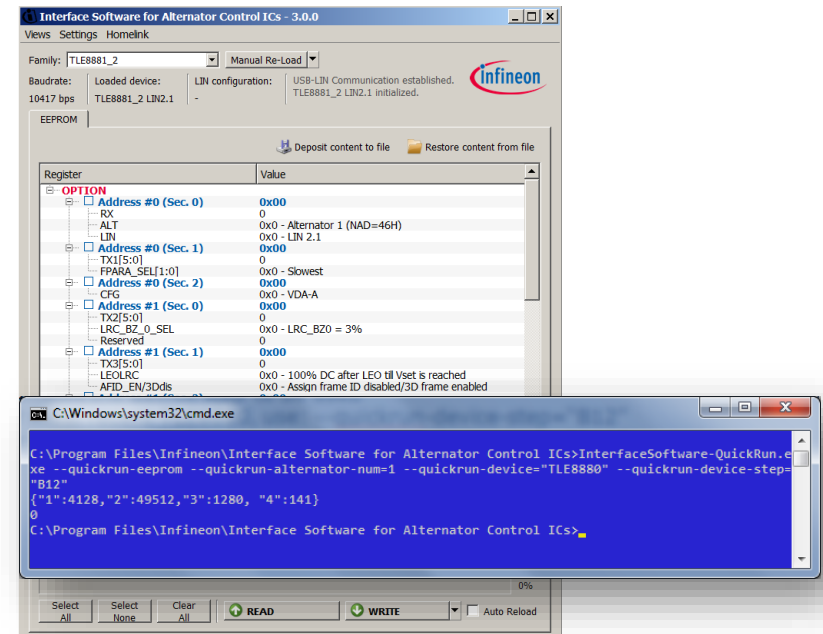
# Interface Tool Bundle

## Interface Tool for Alternator Control ICs

### 1. Interface Board



### 2. Interface Software



## EEPROM

Use a  
**Graphical User Interface**  
to modify the NVM

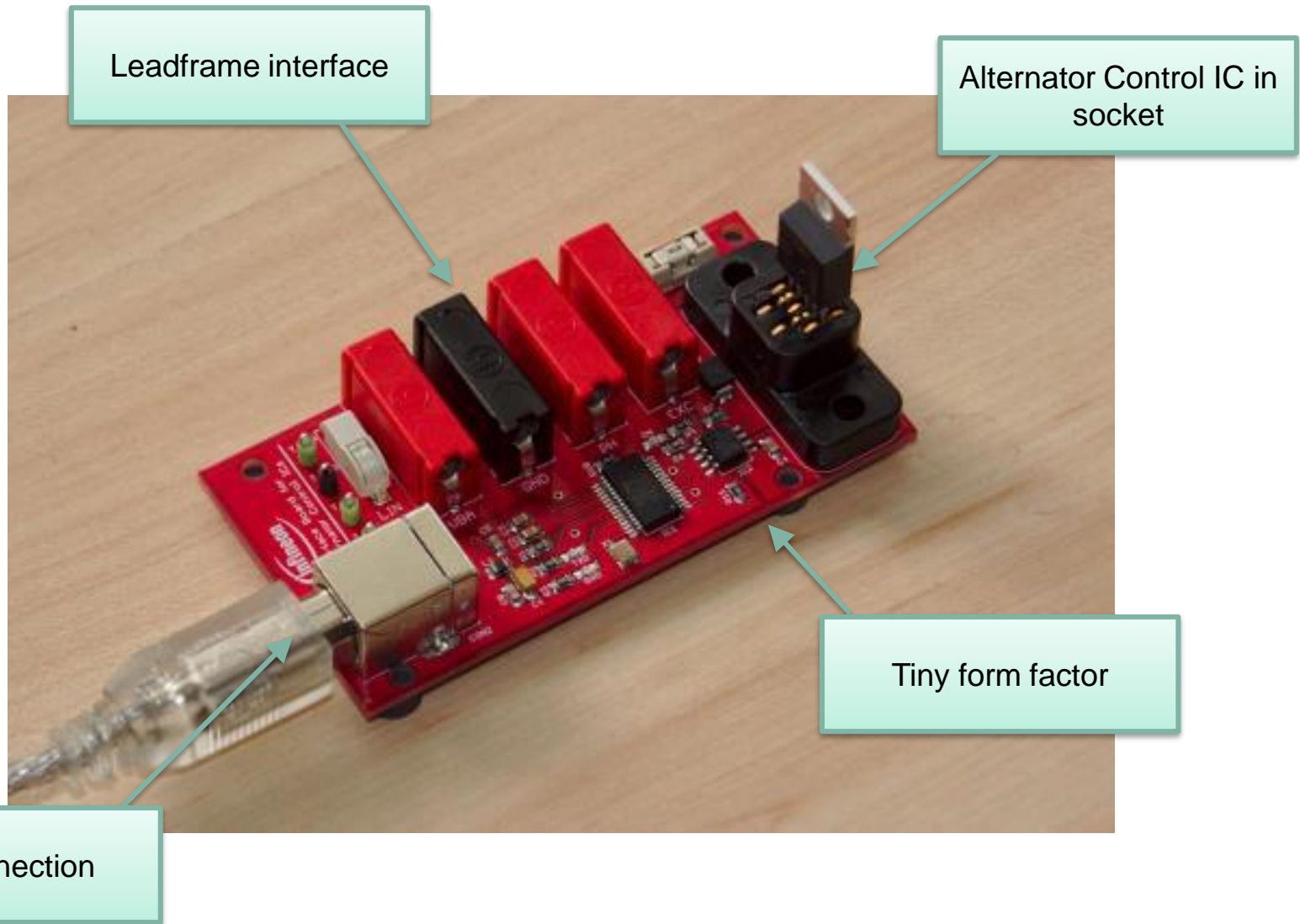
- Read-out EEPROM content
- Write EEPROM map
- Change specific bits
- Mapping for all EEPROM bits including descriptions

## Automation

Use a  
**Command Line mode**  
to automate

- Command line tool for automation processes
- Trigger EEPROM write/read-out and get the result

# Interface Board Overview

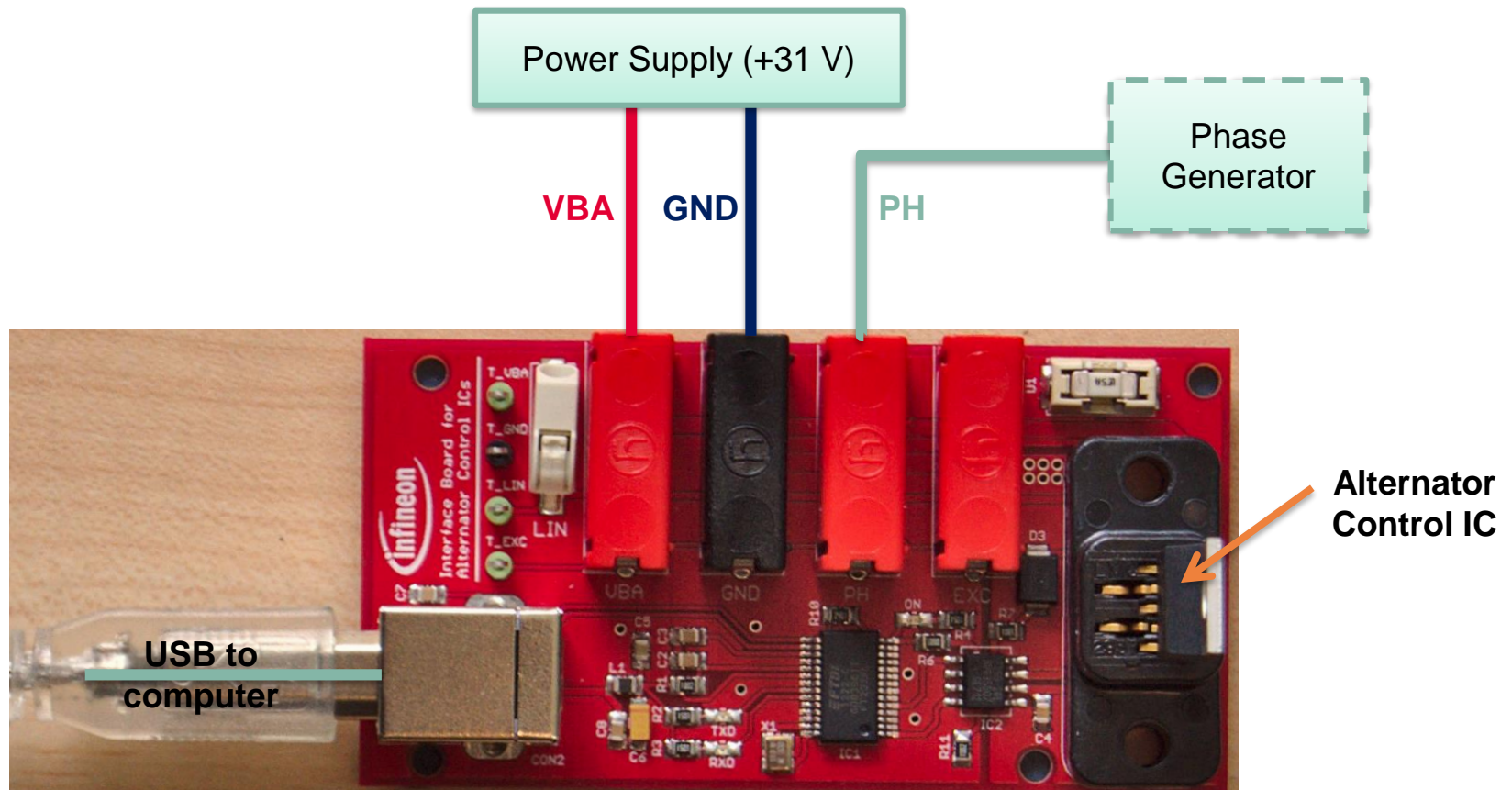




# Interface Board

## EEPROM Programming w/ chip on top

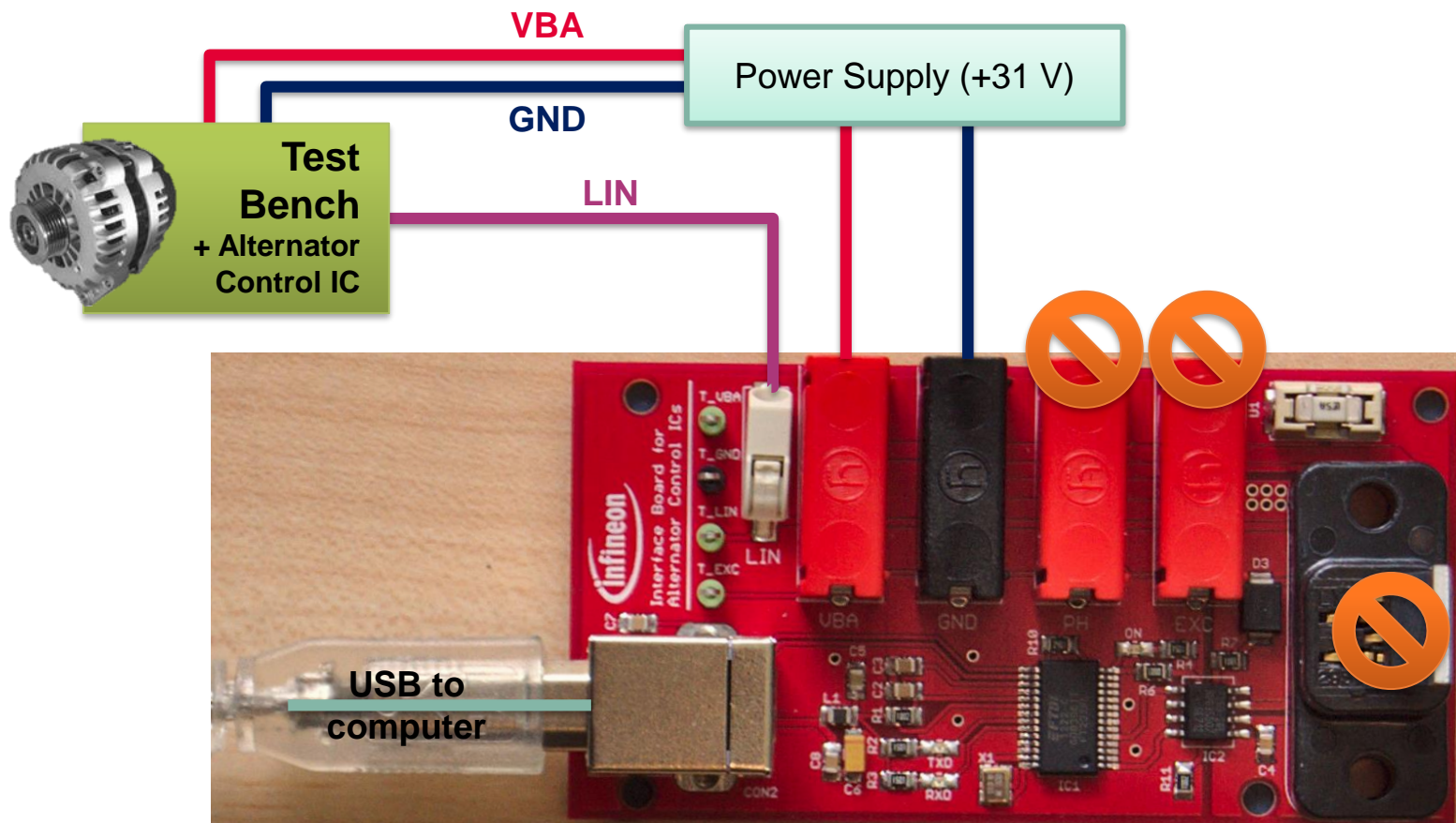
- › Set-up for Interface Board and in the socket:



# Interface Board

## EEPROM Programming on test bench

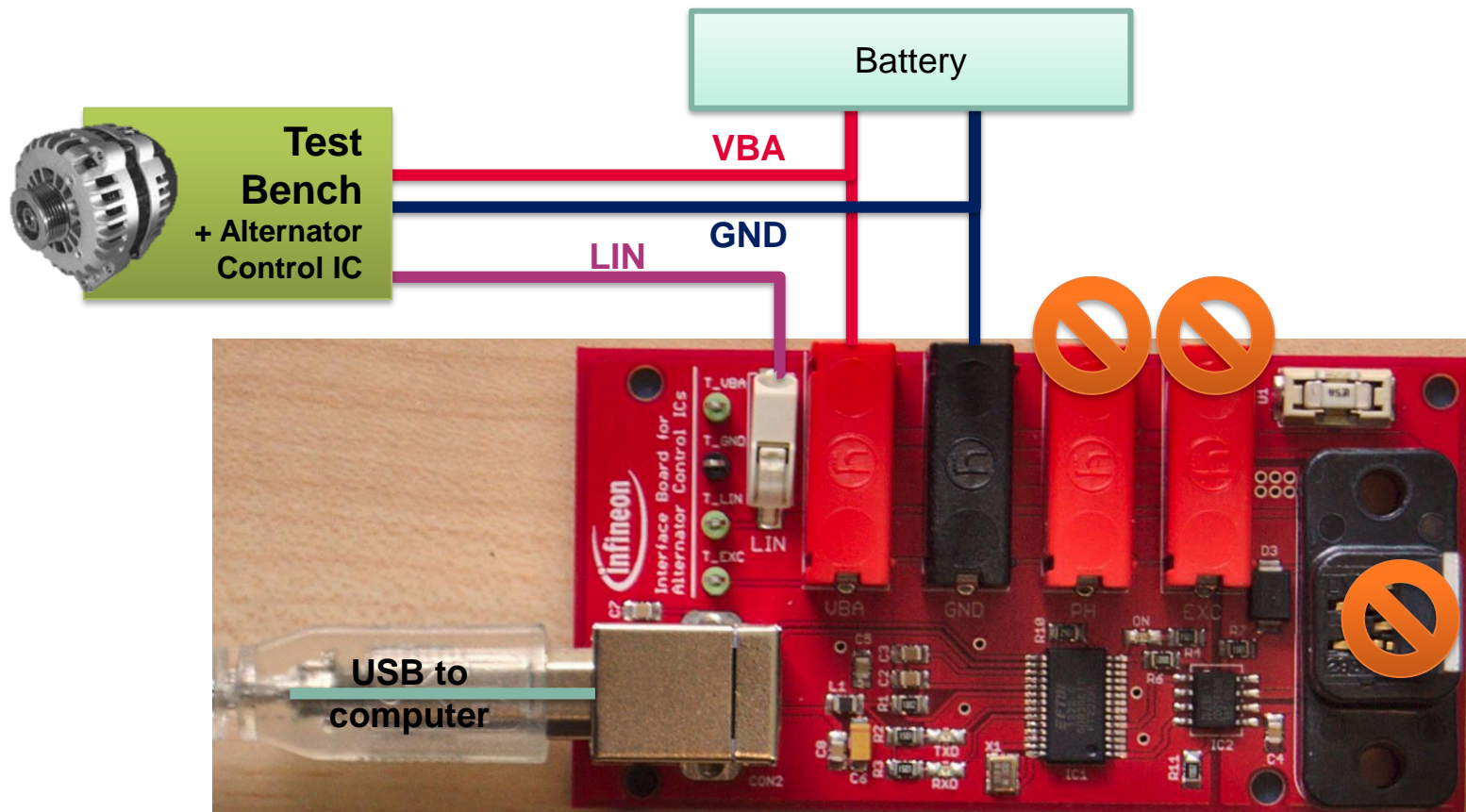
- › Possible connections between Interface Board and Test Bench:



# Interface Board

## Regular LIN communication on test bench

- › Possible connections between Interface Board and Test Bench:





1. Connect Interface Board with battery @ 12V (and alternator)
2. Start Interface Software, select the regulator and press “Auto Load” (during Auto Load, both LEDs on the Interface Board shall blink)
3. If failed, check connections or select “Manual Load” as alternative way
4. Select address and read / write from / to the device.
  - a) For some devices a voltage above 32V at the VBA pin might be required to read from the device.
  - b) For all devices a voltage above 32V VBA pin is required to write to the device.



Part of your life. Part of tomorrow.