Introduction to DCDC SBC Demo-Board

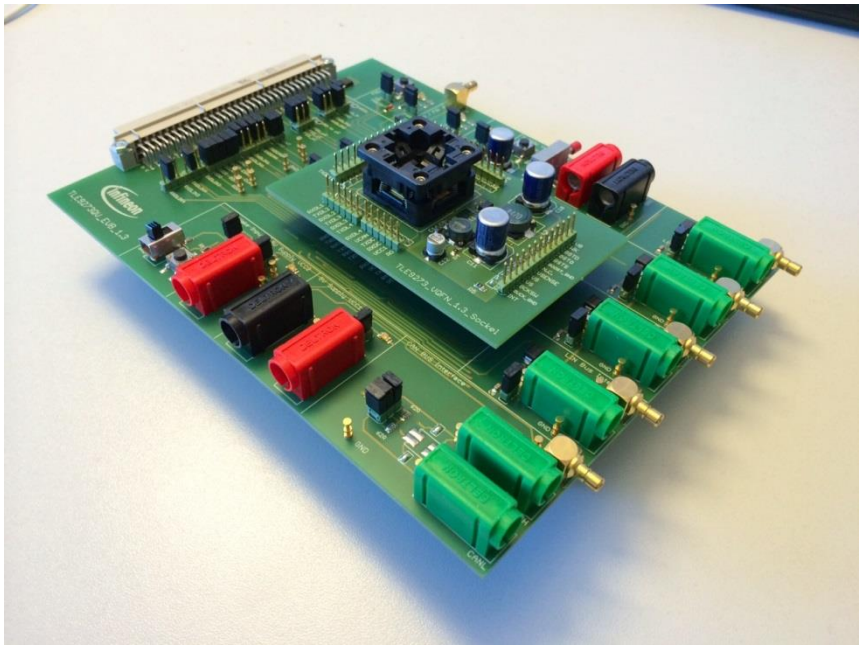
Tool Chain

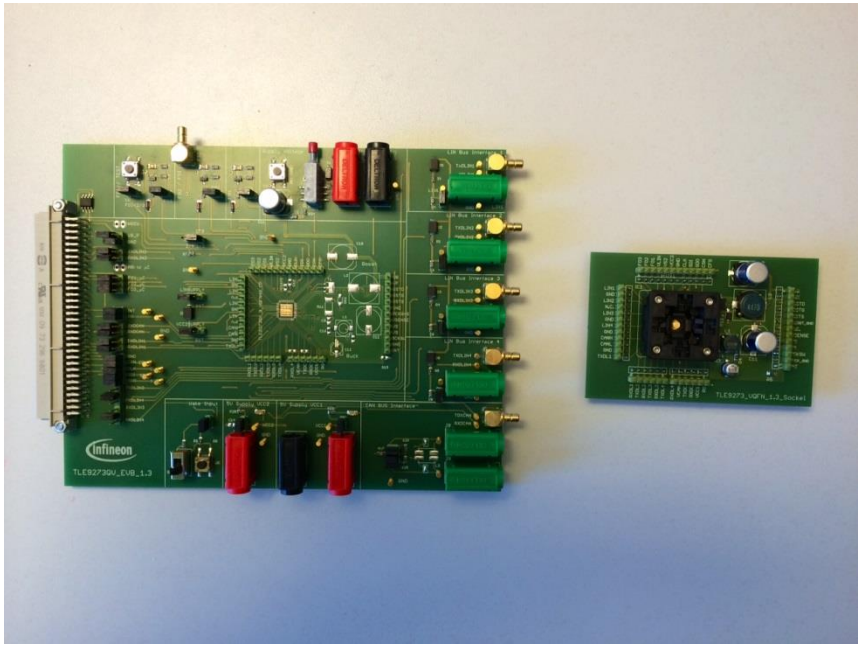
- To get in to the TLE9273QX IFX System Basis Chip, Infineon provides a complete tool chain composed:
  - Evaluation Board;
  - Graphical User Interface (GUI) to explore the SBC functionalities and to check SPI routine.
- The hardware and software is compatible with Infineon Power Easy Kit (PEK) already used for other IFX product.

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Evaluation Board: Overview

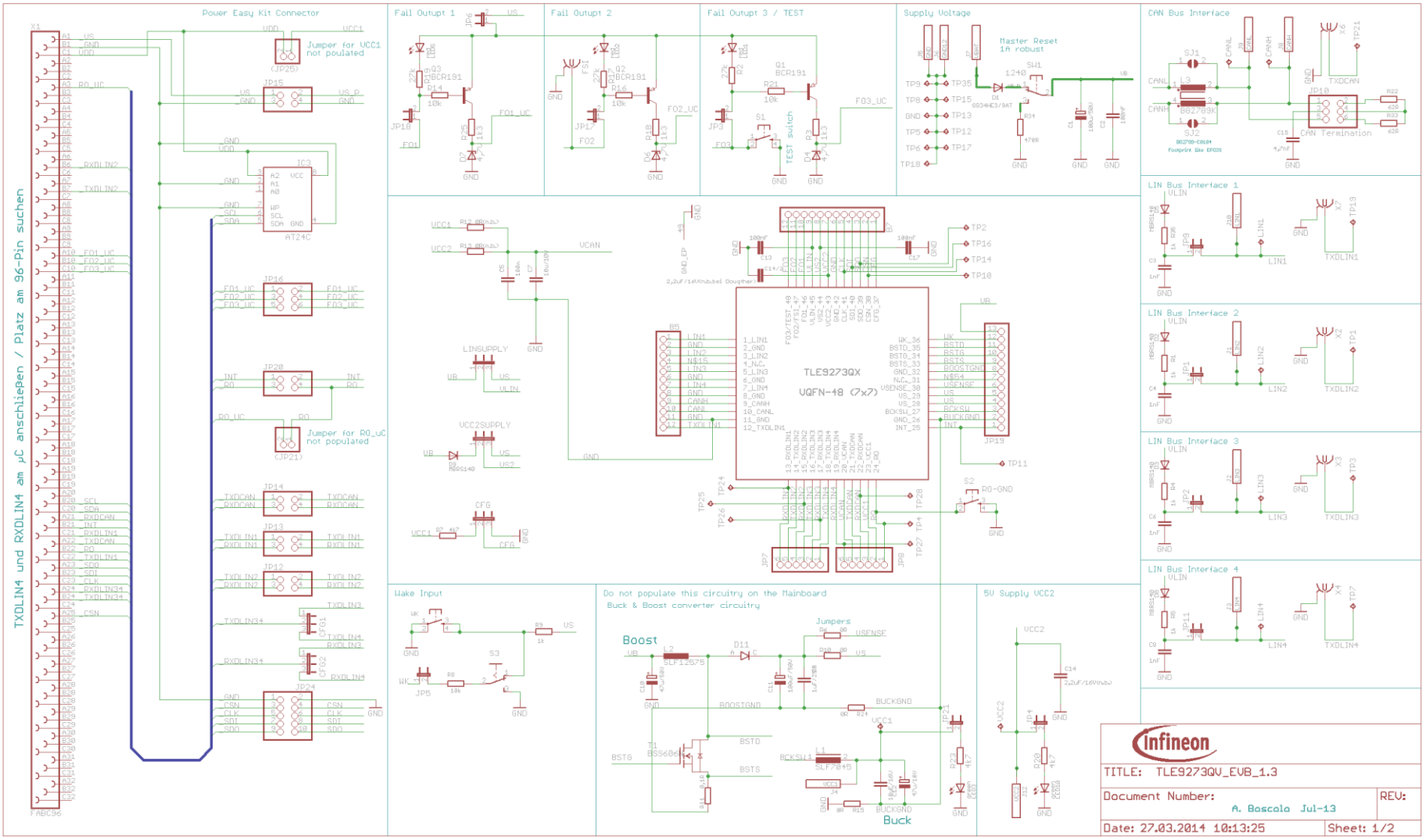
- The Evaluation Board is made up two parts:
  - One Base board where power supply, transceiver, digital I/O connections are present
  - One daughter Board where the socket and test pin are placed





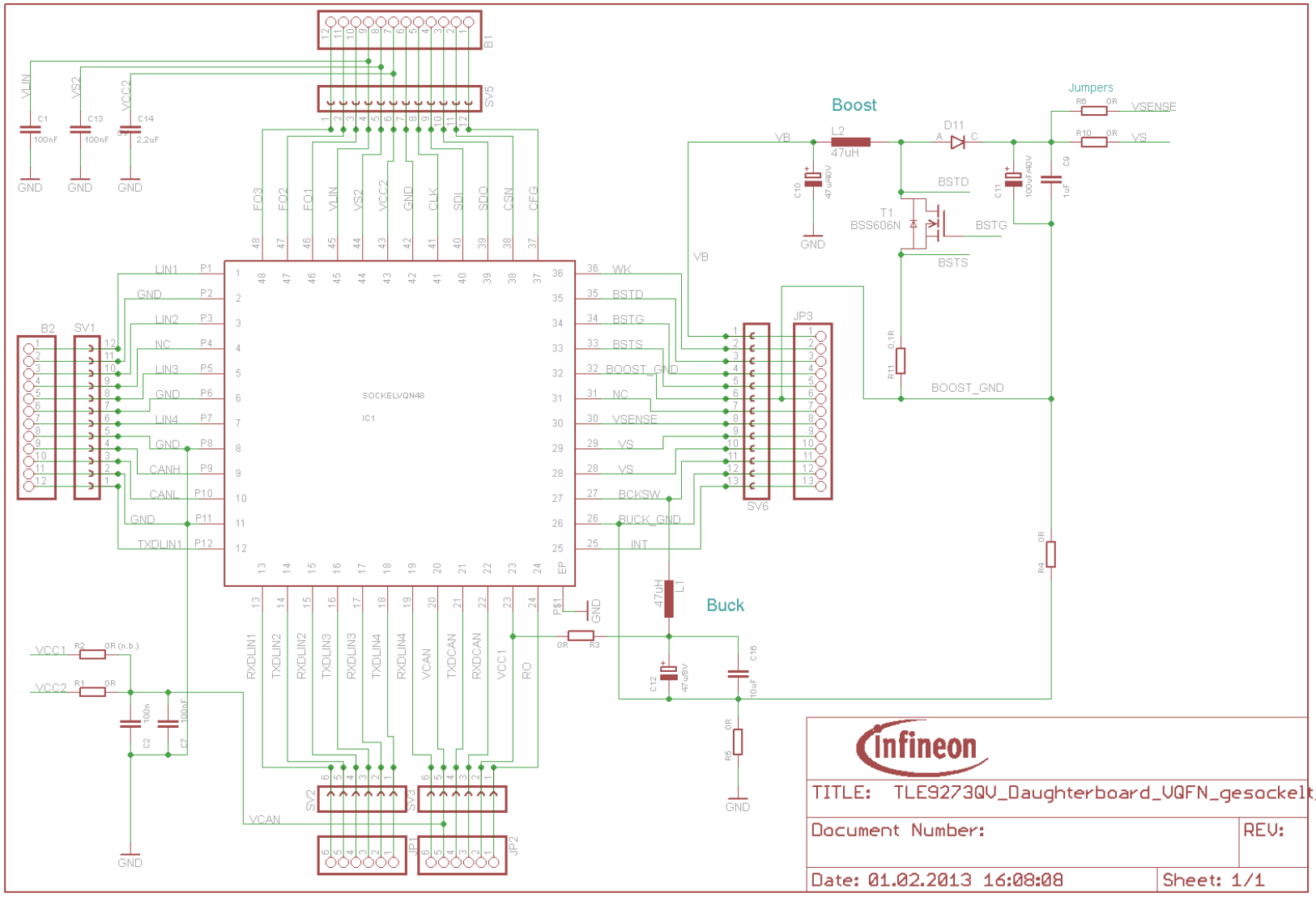
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Evaluation Board:
Base Board Schematic



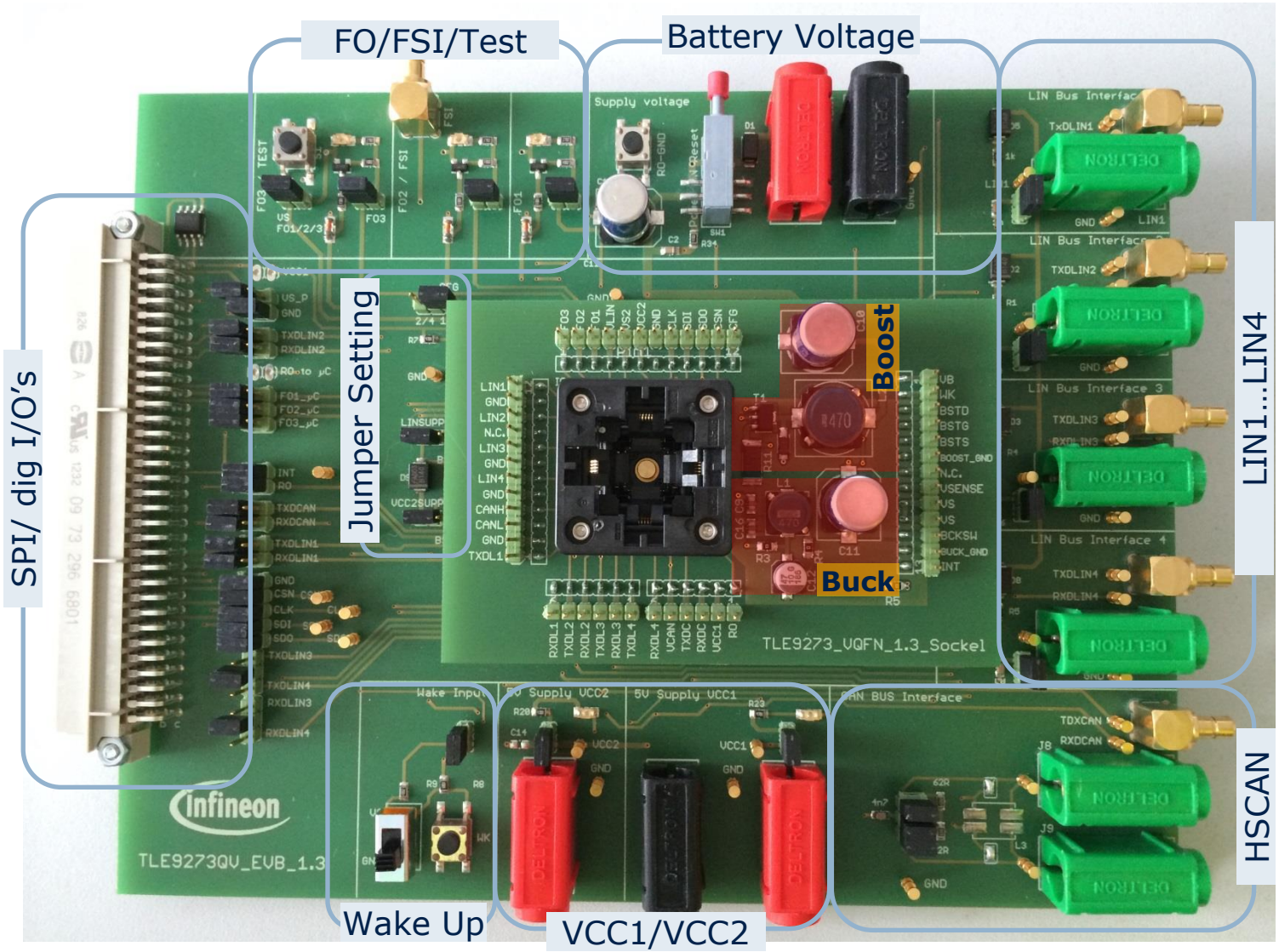
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Evaluation Board:
Daugther Board Schematic



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Evaluation Board: Base Board Layout



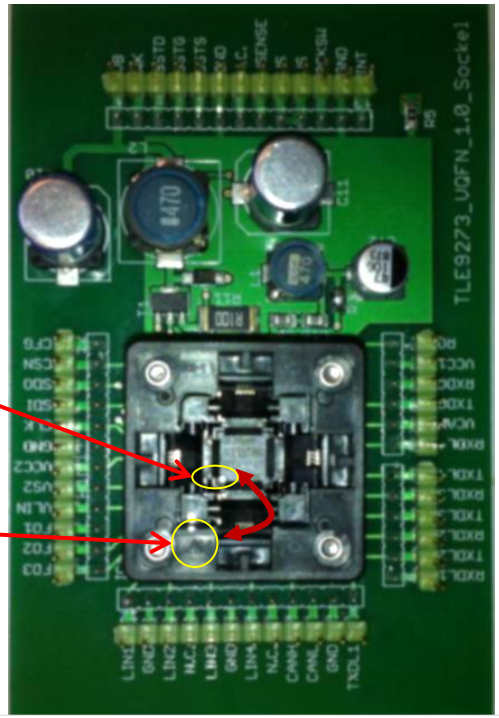
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Evaluation Board
Getting Started

- Inserting the device properly into the socket:

Pin 1 can be recognized by dot on corner of package

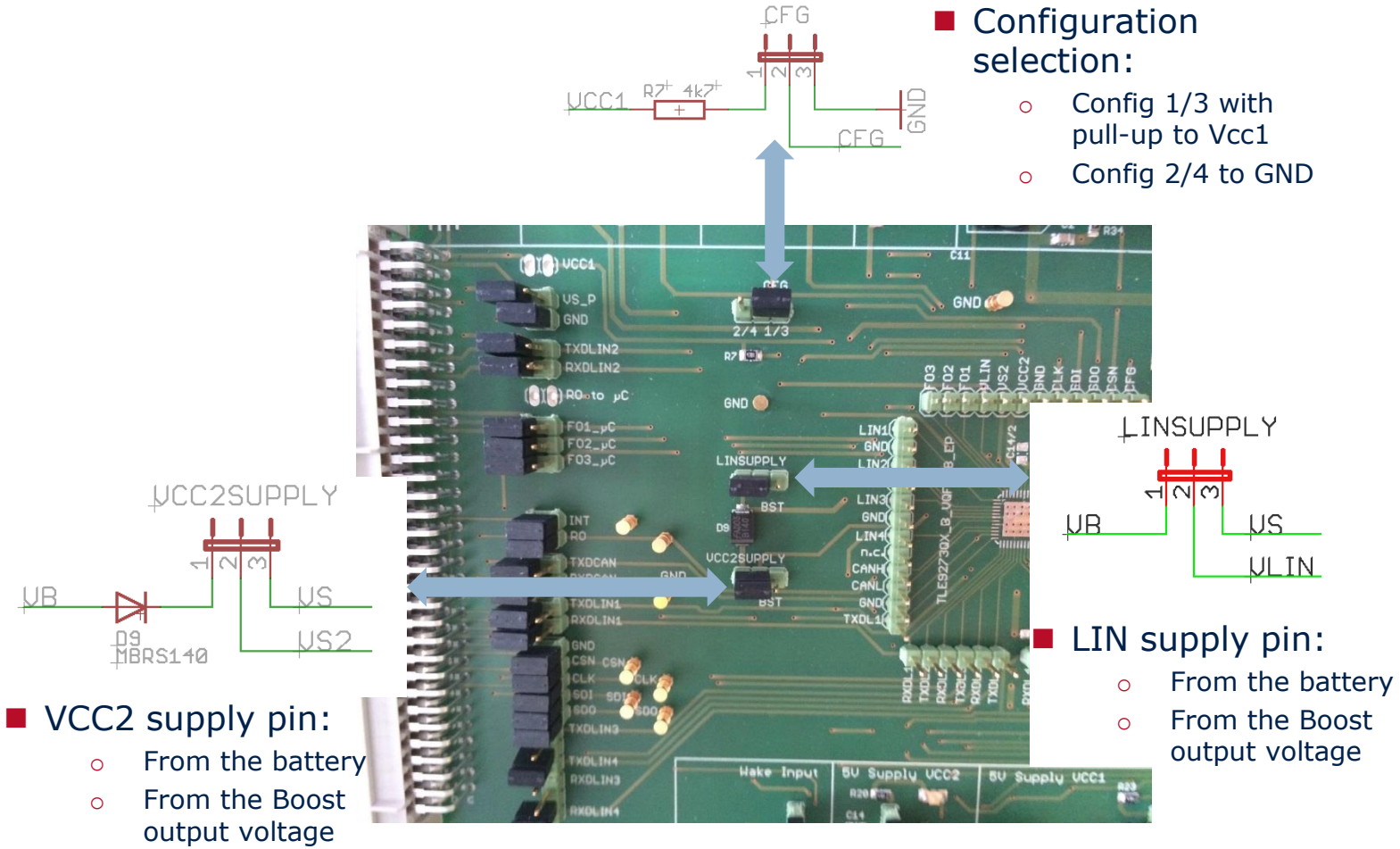
Device is inserted properly when the dot on package is at the same position than the triangle mark on the socket



Please contact your local Field Application Engineer for technical support and for obtaining the latest User Guide software, which works in combination with the Power Easy Kit uC

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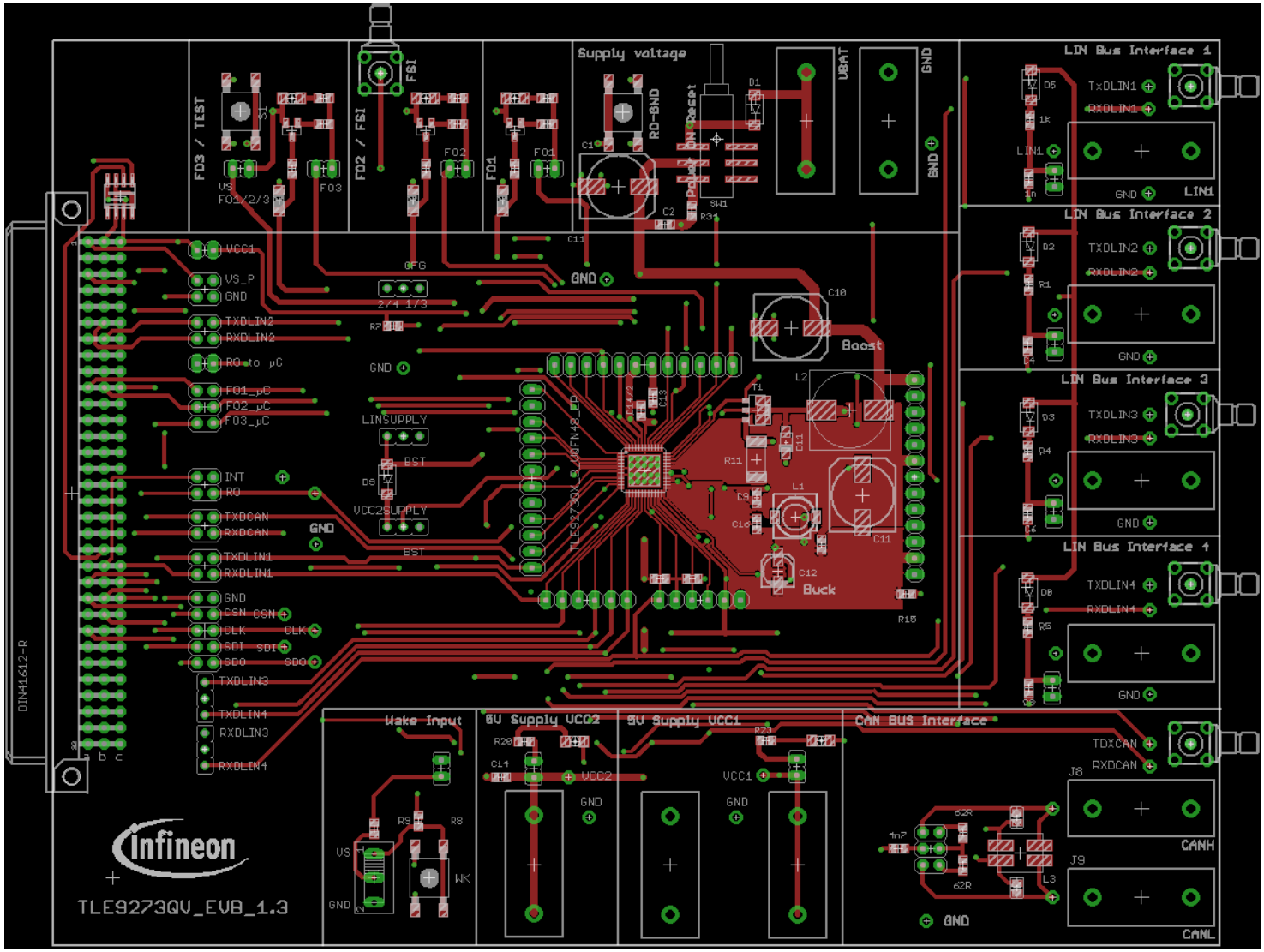
Evaluation Board: Jumper Setting



- Configuration selection:
  - Config 1/3 with pull-up to Vcc1
  - Config 2/4 to GND
- VCC2 supply pin:
  - From the battery
  - From the Boost output voltage
- LIN supply pin:
  - From the battery
  - From the Boost output voltage

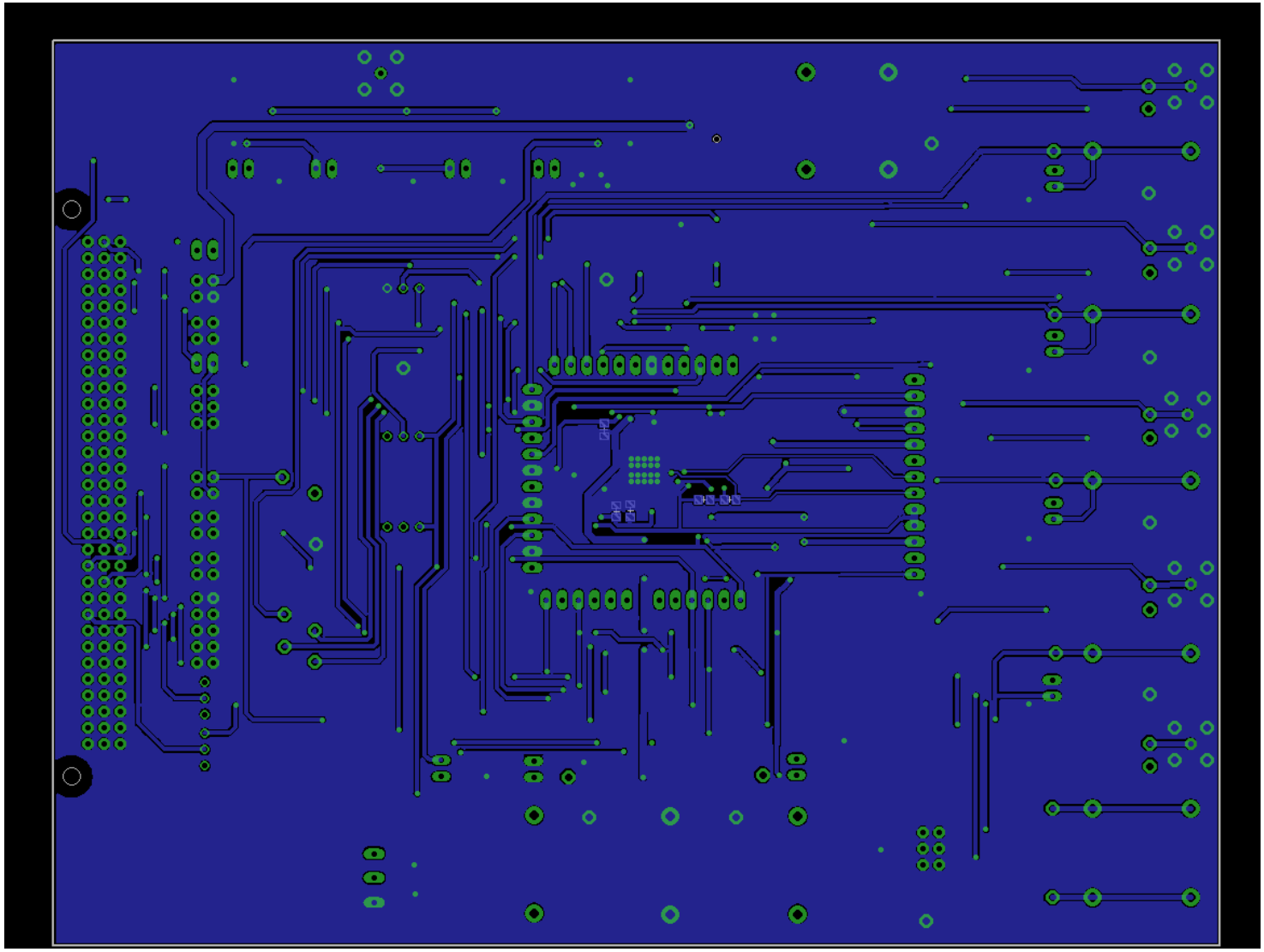
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Evaluation Board
Top Layout Routing



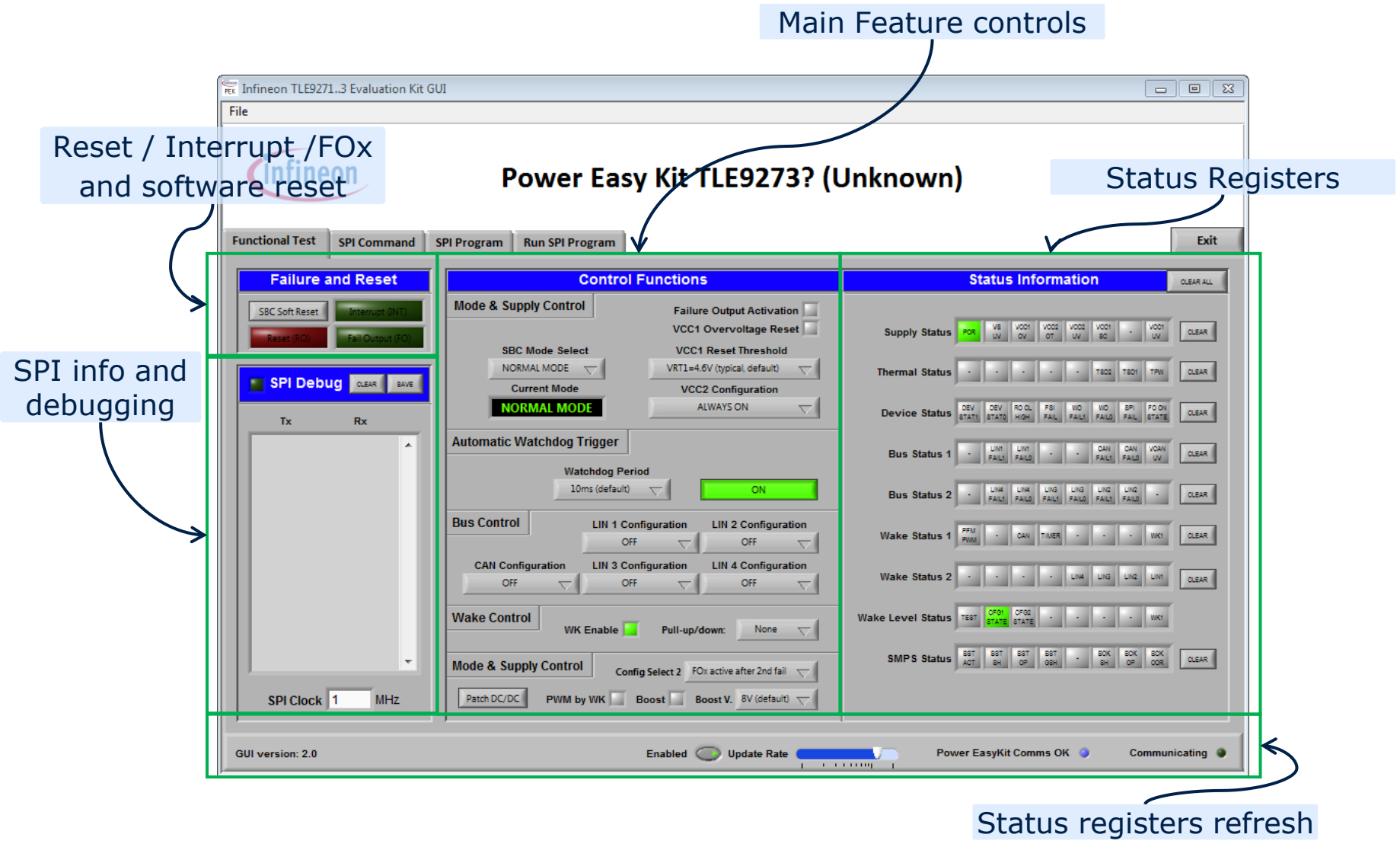
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Evaluation Board
Bottom Layout Routing



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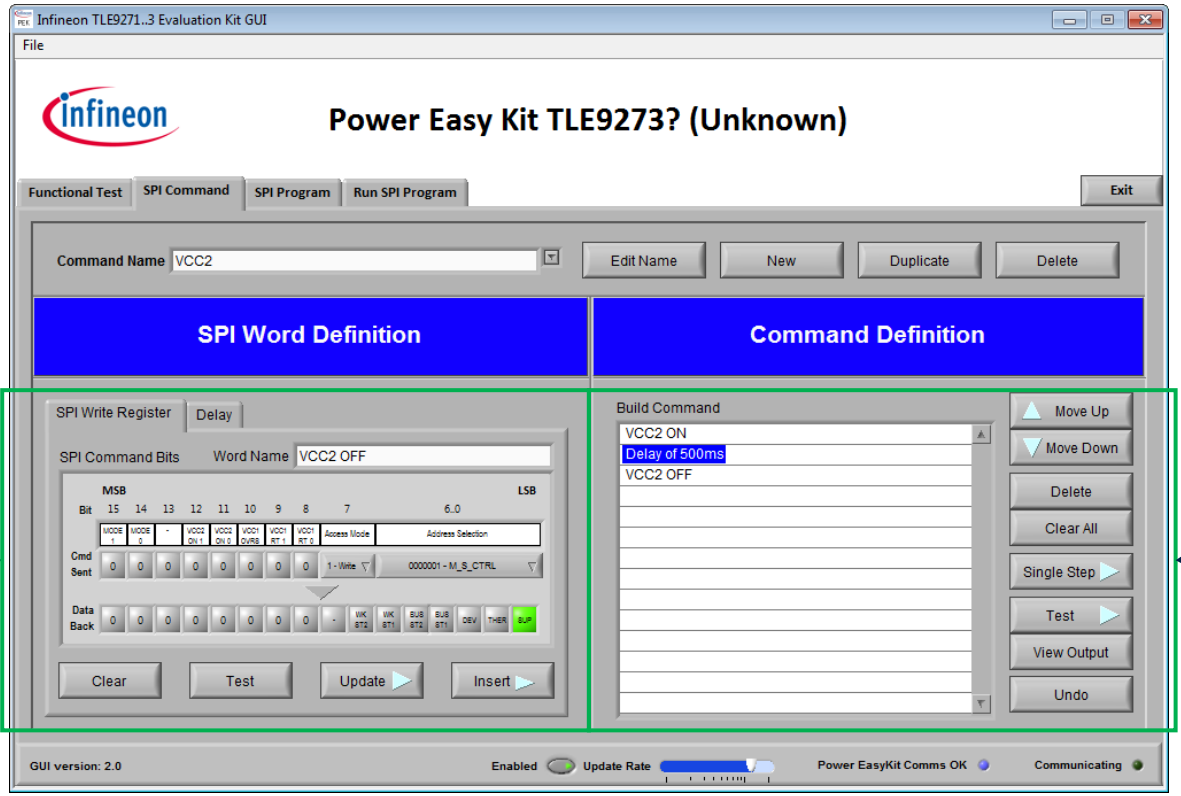
GUI (Beta): Functional test



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GUI (Beta): Detailed SPI commands

Detailed SPI Registers

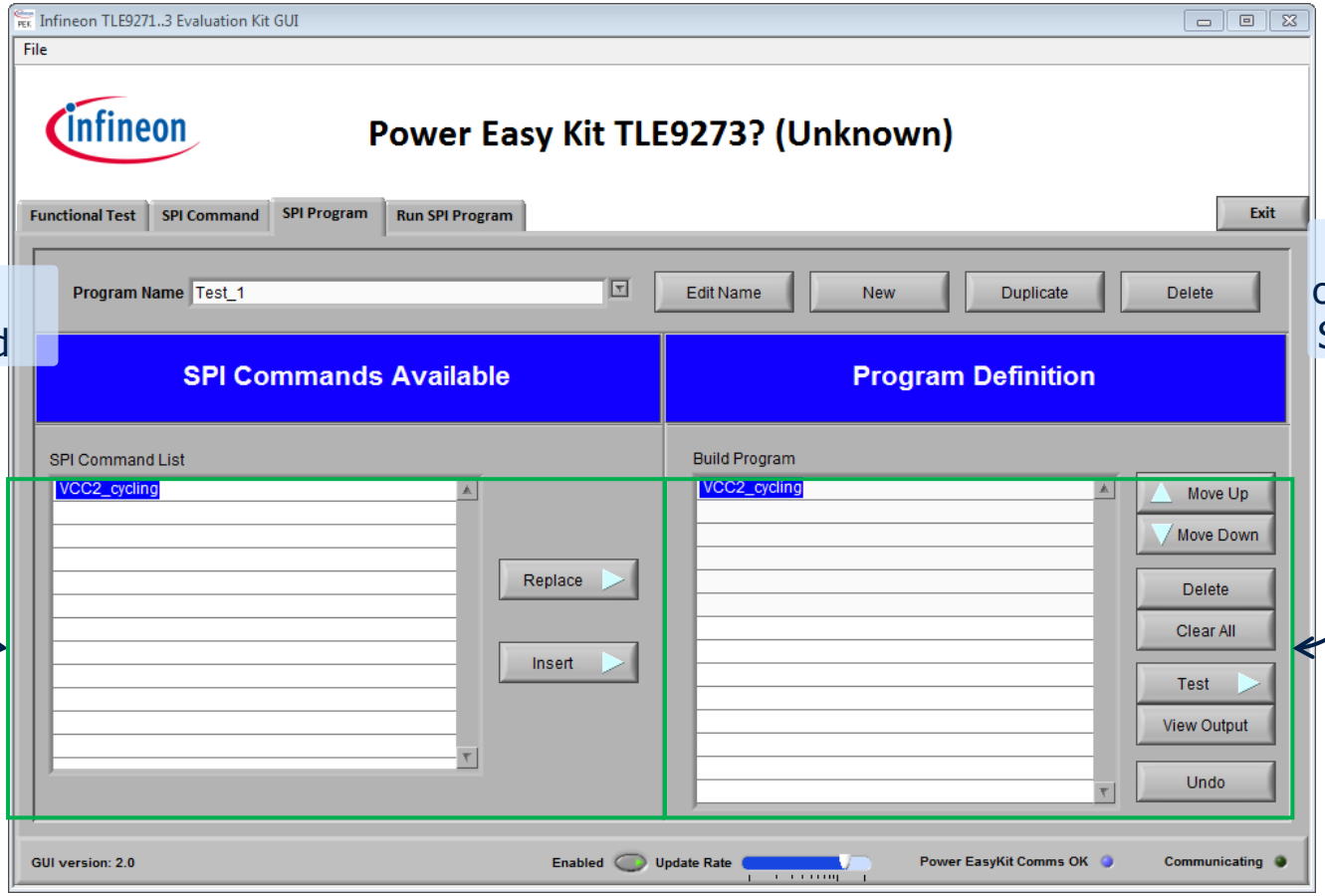


SPI command

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GUI (Beta): Detailed SPI commands

SPI command



Script based on the defined SPI command

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