

Application Kit – TC3xx Safety

Check List

- Application Kit – TC3xx Safety, which consists of:
 - Application Kit – TC397 TFT 5V
 - Evaluation Board – TC3xx Safety V3.1
- Power supply 12V
- USB Standard-A to USB Micro-B cable
- Magnet for GMR sensor
- Quick Start Guide (this document)



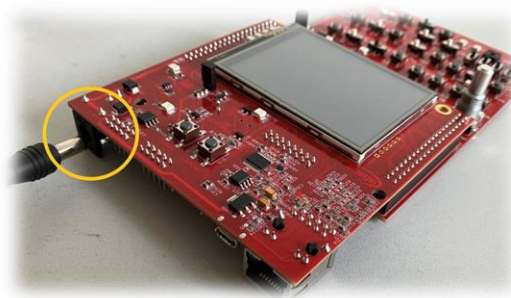
1

Connect the Application Kit to the Evaluation Board:



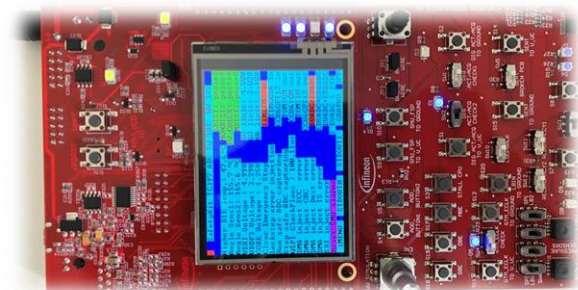
2

Connect the power supply to the Evaluation Board:



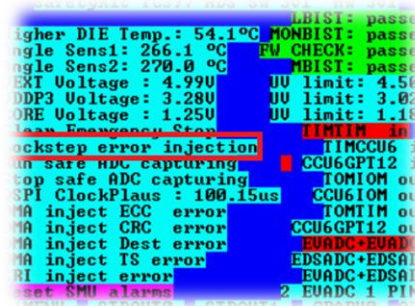
3

With power provided, the board starts up. LEDs blink and real-time data is displayed:



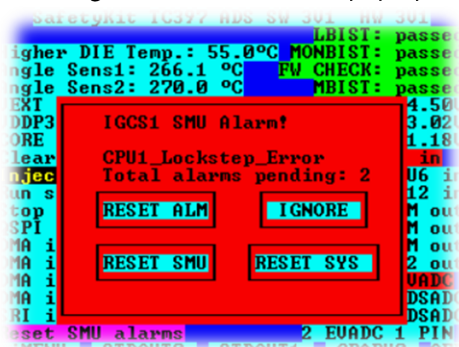
4

By using the touch display, buttons and switches, different faults can be injected, such as a Lockstep error for example:



5

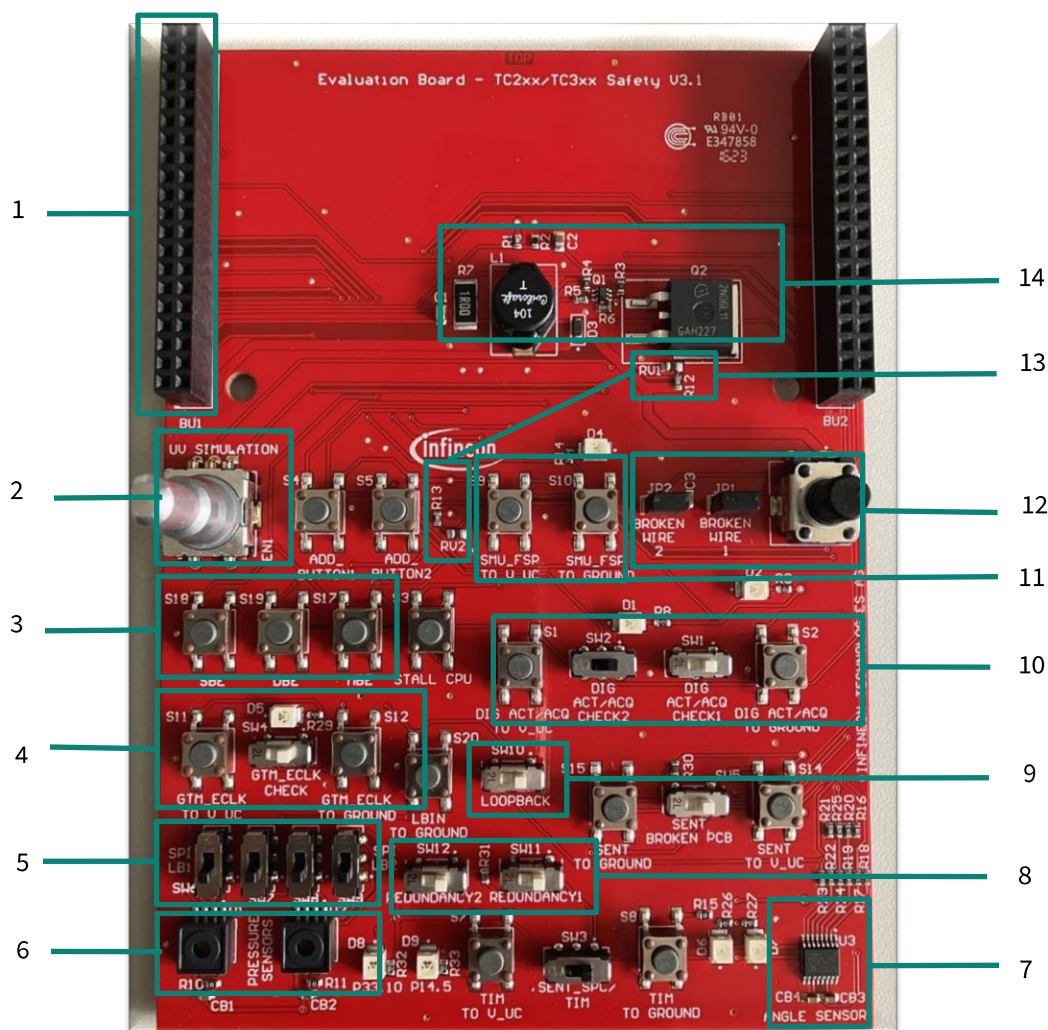
As a result of this example Lockstep error, the following alarm window would pop-up



6

For debugging, SW flashing or terminal window use, connect the Application Kit to your computer using the USB cable provided:





- | | |
|---------------------------------------|---|
| 1. AURIX™ connector | 8. Port redundancy switches |
| 2. Encoder knob to control PWM | 9. Port loopback switch |
| 3. NVM error injection buttons | 10. GTM, CCU6 and GPT12 error injection |
| 4. GTM clock error injection | 11. Fault signaling protocol test |
| 5. QSPI loopback switches | 12. Broken wire detection simulation |
| 6. Pressure sensors QSPI redundancy | 13. Analog temperature sensors |
| 7. GMR angle sensor's SENT redundancy | 14. Undervoltage simulation circuitry |

Additional resources

- AURIX™ Application Kit – TC3xx Safety:
 - <https://www.infineon.com/aurixsafetykit>
- AURIX™ Development Studio:
 - <https://www.infineon.com/aurixdevelopmentstudio>
- AURIX™ Code examples:
 - https://github.com/Infineon/AURIX_code_examples
- AURIX™ Forum for questions and support:
 - <https://community.infineon.com>

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