



Siemens Technical Bulletin STAB16-0102

# ST950 Failure to Reprogram CPU

7th October 2016

**Product:** ST950

**Modifications Req:** No

**Retrospective Action Req:** No

**Priority of Change:** Action only if problem arises

- ✓ Introduction
- ✓ Scope
- ✓ Procedure

## Introduction

This bulletin is to notify users of a weakness identified on the ST950 which may affect any procedure that requires the PROGRAM button to be pressed (i.e. Firmware Upgrade or Import of an IC4 Configuration).

NOTE: This does not occur during Quiet Initialisation.

## Scope

There are a number of ST950 CPU PCBs already installed that may exhibit this problem. However changes have already been made such that all new PCBs should not exhibit this problem.

## Procedure

Due to an issue with a particular manufacturer's device on the ST950 CPU PCB card, it has been found that the reprogramming procedure can sometimes terminate before it begins, preventing the reprogramming process from completing successfully.

It is therefore recommended that whenever the PROGRAM button needs to be pressed to reprogram the CPUs, the procedure is closely monitored using the status LEDs. It is also recommended that the web interface, rather than a handset, is used to perform any such procedures because it is easier to monitor the procedure (using notifications in the Fault Table), identify and resolve any problems.

Normally after pressing the PROGRAM button, the programming procedure consists of the blue 'PRG' LED showing a fast flash and then remaining on steady when the procedure is complete. However, if the blue 'PRG' LED remains off, the reprogramming process may have been affected by the identified weakness and the user should therefore check for the following scenarios:

- If the red 'BSY' LED is flashing, please keep waiting. An EFC software update can take several minutes.
- If the EFC keeps rebooting (e.g. the web page interface keeps appearing and disappearing), try pressing the PROGRAM button again to restart the reprogramming procedure. Pressing this button again has no adverse effects.
- If the EFC reboots a number of times, it will eventually enter 'Restricted Mode' – clearly identified by a fault in the Fault Table\* and a very fast flash of the green 'SYS' LED. Should this occur, press the reboot button associated with the fault in the Fault Table, wait for the EFC to reboot and then press the PROGRAM button to restart the reprogramming procedure.

In scenarios (b) and (c), within a minute of pressing the PROGRAM button the Blue 'PRG' LED should fast flash showing the programming procedure has started successfully. Monitor the progress using the status LEDs and the Fault Table on the web interface.

## Harry Smyth

Senior Product Engineer  
Governance

## Intelligent Traffic Systems

Sopers Lane, Poole, Dorset BH17 7ER  
Tel: +44 (0)1202 782027

Email: > [harry.smyth@siemens.com](mailto:harry.smyth@siemens.com)

> [www.siemens.co.uk/traffic](http://www.siemens.co.uk/traffic)

*Committed to quality traffic solutions and service excellence*

(\* Note: In 'Restricted Mode' the RS232 handset port is not operational.)

If, having followed the procedure above, the PRG LED remains off and the EFC remains unresponsive, the PCB should be returned to Poole for repair as this indicates that the PCB is faulty.

.....

**Approved by:** Keith Manston

---

*Siemens plc. Registered office: Siemens plc, Faraday House, Sir William Siemens Square, Frimley, Camberley, GU16 8QD. Registered no: 727817, England*