STSW-STM8077

STM8AF and STM8S HSI oscillator calibration using LIN automatic resynchronization

Data brief

Features

- HSI calibration from the LIN frame sync field
- HSI calibrated after few frames received
- HSI frequency maintained in spite of temperature and voltage variation

Description

This document provides a firmware example (STSW-STM8077), showing a way to calibrate the STM8AF or STM8S high-speed internal oscillator (HSI), when the STM8 is used as a LIN bus slave node.

The LINUART automatic resynchronization feature allows to compensate any possible HSI frequency deviation. It allows to maintain the LIN communication on the complete voltage and temperature range. On top of that, this example shows how to calibrate the HSI, thanks to the value updated by the automatic resynchronization in the LINUART baudrate registers.

1   Revision history

Table 1. Document revision history

Date	Revision	Changes
03-Nov-2015	1	Initial version.

IMPORTANT NOTICE – PLEASE READ CAREFULLY