



## STM32F10xxx CAN application examples

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### **Introduction**

This application note is intended to provide practical application examples of the STM32F10xxx CAN peripheral use.

This document, its associated firmware, and other such application notes are written to accompany the STM32F10xxx firmware library. These are available for download from the STMicroelectronics website: [www.st.com](http://www.st.com).

# 1 STM32F10xxx CAN communication in Loop Back mode

## 1.1 Overview

This section describes how to use the CAN firmware library to communicate in Loop Back mode. An example is given that uses most of the CAN driver functionality: configure, send, receive, etc.

## 1.2 Firmware description

The provided firmware includes the CAN driver that supports all CAN communications through a set of functions. An example of use for most of these functions is provided.

The CAN cell first performs a transmission and a reception of a standard data frame by polling at 100 Kbits/s. The received frame is checked and some LEDs light up to indicate whether the communication was successful. Then, an extended data frame is transmitted at 500 Kbits/s. Reception is done in the interrupt handler when the message becomes pending in the FIFO. Finally, the LEDs indicate if both transmission and reception have been successful.

This firmware is provided as the *CAN example* in the STM32F10xxx firmware library, available from the STMicroelectronics microcontrollers website.

## 1.3 Conclusion

Using this CAN driver example, it is possible to develop greater and more complex communication applications between the STM32F10xxx and any interfaced CAN, without connecting to a CAN bus.

## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
14-Jun-2007	1	Initial release.

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