

Manual

emtas CANopen slave1 AT90CAN128 Example

Version 1.0

Version history

Version	Changes	Date	Author	Release
1.0	First Version	17.08.2017	hil	

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1 Introduction

„emtas CANopen slave1 AT90CAN128 Example” demonstrates the emtas CANopen stack functionality in an embedded environment.

The example comes with a compiled .bin binary or a Atmel Studio 7 Project.

Both provide the same functionality and are designed as simple CANopen slave.

It implements indications for CAN-State Changes, as well as PDO, and Error Control indications.

2 PDOs are implemented in this example, 1 receive and 1 transmit PDO.

The transmit PDO is mapped to the manufacturer objects 0x3000:0 (U32) and 0x3000:1 (U16).

The receive PDO is mapped to the manufacturer objects 0x3000:2 (U16) and 0x2001:0 (U32).

For detailed information have a look in files main.c and slave1.eds.

This example has a time limit of 60 minutes and stops working if this limit is reached!

2 Examples

2.1 Binary Example

Our precompiled binary .elf example is ready to use and can be flashed directly onto the AT90CAN128 board.

2.2 Atmel Studio 7 Example

The Atmel Studio 7 example contains a main.c file which shows the initialisation of the board and several indication functions.

It also contains a library which holds the CANopen slave functionality, the driver functionality and all necessary header files.

After compiling, the application can be started directly through Atmel Studio 7.

3 CAN Device Support

3.1 *AT90CAN128*

This example is designed for the AVR CAN AT90CAN128 DEVELOPMENT BOARD.