

Application Note

CAN

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1. Preface

This application note describes the sample software of CAN using CAN Controller(CAN).
This document helps the user check operation of a product under develop its program.

2. Technical Term

Term/Abbreviation	Definition
BSP	Board Support Package
UART	Universal Asynchronous Receiver Transmitter
T32A	32bit Timer Event Counter
CAN	Controller Area Network
ADC	Analog to Digital Converter

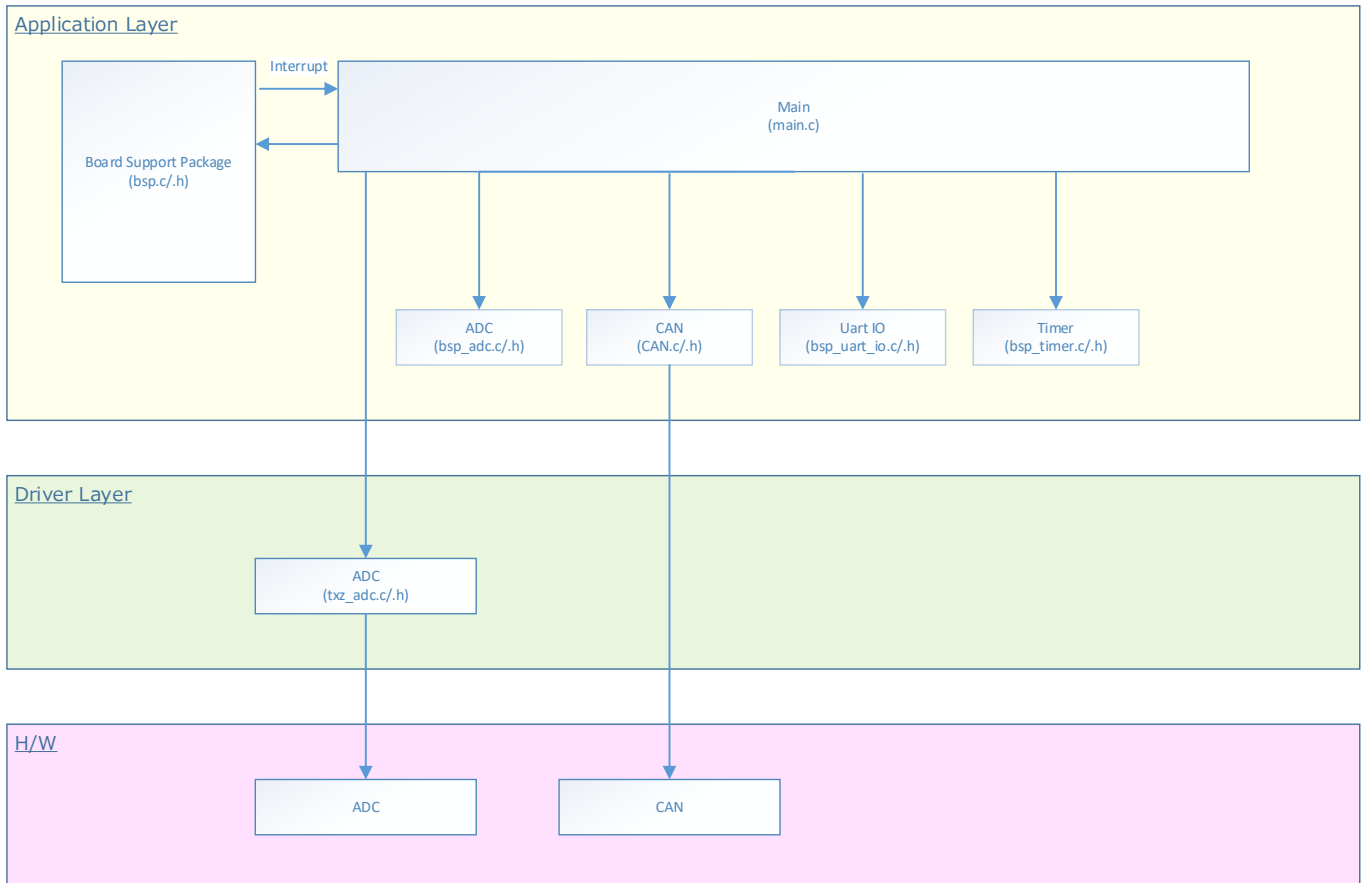
3. Reference Document

Document	Notes
Data sheet	Refer to the data sheet of MCU to be used.
Reference manual	Refer to the reference manual of each IP to be used.
Application note MCU User Guide	Refer to the MCU user manual to be used.

4. Target Sample Program

Sample Program	Outlines
CAN	Sample of CAN function.

5. Configuration Diagram



6. Sample Program: CAN

This sample software measures voltage with ADC. It sends and receives conversion result value with test loop back mode of CAN, and display received data on the terminal emulator.

6.1. Outlines of Operation

Voltage 1ch is measured every five seconds by BSP_ADC_0. Conversion result value sends and receives by test loop back mode of CAN, and display received data on the terminal emulator.

6.2. Function to Use

The functions to use are as follows.

For the Port assignment of each channel, refer to the MCU user manual.

IP	Channel	Objective
UART	BSP_UART_0	Communication with terminal emulator
ADC	BSP_ADC_0	Voltage measure
CAN	BSP_CAN_0	Communication with CAN

6.3. Interrupt to Use

Interrupt	Outlines
UART Interrupt	UART reception interrupt
	UART transmission interrupt
	UART ERROR interrupt
Timer Interrupt	Interval timer interrupt

6.4. Configuration

Nothing.

6.5. Example of Terminal Emulator Output

6.5.1. Normal Operation

```
nAIN0 > 0x019b
nAIN0 > 0x019c
nAIN0 > 0x02a6
```

6.5.2. Case of Error Occurrence

Nothing.

7. Revision History

Revision	Date	Description
1.0	2021-11-09	First release

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