

Application Note

LVD DEMO

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1. Preface

This application note describes the sample software of LVD_DEMO using Voltage Detection Circuit (LVD). This document helps the user check operation of a product under development and develop its program.

2. Technical Term

Term/Abbreviation	Definition
BSP	Board Support Package
LVD	Voltage Detection Circuit
T32A	32bit Timer Event Counter

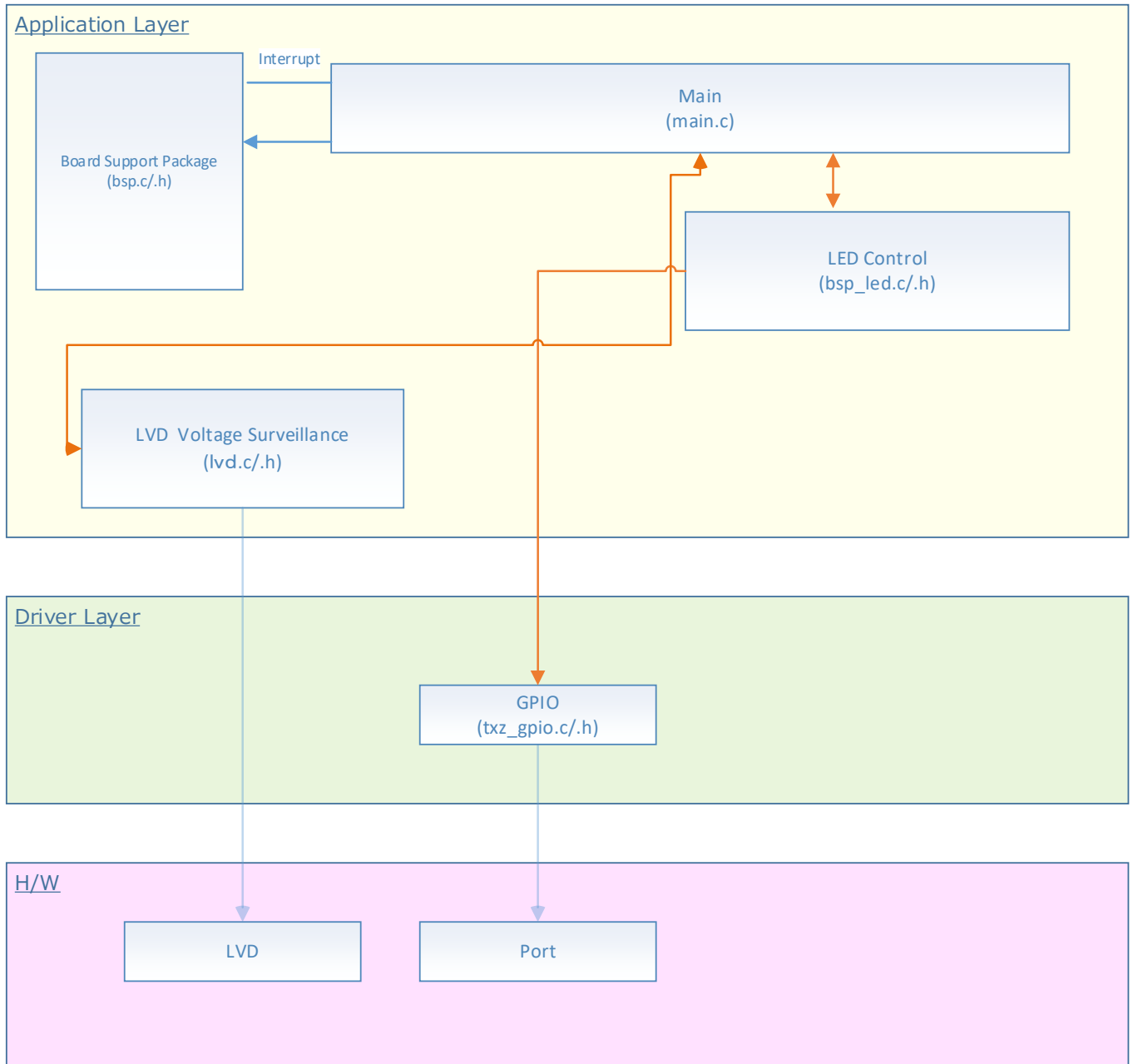
3. Reference Document

Document Name	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
LVD_DEMO	Sample of LVD_DEMO

5. Configuration Diagram



6. Sample Program: LVD_DEMO

This sample software detects a voltage using LVD function.

6.1. Outlines of Operation

When the voltage is equal to or higher than the detection voltage ($3.1\text{ V} \pm 0.1\text{ V}$), the BSP_LED_0 turns on.

When the voltage is lower than the detection voltage ($3.1\text{ V} \pm 0.1\text{ V}$) (normal operation), the BSP_LED_2 blinks (the blink cycle is 2 seconds).

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	Outlines
PORT	BSP_LED_0	LED control
	BSP_LED_2	LED control

6.3. Interrupt to Use

Interrupt	Outlines
Timer interrupt	Interval timer interrupt

6.4. Configuration

Nothing.

6.5. Example of Terminal Emulator Output

Nothing.

7. Revision History

Revision	Date	Description
1.0	2021-11-01	First release

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