Application Note

EBIF_SRAM

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1. Preface

This application note describes the sample software of EBIF_SRAM using External Bus Interface (EBIF). This document helps the user check operation of a product under development and develop its program.

2. Technical Term

Term/Abbreviation	Definition
UART	Universal Asynchronous Receiver Transmitter
EBIF	External Bus Interface
SRAM	Static Random Access Memory

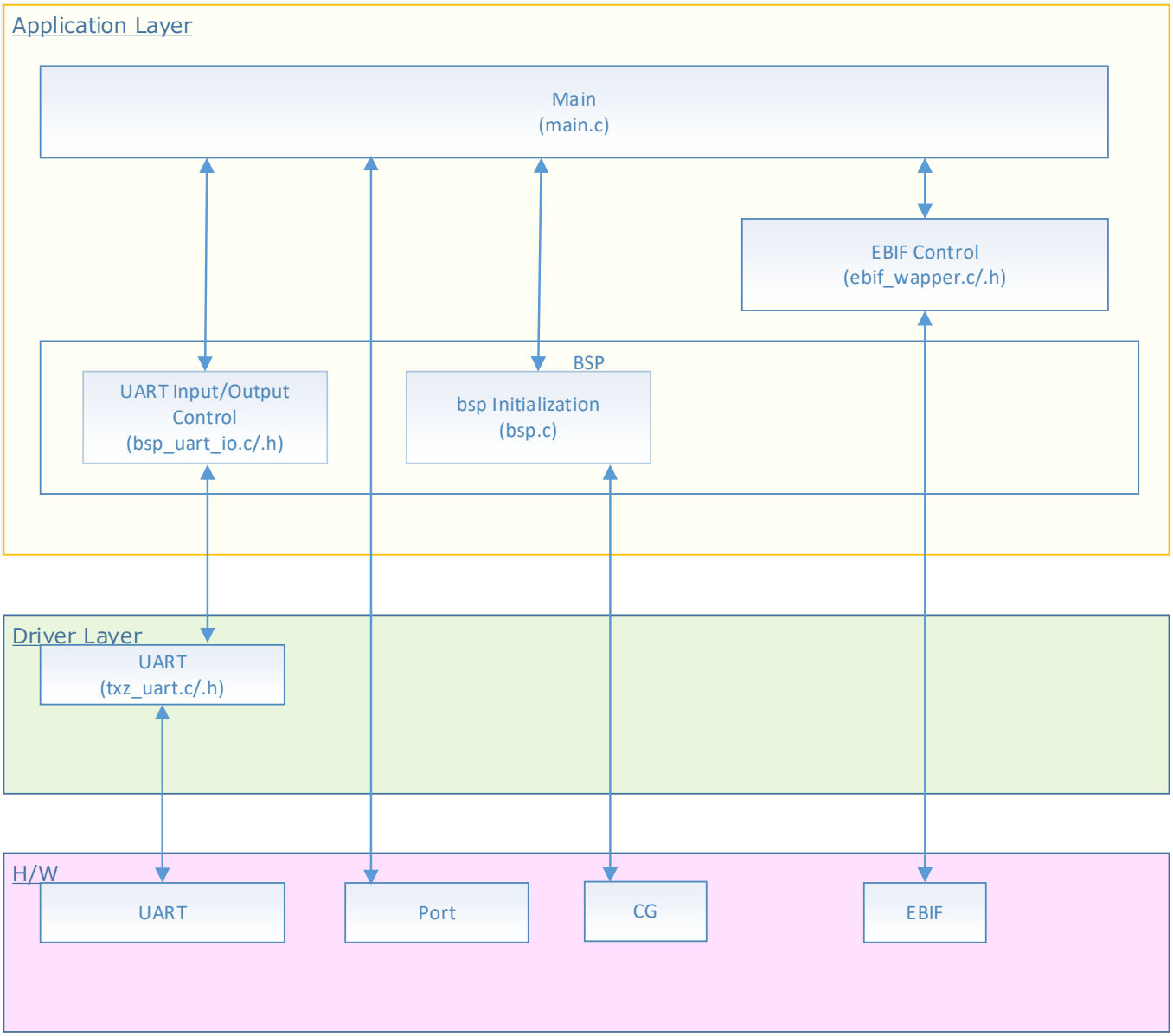
3. Reference Document

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
EBIF_SRAM	Sample of EBIF_SRAM (External bus interface)

5. Configuration Diagram



6. Sample Program: EBIF_SRAM

This sample software outputs the external SRAM communication data on the terminal emulator using EBIF function.

6.1. Outlines of Operation

"command >" is displayed on the terminal emulator.
The command is input according to the format of the following "write" command or "read" command.
When the "write" command is executed, the input data is stored to the SRAM (0x00000). When the “read” command is executed, the data stored in the SRAM (Address: 0x00000) is read and displayed on the terminal emulator.

- Command format:
  “write” command
  write␣X X: Any character
  “read” command
  read
- SRAM: IS62WV51216BLL-55TLI

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_2	Communication with the terminal emulator
EBIF	-	Communication with EBIF

6.3. Interrupt to Use

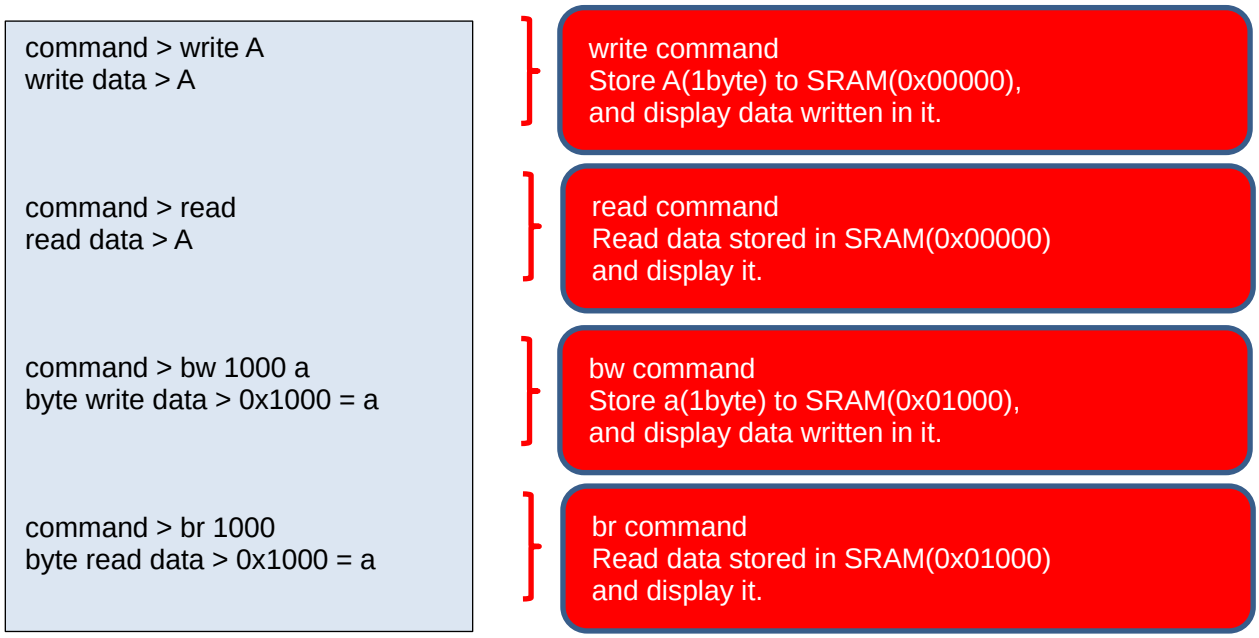
Interrupt	Outlines
UART Interrupt	UART reception interrupt
	UART transmission interrupt
	UART ERROR interrupt

6.4. Configuration

Nothing.

6.5. Example of Terminal Emulator Output

6.5.1. Normal Mode



6.5.2. Case of Error Occurrence

Nothing.

7. Revision History

Revision	Date	Description
1.0	2021-10-18	First release

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