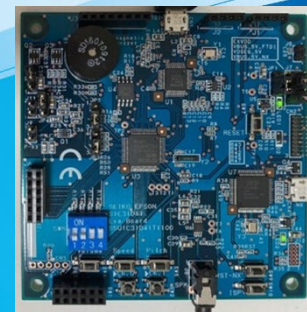


Sound MCU: S1C31D41

Demonstration Software Guide



Rev1.00

Evaluation board/kit and Development tool important notice

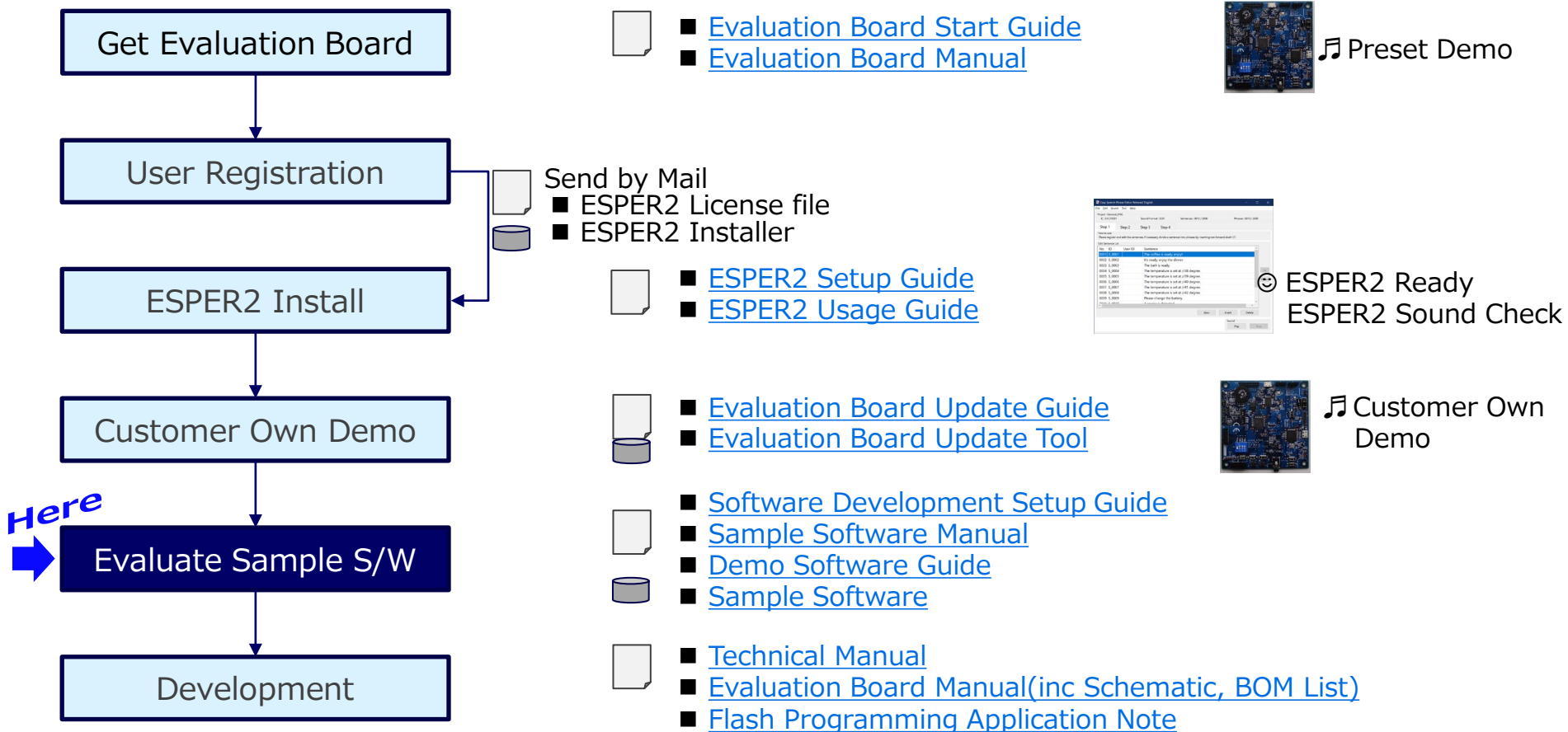
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- Purpose : This document describes **how to use the demonstration software** included in the S1C31D41 Peripheral Circuit Sample Software Package.

1. System Requirements
 - 1.1. System Requirements
2. Folder Structure
 - 2.1. Folder Structure
3. Various Demo Software Guides (Provided in another document)
 - 3.1 Various Demo Software Guides
 1. SOUNDPLAY_DEMO ... Sound Playback Demo (Evaluation Board Preset)
 2. SOUNDPLAY ... Sound Playback Example
 3. SOUNDREC_DEMO ... Sound Recording and Playback Demo
 4. MEMCHECK ... Memory Checking Example

**This document is intended for sample software packages of ver.5.00 or later.*

1. System Requirements

1.1. System Requirements

The following devices are required to run the S1C31D41 demo software:

- **Evaluation Board**

- S1C31D41 evaluation board (S5U1C31D41T)

- **Debug Probe *1,2**

- IAR Systems I-jet or SEGGER J-Link

- **Integrated Development Environment (IDE)**

- IAR Embedded Workbench for ARM®(IAR EWARM) or MDK-ARM®

**1: I-jet can only be used with IAR EWARM. J-Link can be used with both IAR EWARM and MDK-ARM.*

**2: Since the S1C31D41 evaluation board (S5U1C31D41T) is equipped with the CMSIS-DAP function, this software can be executed without a debug probe.*

2. Folder Structure

2.1. Folder Structure

The folder structure of the [Demonstration Software](#) and related programs included in the S1C31D41 peripheral circuit sample software package is shown on the right.

```
[s1c31d5xd41sp_verx_xx]
- [Licenses] : License group
- [Drivers] : Driver group
  - [board] : 評価ボード関連ドライバ Drivers related to the evaluation board
    - [S5U1C31D41T1]
      - [ARM]
      - [IAR]
      - board.c/.h : Evaluation board setting program
      - settings.h : Definition file for setting the function of the evaluation board
      - ...
    - [CMSIS] : CMSIS driver
      - [Device]
        - [S1C31D41]
          - [Include]
            - S1C31D41.h : CMSIS peripheral circuit access layer header file
            - ...
          - [Source]
            - [ARM]
            - [IAR]
            - startup_S1C31D41.s : CMSIS startup program
            - system_S1C31D41.c : CMSIS peripheral circuit access layer program
        - [Driver]
        - [SVD]
      - [sePeripheralLibrary] : Peripheral circuit library
        - se_clg.c/.h
        - se_i2c.c/.h
        - ...
    - [Middlewares] : Middleware group
      - [seHWProcLibrary] : HW Processor library
      - [seEepromLibrary] : EEPROM emulation library
      - [seFlashLibrary] : Self-programming library
  - [Projects] : Sample software group
    - [Demonstration] : Demonstration software group
      - [SOUNDPLAY] : Sound playback example
      - [MEMCHECK] : Memory checking example
      - [SOUNDPLAY_DEMO] : Sound playback demo
      - [SOUNDREC_DEMO] : Sound recording and playback demo
      - ...
    - [Applications] : Application software group
    - [Examples] : Peripheral circuit sample software group
- README.txt
```


3. Various Demo Software Guides (Provided in another document)

1. SOUNDPLAY_DEMO ... Sound Playback Demo (Evaluation Board Preset)

➔ Please refer to "1_S1C31D41_SoundPlayDemo_e_revx.xx.pdf".

2. SOUNDPLAY ... Sound Playback Example

➔ Please refer to "2_S1C31D41_SoundPlay_e_revx.xx.pdf".

3. SOUNDREC_DEMO ... Sound Recording and Playback Demo

➔ Please refer to "3_S1C31D41_SoundRecDemo_e_revx.xx.pdf".

4. MEMCHECK ... Memory Checking Example

➔ Please refer to "4_S1C31D41_MemCheck_e_revx.xx.pdf".

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