

AW952XX Software Porting Guide

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1 Software Overview

Driver File	aw952xx.c、aw952xx.h、aw_type.h、aw952xx_reg.h
Support Device	aw9523b、aw9527
I ² C Address	0x58/0x59/0x5A/0x5B

2 Software Porting

2.1 I2C Communication Interfaces Configuration

Implement I2C read and write interfaces based on the actual platform in use.

```
static AW_U8 aw_i2c_write_reg(AW_U8 reg_addr, AW_U8 reg_data)
static AW_U8 aw_i2c_read_reg(AW_U8 reg_addr, AW_U8 *reg_data)
static AW_U8 aw_i2c_write(AW_U8 reg_addr, AW_U8 *reg_data, AW_U16 num)
static AW_U8 aw_i2c_read(AW_U8 reg_addr, AW_U8 *reg_data, AW_U16 num)
```

2.2 Delay Interface Configuration

Implement a delay interface based on the actual platform in use.

```
static void delay_ms(AW_U32 ms)
```

2.3 Enable Pin Configuration

Configure the chip enable interface according to the actual hardware platform used.

```
static void aw952xx_chip_enable(AW_BOOL enable)
```

2.4 Interrupt Function Configuration

If the macros ***AW952XX_SINGLE_KEY_MODE_ENABLE*** or ***AW952XX_MATRIX_KEY_MODE_ENABLE*** (defined in *aw952xx.h*) are enabled, you must implement the interrupt interface based on the target platform and call the following two functions within the interrupt handler.

```
aw952xx_enbale_interrupt_by_mask(AW952XX_INPUT_PORT_MASK, 0);
aw952xx_key_work();
```

2.5 Entry Function Porting

Call the entry function at an appropriate location in the main program.

```
int aw2110x_enter(void)
```

3 Driver Function Configuration

3.1 I2C Address Configuration

The I2C address can be modified directly by changing the macro ***AW952XX_DEVICE_ADDR*** in ***aw952xx.h***

3.2 GPIO Port Enable Selection

The driver provides two port control macros in ***aw952xx.h***, where each bit can independently enable a GPIO port:

AW9523B_INPUT_PORT_MASK: Enables the port as input.

AW9523B_OUTPUT_PORT_MASK: Enables the port as output.

Note: A port cannot be simultaneously configured as both input and output.

3.3 Driver Function Mode Selection

The driver supports four functional modes in ***aw952xx.h***, enabled via macros:

AW952XX_LED_MODE_ENABLE: LED mode

AW952XX_GPIO_MODE_ENABLE: GPIO mode

AW952XX_SINGLE_KEY_MODE_ENABLE: Single-key mode

AW952XX_MATRIX_KEY_MODE_ENABLE: Matrix-key mode

Revision History

Version	Date	Description
V1.0	2021-05	AW9523B MCU Driver Porting Documentation (Initial Version)
V1.1	2023-02	Update template
V1.2	2025-05	Update document name and template

Declaration

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