

1. Description

In this demo, Microchip I2C EEPROM 24xx256 is used as the slave device, and I2C0 is used as the master, through program and read EEPROM 24xx256, test the I2C write and read function.

2. Test

The status of the test run correct or not are shown through P2, Programming status will also be shown through P2.

Before test begin, make sure that I2C0 interface is connected with EEPROM correctly, that is, I2C_SCL connect with EEPROM SCL pin, while I2C_SDA connect with EEPROM SDA pin, and make sure EEPROM address is 0.

Then, download executable file into develop board, then run the demo.

Start run the demo, EEPROM is programmed with 64 bytes of 00H, 64 bytes of 01H, and so on, until 64 bytes of 0FH. During Programming, P2 output will change from 0 to 15, corresponding to EEPROM page0 to page15, if an error occurs when programming EEPROM, an error code xF0 will be shown through P2.

After program complete successfully, I2C will read programmed data back to verify. If verification passes, P2 will output 0x5D. If there is any error occurs during the progress, P2 will output 0xF0.