

Dediware Software User Manual For Microchip SPI NOR Flash Option Bytes

Version 1.0



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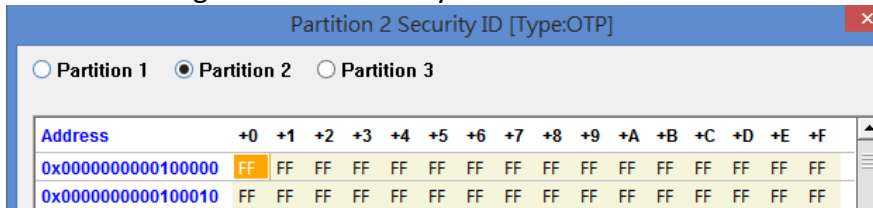
I. Description

This application note illustrates how to set up Dediware settings for programming Microchip SPI NOR Flash option bytes. Learn more about DediProg products and how to use them.

II. Microchip Data Protection Feature

- Write Protection (reference SST25PF040C Datasheet 4.1 “Write Protection” chapter <http://www.microchip.com/wwwproducts/en/SST25PF040C>)
- Hardware Write Protection (reference SST26VF016B / SST26VF016BA Datasheet 4.2 “Hardware Write Protection” chapter <http://www.microchip.com/wwwproducts/en/SST26VF016B>)
- Security ID: divided into two types
 - 256-bit Security ID (reference SST25PF080B Datasheet 4.3 “Security ID” chapter <http://www.microchip.com/wwwproducts/en/SST25PF080B>)

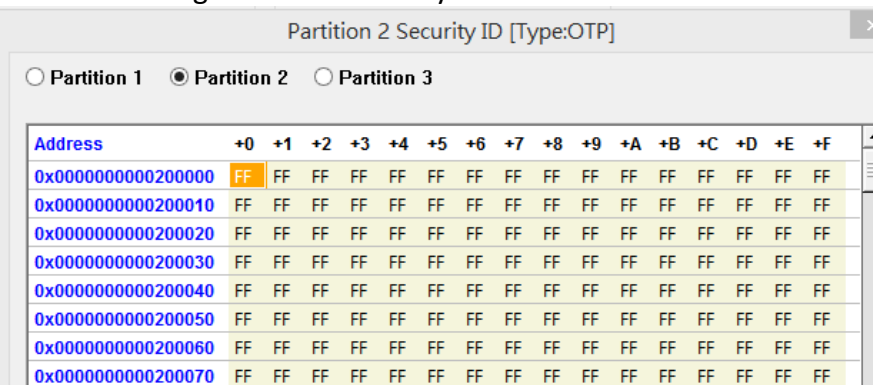
◆ Buffer configuration of Security ID: Partition 2



◆ The first eight Bytes (00H~07H) in the Buffer area are factory-programmed, which will be skipped during Blank Check and Verification.

- 2 KByte Security ID (reference SST25PF080B Datasheet 4.3 “Security ID” chapter <http://www.microchip.com/wwwproducts/en/SST26VF016B>)



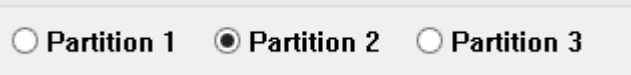
◆ Buffer configuration of Security ID: Partition 2

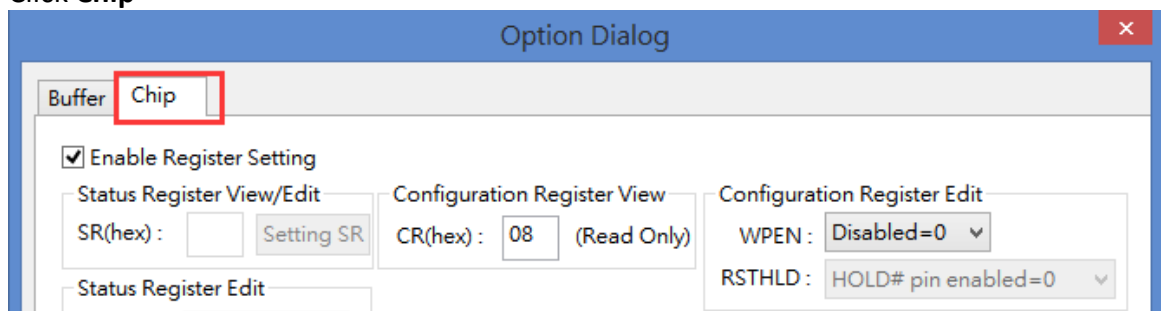


- The first eight Bytes (00H~07H) in the buffer area is factory-programmed, which will be skipped during Blank Check and Verification.
- non-Volatile Write-Lock Lock-Down register (reference SST26VF016B / SST26VF016BA Datasheet 4.1.3 chapter <http://www.microchip.com/wwwproducts/en/SST26VF016B>)

III. Read Register Value

Read IC's register value according to the following steps.

1. Click **Select**  → Select Chip
2. Click **Read IC** 
3. Click **Partition 2** or **Partition 3** 
4. Click **Chip**

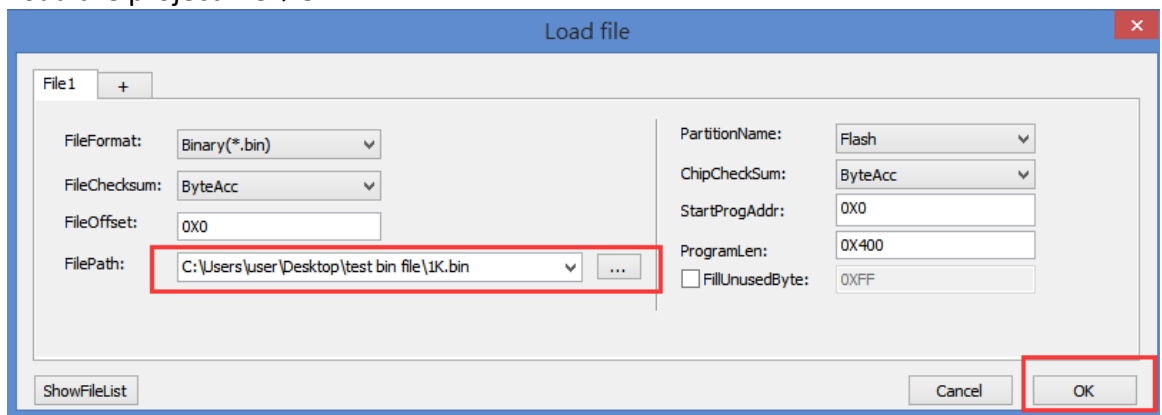


IV. Option Bytes Setting

Please load the file before programming the register.



1. Click **Load**
2. Load the project file→OK



3. Click **Config**



4. Click **SPI NOR**

- **Status Register**

1. Enter the SR(hex) value→**Setting SR**, or select the status for each Bit in Status Register

Status Register View/Edit

SR(hex) : **Setting SR**

Status Register Edit

BPL : Disabled=0

TB : Disabled=0

BP2 : Disabled=0

BP1 : Disabled=0

BPO : Disabled=0

2. Programming Parameters → Check **Status Register**

Programming Parameters

Status Register

Status and Configuration Register

non-Volatile Write Lock-Down Register

Lockout OTP Security ID

3. Click **OK** to save values



4. Program → Config

Note: Program Flash or Erase Flash will erase Status Register to 00h

● **Configuration Register**

1. Set up WPEN Bit or RSTHLD Bit

Configuration Register Edit

WPEN :

RSTHLD :

2. Programming Parameters → Check **Status and Configuration Register**

Programming Parameters

Status Register

Status and Configuration Register

non-Volatile Write Lock-Down Register

Lockout OTP Security ID

3. Click **OK** to save values



4. Program → Config

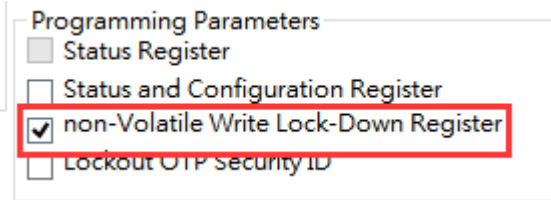
● **non-Volatile Write-Lock Lock-Down register**

1. Set up a zone that needs protection → Setting protect

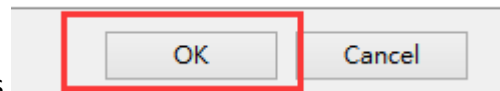
non-Volatile Write Lock-Down Register


Block(s) to lock(e.g 0,3,5-7,... or 'all'): 0 - 47(max.) :

2. Programming Parameters → Check **non-Volatile Write-Lock Lock-Down register**



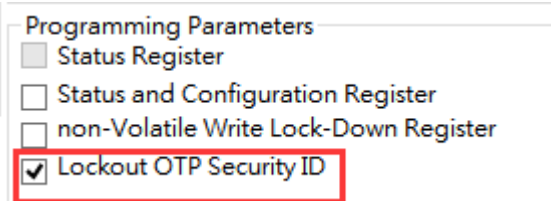
3. Click **OK** to save values



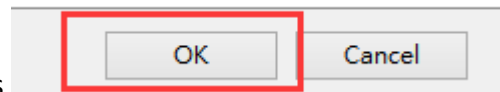
4. Program  → Config


- **Lockout Security ID**

1. Programming Parameters → Check **Lockout OTP Security ID**



2. Click **OK** to save values



3. Program  → Config

V. Revision History

Date	Version	Changes
09/30/2016	1.0	Initial release

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