

N76E003 Series Errata Sheet

Errata Sheet for 8-bit 8051 Family

Document Information

Abstract	This errata sheet describes the functional problems known at the release date of this document.
Apply to	N76E003 Series.

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1 Overview

Functional Problem	Description
POR issue after Power down Wake up	Wake-up from Power-down mode can cause Power-on Reset (POR). It can be worked around by Disable POR function before the N76E003 enters Power-down mode to prevent the problem.

2 Functional Problem

2.1 POR issue after Power down Wake up

Description:

Wake-up from Power-down mode can cause Power-on Reset (POR). [It can be worked around](#) by disable the POR function before the N76E003 enters Power-down mode to prevent the problem.

Problem:

The N76E003 provides power-on detection to prevent incorrect execution during power up and power drop. The power-on detection function is designed for detecting power up after power voltage reaches a level where system can work. The N76E003 POR-detect-voltage is stable at one value which falls between 1.3 V and 1.5 V. When the N76E003 runs in Power-down mode, the core runs under a low power consumption condition. Every time the N76E003 wakes up from Power-down mode, power consumption condition changes to normal power consumption. This may cause the core voltage glitch to be less than 1.5 V. The POR will be triggered, and N76E003 will reset.

Workaround:

POR is for use by V_{DD} power-on. After power-on, the system uses LVR for power detection. It is strongly suggested to disable the POR function every time after power-on reset (POR) at the initial part of customer code.

How to disable POR:

At SFR address, FDH is the PORDIS register to control POR function disable through software.

PORDIS – POR disable (TA protected)

7	6	5	4	3	2	1	0
PORDIS[7:0]							
W							

Address: FDH, Page: 0

Reset value: 0000 0000b

Bit	Name	Description
7:0	PORDIS[7:0]	POR disable Writing 5AH to the PORDIS first and immediately followed by a writing of A5H will disable POR.

Since the PORDIS register is TA protected, please always follow the code sequence below to disable POR.

```
sfr PORDIS = 0XFD;  
    TA = 0XAA;  
    TA= 0X55;  
    PORDIS = 0X5A;  
    TA=0XAA;  
    TA=0X55;  
    PORDIS  = 0XA5;
```

Revision History

Date	Revision	Description
2017.05.01	1.00	1. Initially issued.

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