



# MC33937, Mask R15N Errata

## Introduction

This errata sheet applies to the following SMARTMOS part numbers PCZ33937EK/R2 and MCZ33937EK/R2.

### Device Build Information / Date Code

Device markings indicate build information containing the week and year of manufacture. The date is coded with the last four characters of the nine character build information code (e.g. "CTKAH0429"). The date is coded as four numerical digits where the first two digits indicate the year and the last two digits indicate the week. For instance, the date code "0429" indicates the 29th week of the year 2004.

### Device Part Number Prefixes

Some device samples are marked with a **PC** prefix. A **PC** prefix indicates a prototype device which has undergone basic testing only. After full characterization and qualification, devices will be marked with the **MC** prefix.

## VLS Under-Voltage Protection Reduced When Inputs Change State

### Description

When in a VLS under-voltage (VLSUV) condition the low-side gate drive can be turned ON by a change in state on the input pin. After being turned ON, that low-side gate will not respond to further changes to the input pin until the VLSUV condition clears or the reset pin goes low.

In the case that one of the EN pins goes low during a VLSUV condition, input transitions will not affect the output state of any gate.

In the case that the device is enabled when the VLSUV condition clears, the low-side gates will immediately drive to match the input state. However, the low-side control must be toggled ON and then OFF before the high-side gate will respond to the inputs.

### Preventive Action

Set the device interrupt pin to signal VLSUV and suspend all activity on the input pins when the interrupt is received. Forcing an EN pin low will do this. If the interrupt is determined to be caused by VLSUV, perform a full device reset and initialization to recover from the fault.

## REVISION HISTORY

Revision	Date	Description of Changes
2.0	1/2014	• Added Revision History. No technical changes. Revised back page. Updated document properties.

**How to Reach Us:**

**Home Page:**  
[freescale.com](http://freescale.com)

**Web Support:**  
[freescale.com/support](http://freescale.com/support)

Information in this document is provided solely to enable system and software implementers to use Freescale products. There are no express or implied copyright licenses granted hereunder to design or fabricate any integrated circuits based on the information in this document.

Freescale reserves the right to make changes without further notice to any products herein. Freescale makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does Freescale assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters that may be provided in Freescale data sheets and/or specifications can and do vary in different applications, and actual performance may vary over time. All operating parameters, including "typicals," must be validated for each customer application by customer's technical experts. Freescale does not convey any license under its patent rights nor the rights of others. Freescale sells products pursuant to standard terms and conditions of sale, which can be found at the following address: [freescale.com/SalesTermsandConditions](http://freescale.com/SalesTermsandConditions).

Freescale and the Freescale logo are trademarks of Freescale Semiconductor, Inc., Reg. U.S. Pat. & Tm. Off. SMARTMOS is a trademark of Freescale Semiconductor, Inc. All other product or service names are the property of their respective owners.

© 2014 Freescale Semiconductor, Inc.

Document Number: MC33937ER  
Rev. 2.0  
1/2014