

MC33730, Mask DA03M89H, Rev. 4.2 Errata

Introduction

This errata sheet applies to the following device part numbers:

MCZ33730EK / R2

Device Revision Identification

The device revision is indicated by a 1-character code after the device code. For instance the “A” in the “MCZ33730?” indicates revision A. All standard devices are marked with a device identification and build information code.

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.

Table 1. VDDL and VDD3 Reset Detect

VDDL and VDD3 Reset Detect	4.2	<p>Description: At device power-up, the VDD3 and VDDL Reset pins may not properly indicate the state of the VDD3 and VDDL regulators. The reset pins may stay low, even though the VDD3 and VDDL regulators have powered up normally.</p> <p>Consequence: The application MCU may read a fault on the VDD3 or VDDL regulators and refuse to start normal operation.</p> <p>Root Cause: Timing conflicts in the state machine that controls the Reset Detect function can cause the VDD3 and VDDL inputs to be misread and provide a false Reset output.</p> <p>Work Around: There is no possible work around to ensure the state machine will always properly interpret the VDD3 and VDDL regulator inputs. Freescale understands the root cause circuit fault and has implemented a circuit change to solve the problem.</p>
Devices Impacted	4.2	MCZ33730EK/R2 will exhibit the problem behavior. A new device, MC33730EK/R2 has the corrected circuit to restore proper state machine operation.
Solution	4.2	Logic gate sequencing has been modified in the Reset state machine, via a metal mask change, to guarantee that the state machine properly tracks the VDD3 and VDDL regulators. There is no change to the data sheet parameters or normal operation of the device.

How to Reach Us:

Home Page:

freescale.com

Web Support:

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 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: <http://www.reg.net/v2/webservices/Freescale/Docs/TermsandConditions.htm>

Freescale, the Freescale logo, Altivec, C-5, CodeTest, CodeWarrior, ColdFire, C-Ware, Energy Efficient Solutions logo, mobileGT, PowerQUICC, QorIQ, Qorivva, StarCore, and Symphony are trademarks of Freescale Semiconductor, Inc., Reg. U.S. Pat. & Tm. Off. Airfast, BeeKit, BeeStack, ColdFire+, CoreNet, Flexis, MagniV, MXC, Platform in a Package, Processor expert, QorIQ Qonverge, QUICC Engine, Ready Play, SMARTMOS, TurboLink, Vybrid, and Xtrinsic are trademarks of Freescale Semiconductor, Inc. All other product or service names are the property of their respective owners.

© 2012 Freescale Semiconductor, Inc.

Document Number: MC33730ER

Rev. 1.0

8/2012