
Mask Set Errata for Mask 2M92K

Introduction

This report applies to mask 2M92K for these products:

- MCF51JM128
- MCF51JM64
- MCF51JM32

MCU device mask set identification

The mask set is identified by a 5-character code consisting of a version number, a letter, two numerical digits, and a letter, for example 0J27F. All standard devices are marked with a mask set number and a date code.

MCU device date codes

Device markings indicate the week of manufacture and the mask set used. The date is coded as four numerical digits where the first two digits indicate the year and the last two digits indicate the work week. For instance, the date code "0301" indicates the first week of the year 2003.

MCU device part number prefixes

Some MCU samples and devices are marked with an SC, PC, or XC prefix. An SC prefix denotes special/custom device. A PC prefix indicates a prototype device which has undergone basic testing only. An XC prefix denotes that the device is tested but is not fully characterized or qualified over the full range of normal manufacturing process variations. After full characterization and qualification, devices will be marked with the MC or SC prefix.

SE156-ADC-COCO: COCO bit may not get cleared when ADCSC1 is written to

Errata type: Silicon

Affected component: ADC

Description: If an ADC conversion is near completion when the ADC Status and Control 1 Register (ADCSC1) is written to (i.e., to change channels), it is possible for the conversion to complete, setting the COCO bit, before the write instruction

is fully executed. In this scenario, the write may not clear the COCO bit, and the data in the ADC Result register (ADCR) will be that of the recently completed conversion.

If interrupts are enabled, then the interrupt vector will be taken immediately following the write to the ADCSC1 register.

Workaround:

It is recommended when writing to the ADCSC1 to change channels or stop continuous conversion, that you write to the register twice. The first time should be to turn the ADC off and disable interrupts, and the second should be to select the mode/channel and re-enable the interrupts.

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