

Mask Set Errata 2

68HC908KX8 8-Bit Microcontroller Unit

INTRODUCTION

This mask set errata provides information pertaining to the erase routine in ROM for the 68HC908KX8 MCU mask set device:

- 1K45D

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 3J74Y. Slight variations to the mask set identification code may result in an altered version number, for example 4J74Y.

MCU DEVICE DATE CODES

Device markings indicate the week of manufacture and the mask set used. The data 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 "9915" indicates the 15th week of the year 1999.

MCU DEVICE PART NUMBER PREFIXES

Some MCU samples and devices are marked with an SC or XC prefix. An SC prefix denotes special/custom device. 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 prefix.

When contacting a Motorola representative for assistance, please have the MCU device mask set and date code information available.

Specifications and information herein are subject to change without notice.




ERASE ROUTINE IN ROM

The ROM-based erase routine, called ERARNGE and located at \$1006 on this device, may cause the erase of the vector page when called to erase another page of FLASH. This behavior is a side-effect of servicing the COP during this routine's necessary delay of 1 ms to 4 ms.

Workarounds:

1. Set block protection so that at least the vector page is protected from erase and inadvertent reprogramming. Then any page erases, other than an attempt to erase the vector page, will result in the intended page being erased, but the vector page will remain intact.
2. Accept the erase of the vector page by first buffering the data of this page in RAM and then, after the intended page is erased along with the vector page, reprogram the vector page with the buffered data.
3. Do not use the erase routine in ROM. Write your own erase routine and keep it in FLASH. Whenever a page erase is desired, copy the routine to RAM and execute the erase from there. For help on writing the erase routine, consult the *MC68HC908KX8/MC68HC908KX2 Advance Information*, Motorola document order number MC68HC908KX8/D, or the application note *Using MC68HC908 On-Chip FLASH Programming Routines*, Motorola document order number AN1831/D. If using the routine from AN1831, which is the routine stored in ROM, make sure to delete the instructions that service the COP.

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