

# PRODUCT/PROCESS CHANGE NOTIFICATION

PCN MPA-MIC/06/1938 Notification Date 07/18/2006

uPSD Memory Die Change for 64KB Flash Version of uPSD

MIC - MICROCONTROLLERS

## **Table 1. Change Identification**

Product Identification (Product Family/Commercial Product)	uPSD3212, uPSD3312 and uPSD3422 based devices	
Type of change	Product design change	
Reason for change	Compatibility across uPSD product series	
Description of the change	Replaces Previous PCN MPA-MIC/06/1574 see attached	
Product Line(s) and/or Part Number(s)	See attached	
Description of the Qualification Plan	See attached	
Change Product Identification	Product change will be ID by date code	
Manufacturing Location(s)		

## **Table 2. Change Implementation Schedule**

Forecasted implementation date for change	18-Sep-2006
Forecasted availability date of samples for customer	21-Aug-2006
Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability	14-Jul-2006
Estimated date of changed product first shipment	18-Sep-2006

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**Table 3. Change Responsibility** 

	Name	Signature	Date
Division Product Manager	Stephen Cheng		Jul.14 ,06
Division Q.A. Manager	Timothy Archer		Jul.14 ,06
Division Marketing Manager	Bryan Hahn		Jul.14 ,06

#### **Table 4. List of Attachments**

Customer Part numbers list	
Qualification Plan results	

Customer Acknowledgement of Receipt	PCN MPA-MIC/06/1938			
Please sign and return to STMicroelectronics	Sales Office Notification Date 07/18/2006			
□ Qualification Plan Denied	Name:			
□ Qualification Plan Approved	Title:			
	Company:			
□ Change Denied	Date:			
□ Change Approved	Signature:			
Remark				

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Subject: Product Change Notice

Devices Affected: uPSD3212, uPSD3312 and uPSD3422 devices

In order to improve manufacturing efficiency across all three series of uPSD, it is necessary to implement a change to the memory die for the 64KB Flash version of all three series of uPSD.

The devices affected are listed below:

uPSD3200 series	uPSD3300 series	uPSD3400 series
uPSD3212CV-24T6 uPSD3212C-40T6 uPSD3212CV-24U6 uPSD3212C-40U6 uPSD3212A-40T6 uPSD3212A-40U6	uPSD3312D-40T6 uPSD3312DV-40T6	uPSD3422EV-40U6 uPSD3422E-40U6 uPSD3422EV-40T6 uPSD3422E-40T6

The part numbers will remain the same as the new devices are Form, Fit, Functionally equivalent to the existing products, with the exception of the product ID code masked onto the die. The new ID code could cause a programming error unless the following precautions are taken.

#### For uPSD3212 derivatives:

- If programming via PSDsoft Express and either FlashLINK or RLINK, verify that your
  version is no earlier than 8.40, otherwise you'll have to upgrade to the latest version of
  PSDsoft Express. If you are using a version older than 8.40, you'll need to download the
  latest version from <a href="http://mcu.st.com/mcu/contentid-57.html">http://mcu.st.com/mcu/contentid-57.html</a>, and use the newer version
  for programming.
  - To determine which version of PSDsoft Express you're using, launch PSDsoft Express and click on the [Help>About PSDsoft] menu.
- If programming via Keil uVision using ULINK, verify that the c51 version is 8.02 or higher, or use PSDsoft Express version 8.40 or later and FlashLINK to program
  - o If you are using an older version of uVision you will get an error when attempting to program the uPSD that says: [No uPSD device found in JTAG chain. Please check the JTAG cable and the connected devices.]
- If programming via Raisonance RIDE using RLINK-ST, you'll need to upgrade to version BN7.43, and install a patch for the new ID Code. If you're using a version later than

internet: <a href="http://mcu.st.com/micropsd">http://mcu.st.com/micropsd</a> email: <a href="mailto:ask.psd@st.com">ask.psd@st.com</a>

BN7.43 there will be no issue. The patch for version BN7.43 is available on the Raisonance website (http://www.raisonance.com/products/8051/uPSD.php).

- If you try to use an older version of RIDE you'll get the following error: [Unable to read ID Code. Please check that the target is connected]
- However, in the case of RIDE there is a workaround available. You can use an alternate JTAG Chain Information (JCI) file to force your current version of RIDE to recognize the new ID Code.
  - To create the new JCI file, run PSDsoft Express v 8.40 or later
  - Open the project file
  - Click on [JTAG/ISP] in the Design Flow
  - Click [save] to save the JTAG-ISP session.
    - The JCI file will be updated with all available ID Codes included for the selected device during a save
  - Once you've saved the JCI file, run RIDE
  - Go to [Options>Debug]
  - Click on [Advanced Options]
  - Click on [Custom Device Chain] option and select your newly created JCI file.
  - Now click [Program Now!] to program the part

### For uPSD3312/3422 derivatives:

- If programming via PSDsoft Express using FlashLINK or RLINK, no changes to the software are required
- If you're using either Keil uVision for JTAG debugging or programming, verify that the c51 version is 8.02 or higher, or use PSDsoft Express version 8.40 or later and FlashLINK to program.
  - If you are using an older version of uVision you will get an error when attempting to program the uPSD that says: [No uPSD device found in JTAG chain. Please check the JTAG cable and the connected devices.]
- If you're using Raisonance RIDE for JTAG debugging or programming, you will need to upgrade to version BN7.43, and install a patch for the new ID Code, or use the workaround mentioned above in the uPSD3212 section, or use PSDsoft Express version 8.40 or later to program.
  - o If you try to use an older version of RIDE you'll get the following error: [Unable to read ID Code. Please check that the target is connected]

Software Update Links:

PSDsoft Express: <a href="http://mcu.st.com/mcu/contentid-57.html">http://mcu.st.com/mcu/contentid-57.html</a>

internet: http://mcu.st.com/micropsd email: ask.psd@st.com

Keil uVision: <a href="http://www.keil.com/update/list.asp?p=c51&bhcp=1">http://www.keil.com/update/list.asp?p=c51&bhcp=1</a> Raisonance RIDE: http://www.raisonance.com/products/8051/uPSD.php You may start receiving products assembled with the new die as early as Sep 18<sup>th</sup>, 2006. Thank you, **STMicroelectronics** MCD - Advanced MCU Marketing internet: <a href="http://mcu.st.com/micropsd">http://mcu.st.com/micropsd</a> email: <a href="mask.psd@st.com">ask.psd@st.com</a>

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