Customer Information Notification

202408002I : MCX Nx4x (N94x and N54x) Data Sheet Update to Rev 6

Note: This notice is NXP Company Proprietary.

Issue Date: Nov 01, 2024 **Effective Date:** Nov 02, 2024

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Management summary

NXP Semiconductor announces a data sheet update to revision 6 for MCX Nx4x (N94x and N54x) devices.

The MCX Nx4x data sheet is attached to this notice, and can be found at:
https://www.nxp.com/docs/en/data-sheet/MCXNx4xDS.pdf

Change Category

[ ]Wafer Fab Process	[ ]Assembly Process	[ ]Product Marking	[ ]Test Process	[ ]Design
[ ]Wafer Fab Materials	[ ]Assembly Materials	[ ]Mechanical Specification	[ ]Test Equipment	[ ]Errata
[ ]Wafer Fab Location	[ ]Assembly Location	[ ]Packing/Shipping/Labeling	[ ]Test Location	[ ]Electrical spec./Test coverage

[ ]Firmware [X]Other: Datasheet

Notification Overview

Description

NXP Semiconductor announces a data sheet update to revision 6 for MCX Nx4x (N94x and N54x) devices. The revision history included in the updated document provides a detailed description of the changes.

Changes are summarized below:

1. Added VREFH and VREFL in Table 8
2. In the front page content, updated features section completely, added new block diagram and renamed the existing diagram as MCX N94x / N54x Architecture and so on.
3. Updated Pinout table for Vss row of HLQFP pin entries.
4. Updated Table 92.
5. Added new tables VDD_CORE supply HVD and LVD Operating Requirements, and VBAT supply POR operating requirements in HVD, LVD, and POR operating requirements.
6. Removed VDD_P2 row from Table 93.
7. Removed all occurrences of IDD_VBAT_TAMPER
8. Removed TRNG block from Figure 2.

9. Removed note for 100HLQFP package from the front page.
10. Updated title of the document.
11. Updated front-matter for Power-efficient, Low-Power Performance, Analog modules, and Communication Interfaces.
12. Updated temperature range in Part number format from "-40 to 105" to "-40 to 125".
13. Updated Power Consumption Operating Behaviors .
14. Updated General switching specifications.
15. Updated Table VDD_CORE supply HVD and LVD Operating Requirements in HVD, LVD, and POR operating requirements.
16. Updated ADC electrical characteristics.
17. Removed PF_* entries from Table 93. Also, updated attached Pinout excel sheet accordingly.
18. Updated SYSCON[DIEID] in Table 2.
19. Updated Resource for the Type Chip Errata in Table 3.
20. Updated footnote 7 in Table 15.
21. Updated the value of Max for the Symbol tpon in Table 41.
22. Updated footnote 7 in Table 56.
23. Added a footnote in Table 64 and updated the Max value for the Symbol Vacc.
24. Updated the values of Pin name VSS from H5 to G2 and E19 to E13 for 184BGA ALL in Table 93.
25. Updated the values of A, B and α in Table 57.

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Reason

The data sheet has been updated to correct errors and add new items that will not limit customer usage, functionality or parametric spec range.

Identification of Affected Products

Product identification does not change

Anticipated Impact on Form, Fit, Function, Reliability or Quality

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No Impact on form, fit, function, reliability or quality

Data Sheet Revision

A new data sheet will be issued

Additional information

Additional documents: view online

Remarks

Questions concerning this Customer Information Notice should be directed to the NXP Community (https://community.nxp.com/t5/MCX-Microcontrollers/bd-p/MCX).

Contact and Support

For all inquiries regarding the ePCN tool application or access issues, please contact NXP "Global Quality Support Team".

For all Quality Notification content inquiries, please contact your local NXP Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly:

Name	NXP Technical Support
e-mail address	tech.support@nxp.com

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NXP Quality Management Team.

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NXP Semiconductors
High Tech Campus, 5656 AG Eindhoven, The Netherlands