# Customer Information Notification

202207014I : i.MX RT1170 Data Sheet Update to Rev 3

**Note:** This notice is NXP Company Proprietary.

**Issue Date:** Aug 13, 2022 **Effective date:Aug 14, 2022**

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For detailed information we invite you to view this notification online

**Management summary**

Data sheet update to revision 3 for i.MX RT1170.

**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: Data Sheet | | | |

# PCN Overview

## Description

NXP Semiconductor announces a data sheet update to revision 3 for i.MX RT1170. The revision history included in the updated document provides a detailed description of the changes.

Changes are summarized below:
• In Table 50, SEMC input timing in SYNC mode (SEMC_MCR.DQSMD = 0x1), changed the TIS Min value from 2 to 0.6.
• In Table 4. Special signal considerations, in the signal “RTC_XTALI/RTC_XTALO” changed the tolerance from ±10% to ±25%.
• In Table 4. Special signal considerations, for the signal “RTX_XTALI/RTX_XTALO” changed VDD_SNVS_DIG to VDD_SNVS_ANA.
• Updated the Figure 3, "i.MX RT1170 system block diagram".
• Updated the Table 1. Order information.

The i.MX RT1170 data sheet is attached to this notice, and can be found at:
https://www.nxp.com/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1170-first-ghz-crossover-mcu-with-arm-cortex-m7-and-cortex-m4-cores:i.MX-RT1170?tab=Documentation_Tab&linkline=Data-Sheet

Corresponding ZVEI Delta Qualification Matrix ID: SEM-DS-02

**Reason**
The data sheet has been updated to correct errors and/or provide additional technical clarification on some device features.
**Identification of Affected Products**
Product identification does not change

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

No Impact on form, fit, function, reliability or quality
**Data Sheet Revision**
A new datasheet will be issued

## Additional information

Additional documents: view online

## 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** | technical support |
| **e-mail address** | tech.support@nxp.com |

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| Changed Orderable Part# | 12NC | Product Type | Product Description | Package Outline | Package Description | Product Status | Customer Specific Indicator | Product Line |
|---|---|---|---|---|---|---|---|---|
| MIMXRT1176AVM8AR | 935416203518 | MIMXRT1176AVM8AR | i.MXRT1170 Auto, 289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLAM |
| MIMXRT1176AVM8A | 935416203557 | MIMXRT1176AVM8A | i.MXRT1170 Auto, 289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLAM |
| MIMXRT1176CVM8A | 935416204557 | MIMXRT1176CVM8A | i.MXRT1170, Indus,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1176DVMAA | 935416205557 | MIMXRT1176DVMAA | i.MXRT1170, 289MAPBGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1171AVM8AR | 935416772518 | MIMXRT1171AVM8AR | i.MXRT1170, Auto,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLAM |
| MIMXRT1171AVM8A | 935416772557 | MIMXRT1171AVM8A | i.MXRT1170, Auto,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLAM |
| MIMXRT1171CVM8A | 935416773557 | MIMXRT1171CVM8A | i.MXRT1170, Indus,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1171DVMAA | 935416774557 | MIMXRT1171DVMAA | i.MXRT1170, Conm,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1172AVM8AR | 935416775518 | MIMXRT1172AVM8AR | RT1172,1052/1062 Upd,A | (L)FBGA289M | SOT1534-4 | RFS | No | BLAM |
| MIMXRT1172AVM8A | 935416775557 | MIMXRT1172AVM8A | RT1172,1052/1062 Upd,A | (L)FBGA289M | SOT1534-4 | RFS | No | BLAM |
| MIMXRT1172CVM8A | 935416776557 | MIMXRT1172CVM8A | i.MXRT1170, Indus,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1172DVMAA | 935416777557 | MIMXRT1172DVMAA | i.MXRT1170, Conm,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1173CVM8A | 935416778557 | MIMXRT1173CVM8A | RT1173, POS,I | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1175AVM8A | 935416779557 | MIMXRT1175AVM8A | i.MXRT1170, Auto,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLAM |
| MIMXRT1175CVM8A | 935416781557 | MIMXRT1175CVM8A | i.MXRT1170, Indus,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT1175DVMAA | 935416782557 | MIMXRT1175DVMAA | i.MXRT1170, Conm,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT117FAVM8A | 935421521557 | MIMXRT117FAVM8A | i.MXRT117F, Auto,289BGA | (L)FBGA289M | SOT1534-4 | ASM | No | BLAM |
| MIMXRT117FCVM8A | 935421522557 | MIMXRT117FCVM8A | i.MXRT117F, Indus,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT117FDVMAA | 935421523557 | MIMXRT117FDVMAA | i.MXRT117F, Conm,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT117HAVM8A | 935421524557 | MIMXRT117HAVM8A | i.MXRT117H, Auto,289BGA | (L)FBGA289M | SOT1534-4 | ASM | No | BLAM |
| MIMXRT117HCVM8A | 935421525557 | MIMXRT117HCVM8A | i.MXRT117H, Indus,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |
| MIMXRT117HDVMAA | 935421526557 | MIMXRT117HDVMAA | i.MXRT117H, Conm,289BGA | (L)FBGA289M | SOT1534-4 | RFS | No | BLM1 |