



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

Here is your personalized notification about a NXP general announcement.
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 ☒ 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 $\pm 10\%$ to $\pm 25\%$.
- 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

At NXP Semiconductors we are constantly striving to improve our product and processes to ensure they reach the highest possible Quality Standards. Customer Focus, Passion to Win.

NXP Quality Management Team.

About NXP Semiconductors

NXP Semiconductors N.V. (NASDAQ: NXPI) provides High Performance Mixed Signal and Standard Product solutions that leverage its leading RF, Analog, Power Management, Interface, Security and Digital Processing expertise. These innovations are used in a wide range of automotive, identification, wireless infrastructure, lighting, industrial, mobile, consumer and computing applications.

You have received this email because you are a designated contact or subscribed to NXP Quality Notifications. NXP shall not be held liable if this Notification is not correctly distributed within your organization.

This message has been automatically distributed. Please do not reply .

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

© 2006- 2022 NXP Semiconductors. All rights reserved.

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