



**PRODUCT BULLETIN**  
Generic Copy

**ISSUE DATE:** 04-Jun-2013  
**NOTIFICATION:** 15651  
**TITLE:** I.MX 6DUAL6QUAD DOCUMENTATION UPDATE  
**EFFECTIVE DATE:** 05-Jun-2013

**DEVICE(S)**

MPN
MCIMX6D4AVT08AC
MCIMX6D4AVT08ACR
MCIMX6D4AVT10AC
MCIMX6D4AVT10ACR
MCIMX6D5EYM10AC
MCIMX6D5EYM10ACR
MCIMX6D5EYM12AC
MCIMX6D6AVT08AC
MCIMX6D6AVT08ACR
MCIMX6D6AVT10AC
MCIMX6D6AVT10ACR
MCIMX6D7CVT08AC
MCIMX6Q4AVT08AC
MCIMX6Q4AVT08ACR
MCIMX6Q4AVT10AC
MCIMX6Q4AVT10ACR
MCIMX6Q5EYM10AC
MCIMX6Q5EYM10ACR
MCIMX6Q5EYM12AC
MCIMX6Q6AVT08AC
MCIMX6Q6AVT08ACR
MCIMX6Q6AVT10AC
MCIMX6Q6AVT10ACR
MCIMX6Q7CVT08AC
PCIMX6Q5EYM10AC
PCIMX6Q6AVT10AC

## **AFFECTED CHANGE CATEGORIES**

- DEVICE SPECIFICATION / ERRATA

## **DESCRIPTION OF CHANGE**

### Datasheets:

The datasheets have been updated to revision 2 for the i.MX 6Dual/6Quad product lines. The updated automotive grade datasheet can be found at: [IMX6DQAEC](#)  
The updated commercial/extended commercial grade datasheet can be found at: [IMX6DQCEC](#)

The changes to the datasheets apply to all qualification grades. Substantive changes in the datasheet are as follows:

- Incorporated standardized signal names. This change is extensive throughout. Added reference to EB792, i.MX Signal Name Mapping.
- Figures updated to align to standardized signal names.
- Aligned references to FCBGA to read FCPBGA throughout document.
- Updated references to eMMC standard to include 4.41
- Table “i.MX 6Dual/6Quad Modules List”: Changed reference to Global Power Controller to read General Power Controller.
- Table “Absolute Maximum Ratings”: Added VDD\_ARM23\_IN to Core supply voltages.
- Table “Operating Ranges ”: Run Mode - LDO Enabled, VDD\_ARM\_IN/VDD\_ARM23\_IN, 792 MHz, input voltage minimum changed to 1.275V and VDD\_ARM CAP minimum changed to 1.150V.
- Table “Operating Ranges ”: Added reference for information on product lifetime : i.MX 6Dual/6Quad Product Usage Lifetime Estimates Application Note, AN4724.
- Table “Maximum Supply Currents”: Added current for i.MX6Dual
- Table “Stop Mode Current and Power Consumption”: Added SNVS Only mode
- Table “GPIO I/O DC Parameters”: Removed parameters Iskod and Isspp.
- Table “ECSPI Master Mode Timing Parameters”: Updated parameter CS6 ECSPiX\_SSx Lag Time (CS hold time) Min from Half SCLK period to Half SCLK period-2.
- Table “SD/eMMC4.3 Interface Timing Specification”: eMMC parameter SD8 value Min updated from 5.6 ns to 1.5 ns. This parameter is a hold time, so this change represents a relaxation in the requirement.
- Table “RGMII Signal Switching Specifications” RGMII parameter TskewR units corrected.
- Table “Functional Contact Assignments”: Updated GPIO\_1 Ball Name value to PU (100K).
- Table “Functional Contact Assignments”: Clarification of ENET\_REF\_CLK naming.
- Removed section “EIM Signal Cross Reference”. Signal names are now aligned with reference manual.
- Section “Power-Up Sequence” updated wording.
- Section “Regulators for Analog Modules” section updates.
- Added Section “XTALI and RTC\_XTALI (Clock Inputs) DC Parameters”.
- Section “General-Purpose Media Interface (GPMI) Timing” figures replaced, tables revised. Refer to the document revision history for detailed information.

### Reference Manual:

The reference manual has been updated to revision 1 for the i.MX 6Dual/6Quad product lines.

The updated reference manual can be found at: [IMX6DQRM](#)

The following chapters have been updated:

- Architecture Overview
- External Signals
- Fusemap
- System Boot
- System Security
- CCM
- CSI2IPU
- IOMUXC
- IPU
- MMDC
- SRC
- UART
- USB
- SDMA Scripts

Refer to the document revision history for detailed information.

#### Silicon Errata:

The silicon errata document has been updated to revision 2 for the i.MX 6Dual/6Quad product lines.

The updated errata can be found at: [IMX6DQCE](#)

Substantive changes in the errata are as follows:

- Deleted the following errata:
  - ERR003775: addressed in rev. 1 of the i.MX 6Dual/6Quad Applications Processor Reference Manual (IMX6DQRM)
- Added the following errata:
  - ERR006282 “ROM code uses nonreset PFDs to generate clocks, which may lead to random boot failures”
  - ERR006308 “USB: Host non-doubleword –aligned buffer address can cause host to hang on OUT Retry”
  - ERR006358 “ENET: Write to Transmit Descriptor Active Register (ENET\_TDAR) is ignored”
  - ERR006687 “ENET: Only the ENET wake-up interrupt request can wake the system from Wait mode”
- Updated the following:
  - ERR004353 “CAAM: SMC de-allocates partition when zeroizing CSP pages in Fail State”
  - ERR004446 “EIM: AUS mode is nonfunctional for devices larger than 32 MB”
  - ERR005829 “FlexCAN: FlexCAN does not transmit a message that is enabled to be transmitted in a specific moment during the arbitration process”

Refer to the document revision history for detailed information.

#### **REASON FOR CHANGE**

Updated documentation

**ANTICIPATED IMPACT OF PRODUCT CHANGE(FORM, FIT, FUNCTION, OR RELIABILITY)**

No changes to form, fit, function or reliability

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**NOTE:**

THE CHANGE(S) SPECIFIED IN THIS NOTIFICATION WILL BE IMPLEMENTED ON THE EFFECTIVE DATE LISTED ABOVE. To request further data or inquire about the notification, please enter a [Service Request](#)

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**QUAL DATA AVAILABILITY DATE:** 26-Apr-2013

**QUALIFICATION STATUS:** COMPLETED

**QUALIFICATION PLAN:**

N/A

**RELIABILITY DATA SUMMARY:**

N/A

**ELECTRICAL CHARACTERISTIC SUMMARY:**

N/A

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**CHANGED PART IDENTIFICATION:**

N/A

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**ATTACHMENT(S):**

External attachment(s) FOR this notification can be viewed AT:  
[15651\\_IMX6DQCE.pdf](#)

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