



## PRODUCT AND PROCESS CHANGE NOTIFICATION

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**ISSUE DATE:** 11-Jul-2013  
**NOTIFICATION:** 15545  
**TITLE:** UPDATE IN 8306 AND 8309 PINLIST  
**EFFECTIVE DATE:** 09-Oct-2013

### DEVICE(S)

MPN
KCU8306CVMABDCA
KCU8306SCVMABDCA
KCU8309CVMADDCA
KCU8309CVMAFDCA
KCU8309CVMAGDCA
KCU8309CVMAHFCA
KCU8309CXVMAFDCA
KCU8309CXVMAGDCA
KCU8309CXVMAHFCA
KCU8309VMAHFCA
KSCU8306SVMABDCA
MPC8306CVMABDCA
MPC8306CVMACDCA
MPC8306CVMADDCA
MPC8306CVMAFDCA
MPC8306SCVMABDCA
MPC8306SCVMACDCA
MPC8306SCVMADDCA
MPC8306SCVMAFDCA
MPC8306SVMABDCA
MPC8306SVMACDCA
MPC8306SVMADDCA
MPC8306SVMAFDCA
MPC8306VMABDCA
MPC8306VMACDCA
MPC8306VMADDCA
MPC8306VMAFDCA

MPC8309CVMADDCA
MPC8309CVMAFDCA
MPC8309CVMAGDCA
MPC8309CVMAHFCA
MPC8309CXVMAFDCA
MPC8309CXVMAGDCA
MPC8309CXVMAHFCA
MPC8309VMADDCA
MPC8309VMAFDCA
MPC8309VMAGDCA
MPC8309VMAHFCA
MPC8309XVMAFDCA
MPC8309XVMAGDCA
MPC8309XVMAHFCA
PPC8306CVMABDCA
PPC8306SCVMABDCA
PPC8309VMAHFCA

## **AFFECTED CHANGE CATEGORIES**

- DATASHEET

## **DESCRIPTION OF CHANGE**

This PCN supports the pin list update in 8309/06 families Hardware Specification document. These updates will provide corrections to signal assignments, names and remove signals that have no value added to customer usage. While most of the impacts to the customer were minimal, it was noted that the signal assignments required a customer board revision.

1. **Clk13 – Clk14 Swap** This change is for the new customers, whose boards are under development. The customers, whose boards are in production, are aware of this change.

In 8309 H/W spec, CLK13 is shown at Y20 and CLK14 is shown at Y22.

HDLC2_TXCLK[CLK13]/ GPIO_16/QE_BRG_7/TDM2_TCK[CLK6]	Y20	IO	OVDD	—
HDLC2_RXCLK[CLK14]/GPIO_17/TDM2_RCK [CLK5]/QE_BRG_8	Y22	IO	OVDD	—

The signal assignment is changed to

HDLC2_TXCLK[CLK14]/ GPIO_16/QE_BRG_7/TDM2_TCK[CLK6]	Y20	IO	OVDD	—
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HDLC2_RXCLK[CLK13]/GPIO_17/TDM2_RCK [CLK5]/QE_BRG_8	Y22	IO	OVDD	—
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2. **Correction in Signal Name:** No impact on functionality. There is no need for board revision.

TSEC\_TMR\_TRIG1 should be replaced by FEC\_TMR\_TRIG1  
TSEC\_TMR\_TRIG2 should be replaced by FEC\_TMR\_TRIG2  
TSEC\_TMR\_CLK should be replaced by FEC\_TMR\_CLK  
TSEC\_TMR\_GCLK should be replaced by FEC\_TMR\_GCLK  
TSEC\_TMR\_PP1 should be replaced by FEC\_TMR\_PP1  
TSEC\_TMR\_PP2 should be replaced by FEC\_TMR\_PP2  
TSEC\_TMR\_PP3 should be replaced by FEC\_TMR\_PP3  
TSEC\_TMR\_ALARM1 should be replaced by FEC\_TMR\_ALARM1  
TSEC\_TMR\_ALARM2 should be replaced by FEC\_TMR\_ALARM2  
FEC3\_TMR\_TX\_ESFD should be replaced by FEC2\_TMR\_TX\_ESFD  
FEC3\_TMR\_RX\_ESFD should be replaced by FEC2\_TMR\_RX\_ESFD

3. **Removing Test and Hidden Signals from Pinlist :** No impact on functionality. There is no need for board revision.

Following signals will no longer be part of 8309 pinlist:

- From BOOT\_ROM\_ADDR[2] through BOOT\_ROM\_ADDR[12]
- From BOOT\_ROM\_RDATA [0] through BOOT\_ROM\_RDATA [31]
- BOOT\_ROM\_MOD\_EN, BOOT\_ROM\_RWB, BOOT\_ROM\_XFR\_WAIT, BOOT\_ROM\_XFR\_ERR
- UC1\_URM, UC2\_URM, UC3\_URM, UC5\_URM, UC7\_URM, URM\_TRIG
- ECID\_TMODE\_IN
- TPR\_SYS\_AAD[0] through TPR\_SYS\_AAD[15]
- TPR\_SYS\_SYNC, TPR\_SYS\_DACK
- QE\_TRB\_0, QE\_TRB\_1 (removed from 8306 family pinlist too)
- PLL\_CZ\_CORE\_CLKIN
- JTAG\_BISE, JTAG\_PRPGPS, JTAG\_BISR\_TDO\_EN
- CLOCK\_XLB\_CLOCK\_OUT
- PD\_XLB2MG\_DDR\_CLOCK

## **REASON FOR CHANGE**

- Clk13 – Clk14 Swap:** As per design, CLK13 should be connected to pin Y22 and CLK14 should be connected to pin Y20. Due to documentation error, the signals were swapped.
- Correction in Signal Name:** 8306 and 8309 device families use Fast Ethernet Controller (FEC). Several Ethernet pins are wrongly suffixed with TSEC.

Due to documentation error, FEC3\_TMR\_TX\_ESFD and FEC3\_TMR\_RX\_ESFD are mismarked and should be marked as FEC2\_TMR\_TX\_ESFD and FEC2\_TMR\_RX\_ESFD respectively.

- Removing Test and Hidden Signals from Pinlist :** Due to documentation error, these signals were shown in revision 1 of the hardware specifications.

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

1. **Clk13 – Clk14 Swap** Customers who are in production, have fixed their boards. For those customers in developing phase, they need to revise their boards.
2. **Correction in Signal Name:** There will be no impact to customer's boards.
3. **Removing Test and Hidden Signals from Pinlist :** There will be no impact to customer's boards.

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Freescale will consider specific conditions of acceptance of this change submitted within 30 days of receipt of this notice on a case by case basis. To request further data or inquire about the notification, please enter a [Service Request](#).

For sample inquiries - please go to [www.freescale.com](http://www.freescale.com)

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**QUAL DATA AVAILABILITY DATE:** 14-Sep-2012

**QUALIFICATION STATUS:** N/A

### **QUALIFICATION PLAN:**

Qualification plan is not required for this communication.

### **RELIABILITY DATA SUMMARY:**

Reliability data is not required for this communication.

### **ELECTRICAL CHARACTERISTIC SUMMARY:**

Electrical data is not required for this communication.

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### **CHANGED PART IDENTIFICATION:**

There will be no change in part marking.

**SAMPLE AVAILABILITY DATE:** 19-Jun-2013

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**ATTACHMENT(S):**

External attachment(s) FOR this notification can be viewed AT:

[15545\\_Updates\\_in\\_8309\\_06\\_families\\_Pinlist.pdf](#)

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