

FREESCALE

Freescale Semiconductor, Inc.

PRODUCT BULLETIN
Customer Copy

ISSUE DATE: 3-Sep-15
ATTN: MOUSER ELECTRONICS
NOTIFICATION: 16849
TITLE: eSDHC Erratum A-009204; 837x, 8536, 8569,
830x, P1020, P1022, P2020, and P4080
Family of Devices
EFFECTIVE DATE: 4-Sep-15
SALES CONTACT: Scott Johnson
Email Address: B37427@freescale.com
Phone Number: 512-660-8291

CUSTOMER(S)

MOUSER ELECTRONICS
(MOUSR)
1000 N. MAIN STREET

MANSFIELD TX
76063 USA

DEVICE(S)

CPN	MPN
P2020NXE2KFC	P2020NXE2KFC
P2010NXN2KFC	P2010NXN2KFC
MPC8377ECVRANGA	MPC8377ECVRANGA
MPC8309CVMAHFCA	MPC8309CVMAHFCA
MPC8536EBVTAVLA	MPC8536EBVTAVLA
MPC8378ECVRANGA	MPC8378ECVRANGA
P2020NXN2KFC	P2020NXN2KFC
P2020NXE2KHC	P2020NXE2KHC

P2020NSN2MFC	P2020NSN2MFC
P1020NXN2HFB	P1020NXN2HFB
P1020NXE2HFB	P1020NXE2HFB
P1020NSN2HFB	P1020NSN2HFB
P1020NSE2HFB	P1020NSE2HFB
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P1011NXN2HFB	P1011NXN2HFB
P1011NSN2DFB	P1011NSN2DFB
MPC8377CVRALGA	MPC8377CVRALGA
MPC8309VMAGDCA	MPC8309VMAGDCA
MPC8309CVMAGDCA	MPC8309CVMAGDCA
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P1011NSN2HFB	P1011NSN2HFB
P1011NSE2HFB	P1011NSE2HFB
MPC8569CVTAQLJB	MPC8569CVTAQLJB
P1022NXE2LFB	P1022NXE2LFB
MPC8306SCVMAFDCA	MPC8306SCVMAFDCA
MPC8536BVTAVLA	MPC8536BVTAVLA
P1021NXN2FFB	P1021NXN2FFB
P1013NXN2HFB	P1013NXN2HFB
P1012NSN2DFB	P1012NSN2DFB
P1012NSE2FFB	P1012NSE2FFB
MPC8536ECVTAVLA	MPC8536ECVTAVLA
MPC8536ECVTATHA	MPC8536ECVTATHA
MPC8536BVTATHA	MPC8536BVTATHA
P1022NXN2LFB	P1022NXN2LFB
MPC8379ECVRALGA	MPC8379ECVRALGA
P1024NXE5DFB	P1024NXE5DFB
P4040NSN7MMC	P4040NSN7MMC
P1011NXE2FFB	P1011NXE2FFB
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P2010NSN2MFC	P2010NSN2MFC
P1022NXN2HFB	P1022NXN2HFB
P1016NSE5BFB	P1016NSE5BFB
P2020NSN2KFC	P2020NSN2KFC
P2020NSE2HFC	P2020NSE2HFC
P2010NXN2KHC	P2010NXN2KHC
P2010NSE2HFC	P2010NSE2HFC
P1022NSN2HFB	P1022NSN2HFB
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P1022NSE2HFB	P1022NSE2HFB
P1021NXN2HFB	P1021NXN2HFB
P1021NSN2HFB	P1021NSN2HFB
P1020NXN2FFB	P1020NXN2FFB

P1020NSN2DFB	P1020NSN2DFB
P1020NSE2FFB	P1020NSE2FFB
P1013NXN2LFB	P1013NXN2LFB
P1013NXE2LFB	P1013NXE2LFB
P1012NSN2HFB	P1012NSN2HFB
P1012NSE2HFB	P1012NSE2HFB
P1012NSE2DFB	P1012NSE2DFB
P1011NXE2HFB	P1011NXE2HFB
P1011NSN2FFB	P1011NSN2FFB
MPC8536AVTAQGA	MPC8536AVTAQGA
MPC8378VRALGA	MPC8378VRALGA
MPC8377ECVRALGA	MPC8377ECVRALGA
MPC8377ECVRAGDA	MPC8377ECVRAGDA
MPC8309VMAHFCA	MPC8309VMAHFCA
P2020NXN2MHC	P2020NXN2MHC
MPC8536CVTAULA	MPC8536CVTAULA
P2020NSE2KFC	P2020NSE2KFC
P1021NSE2DFB	P1021NSE2DFB
P1022NSN2MHB	P1022NSN2MHB
P2020NXE2MHC	P2020NXE2MHC
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MPC8308VMAFD	MPC8308VMAFD
MPC8308VMADD	MPC8308VMADD
MPC8377EVRALGA	MPC8377EVRALGA
MPC8536ECVJAVLA	MPC8536ECVJAVLA
P4081NSN7MMC	P4081NSN7MMC
MPC8377CVRANGA	MPC8377CVRANGA
P1015NSN5DFB	P1015NSN5DFB
MPC8377VRANGA	MPC8377VRANGA
MPC8377VRAGDA	MPC8377VRAGDA
MPC8308VMADDA	MPC8308VMADDA
P1016NXN5FFB	P1016NXN5FFB
P1012NXN2HFB	P1012NXN2HFB
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P1013NSE2LFB	P1013NSE2LFB
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P1025NSN5DFB	P1025NSN5DFB
MPC8308CVMADDA	MPC8308CVMADDA
MPC8309CVMADDCA	MPC8309CVMADDCA
MPC8536ECVTAQGA	MPC8536ECVTAQGA
MPC8306VMABDCA	MPC8306VMABDCA

P2020NSE2MHC	P2020NSE2MHC
MPC8306CVMADDCA	MPC8306CVMADDCA
P2020NXN2KHC	P2020NXN2KHC
P1011NSE2DFB	P1011NSE2DFB
MPC8378CVRANGA	MPC8378CVRANGA
P1021NSE2HFB	P1021NSE2HFB
P1021NXE2HFB	P1021NXE2HFB
MPC8308VMAGDA	MPC8308VMAGDA
MPC8308CVMAGDA	MPC8308CVMAGDA
MPC8306SVMAFDCA	MPC8306SVMAFDCA
P2010NXN2HFC	P2010NXN2HFC
P4040NSN1MMB	P4040NSN1MMB
MPC8536AVTAVLA	MPC8536AVTAVLA
MPC8378CVRALGA	MPC8378CVRALGA
MPC8536AVTAULA	MPC8536AVTAULA
MPC8308CVMAGD	MPC8308CVMAGD
P2020NSN2KHC	P2020NSN2KHC
P1011NXN2DFB	P1011NXN2DFB
P2020NSN2MHC	P2020NSN2MHC
P2020NSE2KHC	P2020NSE2KHC
P1021NXE2DFB	P1021NXE2DFB
MPC8306VMADDCA	MPC8306VMADDCA
P2020NSN2HFC	P2020NSN2HFC
P2020NSE2MFC	P2020NSE2MFC

CUSTOMER(S)

MOUSER ELECTRONICS
(RSXBF)
1000 N. MAIN STREET

MANSFIELD TX
76063 USA

DEVICE(S)

CPN	MPN
P2020NSE2KFC	P2020NSE2KFC
MPC8377ECVRANGA	MPC8377ECVRANGA
P1011NSE2HFB	P1011NSE2HFB
P1021NXE2HFB	P1021NXE2HFB

MPC8377CVRALGA	MPC8377CVRALGA
MPC8308CVMAGDA	MPC8308CVMAGDA
MPC8306SCVMAFDCA	MPC8306SCVMAFDCA
MPC8536ECVTATHA	MPC8536ECVTATHA
P2020NXN2KHC	P2020NXN2KHC
MPC8536BVTATHA	MPC8536BVTATHA
MPC8536BVTAVLA	MPC8536BVTAVLA
P2020NXE2KFC	P2020NXE2KFC
P1022NXN2LFB	P1022NXN2LFB
MPC8379ECVRALGA	MPC8379ECVRALGA
MPC8309CVMAGDCA	MPC8309CVMAGDCA
MPC8378ECVRANGA	MPC8378ECVRANGA
MPC8569CVTAQLJB	MPC8569CVTAQLJB
P1021NXN2FFB	P1021NXN2FFB
P1012NSN2DFB	P1012NSN2DFB
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P1020NSE2DFB	P1020NSE2DFB
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P1020NSE2HFB	P1020NSE2HFB
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MPC8309CVMAHFCA	MPC8309CVMAHFCA
MPC8308VMAGDA	MPC8308VMAGDA
MPC8306SVMAFDCA	MPC8306SVMAFDCA
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P4040NSN7MMC	P4040NSN7MMC
P2010NXN2KHC	P2010NXN2KHC
MPC8536AVTAQGA	MPC8536AVTAQGA
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P1021NXN2HFB	P1021NXN2HFB
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P1012NSN2HFB	P1012NSN2HFB
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MPC8309VMAHFCA	MPC8309VMAHFCA
MPC8536ECVJAVLA	MPC8536ECVJAVLA
P2020NXE2KHC	P2020NXE2KHC
P2020NSN2MFC	P2020NSN2MFC

MPC8309VMAGDCA	MPC8309VMAGDCA
MPC8378CVRANGA	MPC8378CVRANGA
P2010NSE2HFC	P2010NSE2HFC
P1022NSN2HFB	P1022NSN2HFB
P1022NSE2HFB	P1022NSE2HFB
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P1020NSE2FFB	P1020NSE2FFB
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P1020NSN2DFB	P1020NSN2DFB
P1011NSN2FFB	P1011NSN2FFB
P1022NSN2MHB	P1022NSN2MHB
P4081NSN7MMC	P4081NSN7MMC
MPC8377ECVRAGDA	MPC8377ECVRAGDA
P2020NSN2KFC	P2020NSN2KFC
MPC8377EVRALGA	MPC8377EVRALGA
P1013NSE2LFB	P1013NSE2LFB
P2020NXE2MHC	P2020NXE2MHC
P1011NXE2FFB	P1011NXE2FFB
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MPC8308VMADDA	MPC8308VMADDA
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P1011NSE2DFB	P1011NSE2DFB
MPC8306VMABDCA	MPC8306VMABDCA
MPC8306CVMADDCA	MPC8306CVMADDCA
MPC8308CVMADDA	MPC8308CVMADDA
P2010NXE2HFC	P2010NXE2HFC
P1011NXN2DFB	P1011NXN2DFB
MPC8377VRANGA	MPC8377VRANGA
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P1011NSN2DFB	P1011NSN2DFB
P1024NXE5DFB	P1024NXE5DFB

P1012NSE2FFB	P1012NSE2FFB
MPC8377VRAGDA	MPC8377VRAGDA
P2020NSN2KHC	P2020NSN2KHC
MPC8378CVRALGA	MPC8378CVRALGA
P2020NSE2KHC	P2020NSE2KHC
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P1022NXN2HFB	P1022NXN2HFB
MPC8536AVTAVLA	MPC8536AVTAVLA
MPC8536ECVTAQGA	MPC8536ECVTAQGA
MPC8569EVTAUNLB	MPC8569EVTAUNLB
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MPC8536ECVTAVLA	MPC8536ECVTAVLA
MPC8536AVTAULA	MPC8536AVTAULA
P2020NSN2MHC	P2020NSN2MHC
P2020NSE2MHC	P2020NSE2MHC
MPC8308CVMAGD	MPC8308CVMAGD
MPC8536CVTAQGA	MPC8536CVTAQGA
MPC8306VMADDCA	MPC8306VMADDCA
P2020NSE2MFC	P2020NSE2MFC
MPC8536CVTAULA	MPC8536CVTAULA

This notice is Freescale Confidential Proprietary and is only intended for the customer listed on this notification.

AFFECTED CHANGE CATEGORIES

ERRATA

DESCRIPTION OF CHANGE

Erratum number **A-009204** is being released that impacts the eSDHC block.

Title: System bus may hang if register SYSCTL[RSTD] is set while DMA transactions are active

Description: In the event of that any data error (like, IRQSTAT[DCE]) occurs during an eSDHC data transaction where DMA is used for data transfer to/from the system memory, setting the SYSCTL[RSTD] register may cause a system hang. If software sets the register SYSCTL[RSTD] to 1 for error recovery while DMA transferring is not complete, eSDHC may hang the system bus. This happens because the software register SYSCTL[RSTD] resets the DMA engine without waiting for the completion of pending system transactions

Impact: Causes system bus hang

Workaround: Add a 5 ms delay before setting SYSCTL[RSTD] to make sure all the DMA transfer are finished.

REASON FOR CHANGE

Alert customers of new eSDHC A-009204 erratum release and the workaround

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

No impact of product change to form, fit, function or reliability

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](#)

For sample inquiries - please go to www.freescale.com

QUALIFICATION STATUS: N/A

QUALIFICATION PLAN:

N/A

RELIABILITY DATA SUMMARY:

N/A

ELECTRICAL CHARACTERISTIC SUMMARY:

N/A

CHANGED PART IDENTIFICATION:

N/A

ATTACHMENT(S):

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

[16849 Erratum A-009204.pdf](#)
