Product Change Notification - KSRA-24TYAZ595

Date: 07 Nov 2017

Product Category: Memory; 8-bit PIC Microcontrollers

Notification subject: CCB 2936 Initial Notice: Qualification of MMT as a new assembly site for selected Atmel Product available in 40L PDIP package.

Notification text:

PCN Status:
Initial notification

Microchip Parts Affected:
Please open the attachments found in the attachments field below labeled as PCN_#_Affected_CPN.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

Description of Change:
Qualification of MMT as a new assembly site for selected Atmel Product available in 40L PDIP package.

Pre Change:

Assembled at ANAP Assembly site using 8390A die attach material, Q3-6646 Die Coat material and CK5000A molding compound material

Post Change:

Assembled at MMT Assembly site using CRM-1064L die attach material, Q1-4939 die coat material and GE800 molding compound material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Amkor Technology Philippine INC.(ANAP)	Microchip Technology Thailand (MMT)
Wire material	Au Wire	Au Wire
Die attach material	8390A	CRM-1064L
Molding compound material	CK5000A	GE800
Lead frame material	C194	C194
Die Coat material	Q3-6646	Q1-4939

Impacts to Data Sheet:
None

Change Impact:
None

Reason for Change:
To improve manufacturability by qualifying MMT assembly site as part of the Atmel and Microchip integration.

Change Implementation Status:
In Progress

Estimated Qualification Completion Date:
December 2017

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

	May 2017					-->	December 2017				
Workweek	18	19	20	21	22		48	49	50	51	52
Initial PCN Issue Date					X						
Qual Report Availability											X
Final PCN Issue Date											X

Method to Identify Change:
Traceability code

Qualification Plan:
Please open the attachments included with this PCN labeled as PCN_#_Qual Plan

Revision History:

May 29, 2017: Issued initial notification.
November 07, 2017: Re-issued initial notification to update the affected parts list. Updated the pre and post change to include die coat material. Updated the qual report availability and revision of the qualification plan.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachment(s):

PCN_KSRA-24TYAZ595_Affected_CPN.pdf
PCN_KSRA-24TYAZ595_Qual Plan.pdf
PCN_KSRA-24TYAZ595_Affected_CPN.xlsx

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KSRA-24TYAZ595 -CCB 2936 Initial Notice: Qualification of MMT as a new assembly site for selected Atmel Product available in 40L PDIP package.

Affected Catalog Part Numbers (CPN)

PCN_ KSRA-24TYAZ595
CATALOG_PART_NBR
AT27C4096-55PU
AT27C4096-90PU

QUALIFICATION PLAN SUMMARY

PCN#: KSRA-24TYAZ595

Date:
May 4, 2017

Qualification of MMT as a new assembly site for selected Atmel Product available in 40L PDIP package.

Purpose: Qualification of MMT as a new assembly site for selected Atmel Product available in 40L PDIP package.

CCB No: 2936

Misc.	**Assembly site**	MMT
	BD Number	BDM-001317 rev B
	MP Code (MPC)	34A097S2XC01 34A097S2XC02
	Part Number (CPN)	AT27C4096-90PU/55PU
Lead-Frame	**Paddle size**	260x266 mils
	Material	CDA194
	Manufacturer	ASM
	Surface	Ag Spot Plated
	Treatment	N/A
	Process	Stamped
	Lead-lock	Yes
	Part Number	10104004
	Lead Plating	Matte Tin
Bond Wire	**Material**	Au
Die Attach	**Part Number**	CRM-1064L
	Conductive	Yes
MC	**Part Number**	GE800
PKG	**PKG Type**	PDIP
	Pin/Ball Count	40
	PKG width/size	600 mils
Die	**Die Thickness**	15 mils
	Die Size	200x198 mils

Test Name and Location	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
Wire Bond Pull – WBP at MMT	Mil. Std. 883-2011	5	0	3	24	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear – WBS at MMT	CDF-AEC-Q100-001	5	0	3	24		5	30 bonds from a minimum of 5 devices.
Wire Sweep at MMT		5	0	3	15	0		Required for any reduction in wire bond thickness.
External Visual at MMT	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
HTSL (High Temp Storage Life) at MPHIL	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25°C and hot temp.85ºC, E-test at 85°C only	45	5	1	50	0	10	Must be in progress at time of package release to production, but completion is not required for release to production.
B-HAST at MMT(but electrical testing at MPHIL)	+130°C/85% RH for 96 hours or 110°C/85%RH for 264 hours. Electrical test pre and post stress at +25°C and hot temp .	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST at MPHIL	+130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at +25°C. E-test at 85°C only	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle at MPHIL	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress. E-test at 85°C only	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Product Change Notification - KSRA-24TYAZ595

Date: 29 May 2017

Product Category: Memory; 8-bit PIC Microcontrollers

Notification subject: CCB 2936 Initial Notice: Qualification of MMT as an assembly site for selected Atmel Product available in 40L PDIP package.

Notification text:

PCN Status:
Initial notification

Microchip Parts Affected:
Please open the attachments found in the attachments field below labeled as PCN_#_Affected_CPN.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

Description of Change:
Qualification of MMT as an assembly site for selected Atmel Product available in 40L PDIP package.

Pre Change:
Assembled at ANAP Assembly site using 8390A die attach material, and CK5000A molding compound material

Post Change:
Assembled at MMT Assembly site using CRM-1064L die attach material, and GE800 molding compound material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	ANAP Assembly Site	MMT Assembly Site
Wire material	Au Wire	Au Wire
Die attach material	8390A	CRM-1064L
Molding compound material	CK5000A	GE800
Lead frame material	C194	C194

Impacts to Data Sheet:
None

Change Impact:
None

Reason for Change:
To improve manufacturability by qualifying MMT assembly site as part of the Atmel and Microchip integration.

Change Implementation Status:
In Progress

Estimated Qualification Completion Date:
August 2017

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

	May 2017					-->	August 2017				
Workweek	18	19	20	21	22		31	32	33	34	35
Initial PCN Issue Date					X						
Qual Report Availability								X			

Final PCN Issue Date								X			

Method to Identify Change:
Traceability code

Qualification Plan:
Please open the attachments included with this PCN labeled as PCN_#_Qual Plan

Revision History:
May 29, 2017: Issued initial notification.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachment(s):

PCN_KSRA-24TYAZ595_Affected CPN.pdf
PCN_KSRA-24TYAZ595_Qual Plan.pdf
PCN_KSRA-24TYAZ595_Affected CPN.xlsx

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KSRA-24TYAZ595 -CCB 2936 Initial Notice: Qualification of MMT as an assembly site for selected Atmel Product available in 40L PDIP package.

Affected Catalog Part Numbers (CPN)

PCN_ KSRA-24TYAZ595
CATALOG_PART_NBR
AT27C4096-55PU
AT27C4096-90PU
ATMEGA1284P-PU
ATMEGA1284-PU

QUALIFICATION PLAN SUMMARY

PCN#: KSRA-24TYAZ595

Date:
May 4, 2017

Qualification of MMT as an assembly site for selected Atmel Product available in 40L PDIP package.

Purpose: Qualification of MMT as an assembly site for selected Atmel Product available in 40L PDIP package.

CCB: 2936

Misc.	**Assembly site**	MMT
	BD Number	BDM-001317 rev B (for 34A09) BDM-001353 rev A (for 35452)
	MP Code (MPC)	34A097S2XC01 354527S2XC01 354527S2XC02
	Part Number (CPN)	AT27C4096-90PU(34A09) ATMEGA1284P-PU (35452) ATMEGA1284-PU (35452)
Lead-Frame	**Paddle size**	260x266 mils
	Material	CDA194
	Surface	Ag Spot Plated
	Process	Stamped
	Lead-lock	Yes
	Part Number	10104004
	Lead Plating	Matte Tin
Bond Wire	**Material**	Au
Die Attach	**Part Number**	CRM-1064L
	Conductive	Yes
MC	**Part Number**	GE800
PKG	**PKG Type**	PDIP
	Pin/Ball Count	40
	PKG width/size	600 mils
Die	**Die Thickness**	15 mils
	Die Size	200x198 mils (34A09) 200x167 mils (35452)

Test Name and Location	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
Wire Bond Pull – WBP at MMT	Mil. Std. 883-2011	5	0	3	24	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear – WBS at MMT	CDF-AEC-Q100-001	5	0	3	24		5	30 bonds from a minimum of 5 devices.
Wire Sweep at MMT		5	0	3	15	0		Required for any reduction in wire bond thickness.
External Visual at MMT	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
HTSL (High Temp Storage Life) at MPHIL	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25°C and hot temp.85°C, E-test at 85°C only	45	5	1	50	0	10	Must be in progress at time of package release to production, but completion is not required for release to production.
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