Product Change Notification - IIRA-15DIUK933

Date:	31 Oct 2014
Product Category:	Memory
Notification subject:	CCB 1397.04 Final Notice: Qualification of HR-5104 die attach film for 24AA1025, 24AA1026, 24FC1025, 24FC1026, 24LC1025 and 24LC1026 device families in the 8L SOIJ package at NSEB (UTL) assembly site.
Notification text:	

PCN Status:

Final notification

Microchip Parts Affected:

See attachments of affected catalog part numbers (CPN) labeled as…

PCN_IIRA-15DIUK933_Affected_CPN.xls

PCN_IIRA-15DIUK933_Affected_CPN.pdf

Description of Change:

Qualification of HR-5104 die attach film for 24AA1025, 24AA1026, 24FC1025, 24FC1026, 24LC1025 and 24LC1026 device families in the 8L SOIJ package at NSEB (UTL) assembly site.

Pre Change:

HS-231W die attach film

Post Change:

HR-5104 die attach film

Impacts to Data Sheet:

None

Reason for Change:

To improve manufacturability because current die attach film is being phased out by supplier.

Change Implementation Status:

In Progress

Estimated First Ship Date:

November 20, 2014 (date code: 1447)

NOTE: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Markings to Distinguish Revised from Unrevised Devices:

Traceability code

Revision History:

April 28, 2014: Issued initial notification.

October 31, 2014: Issued final notification. Attached the Qualification Report. Updated the reason for change. Revised the estimated first ship date from July 15, 2014 to November 20, 2014.

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_IIRA-15DIUK933_Qual Report.pdf PCN_IIRA-15DIUK933_Affected CPN.pdf PCN_IIRA-15DIUK933_Affected CPN.xls

Please contact your local Microchip sales office with questions or concerns regarding this notification.

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PCN_IIRA-15DIUK933
CATALOG_PART_NBR
24AA1025-I/SM
24AA1025T-I/SM
24AA1026-I/SM
24AA1026T-I/SM
24FC1025-I/SM
24FC1025T-I/SM
24FC1025T-I/SMC79
24FC1026-I/SM
24FC1026T-I/SM
24LC1025-E/SM
24LC1025-I/SM
24LC1025T-E/SM
24LC1025T-I/SM
24LC1026-E/SM
24LC1026-I/SM
24LC1026T-E/SM
24LC1026T-I/SM

QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN#: IIRA-15DIUK933

Date
September 22, 2014

Qualification of HR-5104 die attach film for 24AA1025, 24AA1026, 24FC1025, 24FC1026, 24LC1025 and 24LC1026 device families in the 8L SOIJ package at NSEB (UTL) assembly site.

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PACKAGE QUALIFICATION REPORT

Purpose	Qualification of HR-5104 die attach film for 24AA1025, 24AA1026, 24FC1025, 24FC1026, 24LC1025 and 24LC1026 device families in the 8L SOIJ package at NSEB (UTL) assembly site.
CN	BC140587
QUAL ID	Q14096
MP CODE	360037C3XB00
Part No.	24AA1025-I/SM
Bonding No.	BDE-002614 Rev. 02
CCB No.:	1397.04

Package

Type	8L SOIJ
Package size	208 mils
Die thickness	8 mils
Die size	114.3 x 109.5 mils –D5AB2 (Die 1)
Die size	114.3 x 109.5 mils –D5AB2 (Die 2)

Lead Frame

Paddle size	140 x 160 mils
Material	C194
Surface	no treatment
Process	stamp
Lead Lock	Yes
Part Number	FD0379
Treatment	No

Die attach material

Epoxy	HR5104
Wire	Au wire
Mold Compound	G600
Plating Composition	Matte Tin

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PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
NSEB150700736.000	GRSM415072968.100	1420SPR
NSEB150700737.000	GRSM415072968.100	1420SPT
NSEB150700738.000	GRSM415072968.100	1420SPV

Result [X] Pass [ ] Fail [ ] ____________________

8L SOIJ (.208") assembled by UTL (NSEB) pass reliability test per QCI-39000.This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020D standard.

Prepared By:____________________**Date:** September 22, 2014 **(Sr.Reliability Engineer)**

(Mr.Udom Suksansakul)

Approved By:____________________**Date:** September 22, 2014 **(Reliability Manager)**

(Mr. Somnuek Thongprasert)

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Moisture/Reflow Sensitivity Classification Test (At MSL Level 1)	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243 (IPC/JEDEC J-STD-020D)	IPC/JEDEC J-STD-020D	135	0/135	Pass	

Precondition Prior Perform Reliability Tests (At MSL Level 1)	**Electrical Test :**+25°C and 85°C System: NEXTEST_PT	JESD22-A113	693(0)	693		Good Devices
	Bake 150°C, 24 hrs System: CHINEE			693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max			693		
	System: Vitronics Soltec MR1243					
	Electrical Test :+25°C and 85°C System: NEXTEST_PT			0/693	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	**Stress Condition:** -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: + 85°C System: NEXTEST_PT		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (> 4.0 grams)		15 (0)	0/15	Pass	
	Bond Shear (>18.00 grams)		15 (0)	0/15	Pass	
UNBIASED-HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: NEXTEST_PT		231(0)	0/231	Pass	77 units / lot
HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. **Bias Volt:** 5.5 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test:+25°C and 85°C System: NEXTEST_PT		231(0)	0/231	Pass	77 units / lot
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB	JESD22-A103		45		45 units
	Electrical Test :+25°C and 85°C System: NEXTEST_PT		45(0)	0/45	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Bond Line Thickness	Bond Line Thickness	-	15(0)	15(0)	Pass	5 units / lot
Physical Dimensions	Physical Dimension, 30 units from 1 lot	JESD22-B100/B108	30(0) Units	0/30	Pass	
Bond Strength Data Assembly	Wire Pull (> 4.0 grams)	M2011	30 (0) Wires	0/30	Pass	
	Bond Shear (>18.00 grams)	JESD22-B116	30 (0) bonds	0/30	Pass	