

Product Change Notification - IIRA-15OECT725

Date: 10 Sep 2014

Product Category: Memory

Notification subject: CCB 1397.05 Final Notice: Qualification of HR-5104 die attach film for 24AA1025, 24AA1026, 24FC1025, 24FC1026, 24LC1025 and 24LC1026 device families in the 8L SOIC 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-15OECT725_Affected_CPN.xls

PCN_IIRA-15OECT725_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 SOIC 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:

October 3, 2014 (date code: 1440)

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.

September 10, 2014: Issued final notification. Attached the Qualification Report. Updated the reason for change. Revised the estimated first ship date from July 15, 2014 to October 3, 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-15OECT725_Qual Report.pdf](#) [PCN_IIRA-15OECT725_Affected CPN.pdf](#) [PCN_IIRA-15OECT725_Affected CPN.xls](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

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PCN_IIRA-15OECT725
CATALOG_PART_NBR
24AA1025-I/SN
24AA1025T-I/SN
24AA1025T-I/SNVAO
24AA1026-I/SN
24AA1026T-I/SN
24FC1025-I/SN
24FC1025T-I/SN
24FC1026-I/SN
24FC1026T-I/SN
24LC1025-E/SN
24LC1025-E/SN16KV01
24LC1025-I/SN
24LC1025T-E/SN
24LC1025T-E/SN16KVAO
24LC1025T-I/SN
24LC1026-E/SN
24LC1026-I/SN
24LC1026T-E/SN
24LC1026T-I/SN



MICROCHIP

**QUALIFICATION REPORT
RELIABILITY LABORATORY**

PCN #: IIRA-15OECT725

**Date
August 25, 2014**

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

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MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose	Qualification of HR-5104 die attach film for 24AA1025, 24AA1026, 24FC1025, 24FC1026, 24LC1025 and 24LC1026 device families in the 8L SOIC package at NSEB (UTL) assembly site
CN	BC140589
QUAL ID	Q14076
MP CODE	360107C2XB00
Part No.	24AA1025-I/SN
Bonding No.	BDE-002615 Rev. 01
CCB No.:	1397.05
<u>Package</u>	
Type	8L SOIC
Package size	150 mils
Die thickness	7mils top/ 7 mils bottom / 7 mils spacer
Die size	78.7 x 111.0 mils
<u>Lead Frame</u>	
Paddle size:	95x130 mils
Material /Manufacturer	C194/ ASM
Surface	No treatment
Paddle plating	Ag spot
Process	Stamped
Lead Lock	Yes
Part Number	FD0258
Strip dimensions	238x70mm
<u>Die attach material</u>	
Epoxy	HR-5104 / Hitachi
Wire	Au wire
Mold Compound	G600 / Sumitomo
Plating Composition	Matte Tin




MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
NSEB150700479.000	GR SM4 14501648.200	1420HVC
NSEB150700483.000	GR SM4 14501648.200	1420HVP
NSEB150700487.000	GR SM4 14501648.200	1420HW 1

Result Pass Fail _____

8L SOIC (.150") 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:** August 25, 2014 (Sr. Reliability Engineer)

(Mr. Udom Suksansakul)

Approved By:  **Date:** August 25, 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 C 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	Pass	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 System: Vitronics Soltec MR1243			693		
	Electrical Test :+25°C and 85°C System: NEXTEST_PT			0/693		

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) 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	SPI-45528	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	