Product Change Notification - JAON-04UCYV212

Date: 06 Dec 2016

Product Category: Memory

Notification subject: CCB 2745 Initial Notice: Qualification of 35.8K process technology for selected products of the 25xx128 and 25xx256 device families available in 8L TSSOP 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 35.8K process technology for selected products of the 25xx128 and 25xx256 device families available in 8L TSSOP package.

Pre Change:
Available in 160K wafer technology fabricated at Microchip fabrication sites FAB2 and FAB4 (Tempe, AZ and Gresham, OR, USA) using 8 inch wafers

Post Change:
Available in 160K wafer technology fabricated at Microchip fabrication sites FAB2 and FAB4 (Tempe, AZ and Gresham, OR, USA) using 8 inch wafers or available in 35.8K wafer technology fabricated at FAB 5 (Colorado Springs, CO, USA) using 6 inch wafers

Pre and Post Change Summary:

	Pre Change	Post Change	
Wafer Technology	160K wafer technology	160K wafer technology	35.8K wafer technology
Fabrication Location	Microchip Fabrication Sites FAB 2 and FAB4 (Tempe, AZ and Gresham, OR, USA)	Microchip Fabrication Sites FAB 2 and FAB4 (Tempe, AZ and Gresham, OR, USA)	FAB 5 (Colorado Springs, CO USA)
Wafer Diameter	8 inches (200 mm)	8 inches (200 mm)	6 inches (150 mm)
Quality certification	ISO/TS16949	ISO/TS16949	ISO9001/TS16949

Impacts to Data Sheet:
None

Change Impact:
None

Reason for Change:
To improve manufacturability by qualifying an additional fabrication site.

Change Implementation Status:
In Progress

Estimated Qualification Completion Date:
January 2017

NOTE:

1. In order to receive products only fabricated with the current 160K process please use the revised part number identified with RVA added to the end of the part number (see example below).

Standard Part Number: 25xx128x-x/xx or 25xx256x-x/xx
Revised Part Number (160K only): 25xx128x-x/xxRVA or 25xx256x-xx/xxRVA

2. 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.

Time Table Summary:

	December 2016					->	January 2017			
Workweek	48	49	50	51	52		01	02	03	04
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:
December 6, 2016: 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_JAON-04UCYV212_Qual Plan.pdf

PCN_JAON-04UCYV212_Affected CPN.pdf

PCN_JAON-04UCYV212_Affected CPN.xls

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

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JAON-04UCYV212 - CCB 2745 Initial Notice: Qualification of 35.8K process technology for selected products of the 25xx128 and 25xx256 device families available in 8L TSSOP package.

Affected Catalog Part Numbers (CPN)

PCN_JAON-04UCYV212
CATALOG_PART_NBR
25AA256-I/ST
25AA256T-I/ST
25LC256-E/ST
25LC256-I/ST
25LC256T-E/ST
25LC256T-I/ST
25AA128-I/ST
25AA128T-I/ST
25LC128-E/ST
25LC128-I/ST
25LC128T-E/ST
25LC128T-I/ST

QUALIFICATION PLAN

PCN #: JAON-04UCYV212

Date
September 07, 2016

Qualification of 35.8K process technology for selected products of the 25xx128 and 25xx256 device families available in 8L TSSOP package.

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Purpose: Qualification of 35.8K process technology for selected products of the 25xx128 and 25xx256 device families available in 8L TSSOP package.

MP code: 358A24C5X/358A27C5X/358A2TC5X/358A2YC5X

Part No.: 25LC256/25AA256/25LC256T/25AA256T

BD No: BDE003951-01

CCB No.: 2745

Package:

Type 8L TSSOP

Width or Size 4.4 mm

Die thickness 11 mils

Die size 57.1x69.5 mils

Leadframe:

Material C7025/stamped

Plating Ag spot plated

Part Number 10100821

Surface treatment No

Solder Plating:

Material Pure matte tin

Wire:

Material Au wire

Die Attach Film:

Part Number 2200D

Conductive YES

Mold Compound:

Type/Supplier EME-G600V

Test Name	Conditions	Reliability Stress Read Point	Pre & Post Reliability Stress Test Temperature	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
		-40°C to +125°C datasheet operating range (E Temp)	-40°C to +125°C datasheet operating range (E Temp)							
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5	30 bonds from a min. 5 devices.
HTSL (High Temp Storage Life)	+175°C	500 hrs	+25°C, +85°C, +125°C	45	5	1	50	0	10	Spares should be properly identified.
Preconditioning - Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020D for package type. MSL-1 @ 260°C		+25°C	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours or 110°C/85%RH for 264 hours	96 hrs	+25°C, +85°C, +125°C,	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST	+130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs	96 hrs or 264 hrs	+25°C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C. 3 gram force WBP on 5 devices from 1 lot, test following Temp Cycle stress.	500 cycles	+85°C, +125°C,	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.