Product Change Notification - JAON-04VUHY153

Date: 29 Sep 2015

Product Category: SMSC

Notification subject: CCB 1735 Initial Notice: Qualification of NSEB as an additional assembly site for selected products in 16L QFN (5x5x0.9mm) 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 NSEB as an additional assembly site for selected products in 16L QFN (5x5x0.9mm) package.

Pre Change:

Assembled at SCC assembly site using C194 lead-frame, 8290 die attach material, G770 molding compound and Palladium coated copper wire with gold flash (CuPdAu) bond wire.

Post Change:
Assembled at SCC assembly site using C194 lead-frame, 8290 die attach material, G770 molding compound and palladium coated copper wire with gold flash (CuPdAu) bond wire.
or
Assembled at NSEB assembly site using Eftek 64T lead-frame, 8600 die attach material, G700LTD molding compound and palladium coated copper wire with gold flash (CuPdAu) bond wire.

Impacts to Data Sheet:
None

Reason for Change:
To improve on-time delivery performance by qualifying NSEB assembly site.

Change Implementation Status:
In Progress

Estimated First Ship Date:
January 22, 2016 (date code: 1604)

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:
September 29, 2015: 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-04VUHY153_Qual_Plan.pdf PCN_JAON-04VUHY153_Affected_CPN.pdf PCN_JAON-04VUHY153_Affected_CPN.xls

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

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To opt out of future offer or information emails (other than product change notification emails), click here to go to microchipDIRECT and login, then click on the "My account" link, click on "Update profile" and un-check the box that states "Future offers or information about Microchip's products or services."

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Affected Catalog Part Numbers (CPN)

PCN_JAON-04VUHY153
CATALOG_PART_NBR
SEC1100-A5-02
SEC1100-A5-02H1
SEC1100-A5-02NC-TR
SEC1100-A5-02S2
SEC1100-A5-02-TR
SEC1110-1100A5
SEC1110-A5-02
SEC1110-A5-02A1
SEC1110-A5-02A1-TR
SEC1110-A5-02G1
SEC1110-A5-02G1-TR
SEC1110-A5-02NC
SEC1110-A5-02NC-TR
SEC1110-A5-02-TR
SEC1110I-A5-02
SEC1110I-A5-02G1
SEC1110I-A5-02G1-TR
SEC1110I-A5-02-TR
USX1011-A5-02

QUALIFICATION PLAN

PCN #: JAON-04VUHY153

Date
August 26, 2015

Qualification of NSEB as an additional assembly site for selected products in 16L QFN (5x5x0.9mm) package

Distribution

Surasit P.	Greg P
A. Navarro	Vassilis
Wichai K.	Fernando C
Chaweng W.	Gerry O
Chalermpon P.	Arnel M
Mitch R	Maitree Y
Sunisa K	Supakorn L
Ponpitug Y	Irina K
Jeffrey J	Marco Ho
Rhoderick O	Fannie Lin

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Purpose:________________ Qualification of NSEB as an additional assembly site for selected products in 16L QFN (5x5x0.9mm) package

MP code: ________________ XA6011UKXA0C

Part No.:________________ USX1011-A5-02

BD No:________________ BDM-000885C

CCB No.________________ 1735

Package:

Type ________________ QFN

Width or Size ___________ 5x5x0.9

Die thickness: __________ 11

Die size: ______________ 93x93

MSL: ________________ 1

Lead frame:

Paddle size: ____________ 138x138

Material________________ Eftek-64T

Surface ________________ double Ag ring

Treatment _____________ roughned

Process________________ stamped

Leadlock_______________ yes

Part Number____________ FR1091

Wire:

Material________________ CuPdAu

Die Attach Epoxy:

Part Number____________ 8600

Conductive_____________ yes

Mold Compound:

Part Number____________ G700LTD

Lead finish:______________ Matte tin

Test Name	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
Standard Pb-free Solderability	JESD22B-102E; Perform 8 hour steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Standard Pb-free: Matte tin/ NiPdAu finish, SAC solder, wetting temp 245°C for both SMD & through hole packages.	22	5	1	27	> 95% lead coverage	5	Standard Pb-free solderability is the requirement. SnPb solderability (backward solderability- SMD reflow soldering) is required for any plating related changes and highly recommended for other package BOM changes.
Wire Bond Pull - WBP	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	CDF-AEC-Q100-001	5	0	3	24	0	5	30 bonds from a minimum of 5 devices.
Wire Sweep		5	0	3	15	0		Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
HTSL (High Temp Storage Life)	+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	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.
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; Electrical test pre and post stress at +25°C. MSL1 @ 260°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 96/192hrs for Cu wire 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	+130°C/85% RH for 96/192hrs for Cu wire. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Test Name	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
Temp Cycle	-65°C to +150°C for 500/100 cycles for cu wire . Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.