Product Change Notification - LIAL-25ZCPA706

Date:

21 Mar 2018

Product Category:

8-bit PIC Microcontrollers

Affected CPNs:

Notification subject:

CCB 3257 Initial Notice: Qualification of MTAI as an additional assembly site for selected Atmel products available in 8L SOIJ package.

Notification text:

PCN Status:

Initial notification.

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found on the Affected CPNs section above.

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

Description of Change:

Qualification of MTAI as an additional assembly site for selected Atmel products available in 8L SOIJ package.

Pre Change:

Assembled in LPI using palladium coated copper wire with gold flash (CuPdAu) bond wire, CRM-1033BF die attach material

Post Change:

Assembled in LPI using palladium coated copper wire with gold flash (CuPdAu) bond wire, CRM-1033BF die attach material and assembled in MTAI using gold (Au) bond wire and 8390A die attach material

Pre and Post Change Summary:

	Pre Change	Post Change	
Assembly Site	Lingsen Precision Industires, LTD. (LPI)	Lingsen Precision Industires, LTD. (LPI)	Microchip Technology Thailand HQ (MTAI)
Wire material	CuPdAu	CuPdAu	Au
Die attach material	CRM-1033BF	CRM-1033BF	8390A
Molding compound material	G600	G600	G600
Lead frame material	C194	C194	C194

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on-time delivery performance by qualifying MTAI as additional assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

April 2018

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:

	February 2018					-->	April 2018			
Workweek	06	07	08	09	10		14	15	16	17
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:

March 1, 2018: Issued initial notification.

March 21, 2018: Re-issued initial notification to update the post change and affected CPN list and to revised this initial notification to be issued to all affected customers.

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_LIAL-25ZCPA706_QUAL PLAN.pdf

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

Terms and Conditions:

If you wish to change your product/process change notification (PCN) profile please log on to our website at http://www.microchip.com/PCN sign into myMICROCHIP to open the myMICROCHIP home page, then select a profile option from the left navigation bar.

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."

Affected Catalog Part Numbers (CPN)

ATTINY13-20SQ
ATTINY13-20SQR
ATTINY13-20SU
ATTINY13-20SU188
ATTINY13-20SU365
ATTINY13-20SUR
ATTINY13-20SUR365
ATTINY13A-SF
ATTINY13A-SFR
ATTINY13A-SFRA5
ATTINY13A-SN
ATTINY13A-SNR
ATTINY13A-SU
ATTINY13A-SU523
ATTINY13A-SUR
ATTINY13A-SURA2
ATTINY13A-SURA4
ATTINY13V-10SU
ATTINY13V-10SUR
ATTINY25-15ST
ATTINY25-15ST1
ATTINY25-15SZ
ATTINY25-20SN
ATTINY25-20SNR
ATTINY25-20SU
ATTINY25-20SUR
ATTINY25V-10SN
ATTINY25V-10SNR
ATTINY25V-10SU
ATTINY25V-10SUR
ATTINY25V-15ST
ATTINY45-15ST
ATTINY45-15ST1
ATTINY45-15SZ
ATTINY45-20SU
ATTINY45-20SUR
ATTINY45V-10SU
ATTINY45V-10SUR
ATTINY45V-15ST
ATTINY45VMAH-15ST
ATTINY85-20SF
ATTINY85-20SFR
ATTINY85-20SU
ATTINY85-20SUR
ATTINY85V-10SU
ATTINY85V-10SUR

QUALIFICATION PLAN SUMMARY

PCN#: LIAL-25ZCPA706

Date

February 07, 2018

Qualification of MTAI as an additional assembly site for selected Atmel products available in 8L SOIJ package.

Purpose: Qualification of MTAI as an additional assembly site for selected Atmel products available in 8L SOIJ package.

CCB No.: 3257

Misc.	**Assembly site**	MTAI
	BD Number	BDM-001676 rev. A
	MP Code (MPC)	355C4YC3XC01
	Part Number (CPN)	ATTiny45-15SZ
Lead-Frame	**Paddle size**	140x160 mils
	Material	CDA194
	Surface	Bare Cu paddle
	Treatment	Roughening
	Process	Stamped
	Lead-lock	No
	Part Number	10100840
	Lead Plating	Matte Tin
Bond Wire	**Material**	Au
Die Attach	**Part Number**	8390A
	Conductive	Yes
MC	**Part Number**	G600V
PKG	**PKG Type**	SOIJ
	Pin/Ball Count	8
	PKG width/size	208 mils
Die	**Die Thickness**	15 mils
	Die Size	90.0 x 88.0 mils

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	Test Site	Special Instructions
Standard Pb-free Solderability	JESD22B-102E; Perform 8 hours of 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	MTAI	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	CDF-AEC-Q100-001	5	0	1	5	0	5		
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	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 (500hrs) Electrical test pre and post stress at +25°C and hot temp at +85°C, +125°C.	45	5	3	150	0	10	MPH LI	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-020E for package type. Electrical test pre and post stress at 25°C and hot temp +85°C, 125°C MSL1 @+260°C	231	15	3	738	0	15		Spares should be properly identified.
HAST	+130°C/85% RH for 96hrs. Electrical test pre and post stress at +25°C and hot temp at +85 °C,125°C	77	5	3	246	0	10		Spares should be properly identified
UHAST	+130°C/85% RH for 96hrs. Electrical test pre and post stress at 25°C	77	5	3	246	0	10		Spares should be properly identified.

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PCN#: LIAL-25ZCPA706

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ATTINY13A-SFR
ATTINY13A-SFRA5
ATTINY13A-SN
ATTINY13A-SNR
ATTINY13A-SU
ATTINY13A-SU523
ATTINY13A-SUR
ATTINY13A-SURA2
ATTINY13A-SURA4
ATTINY13V-10SU
ATTINY13V-10SUR
ATTINY25-15ST
ATTINY25-15ST1
ATTINY25-15SZ
ATTINY25-20SN
ATTINY25-20SNR
ATTINY25-20SU
ATTINY25-20SUR
ATTINY25V-10SN
ATTINY25V-10SNR
ATTINY25V-10SU
ATTINY25V-10SUR
ATTINY25V-15ST
ATTINY45-15ST
ATTINY45-15ST1
ATTINY45-15SZ
ATTINY45-20SU
ATTINY45-20SUR
ATTINY45V-10SU
ATTINY45V-10SUR
ATTINY45V-15ST
ATTINY45VMAH-15ST
ATTINY85-20SF
ATTINY85-20SFR

ATTINY85-20SU
ATTINY85-20SUR
ATTINY85V-10SU
ATTINY85V-10SUR