Product Change Notification - LIAL-11GXQL417

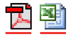
Date:

05 Mar 2020

Product Category:

Switchtec

Affected CPNs:



Notification subject:

CCB 3779 Final Notice: Qualification of STAK as an additional assembly site and WINS as an additional bumping facility for selected Microsemi products of the 28nm TSMC wafer technology available in 650L BBGA (27x27x2.79mm) package.

Notification text:

PCN Status:

Final notification.

PCN Type:

Manufacturing Change

Microchip Parts Affected:

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

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

Description of Change:

Qualification of STAK as an additional assembly site and WINS as an additional bumping facility for selected Microsemi products of the 28nm TSMC wafer technology available in 650L BBGA (27x27x2.79mm) package.

Pre Change:

Assembled at ATK site and bumping facility at ATT using NAU-27 underfill material.

Post Change:

Assembled at ATK site and bumping facility at ATT using NAU-27 underfill material or assembled at STAK site and bumping facility at WINS using UF8830S underfill material.

Pre and Post Change Summary:

	Pre Change	Post Change	
Assembly Site	Amkor Technology Korea (K4), INC. (ATK)	Amkor Technology Korea (K4), INC. (ATK)	Stats Chippac Korea Ltd. (STAK)
Bumping facility	Amkor Technology Taiwan (ATT)	Amkor Technology Taiwan (ATT)	Winstek Semiconductor Technology Co.,Ltd. (WINS)
Bump material	SnAg	SnAg	SnAg
Underfill material	NAU-27	NAU-27	UF8830S

Impacts to Data Sheet:
None

Change Impact:
None

Reason for Change:
To improve on time delivery performance by qualifying STAK as an additional assembly site and WINS as an additional bumping facility.

Change Implementation Status:
In Progress

Estimated First Ship Date:
November 02, 2019 (date code: 1944)

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

Time Table Summary:

	May 2019					->	October 2019				
Workweek	18	19	20	21	22		40	41	42	43	44
Initial PCN Issue Date	X										
Qual Report Availability							X				
Final PCN Issue Date							X				
Estimated Implementation Date											X

Method to Identify Change:
Traceability code

Qualification Report:
Please open the attachments included with this PCN labeled as PCN_#_Qual Report.

Revision History:
May 3, 2019: Issued initial notification.
October 02, 2019: Issued final notification. Attached the qualification report. Provided estimated first ship date to be on November 02, 2019.
February 28, 2020: Re-issued final notification to update the post change to correct the bumping facility from STAK to WINS.
March 05, 2020: Re-issued final notification to correct the typo error of bumping facility site from STAK to WINS in qualification report.

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-11GXQL417_Qual__Report.pdf

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

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If you wish to change your PCN profile, including opt out, please go to the PCN home page select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

QUALIFICATION REPORT SUMMARY

PCN #: LIAL-11GXQL417

Date
September 19, 2019

Qualification of STAK as an additional assembly site and WINS as an additional bumping facility for selected Microsemi products of the 28nm TSMC wafer technology available in 650L BBGA (27x27x2.79mm)

Purpose: **Qualification of STAK as an additional assembly site and WINS as an additional bumping facility for selected Microsemi products of the 28nm TSMC wafer technology available in 650L BBGA (27x27x2.79mm)**

Miscellaneous	Assembly site	STAK
	Part Number (CPN)	PM8573B-F3EI
	CCB No.	3779
Substrate	Body Size	27x27
	Bump SRO Material	SAC305 (ULA)
Bump	Bumping Site	WINS
	Material	Sn1.8Ag
Underfill	Part Number	UF8830S
PKG	PKG Type	FCBGA
	Pin/Ball Count	650
	PKG width/size	27x27
Die	Fab Process (site)	TSMC
MSL	MSL	4

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	Result
Solder Ball Shear	JESD22B117A	5	0	1	5		5	10 balls/5 units. Parts should gone Preconditioning	Passed
Coplanarity	JESD22B108A/POD	5	0	1	5		2	All units	Passed
High Temperature Storage Life (HTSL)	JESD22A-103. 150°C for 1000 hours Readpoints at 0, and 1000 hours. Electrical test pre and post stress at +25°C and hot temp.	40	0	1	40	0	45	Spare should be properly identified.	Passed
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. JESD22A113.	120	0	1	120	0	15	Spares should be properly identified. MSL level 4	Passed
Unbiased HAST	JESD22A110. +130°C/85% RH for 96 hours or +110°C/85% RH for 264 hours. Electrical test pre and post stress at +25°C.	40	0	1	40	0	10	Spare should be properly identified. Use the parts which have gone through Pre-conditioning.	Passed
Temp Cycle	JESD22A104. -55°C to +125°C for 1000 cycles. Electrical test pre and post stress at +25°C. JESD22A113.	80	0	1	80	0	30		Passed

Affected Catalog Part Numbers (CPN)

PM8531B-F3EI
PM8532B-F3EI
PM8533B-F3EI
PM8541B-F3EI
PM8542B-F3EI
PM8543B-F3EI
PM8551B-F3EI
PM8552B-F3EI
PM8553B-F3EI
PM8561B-F3EI
PM8562B-F3EI
PM8563B-F3EI
PM8571B-F3EI
PM8572B-F3EI
PM8573B-F3EI