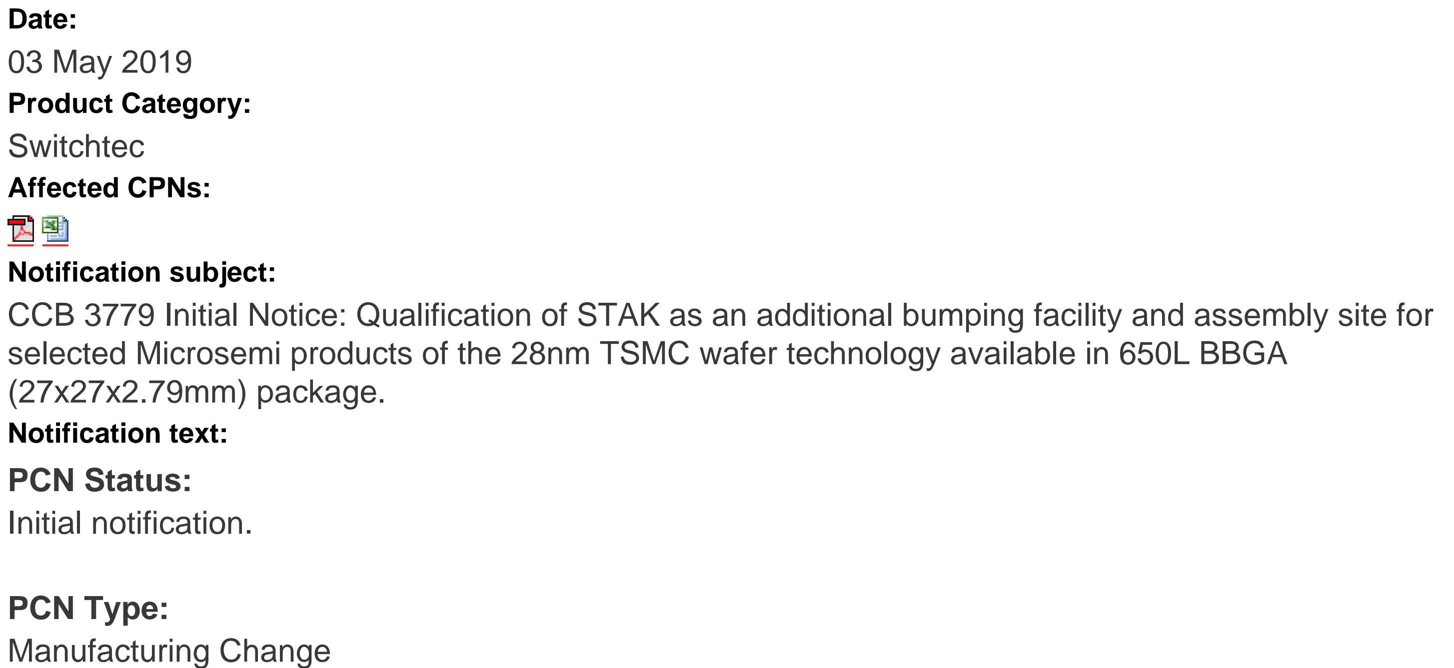
Product Change Notification - LIAL-11GXQL417



Date:
03 May 2019
Product Category:
Switchtec
Affected CPNs:

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

PCN Status:
Initial 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 bumping facility and assembly site 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 and bumping facility at STAK site using UF8830S underfill material.

Pre and Post Change Summary:

<table>
<tr><th></th><th>Pre Change</th><th colspan="2">Post Change</th></tr>
<tr><td>Assembly Site</td><td>Amkor Technology Korea (K4), INC.
(ATK)</td><td>Amkor Technology Korea (K4), INC.
(ATK)</td><td rowspan="2">Stats Chippac Korea Ltd.
(STAK)</td></tr>
<tr><td>Bumping facility</td><td>Amkor Technology Taiwan
(ATT)</td><td>Amkor Technology Taiwan
(ATT)</td></tr>
<tr><td>Bump material</td><td>SnAg</td><td>SnAg</td><td>SnAg</td></tr>
<tr><td>Underfill material</td><td>NAU-27</td><td>NAU-27</td><td>UF8830S</td></tr>
</table>

Impacts to Data Sheet:

None

Change Impact:
None

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

Change Implementation Status:
In Progress

Estimated Qualification Completion Date:
July 2019

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:

	May 2019					->	July 2019				
Workweek	18	19	20	21	22		27	28	29	30	31
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:
May 3, 2019: 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_LIAL-11GXQL417 QUAL PLAN.pdf

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

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our PCN home page select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the PCN FAQ section.
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.

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

QUALIFICATION PLAN SUMMARY

PCN #: LIAL-11GXQL417

Date
March 28, 2019

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

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

Miscellaneous	Assembly site	STAK
	Part Number (CPN)	PM8573B-F3EI
	CCB No.	3779
Substrate	Body Size	27x27
	Bump SRO Material	SAC305 (ULA)
Bump	Bumping Site	STAK
	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
Solder Ball Shear	JESD22B117A	5	0	1	5		5	10 balls/5 units. Parts should gone Preconditioning
Coplanarity	JESD22B108A/POD	5	0	1	5		2	All units
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.
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
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.
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	