Advance Product Change Notification

202005038A

Issue Date: 21-Oct-2020

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Management Summary

Implement tape holder R970 at wire bond to prevent ball neck breaks due to lead frame vibration. Change MSL rating from MSL1 to MSL3 to maintain consistent classification among package types.

Change Category

[ ] Wafer Fab Process	[ ] Assembly Process	[ ] Product Marking	[ ] Test Location	[ ] Design
[ ] Wafer Fab Materials	[X] Assembly Materials	[ ] Mechanical Specification	[ ]Test Process	[ ] Errata
[ ] Wafer Fab Location	[ ] Assembly Location	[X] Packing/Shipping/Labeling	[ ] Test Equipment	[ ] Electrical spec./Test coverage
[ ] Firmware	[ ] Other			

Incorporation of Tape Holder for TSSOP48 Assembly

Description of Change

Two changes will be made:

1) NXP will implement a leadframe tape holder to provide long lead stability at wire bond.
2) Realign MSL rating to MSL3 to be consistent with other package types. (which results in a change from non-drybagged to a dry bag ship format)

Reason for Change

1) Implement a 'tape holder' in the assembly process where the laedframe is afixed to the platten in the wire-bond process. This is being done to eliminate vibration during wire bonding thereby improving wire bond robustness. Its key to note that the current assembly methodology is robust as Millions of the TSSOP48/56 package have been produced without the tape and there has been only 1 return where a broken ball neck was observed. This implementation will assure customer deliveries. The 'to-be' implememented tape solution has been successfully employed on several package types within NXP.

2) To further improve package robustness, Ratings on those TSSOP48/56 products with rating MSL1 will be changed to MSL3 to be internally consistent within the package family. This change virtually eliminates package delamination after assembly reflow. As there will be a reclassification from MSL1 to MSL3, the associated orderable 12NC will need to also be changed. The Final PCN will contain the updated 12NC information.

Identification of Affected Products

Packing labels

Packing labels will reflect an MSL3.

Product Availability

Sample Information

Samples are available upon request

Production

Planned first shipment 15-Jan-2021

Anticipated Impact on Form, Fit, Function, Reliability or Quality

No impact on form, fit, function, reliability or quality.

No difference in reliability results pre/post implementation of tape holder.

Data Sheet Revision

No impact to existing datasheet

Disposition of Old Products

Existing inventory will be shipped until depleted, however material with the 'tape' will have a new orderable 12NC.

Timing and Logistics

The Self Qualification Report will be ready on 30-Sep-2020.

The Final PCN is planned to be issued on: 15-Nov-2020.

In compliance with JEDEC J-STD-046, your acknowledgement of this change is expected by 19-Nov-2020.

Contact and Support

For all inquiries regarding the ePCN tool application or access issues, please contact NXP "Global Quality Support Team".

For all Quality Notification content inquiries, please contact your local NXP Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly:

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Customer Focus, Passion to Win.

NXP Quality Management Team.

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Changed Orderable Part#	Changed Part 12NC	Changed Part Number	Changed Part Description	Package Outline	Package Name	Status	Product Line	Notes
PCF8551ATT/AJ	935304761118	PCF8551ATT/A	LCD segment driver 4x36 with I2C	SOT362-1	TSSOP48	RFS	High Performance Analog	PCF8551ATT/A
PCF8551BTT/AJ	935305822118	PCF8551BTT/A	LCD segment driver 4x36 with SPI	SOT362-1	TSSOP48	RFS	High Performance Analog	PCF8551BTT/A
PCA8551ATT/AJ	935306053118	PCA8551ATT/A	LCD segment driver 4x36 with I2C	SOT362-1	TSSOP48	RFS	High Performance Analog	PCA8551ATT/A