



Final Product Change Notification

202102010F01 : Incorporation of Tape Holder for TSSOP48/TSSOP56 Assembly

Note: This notice is NXP Company Proprietary.

Issue Date: Jun 05, 2021 **Effective date:** Oct 01, 2021

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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

<input type="checkbox"/> Wafer Fab Process	<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Product Marking	<input type="checkbox"/> Test Process	<input type="checkbox"/> Design
<input type="checkbox"/> Wafer Fab Materials	<input checked="" type="checkbox"/> Assembly Materials	<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Equipment	<input type="checkbox"/> Errata
<input type="checkbox"/> Wafer Fab Location	<input type="checkbox"/> Assembly Location	<input checked="" type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Location	<input type="checkbox"/> Electrical spec./Test coverage
<input type="checkbox"/> Firmware <input type="checkbox"/> Other				

PCN Overview

Description

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

1) Implement a 'tape holder' in the assembly process where the leadframe is affixed to the platen 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 is in-line with on going continuous improvement and in support of customer delivery needs. The 'to-be' implemented 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 Nov 01, 2021

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

No Impact on form, fit, function, reliability or quality

Data Sheet Revision

A new datasheet will be issued

Disposition of Old Products

Existing inventory will be shipped until depleted

Existing inventory will be shipped until depleted, however material that has changed to MSL3 will have a new orderable 12NC and a new datasheet will be issued.

Additional information

Self qualification: [view online](#)

Additional documents: [view online](#)

Timing and Logistics

In compliance with JEDEC J-STD-046, your acknowledgement of this change is expected by Jul 05, 2021.

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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