



## Final Product Change Notification

202005038F01 : Incorporation of Tape Holder for TSSOP48 Assembly

**Note:** This notice is NXP Company Proprietary.

**Issue Date:** Feb 05, 2021 **Effective date:** May 06, 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 MSL3.

#### **Product Availability**

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#### **Sample Information**

Samples are available upon request

#### **Production**

Planned first shipment Mar 22, 2021

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

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

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

#### **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.

#### **Timing and Logistics**

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In compliance with JEDEC J-STD-046, your acknowledgement of this change is expected by Mar 07, 2021.

#### **Contact and Support**

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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.

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**Affected Part Numbers**

PCF8551ATT/AJ

PCF8551BTT/AJ

PCA8551ATT/AJ

PCA8551BTT/AJ

<b><u>Changed Orderable Part#</u></b>	<b><u>12NC</u></b>	<b><u>New Orderable Part#</u></b>	<b><u>12NC New</u></b>
PCF8551ATT/AJ	935304761118	PCF8551ATT/AY	935304761518
PCF8551BTT/AJ	935305822118	PCF8551BTT/AY	935305822518
PCA8551ATT/AJ	935306053118	PCA8551ATT/AY	935306053518
PCA8551BTT/AJ	935306066118	PCA8551BTT/AY	935306066518