



## 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**

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#### **Sample Information**

Samples are available upon request

#### **Production**

Planned first shipment Nov 01, 2021

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

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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.

#### **Timing and Logistics**

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

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

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NXP Quality Management Team.

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Changed Orderable Part#	12NC	Product Type	Product Description	Package Outline	Package Description	Product Status	Customer Specific Indicator	Product Line
PCF85162T/1,118	935290708118	PCF85162T/1	LCD segment driver	(T)SSOP48	SOT362-1	RFS	No	BLC6
PCF8562TT/2,118	935276218118	PCF8562TT/2	LCD SEGMENT DRIVER	(T)SSOP48	SOT362-1	RFS	No	BLC6
PCA85262ATT/AJ	935303863118	PCA85262ATT/A	Low power LCD segment driver	(T)SSOP48	SOT362-1	RFS	No	BLC6
PCA85162T/Q900/1,1	9352913388118	PCA85162T/Q900/1	LCD segment driver	(T)SSOP48	SOT362-1	RFS	No	BLC6
PCF8562TT/S400/2,1	935287129118	PCF8562TT/S400/2	LCD SEGMENT DRIVER	(T)SSOP48	SOT362-1	RFS	No	BLC6
PCF8576DT/S400/2,1	935287131118	PCF8576DT/S400/2	LCD SEGMENT DRIVER	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCF85176T/1,118	935290075118	PCF85176T/1	LCD segment driver	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA85176T/Q900/1,1	935290076118	PCA85176T/Q900/1	LCD segment driver	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCF8553DTT/AJ	935304762118	PCF8553DTT/A	LCD segment driver 4x40 I2C and SPI	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA8553DTT/AJ	935306067118	PCA8553DTT/A	LCD segment driver 4x40 I2C and SPI	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCF8576DT/2,118	935276166118	PCF8576DT/2	LCD SEGMENT DRIVER	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA9505DGG,118	935284486118	PCA9505DGG	PCA9505	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCF8536AT/1,118	935294042118	PCF8536AT/1	8mux segment driver I2C	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCF8536BT/1,118	935296323118	PCF8536BT/1	8mux segment driver SPI	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA8536AT/Q900/1,1	935296484118	PCA8536AT/Q900/1	8mux segment driver I2C	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA8536BT/Q900/1,1	935296485118	PCA8536BT/Q900/1	8mux segment driver SPI	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCF8545ATT/AJ	935302987118	PCF8545ATT/A	8 Mux Segment Driver I2C Interface	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCF8545BTT/AJ	935302988118	PCF8545BTT/A	8 Mux Segment Driver SPI Interface	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA8546ATT/AJ	935302989118	PCA8546ATT/A	Automotive 4x44 LCD Driver I2C	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA8546BTT/AJ	935302991118	PCA8546BTT/A	Automotive 4x44 LCD Driver SPI	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA85276ATT/AJ	935303864118	PCA85276ATT/A	Low power LCD segment driver	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA9698DGG,512	935278614512	PCA9698DGG	PCA9698	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA9698DGG,518	935278614518	PCA9698DGG	PCA9698	(T)SSOP56	SOT364-1	RFS	No	BLC6
PCA9506DGG,518	935280798518	PCA9506DGG	PCA9506	(T)SSOP56	SOT364-1	RFS	No	BLC6
SC28L202A1DGG,118	935276109118	SC28L202A1DGG	SC28L202A1	(T)SSOP56	SOT364-1	RFS	No	BLC6