


PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	CRP/15/9356	
1.3 Title of PCN	Second source qualification for QFP14x14 1.0mm PEAK tray	
1.4 Product Category	QFP 14x14x1.0	
1.5 Issue date	2015-08-13	

2. PCN Team

2.1 Contact supplier	
2.1.1 Name	ROBERTSON HEATHER
2.1.2 Phone	+1 8475853058
2.1.3 Email	heather.robertson@st.com
2.2 Change responsibility	
2.2.1 Process Owner	Patrick LOW
2.1.2 Corporate Quality Manager	Veronique LIVACHE

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
Materials	Any indirect material modifications for shipping products in dimensions, material, composition, orientation?	Manufacturing plants concerned by this change are ST Muar and Agrate

4. Description of change

	Old	New
4.1 Description	Current tray: ITW	New tray: PEAK
4.2 Anticipated Impact on form, fit, function, quality, reliability or processability?	No impact.	

5. Reason / motivation for change

5.1 Motivation	Improve quality and secure the service and delivery of ST customers with a second source of tray for QFP 14x14x1.0 packages, by improving the positioning of products into the pockets of the tray
5.2 Customer Benefit	DOUBLE SOURCING

6. Marking of parts / traceability of change

6.1 Description	Inner cavity shape of PEAK tray is different from ITW one.
-----------------	--

7. Timing / schedule

7.1 Date of qualification results	2015-08-04
7.2 Intended start of delivery	2016-02-12
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description			
8.2 Qualification report and qualification results	In progress	Issue Date	

9. Attachments (additional documentations)

9356PpPrdtLst.pdf
PCN Peak tray 14x14x1 0.pdf

10. Affected parts		
10.1 Current		10.2 New (if applicable)
10.1.1 Customer Part No	10.1.2 Supplier Part No	10.1.2 Supplier Part No
	ST7590T	

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND / OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY TWO AUTHORIZED ST REPRESENTATIVES, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners

©2014 STMicroelectronics - All rights reserved.

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -
Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com



Public Products List

PCN Title : Second source qualification for QFP14x14 1.0mm PEAK tray

PCN Reference : CRP/15/9356

PCN Created on : 04-Aug-2015

Subject : Public Products List

Dear Customer,

Please find below the Standard Public Products List impacted by the change.

ST7590T	FDA450LV	
---------	----------	--



Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND / OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY TWO AUTHORIZED ST REPRESENTATIVES, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners

©2014 STMicroelectronics - All rights reserved.

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -
Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com

Packing Tray improvement – QFP 14x14x1.0

1- WHAT is the change?

- This change is concerning the qualification of a 2nd source of tray, used to transport and pack QFP 14x14x1.0.
- This second source of tray material is PEAK, which will be an alternative to existing ITW supplier.
- It concerns the delivery of products for which the list is given at the end of this document.
- Manufacturing plants concerned by this change are ST Muar and Agrate.

2- WHY:

Reason for this change is:

- Improve quality and secure the service and delivery of ST customers with a second source of tray for QFP 14x14x1.0 packages, by improving the positioning of products into the pockets of the tray

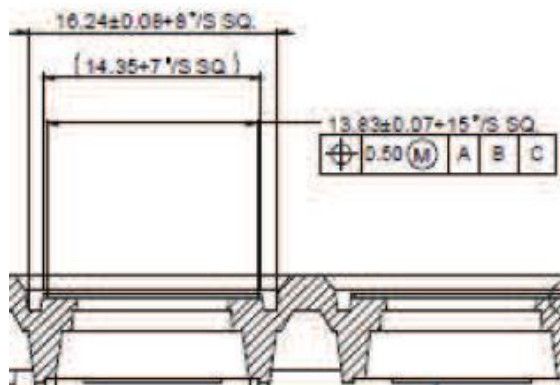
3- WHEN will this change occur?

Target to deploy this change is W06'2016

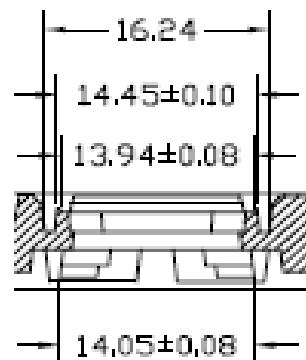
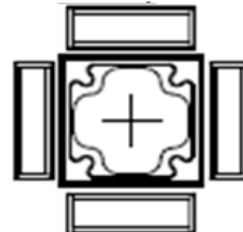
4- HOW will the change be qualified?

This change is qualified using the standard STMicroelectronics procedures for quality and reliability.

Comparison between existing ITW tray and second source PEAK tray:



Existing ITW tray



PEAK tray (Second source)

5- IMPACTS OF THE CHANGE ON THE PRODUCTS:

Form: No change
Fit: No change
Function: No change

The change here reported will not affect the electrical, dimensional and thermal parameters of the products, keeping unchanged all information reported on the relevant product's datasheets.

6 - APPENDICES:

APPENDIX 1

Risk assessment

APPENDIX 2

Qualification Plan & results

APPENDIX 1: RISK ASSESSMENT

#	Risks identified	Potential risk resulting from	Class	Considered action
1	Manufacturing and workability Issues	Misplaced parts in the tray	Low	During trials and qualification lots, to verify at each process step using tray that no misplacement of parts occurs (cropping, testing & Finishing)
		Jamming or IN/OUT loaders problems	Low	Verify that new tray do not induce any jamming or problems at IN/OUT loaders of machines using the trays in the process
		Warpage or deformation of tray	Low	To perform baking operation with belt/strap and measure warpage at the end of the operation. Results to be in accordance with ST rules.
		Stackability of trays not ensured	Low	To verify stackability during trials and qualification lots on all equipments along the process
2	Non conform material	Visual Inspection (out of specs dimension, contain foreign material, dent ,deformation)	Low	IQC dimensions check to perform. Results to in accordance with specifications.
3	Transportation problems	Broken tray	Low	Drop test to perform during qualification. Results to be in accordance with ST rules.
		Damaged parts	Low	Drop test to perform during qualification , followed by a scanning operation to detect any damaged parts.
4	Reliability	ESD / EOS issues	Low	ESD check to perform during qualification. Results to be in accordance with ST rules.
5	Supply Chain: Quality issues (ECC)	Quality or reliability problems in the field	Low	Dimension & visual mechanical inspections to be in accordance with ST spec ESD check to perform during qualification. Results to be in accordance with ST rules. No parts misplaced in the pockets of the trays to avoid any damage (bent lead ...)

APPENDIX 2: QUALIFICATION PLAN & RESULTS

ITEM		WHEN	RESULTS
1	Document check : Drawing, MSDS, Data, COC dimension check VS Drawing and ST spec	ww02'2015	PASSED
2	Visual Inspection & Fit analysis	ww07'2015	PASSED
3	Workability check on Equipment	ww08'2015	PASSED
4	Drop test	ww08'2015	PASSED
5	Baking	ww09'2015	PASSED
6	ESD check	ww10'2015	PASSED

Conclusion: all tests passed.