


**PRODUCT / PROCESS CHANGE NOTIFICATION**

**1. PCN basic data**

<b>1.1 Company</b>		STMicroelectronics International N.V
<b>1.2 PCN No.</b>	CRP/21/12734	
<b>1.3 Title of PCN</b>	TQFP 10x10x1.4 Carrier Tape Change	
<b>1.4 Product Category</b>	Refer to impacted product list	
<b>1.5 Issue date</b>	2021-07-20	

**2. PCN Team**

<b>2.1 Contact supplier</b>	
<b>2.1.1 Name</b>	DYLAN OUYANG
<b>2.1.2 Phone</b>	+886 266032145
<b>2.1.3 Email</b>	dylan.ouyang@st.com
<b>2.2 Change responsibility</b>	
<b>2.2.1 Process Owner</b>	Chiara ZACCHERINI
<b>2.1.2 Corporate Quality Manager</b>	Gerard PETIT

**3. Change**

<b>3.1 Category</b>	<b>3.2 Type of change</b>	<b>3.3 Manufacturing Location</b>
Materials	New Indirect material part number (same supplier or different supplier): Boxes, trays, carriers, back grinding tape, wafer mounting tape, mold tape, etc..	ST Muar (Malaysia)

**4. Description of change**

	<b>Old</b>	<b>New</b>
<b>4.1 Description</b>	Peak (ST material code reference: 3CP72514)	SPK (ST material code reference: 3CP10028)
<b>4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?</b>	Form: No change on product Fit: No change on product Function : No Change on product Reliability : No change on product Processability : No change on product	

**5. Reason / motivation for change**

<b>5.1 Motivation</b>	Peak has declared to discontinue production of 3CP72514.
<b>5.2 Customer Benefit</b>	SERVICE CONTINUITY

**6. Marking of parts / traceability of change**

<b>6.1 Description</b>	Date-code - Internal Traceability
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**7. Timing / schedule**

<b>7.1 Date of qualification results</b>	2021-08-01
<b>7.2 Intended start of delivery</b>	2022-02-01
<b>7.3 Qualification sample available?</b>	Upon Request

**8. Qualification / Validation**

<b>8.1 Description</b>			
<b>8.2 Qualification report and qualification results</b>	In progress	<b>Issue Date</b>	

**9. Attachments (additional documentations)**

12734 Public product.pdf  
12734 PCN\_CHANGE OF SUPPLIER\_with material code change from 3CP72514 TO 3CP10028 Rev.9.pdf

**10. Affected parts**

<b>10. 1 Current</b>		<b>10.2 New (if applicable)</b>
<b>10.1.1 Customer Part No</b>	<b>10.1.2 Supplier Part No</b>	<b>10.1.2 Supplier Part No</b>
	L9678PTR-S	
	SPC560P40L1CEFBR	
	STM32F091RCT6TR	
	STM32F100R8T6BTR	
	STM32F100RBT6BTR	
	STM32F101RDT6TR	
	STM32F103R8T6TR	
	STM32F103RCT6TR	
	STM32F103RET6TR	
	STM32F105RCT6TR	
	STM32L100R8T6TR	
	STM8AF6269TCX	
	STM8S207RBT6TR	
	STM8S207S6T6CTR	

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## Public Products List

Public Products are off the shelf products. They are not dedicated to specific customers, they are available through ST Sales team, or Distributors, and visible on ST.com

**PCN Title :** TQFP 10x10x1.4 Carrier Tape Change

**PCN Reference :** CRP/21/12734

**Subject :** Public Products List

Dear Customer,

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

L99DZ120TR	STM32F102RBT6TR	SPC560D30L1B4E0X
STM32F103RCT6TR	L9660TR	STM32F103R8T6TR
STM8S207RBT6TR	STM32F100R4T6BTR	L9658TR
STM32F105RCT6TR	SPC560P34L1CEFAR	STM32L100R8T6TR
STM32F101RCT6TR	SPC560D40L1B3E0X	STM32F103RDT6TR
STM8L151R8T6TR	STM32F101RET6TR	L9369-TR
STM8AF52A9TCX	STM32F103RBT6TR	STM32L151RBT6TR
L99DZ100GTR	L9659TR	L9781TR
STM8AF5269TAX	STM8S105S4T6CTR	STM32F101RBT6TR
STM32F103RET6TR	STM8S207S6T3CTR	STM32F101RDT6TR
STM8S207R6T6TR	STM8L151R6T6TR	L99DZ100GPTR
STM8L052R8T6TR	STM8L152R6T6TR	STM8S207S6T6CTR
STM8S207R8T6TR	FDA801B-VYT	STM8S207R8T3TR
SPC560B50L1C6E0X	STM32F100RBT6BTR	STM32F101R8T6TR
ST7538Q	SPC560P40L1CEFAR	STM8S105S6T6CTR
SPC560D40L1B4E0X	STM32L100RBT6TR	L9370TR
STM32F103R8T7TR	STM8AL3LE89TCX	STM32F100R8T6BTR
STM32F100R6T6BTR	STM32F030RCT6TR	STA309A13TR
STM8AF5289TCX	SPC560D40L1C4E0X	STM8AL3189TCX
STM32F107RCT6TR	STM8AF6269TCX	FDA901-VYT
STM8S207RBT3TR	SPC560C50L1B4E0X	STM8S207S8T3CTR
STM32F105R8T6TR	STM8S207S8T6CTR	STM32L152R8T6TR
STM32F103RCT7TR	STM32F091RCT6TR	SPC560B50L1B4E0X
L9678PTR-S	L9678PTR	STM8AF6289TCX
STM32F107RBT6TR	STM32F105RBT6TR	SPC560P40L1CEFBR



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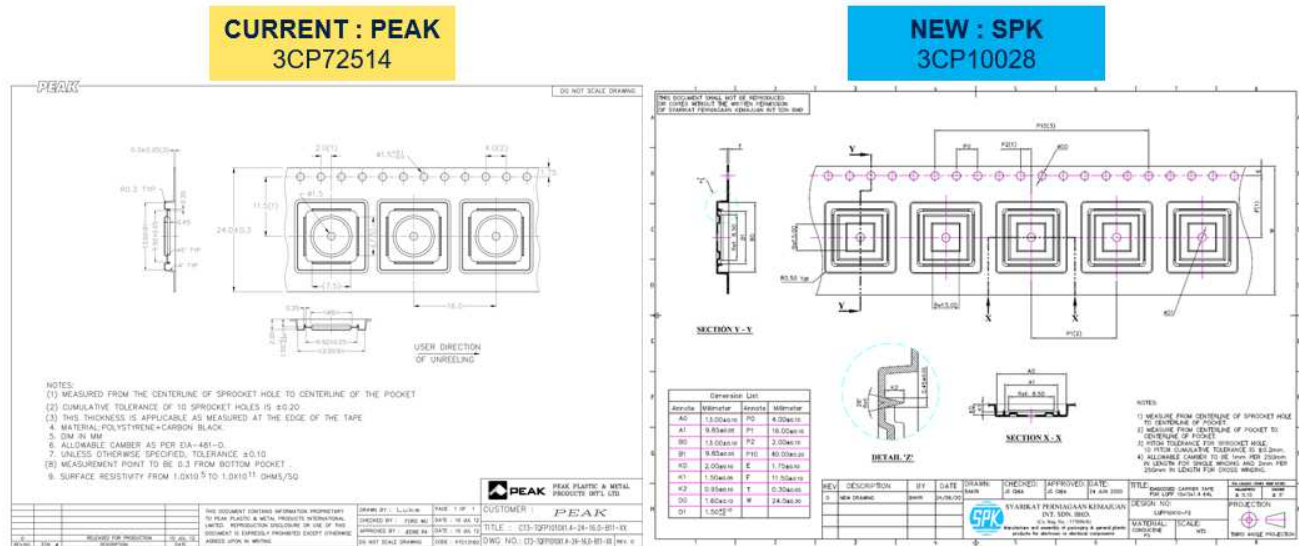
# TQFP 10x10x1.4 Carrier Tape Change

## WHAT is the change?

Change of Supplier from PEAK to SPK for TQFP 10x10x1.4 carrier tape. This affected ST MUAR.

**Current:** PEAK (ST material code reference: 3CP72514)

**New :** SPK (ST material code reference: 3CP10028)



## WHY?

- Peak has declared to discontinue production of 3CP72514.

## WHEN will this change occur?

The change will be implemented when customer acceptance will be received. Change targeted date is beginning of February 2022

## HOW will the change be qualified?

- Carrier tape vs package fit analysis
- Drop test
- ESD check

## IMPACTS of the Change

Form: No change on product  
 Fit: No change on product  
 Function: No change on product  
 Reliability : No change on product  
 Processability : No change on product

## APPENDICES:

- APPENDIX 1 Risk assessment
- APPENDIX 2 Qualification plan
- APPENDIX 3 Qualification results

### APPENDIX 1: RISK ASSESSMENT

#	Risks identified	Potential risk resulting from	Class (Low / Medium)	Considered action
1	Insufficient lead protection from accidental drops up to 4 ft height	Units cannot be soldered at PCBA due to bent leads	Medium	Perform drop test from 4 ft height to ensure no bent leads
2	Device malfunction	EOS damage due to ESD	Medium	Perform validation for ESD protection compliance
3	Insufficient clearance between leads and carrier tape pocket	Bent leads due to mechanical contact	Medium	Perform fit analysis considering all potential combinations for carrier tape vs package dimensions
4	Opened/improper cover tape sealing	Units drop out of carrier tape	Medium	Perform peel off strength to ensure it meets ST requirements
5				
6				
7				
8				
9				

## APPENDIX 2: QUALIFICATION PLAN

- Visual inspection report
- Drop test
- Peel test
- Fit analysis
- ESD



APPENDIX 3: QUALIFICATION EXECUTION & RESULTS

# Visual Inspection Report

Visual inspection	Results
Does not contain stain or foreign material	Passed
No Damage	Passed
No Burr	Passed
Orientation	Passed
The component does not protrude above the top surface of the carrier tape	Passed
The component can be removed from the cavity in a vertical direction without mechanical restriction, after the top cover tape has been removed.	Passed
Lateral movement of the component is restricted to 1.0mm maximum	Passed

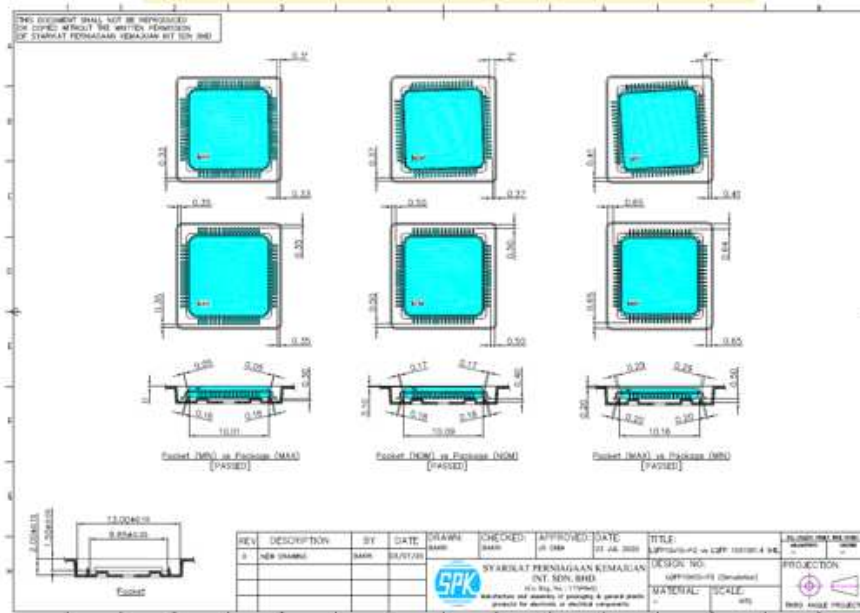
# Drop and Peel Test

Test	Result
Drop Test Result	Passed
Peel Test Result	Passed

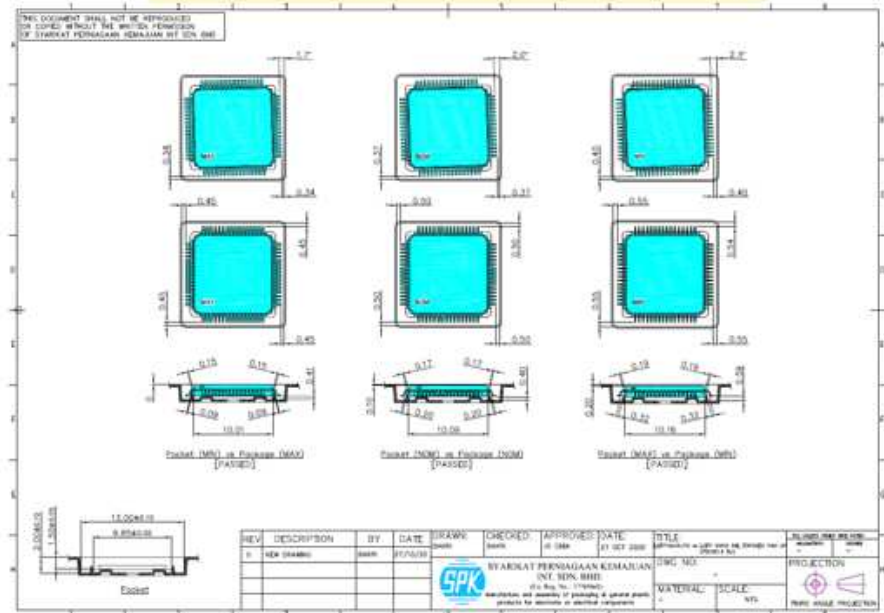
# Fit Analysis - SPK

## Fit Analysis for Proposed SPK carrier tape

TQ10x10 1.4 Full Plastic : (Package code: 5W)



TQ10x10 1.4 ePad UP : (Package code: A0VY)



**Results: Passed**  
 Sufficient clearance are available between leads and carrier tape cavity

# ESD check

	TQ10 Carrier Tape from SPK			
ESD Check	3V	3V	1.50E05Ω	2.60E05Ω
Results	PASS	PASS	PASS	PASS

**ESD results: carrier tape meet ST ESD requirement.**

# Conclusion

- Based on all evaluations performed, the SPK TQ10x10x1.4 carrier tape meets all ST requirements