

PRODUCT / PROCESS CHANGE INFORMATION

1. PCI basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCI No.	CRP/22/12731	
1.3 Title of PCI	CHANGE OF SUPPLIER FOR 3CP21710 (CARRIER TAPE Wi 12mm QFN/LGA 5x5x0.55)	
1.4 Product Category	Refer to impacted product list	
1.5 Issue date	2022-04-08	

2. PCI 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	Chiara ZACCHERINI
2.1.2 Corporate Quality Manager	Gerard PETIT

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...	ST Calamba (Philippines)

4. Description of change

	Old	New
4.1 Description	Change of supplier for ST material code reference: 3CP21710 (CARRIER TAPE Wi 12mm QFN/LGA 5x5x0.55) supplied by PEAK	Change of supplier for ST material code reference: 3CP21710 (CARRIER TAPE Wi 12mm QFN/LGA 5x5x0.55) supplied by ADVANTEK
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	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

5.1 Motivation	PEAK has declared to discontinue production of 3CP21710
5.2 Customer Benefit	SERVICE CONTINUITY

6. Marking of parts / traceability of change

6.1 Description	Date-code - Internal Traceability
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7. Timing / schedule

7.1 Date of qualification results	2022-03-14
7.2 Intended start of delivery	2022-07-18
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)
12731 Public product.pdf 12731 PCI_CHANGE OF SUPPLIER_3CP21710 Rev.11.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
	STM32F031K6U6TR	
	STM32F051K4U6TR	
	STM32F051K4U7TR	
	STM32F051K6U6TR	
	STM32F051K6U7TR	
	STM32F051K8U6TR	
	STM32F051K8U7TR	
	STM8L151K4U6TR	
	STM8L151K6U6TR	
	STM8L152K6U6TR	
	STM8S105K6U6ATR	

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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

PCI Title : CHANGE OF SUPPLIER FOR 3CP21710 (CARRIER TAPE Wi 12mm QFN/LGA 5x5x0.55)

PCI Reference : CRP/22/12731

Subject : Public Products List

Dear Customer,

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

STM32F051K4U7TR	STM32F051K8U6TR	STM8S105K4U3ATR
STM8S105K6U6ATR	STM32F051K8U7TR	STM32F051K6U6TR
STM8L151K6U6TR	STM8S105K4U6ATR	STM8S105K6U3ATR
STM32F031K6U6TR	STM32F031K4U6TR	STM8L151K4U6TR
STM32F051K4U6TR	STM8L152K6U6TR	STM32F051K6U7TR



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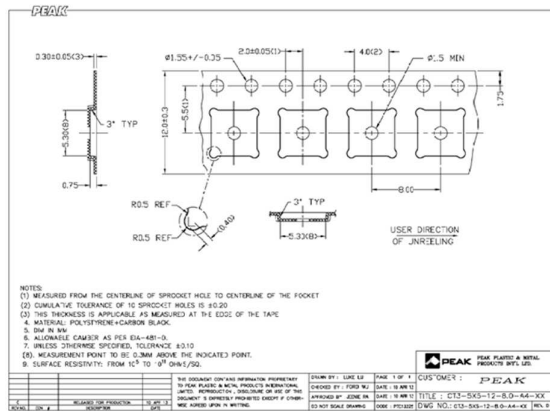
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PCI - CHANGE OF SUPPLIER FOR 3CP21710 (CARRIER TAPE Wi 12mm QFN/LGA 5x5x0.55)

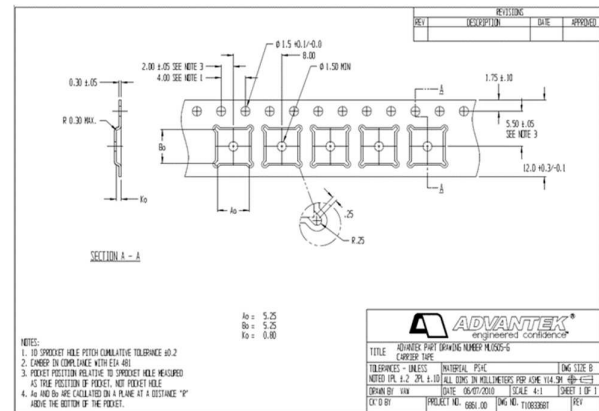
WHAT is the change?

Change of supplier for ST material code reference: 3CP21710 (CARRIER TAPE Wi 12mm QFN/LGA 5x5x0.55) from PEAK to ADVANTEK which affected ST CALAMBA.

CURRENT: PEAK



NEW: ADVANTEK



WHY?

- PEAK has declared to discontinue production of 3CP21710.

WHEN will this change occur?

Change targeted date is mid of July 2022 and cut-in 100% in production to fulfill customer demand.

HOW will the change be qualified?

- Pls refer to attached qualification reports in Appendix 2.

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:

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	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
3	Opened/improper cover tape sealing	Units drop out of carrier tape	Medium	Perform peel off strength test to ensure it meets ST requirements
4	Device malfunction	EOS damage due to ESD	Medium	Perform validation for ESD protection compliance
5				
6				
7				
8				
9				

APPENDIX 2: QUALIFICATION PLAN

- Visual inspection report
- Drop Test, Peel Test and ESD Test
- Fit Analysis

APPENDIX 3: QUALIFICATION EXECUTION & RESULTS

Visual Inspection Report

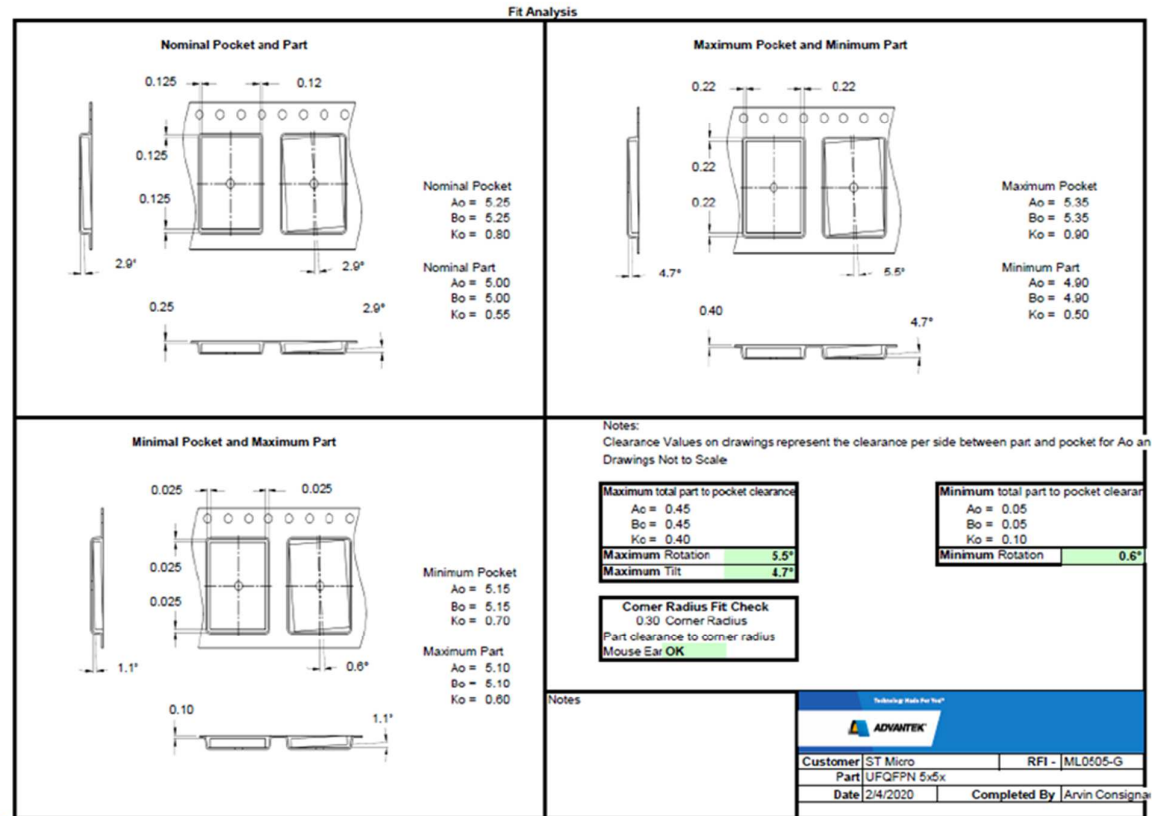
Visual inspection	Results
Does not contain stain or foreign material	Passed
No Damage	Passed
No Burr	Passed
Orientation	Passed
The component does not protrude above the top surface of the carrier tape	Passed
The component can be removed from the cavity in a vertical direction without mechanical restriction,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

Drop Test, Peel Test and ESD Test

Test	Result
Drop Test Result	Passed
Peel Test Result	Passed
ESD Test Result	Passed

CADFIT Simulation

FIT Test: Passed



Results : Passed

Sufficient clearance available between leads and carrier tape cavity

Conclusion

Based on above material qualification, the 12mm carrier tape from Advantek for QFN/BGA 5x5x0.55mm with drawing number ML0505-G passed the Tape and Reel processing requirements.