#### PRODUCT / PROCESS CHANGE INFORMATION

1. PCI basic data			
1.1 Company		STMicroelectronics International N.V	
1.2 PCI No.		CRP/22/12732	
1.3 Title of PCI		CHANGE OF SUPPLIER FOR 3CP40618 (CARRIER TAPE Wi 12mm QFN/LGA/PFLAT 5x5x1)	
1.4 Product Category		Refer to impacted product list	
1.5 Issue date		2022-05-04	

2. PCI Team		
2.1 Contact supplier		
2.1.1 Name		
2.1.2 Phone		
2.1.3 Email	heather.robertson@st.com	
2.2 Change responsibility		
2.2.1 Process Owner		
2.1.2 Corporate Quality Manager		

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: 3CP40618 (CARRIER TAPE Wi 12mm QFN/LGA/PFLAT 5x5x1) supplied by PEAK	Change of supplier for ST material code reference: 3CP40618 (CARRIER TAPE Wi 12mm QFN/LGA/PFLAT 5x5x1) 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 3CP40618	
5.2 Customer Benefit	SERVICE CONTINUITY	

6. Marking of parts / traceability of change		
6.1 Description	Date-code - Internal Traceability	

7. Timing / schedule		
7.1 Date of qualification results	2022-04-11	
7.2 Intended start of delivery	2022-08-01	
7.3 Qualification sample available?	Upon Request	

8. Qualification / Validation			
3.1 Description			
8.2 Qualification report and qualification results		Issue Date	

#### 9. Attachments (additional documentations)

12732 Public product.pdf 12732 PCI\_CHANGE OF SUPPLIER\_3CP40618 Rev.10.pdf

10. Affected parts		
	10. 1 Current	10.2 New (if applicable)
0.1.1 Customer Part No	10.1.2 Supplier Part No	10.1.2 Supplier Part No
	L2293Q	
	L6226Q	
	L6227Q	
	L6228Q	
	L6229Q	
	L6230Q	
	PM6680ATR	
	PM6766TR	
	STLUX325A	
	STNRG328A	
	STPM33TR	
	STPM34TR	



#### **Public Products List**

Publict 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 3CP40618 (CARRIER TAPE Wi 12mm QFN/LGA/PFLAT 5x5x1)

PCI Reference: CRP/22/12732

Subject: Public Products List

Dear Customer,

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

L6229Q	PM6766TR	PM6779TR
PM6680TR	STPM33TR	L2293Q
STPM34TR	L6230Q	STLUX325A
PM6686TR	PM6773TR	STNRG328A
ALED7707	L6226Q	PM6680ATR
L6227Q	PM6766	L6228Q



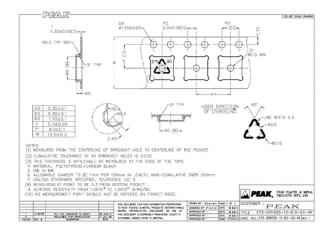
## PRODUCT / PROCESS CHANGE INFORMATION

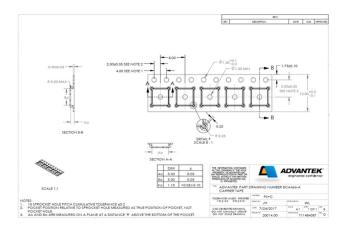
### <u>PCI - CHANGE OF SUPPLIER FOR 3CP40618 (CARRIER TAPE Wi 12mm</u> <u>QFN/LGA/PFLAT 5x5x1)</u>

#### WHAT is the change?

Change of supplier for ST material code reference: 3CP40618 (CARRIER TAPE Wi 12mm QFN/LGA/PFLAT 5x5x1) from PEAK to ADVANTEK which affected ST CALAMBA.

**CURRENT: PEAK** 





**NEW: ADVANTEK** 

#### WHY?

• PEAK has declared to discontinue production of 3CP40618.

#### WHEN will this change occur?

Change targeted date is 1st August 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:**

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**

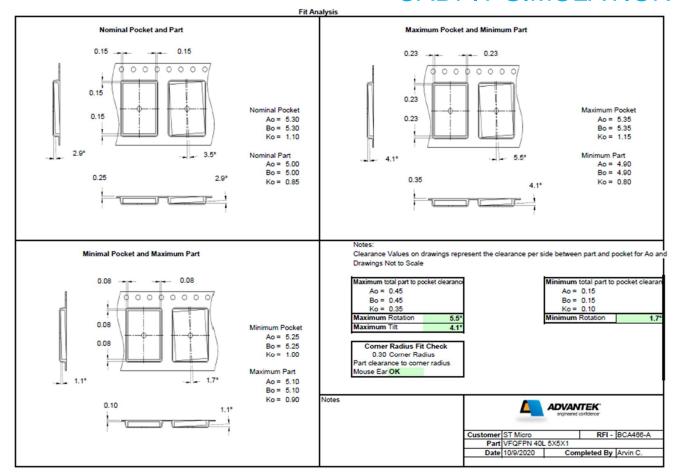
# Visual Inspection Report

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**



**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 5x5x1mm passed the Calamba requirement and can be used for normal tape and reeling process.

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