

## PRODUCT / PROCESS CHANGE NOTIFICATION

### 1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.		ADG/18/11049
1.3 Title of PCN		STripFET™ F7 40V Capacity Extension to HHG Subcon
1.4 Product Category		STripFET™ F7 40V
1.5 Issue date		2018-08-28

### 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 Product Manager	Riccardo NICOLOSO
2.1.2 Marketing Manager	Marcello SGROI
2.1.3 Quality Manager	Vincenzo MILITANO

### 3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
Transfer	Line transfer for a full process or process brick (process step, control plan, recipes) from one site to another site: Wafer fabrication	Catania and HHGrace Subcon

### 4. Description of change

	Old	New
4.1 Description	STripFET™ F7 40V produced in Catania	STripFET™ F7 40V produced in ST Catania and HHGrace Subcon
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No Impact in terms of electrical, physical and functional aspects	

### 5. Reason / motivation for change

5.1 Motivation	Capacity Extension and improvement in Flexibility to better manage the customer orders
5.2 Customer Benefit	MANUFACTURING FLEXIBILITY

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

6.1 Description	by Q.A. number
-----------------	----------------

### 7. Timing / schedule

7.1 Date of qualification results	2018-12-23
7.2 Intended start of delivery	2019-01-27
7.3 Qualification sample available?	Upon Request

### 8. Qualification / Validation

8.1 Description	
8.2 Qualification report and qualification results	In progress

### 9. Attachments (additional documentations)

11049 Public product.pdf
11049 PCN - Capacity Extension for StripFET F7 40V Automotive to HHG.doc

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
	STH410N4F7-2AG	
	STH410N4F7-6AG	
	STL140N4F7AG	
	STL190N4F7AG	
	STL210N4F7AG	

**IMPORTANT NOTICE – PLEASE READ CAREFULLY**

Subject to any contractual arrangement in force with you or to any industry standard implemented by us, STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved



## 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 :** STripFET™ F7 40V Capacity Extension to HHG Subcon

**PCN Reference :** ADG/18/11049

**Subject :** Public Products List

Dear Customer,

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

STH410N4F7-2AG	STH410N4F7-6AG	STL140N4F7AG
STL190N4F7AG	STD134N4F7AG	STD170N4F7AG
STL210N4F7AG		



### **IMPORTANT NOTICE – PLEASE READ CAREFULLY**

Subject to any contractual arrangement in force with you or to any industry standard implemented by us, STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved



life.augmented

Automotive Discrete Group (ADG)  
Power Transistor Division

**Process Change Information**

**STripFET™ F7 40V Capacity Extension in HHGrace (China) FAB**

Dear Customer,

Following the continuous improvement of our service and in order to increase productivity, we are pleased to announce that STripFET™ F7 (OFT) 40V technology wafers, currently manufactured in Catania will be also produced in one of our Subcontractors HHGrace based in China.

The wafers produced in HHGrace, guarantee the same quality and electrical characteristics as per current production.

In the next pages, we are reporting the qualification plan to reach full maturity.

The change has been classified as **Class 1** according to the ZVEI and ST internal rules.

<b>Assessment of impact on Supply Chain regarding following aspects</b>		<b>Remaining risks on Supply Chain?</b>	
<b>ID</b>	<b>Type of change</b>	<b>No</b>	<b>Yes</b>
SEM-PW-13	Move of all or part of wafer fab to a different location/site/subcontractor	P	P

The qualification will be completed by December 2018

Sincerely Yours!

## STripFET™ F7 40V Capacity Extension in HHGrace (China) FAB

<b>ST Part number:</b>	ST PN: <b>STripFET™ F7 40V (OFT40)</b> Package: <b>All the Packages</b>																				
<b>Reason and background of the change</b>	To increase flexibility by improving capacity avoiding the risk for the customer to line down due to lack of silicon at FE level.																				
<b>Detailed description of change(s), including affected type of changes</b>	<p>The Diffusion Process for STripFET™ F7 (OFT) 40V technology to be performed also in HHGrace FAB. Here below the details process by process.</p> <table border="1"> <thead> <tr> <th>Process</th><th>Current</th><th>Proposal</th><th>Note</th></tr> </thead> <tbody> <tr> <td>Diffusion</td><td>Catania 8"</td><td>HHG 8"</td><td>Changed</td></tr> <tr> <td>Wettable Metal (WM)</td><td>AMK 8"</td><td>AMK 8"</td><td>Same</td></tr> <tr> <td>Back Side Metal</td><td>AMK 8"</td><td>AMK 8"</td><td>Same</td></tr> <tr> <td>Wafer Probing</td><td>Catania 8" / AMK 8"</td><td>Catania 8" / AMK 8"</td><td>Same</td></tr> </tbody> </table>	Process	Current	Proposal	Note	Diffusion	Catania 8"	HHG 8"	Changed	Wettable Metal (WM)	AMK 8"	AMK 8"	Same	Back Side Metal	AMK 8"	AMK 8"	Same	Wafer Probing	Catania 8" / AMK 8"	Catania 8" / AMK 8"	Same
Process	Current	Proposal	Note																		
Diffusion	Catania 8"	HHG 8"	Changed																		
Wettable Metal (WM)	AMK 8"	AMK 8"	Same																		
Back Side Metal	AMK 8"	AMK 8"	Same																		
Wafer Probing	Catania 8" / AMK 8"	Catania 8" / AMK 8"	Same																		
<b>Impact on form, fit, function, or reliability.</b>	No Impact																				
<b>Datasheet</b>	No Impact																				
<b>Benefit of the change</b>	Capacity and flexibility increase.																				
<b>Planned Implementation date for change</b>	<p>The qualification has been performed according to the following plan:</p> <table border="1"> <thead> <tr> <th>Test Vehicles</th><th>Package</th><th>Nr of Lots</th><th>Type of Qualification</th></tr> </thead> <tbody> <tr> <td>STH410N4F7-6AG</td><td>H2PAK 6L</td><td>3</td><td rowspan="3">According AEC Q101</td></tr> <tr> <td>STL285N4F7AG</td><td rowspan="2">PowerFLAT™</td><td>1</td></tr> <tr> <td>STL190N4F7AG</td><td>1</td></tr> </tbody> </table> <p>Qualification will be completed by December 2018</p>	Test Vehicles	Package	Nr of Lots	Type of Qualification	STH410N4F7-6AG	H2PAK 6L	3	According AEC Q101	STL285N4F7AG	PowerFLAT™	1	STL190N4F7AG	1							
Test Vehicles	Package	Nr of Lots	Type of Qualification																		
STH410N4F7-6AG	H2PAK 6L	3	According AEC Q101																		
STL285N4F7AG	PowerFLAT™	1																			
STL190N4F7AG		1																			