

PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.		ADG/19/11407
1.3 Title of PCN		STripFET™ F6 and H6 Products Capacity Extension in HHGrace Foundry
1.4 Product Category		STripFET™
1.5 Issue date		2019-03-08

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
2.2.2 Marketing Manager	Marcello SGROI
2.2.3 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	HHGrace Subcon

4. Description of change

	Old	New
4.1 Description	Specific STripFET™ F6 and H6 products produced in Catania	Specific STripFET™ F6 and H6 produced in Catania and in HHGrace
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	no impact	

5. Reason / motivation for change

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

6. Marking of parts / traceability of change

6.1 Description	by QA Number and Finished Good
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7. Timing / schedule

7.1 Date of qualification results	2019-02-25
7.2 Intended start of delivery	2019-08-25
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description	11407 Rel06-19.pdf	
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date

9. Attachments (additional documentations)

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
	STB120N4LF6	
	STB155N3LH6	
	STD120N4LF6	
	STD155N3LH6	
	STD96N3LLH6	
	STL120N4LF6AG	

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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 : STripFET™ F6 and H6 Products Capacity Extension in HHGrace Foundry

PCN Reference : ADG/19/11407

Subject : Public Products List

Dear Customer,

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

STD155N3LH6	STB155N3LH6	STB120N4LF6
STL120N4LF6AG	STD120N4LF6	STD96N3LLH6



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Catania Feb. 21st 2019

Automotive Discrete Group (ADG)
Power Transistor Division

Process Change Notification

STripFET™ F6 and H6 Automotive Products Capacity Extension in HHGrace Foundry

Dear Customer,

Following the continuous improvement of our service and in order to increase productivity, we are pleased to announce that some STripFET™ F6 and H6 technology wafers, currently manufactured in Catania will be also produced in Subcontractor HHGrace.

Wafer Probing currently performed in Catania, will be performed in our ST AMK Site (Singapore) for the wafers produced in HHGrace.

The wafers, and the final assembled products, 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.

Assessment of impact on Supply Chain regarding following aspects		Remaining risks on Supply Chain?	
ID	Type of change	No	Yes
SEM-PW-13	Move of all or part of wafer fab to a different location/site/subcontractor	P	P
SEM-TF-01	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor	P	P

The qualification of the change has been completed

Sincerely Yours!

STripFET™ F6 and H6 Automotive Products Capacity Extension in HHGrace Foundry

ST Part number:	Involved ST Part Numbers																																		
	STripFET™ F6 (40V)	STripFET™ H6 (30V)																																	
	STB120N4LF6	STB155N3LH6																																	
	STL120N4LF6AG	STD155N3LH6																																	
	STB120N4LF6	STD96N3LLH6																																	
Reason and background of the change	To increase flexibility by improving capacity avoiding the risk for the customer to line down due to lack of silicon at FE level.																																		
Detailed description of change(s), including affected type of changes	<ul style="list-style-type: none"> The Diffusion Process for some STripFET™ F6 and H6 technology Automotive products will be performed also in our subcontractor HHGrace. For those wafers, wafer probing will be performed in our AMK site. 																																		
	<p>Wafer Testing for STripFET™ F6 and H6 technology products will be also performed in our ST AMK Site (Singapore).</p> <p><u>Note</u> that AMK Site is an Automotive Grade qualified ST Wafer Probing site from which we test since more than 15 years all technologies Power MOSFET.</p>																																		
	<p>Here below a table reporting the list of technologies diffused in Catania FAB and tested in AMK with the relevant wafers quantity since 2015.</p>																																		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; background-color: #e0f2e0;">Silicon Line</th> <th style="text-align: center; background-color: #e0f2e0;">Technology</th> <th style="text-align: center; background-color: #e0f2e0;">Number of Wafers (2015-2018)</th> <th style="text-align: center; background-color: #e0f2e0;">Note</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">6D6K</td><td rowspan="4" style="text-align: center;">STripFET™ F6 / H6</td><td rowspan="4" style="text-align: center;">52K</td><td rowspan="4" style="text-align: center;">Same technology of Products under notification</td></tr> <tr> <td style="text-align: center;">6L3C</td></tr> <tr> <td style="text-align: center;">6L3F</td></tr> <tr> <td style="text-align: center;">6L38</td></tr> <tr> <td rowspan="6" style="text-align: center; vertical-align: middle;"> Various Series </td><td style="text-align: center;">STripFET™ 2nd Generation</td><td style="text-align: center;">1.6M</td><td></td></tr> <tr> <td style="text-align: center;">STripFET™ 3rd Generation</td><td style="text-align: center;">6.8K</td><td></td></tr> <tr> <td style="text-align: center;">STripFET™ F5</td><td style="text-align: center;">33K</td><td></td></tr> <tr> <td style="text-align: center;">STripFET™ F3</td><td style="text-align: center;">9K</td><td></td></tr> <tr> <td style="text-align: center;">STripFET™ F7</td><td style="text-align: center;">330K</td><td></td></tr> <tr> <td style="text-align: center;">STripFET™ 2nd Gen. – P-Channel</td><td style="text-align: center;">35K</td><td></td></tr> <tr> <td colspan="2" style="text-align: center;">TOTAL</td><td style="text-align: center;">2.0M</td><td></td></tr> </tbody> </table>		Silicon Line	Technology	Number of Wafers (2015-2018)	Note	6D6K	STripFET™ F6 / H6	52K	Same technology of Products under notification	6L3C	6L3F	6L38	Various Series	STripFET™ 2 nd Generation	1.6M		STripFET™ 3 rd Generation	6.8K		STripFET™ F5	33K		STripFET™ F3	9K		STripFET™ F7	330K		STripFET™ 2 nd Gen. – P-Channel	35K		TOTAL		2.0M
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Benefit of the change	Capacity and flexibility increase.																																		

Planned Implementation date for change	The qualification has been completed according to the following plan:																				
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