


# PRODUCT / PROCESS CHANGE NOTIFICATION

## 1. PCN basic data

1.1 Company	 STMicroelectronics International N.V
1.2 PCN No.	ADG/24/14674
1.3 Title of PCN	Power MOSFET in TO-220 Package: Assembly and Final Testing Transfer to TONGKE
1.4 Product Category	see list
1.5 Issue date	2024-04-04

## 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	Rosario RUGGERI
2.1.2 Marketing Manager	Anna RANIOLO, Martina GIUFFRIDA
2.1.3 Quality Manager	Diego Maria FERRARI

## 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: Assembly site (SOP 2617)	Subcon TONGKE - China - Receiving Plant

## 4. Description of change

	Old	New
4.1 Description	Assembly and Final Testing Location ST Shenzhen - China	Assembly and Final Testing Location Subcon TONGKE - China
4.2 Anticipated Impact on form, fit, function, quality, reliability or processability?	No Impact	

## 5. Reason / motivation for change

5.1 Motivation	Due to ST Shenzhen TO-220 line shutdown all the PMOS products housed in TO-220 will be transferred to subcontractor TONGKE - China
5.2 Customer Benefit	SERVICE CONTINUITY

## 6. Marking of parts / traceability of change

6.1 Description	Dedicated finished-goods
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## 7. Timing / schedule

7.1 Date of qualification results	2024-03-27
7.2 Intended start of delivery	2024-05-31
7.3 Qualification sample available?	Upon Request

## 8. Qualification / Validation

8.1 Description	14674 RERLVIP24011_1.0_PowerMOSFET LV_TO220 transfer from STS to TFME Tongkee.pdf		
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date	2024-04-04

## 9. Attachments (additional documentations)

14674 Public product.pdf  
 14674 Details.pdf  
 14674 RERLVIP24011\_1.0\_PowerMOSFET LV\_TO220 transfer from STS to TFME Tongkee.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
IRF630	IRF630	
	STP100N10F7	
	STP100N6F7	
	STP110N10F7	
	STP120N4F6	
STP120NF10	STP120NF10	
	STP130N6F7	
	STP140N6F7	
	STP140N8F7	
	STP150N10F7	
	STP150N10F7AG	
	STP150NF04	
	STP160N4LF6	
STP16NF06	STP16NF06	
	STP180N4F6	
	STP190N55LF3	
	STP19NF20	
STP200NF03	STP200NF03	
	STP20NF20	
	STP220N6F7	
STP24NF10	STP24NF10	
	STP30NF20	
	STP310N10F7	
	STP315N10F7	
STP36NF06L	STP36NF06L	
STP40NF10L	STP40NF10L	
	STP40NF20	
	STP45N10F7	
STP45NF06	STP45NF06	
STP55NF06L	STP55NF06L	
STP60NF06L	STP60NF06L	
	STP75NF20	
	STP76NF75	
STP80NF03L-04	STP80NF03L-04	
STP80NF55-08	STP80NF55-08	
	STP141NF55	

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**Discontinuity of Back-End production line at ST SHENZHEN plant for all Mosfet products in TO220 Power (DZ and DE package codes).**

**Assembly and Final Test Transfer to TONGKE subcontractor plant**

# Agenda

3 Change Description

5 Product lines impacted

4 ZVEI Guidelines

6 Conclusions

## Change description

- Aim of this document is to describe the activity performed to qualify the MOSFET products assembled in TO220 Power (DZ and DE package codes) in the TONGKE subcontractor plant.
- This report shows the qualification activity done to ensure the same quality and electrical characteristics the MOSFET products of the LViP Division assembled in TO220 Power(DZ and DE package codes), currently assembled in SHENZHEN plant.
- In the TONGKE subcontractor plant we will use the same assembly machine of SHENZHEN and maintain the same Bill of materials for each products.
- All reliability tests have been completed with positive results.

# ZVEI Guidelines

- According to ZVEI recommendations, the notification is required.

		<b>Assessment of impact on Supply Chain regarding following aspects</b> - contractual agreements - technical interface of processability/manufacturability of customer - form, fit, function, quality performance, reliability	<b>Remaining risks within Supply Chain?</b>		<b>Understanding of semiconductors experts</b>	<b>Examples to explain</b>
	<b>ID</b>	<b>Type of change</b>	<b>No</b>	<b>Yes</b>		
		<b>ANY</b>				
		<b>DATA SHEET</b>				
		<b>DESIGN</b>				
		<b>PROCESS - WAFER PRODUCTION</b>				
		<b>BARE DIE</b>				
		<b>PROCESS - ASSEMBLY</b>				
<b>x</b>	SEM-PA-18	Move all or parts of production to a different assembly site.	<b>P</b>	<b>P</b>	Assembly transfer or relocation. Includes transfer as well as additional site.	e.g. dual source / fab strategy
		<b>PACKING/SHIPPING</b>				
		<b>EQUIPMENT</b>				
		<b>TEST FLOW</b>				
<b>x</b>	SEM-TF-01	Move of all or part of electrical wafer test and/or final test to a different test site.	<b>P</b>	<b>P</b>	Tester transfer or relocation. Check impact on SEM-AN-01 Includes transfer as well as additional site.	Dual source strategy

# Mosfet Product Test Vehicle lines

## MOSFET Products lines in TO220 Power (DZ package code)

- Commercial Product: STP95N4F3 (Silicon Line 4D4FA1)
- Commercial Product : STP120N4F6 (Silicon Line 6D4FA1)
- Commercial Product : STP180N4F6 (Silicon Line 7D4G01)
- Commercial Product : STP55NF06L (Silicon Line AL6E01)
- Commercial Product : STP130NS04ZB-MT (Silicon Line B64JA1)
- Commercial Product : STP180NS04ZC-MS (Silicon Line BM4KA1)
- Commercial Product : STP45NF06 (Silicon Line ED6Q01)
- Commercial Product : STP20NF20 (Silicon Line MM2G01)
- Commercial Product : STP100N10F7 (Silicon Line OD0F01)
- Commercial Product : STP100N6F7 (Silicon Line OD6401)
- Commercial Product : STP140N6F7 (Silicon Line OD6E01)
- Commercial Product : STP120NF10 (Silicon Line QD0K01)

## MOSFET Products lines in TO220 Power (DE package code)

- Commercial Product: STP190N55LF3 (Silicon Line 4L5KA1 )



# Conclusions

- Detailed qualification activity has been performed in order to qualify the MOSFET products assembled in TO220 Power (DZ and DE package code) in the TONGKE subcontractor plant. All reliability tests have been completed with positive results.
- This report shows the positive results achieved, ensuring the same quality and electrical characteristics as the current production in Shenzhen ST plant.



## 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 :** Power MOSFET in TO-220 Package: Assembly and Final Testing Transfer to TONGKE

**PCN Reference :** ADG/24/14674

**Subject :** Public Products List

Dear Customer,

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

STP20NF20	STP40NF20	STP120N4F6
STP315N10F7	STP200NF03	STP120NF10
STP180N4F6	STP80NF55-08	STP70NS04ZC
STP220N6F7	IRF630	STP140N8F7
STP75NF20	STP100N10F7	STP45N10F7
STP150N10F7	STP60NF06L	STP24NF10
STP130N6F7	STP140N6F7	STP30NF20
STP76NF75	STP310N10F7	STP16NF06
STP110N10F7	STP19NF20	STP55NF06L
STP45NF06	STP160N4LF6	STP100N6F7
STP36NF06L	STP100NF04	STP150N10F7AG
STP190N55LF3	STP150NF04	STP40NF10L
STP95N4F3		

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