PRODUCT / PROCESS CHANGE NOTIFICATION

	1. PCN basic data				
1.1 Company		STMicroelectronics International N.V			
1.2 PCN No.		ADG/22/13415			
1.3 Title of PCN		IPAK Cu wire line relocation from Shenzhen to Tongfu Microelectronics (China)			
1.4 Product Category		Power MOSFET HV			
1.5 Issue date		2022-05-03			

2. PCN 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 Product Manager⊟				
2.1.2 Marketing Manager				
2.1.3 Quality Manager				

3. Change				
3.1 Category	3.2 Type of change	3.3 Manufacturing Location		
	Line transfer for a full process or process brick (process step, control plan, recipes) from one site to another site: Assembly site (SOP 2617)	Tongfu Microelectronics (China)		

4. Description of change				
	Old	New		
4.1 Description	IPAK Cu wire products are manufactured in Zhenzhen (China)	IPAK Cu wire products are manufactured in Tongfu Microelectronics (China)		
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	no impact			

5. Reason / motivation for change				
5.1 Motivation	IPAK Line Shenzhen (China) closure			
5.2 Customer Benefit	SERVICE CONTINUITY			

6. Marking of parts / traceability of change			
6.1 Description	By internal traceability and dedicated FG code.		

7. Timing / schedule				
7.1 Date of qualification results	2022-04-29			
7.2 Intended start of delivery	2022-07-30			
7.3 Qualification sample available?	Upon Request			

8. Qualification / Validation				
8.1 Description 13415 RERPTD22036_Power MOSFET High Voltage_IPAK Cu wire line relocation from Shenzhen to .pdf				
8.2 Qualification report and qualification results	Available (see attachment)	lssue Date	2022-05-03	

9. Attachments (additional documentations)

13415 Public product.pdf 13415 IPAK Cu wire line relocation from Shenzhen to TFME.pdf 13415 RERPTD22036_Power MOSFET High Voltage_IPAK Cu wire line relocation from Shenzhen to_.pdf 13415 Comparison IPAK STS vs TFME.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		
	STD1NK60-1			
	STU2N105K5			
	STU2N80K5			
	STU2N95K5			
	STU3LN80K5			
	STU3N80K5			
	STU4N80K5			



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

PCN Title : IPAK Cu wire line relocation from Shenzhen to Tongfu Microelectronics (China) *PCN Reference :* ADG/22/13415

Subject : Public Products List

Dear Customer,

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

STU3N65M6	STU2N95K5	STU2N80K5
STU3N45K3	STU3N80K5	STU5N80K5
STD3NK80Z-1	STU4N80K5	STU3LN80K5
STU2N105K5	STU5N65M6	STU7N65M6
STD1NK60-1		



Catania, May, 3rd, 2022

Power Transistor Sub-Group High Voltage Business Unit Automotive & Discrete Group (ADG)

Process Change Notification

IPAK Cu wire line relocation from Shenzhen to Tongfu Microelectronics (China)

INDUSTRIAL

Dear Customer,

Following the continuous improvement of our service and with the aim of increasing production capacity, this document announces the closure of IPAK Shenzhen (China) line.

As results of the above-mentioned decision, all products assembled in IPAK with Cu wires, will be relocated to our subcontractor Tongfu Microelectronics (China) named also TFME.

The IPAK Cu wires products, manufactured in TFME, guarantees the same quality and electrical characteristics as per current production.

Any other product related to the above series, even if not expressly included or partially mentioned in the attached table, is affected by this change.

Qualification program and results availability:

The reliability test report is provided in attachment to this document.

Samples availability:

Samples of the test vehicle devices will be available on request starting from week 18 of 2022. Any other sample request will be processed and scheduled by High Voltage Business Unit upon request.

Involved Products	Package	Test Vehicle
Selected High Voltage Power MOSFET Transistors	IPAK Cu wires	STU2N80K5 STU3N65M6 STU4N80K5 STU7N65M6 STU7NM62N(1288) STU7NM62N-H

Change implementation schedule:

The production start and first shipments will be implemented after week 31 of 2022, after customer agreement.

Marking and traceability:

Unless otherwise stated by customer specific requirement, traceability of products in IPAK Cu wires, manufactured in TFME, will be ensured by internal code (Finished Good) and Q.A. number.

Yours faithfully.

Comparison IPAK Shenzhen vs TFME

Sh	Shenzhen (type A) TFME (type C)			type C)				
Dim.		mm		Dim.		mm		Shenzhen	TFME
	Min.	Тур.	Max.		Min.	Тур.	Max.	Shehzhen	
Α	2.20		2.40	Α	2.20	2.30	2.35		
A1	0.90		1.10	A1	0.90	1.00	1.10		
b	0.64		0.90	b	0.66		0.79		
b2			0.95	b2			0.90		
b4	5.20		5.40	b4	5.23	5.33	5.43		02
B5		0.30							$E \rightarrow E \rightarrow E$
с	0.45		0.60	с	0.46		0.59		
c2	0.48		0.60	c2	0.46		0.59		
D	6.00		6.20	D	6.00	6.10	6.20		
				D1	5.20	5.37	5.55		
E	6.40		6.60	E	6.50	6.60	6.70		
				E1	4.60	4.78	4.95	H $L1$ $b2(3x)$	
е		2.28		е	2.20	2.25	2.30	$\begin{bmatrix} 1 \\ 1 \\ 1 \end{bmatrix} \begin{bmatrix} -1 \\ 1 \\ -1 \end{bmatrix} \begin{bmatrix} -1 \\ -1 \\ -1 \end{bmatrix} \begin{bmatrix} -1 \\ -1 \\ -1 \end{bmatrix} \begin{bmatrix} -1 \\ -1 \end{bmatrix} $	
e1	4.40		4.60	e1	4.40	4.50	4.60		$\frac{b2(x3)}{b} = \frac{b}{b}$
н		16.10		н	16.18	16.48	16.78		b (x3)
L	9.00		9.40	L	9.00	9.30	9.60		
L1	0.80		1.20	L1	0.80	1.00	1.20	I <u>∗ ∗</u> Ψ Ψ ₩ H	
L2		0.80	1.00	L2	0.90	1.08	1.25		
V1		10°							<u>e1</u>
				θ1	3°	5°	7°	e1	
				θ2	1°	3°	5°		

