


PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	MDG/19/11543	
1.3 Title of PCN	V590 product (SPEAR320-2): Final Test transfer from subcontractor UTAC to ST Calamba production plant	
1.4 Product Category	V590 product (SPEAR320-2)	
1.5 Issue date	2019-05-20	

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	Giuseppe ASTONE
2.1.2 Marketing Manager	Flavio Giancarlo BENETTI
2.1.3 Quality Manager	Morgan CASON

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
Transfer	Product transfer from one site to another site, even if test or process line is qualified	Z4FT Subcontractor UTAC Singapore

4. Description of change

	Old	New
4.1 Description	Final test in UTAC subcontractor plant	Final test in ST Calamba plant
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	no	

5. Reason / motivation for change

5.1 Motivation	Final Test transfer to ST Calamba from volume production
5.2 Customer Benefit	SERVICE CONTINUITY

6. Marking of parts / traceability of change

6.1 Description	Change will be identifiable through ST traceability system
------------------------	--

7. Timing / schedule

7.1 Date of qualification results	2019-05-07
7.2 Intended start of delivery	2019-08-09
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description	11543 SPEAR320_STMCalamba FT Qualification.pdf		
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date	2019-05-20

9. Attachments (additional documentations)

11543 Public product.pdf 11543 V590 SPEAR320_FT transfer to Calamba.doc 11543 SPEAR320_STMCalamba FT Qualification.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
	SPEAR320-2	

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



V590 product (SPEAR320-2)
Final Test transfer from subcontractor UTAC to ST Calamba production plant

WHAT:

To inform in advance our Customer about the Final Test Transfer of V590 product (SPEAR320-2) from subcontractor UTAC to ST Calamba production plant

Impacted product:

PRODUCT NAME	PRODUCT CODE	STM PART NUMBER
SPEAR	V59004	SPEAR320-2

WHY:

Final Test transfer to ST Calamba from volume production

HOW:

Enclosed the Final Test correlation report between Sending plant (SC UTAC) and Receiving plant (ST Calamba).

WHEN:

The transfer and full ramp- up in the new location will be finalized upon Customer's Acceptance.

IMPACTS OF THE CHANGE:

No impact on Form, Fit or Function

SPEAR 320 (V590BD) FINAL TEST PRODUCT TRANSFER FROM UTAC-SG to ST-Calamba Philippines

Prepared By:

Warren M. GUTIERREZ (MDG Operations)

Vince Sambo (BEM&T Calamba TPE)



May 6th , 2019

FINAL TEST PRODUCT TRANSFER SHEET

GROUP / DIVISION	MDG / DMA	CUSTOMER	OPEN MARKET
PRODUCT LINE	Spear 320	MATURITY	50
CISCO PART #	Spear 320-2	Sales Type	SPEAR-320-2-2/
Sending Plant	UTAC, Singapore	Receiving Plant	STMicroelectronics, CALAMBA

SPEAR 320 FT PRODUCT CORRELATION

DEVICE INFORMATION			
Device Name	SPEAR 320		
Package type	LFBA 14SQX1.7 289 F17	Assembly site	ZR1A SC ASE - TAIWAN
TEST INFORMATION			
Reject Tray (Colored / Black ?)	Red	Good (Color ?)	Black with blue tab
SBL	Open 0.5% Short 0.5%		

TEST QUALIFICATION PROCEDURE

Validation plan

Sending plant: UTAC, Singapore

Receiving plant: STM, Calamba Philippines

1. 10 KGU and 10 KBU
 - a. KGU : Repeatability (10x) on 2 golden samples for site1 and site2 (1x) on other KGU.
 - a. KBU : (1x) for site 1 and site 2

2. Qualification lot run, 252 parts from UTAC Singapore

LB no: 2
 Socket: 5
 Test Progr V590BD_FT_1.11
 Temperatur Ambient

GOOD PARTS		UTAC SG			ST CALAMBA		
Unit #	Site	Result			Result		
		Hbin	Sbin	Comment	Hbin	Sbin	Comment
DG1	1	1	1	10x loop, 100% Pass	1	1	10x loop, 100% Pass
	2	1	1	10x loop, 100% Pass	1	1	10x loop, 100% Pass
DG2	1	1	1	10x loop, 100% Pass	1	1	10x loop, 100% Pass
	2	1	1	10x loop, 100% Pass	1	1	10x loop, 100% Pass
DG3	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x
DG4	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x
DG5	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x
DG6	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x
DG7	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x
DG8	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x
DG9	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x
DG10	1	1	1	1x	1	1	1x
	2	1	1	1x	1	1	1x

KGU Result Shows Sending Plant & Receiving Plant are aligned in terms of repeatability & stability.



LB no: 2
 Socket: 5
 Test Progr V590BD_FT_1.10
 Temperatur Ambient

REJECT PARTS		UTAC SG			ST CALAMBA		
Unit #	Site	Result			Result		
		Hbin	Sbin	Comment	Hbin	Sbin	Comment
DR1	1	7	20	Idd02v_low	7	20	Idd02v_low
	2	7	20	Idd02v_low	7	20	Idd02v_low
DR2	1	6	11	short	6	11	short
	2	6	11	short	6	11	short
DR3	1	7	20	Idd02v_low	7	20	Idd02v_low
	2	7	20	Idd02v_low	7	20	Idd02v_low
DR4	1	7	73	Idd_1v2_USB_max	7	73	Idd_1v2_USB_max
	2	7	73	Idd_1v2_USB_max	7	73	Idd_1v2_USB_max
DR5	1	6	6	short	6	6	short
	2	6	6	short	6	6	short
DR6	1	7	20	Idd02v_low	7	20	Idd02v_low
	2	7	20	Idd02v_low	7	20	Idd02v_low
DR7	1	5	10	Open_dig	5	10	Open_dig
	2	5	10	Open_dig	5	10	Open_dig
DR8	1	7	30	TM_SC_SSA_MIN	7	30	TM_SC_SSA_MIN
	2	7	30	TM_SC_SSA_MIN	7	30	TM_SC_SSA_MIN
DR9	1	7	30	TM_SC_SSA_MIN	7	30	TM_SC_SSA_MIN
	2	7	30	TM_SC_SSA_MIN	7	30	TM_SC_SSA_MIN
DR10	1	6	11	short	6	11	short
	2	6	11	short	6	11	short

RESULT: The data of Calamba (Receiving plant) are aligned with data of UTAC (Sending plant)



TRIAL LOT RESULT

Qualified Site/ Sending Plant: UTAC-SG

Test SITE	Trial	Lot_Id	Job_Nam	Diff Lot	Part In	Good	Mech Rej	Elec Rej	Yield
UTAC-SG (Sending Plant)	Flow 1	UJ05B218.1	V590BDFH0110	VQ833483	252	250	2	0	99.21%

New Test Site/Receiving Plant: ST-Calamba

TEST SITE	Trial	Lot_Id	Job_Nam	Diff Lot	TraceCode	Part In	Good	Mech Rej	Elec Rej	Yield
BEM&T-Calamba (Receiving Plant)	Flow 1	UJ05B218.1	V590BDFH0110	VQ833483		252	250	2	0	99.21%



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 : V590 product (SPEAR320-2): Final Test transfer from subcontractor UTAC to ST Calamba production plant

PCN Reference : MDG/19/11543

Subject : Public Products List

Dear Customer,

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

SPEAR320-2		
------------	--	--



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.