



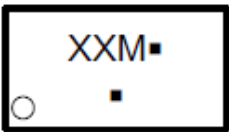
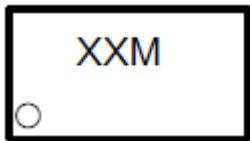
Final Product/Process Change Notification

Document #:FPCN25572X39

Issue Date:13 Oct 2024

Title of Change:	Update to FPCN25572X - To include the Reliability Data of 3V Translator UQFN12 Package for Qualification of Vanguard Fab and Assembly Related Changes for Logic Parts.						
Proposed First Ship date:	20 Jan 2025 or earlier if approved by customer						
Contact Information:	Contact your local onsemi Sales Office or logic.fpcn@onsemi.com						
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.						
Additional Reliability Data:	Contact your local onsemi Sales Office or ChangKit.Mok@onsemi.com						
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com						
Marking of Parts/ Traceability of Change:	Custom source on label will show TW instead of US/JP to indicate new die source from Vanguard. Changed material may be identified by plant code or lot code too.						
Change Category:	Wafer Fab Change, Assembly Change, Test Change						
Change Sub-Category(s):	Shipping/Packaging/Marking, Manufacturing Site Transfer, Datasheet/Product Doc change						
Sites Affected:							
onsemi Sites				External Foundry/Subcon Sites			
onsemi Tarlac, Philippines				UTAC, Thailand			
				Vanguard International Semiconductor, Taiwan			
Description and Purpose:							
With reference to FPCN25572X , this FPCN presents the updated reliability results for 3V Translator UQFN12 Package.							
	From		To				
Fab Site	Tower Semiconductor		Vanguard International				
Wafer Size	6 inch		8 inch				
Assembly Related Changes:							
	From					To	
Assembly Site	onsemi Seremban	UTAC 1	Amkor Technology Philippines	STARS Microelectronics	ATX Shanghai	onsemi Tarlac	UTAC 3
Test Site	onsemi Seremban, STARS Microelectronics					onsemi Tarlac	UTAC 3
LeadFrame	PPF (EFTEC 64)	PPF (EFTEC 64)	PPF (C7025)	PPF (C7025)	PPF (C7025)	PPF (C7025)	PPF (C7025)
Die Attach	8006NS	8006NS	NEX-130CTX-N5	HR-5104	ATB-F125E	8006NS	HR-5104
Bond Wire	1mil Au	1mil Au	1mil Au	1mil Au	1mil Au	0.8mil PCC	0.8mil PCC
Mold Compound	G760	G770HCD	G700Y	G700LTD	G631H	G760	G700LTD

Marking Related Changes:

	From		To	
Product marking change	 XX = Device Code M = Date Code ■ or G = Pb-Free Package (Pb Free indication "G" or Microdot "■", may or may not be present)		 XX = Device Code M = Date Code	
Device Code	NLSV4T3144	WG	NL3V4T3144	AE
	NLSV4T244	UR	NL3V4T244	AG
	NLSV4T244E	AF	NL3V4T240	AJ
	NLSV4T240	WB		
	NLSV4T240E	AE		

Datasheet Changes:

For datasheet change summary, please refer to attach/embedded PDF file.

To view attachments:

1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file.

Reliability Data Summary:

QV DEVICE NAME : NL3V4T244MUTAG

RMS : S94371 / S97767

PACKAGE : UQFN 12 (Tarlac)

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/2400
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only	-	0/693
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231



Final Product/Process Change Notification

Document #:FPCN25572X39

Issue Date:13 Oct 2024

QV DEVICE NAME : NL3V4T244MUTAG

RMS : S98475 / S94377

PACKAGE : UQFN 12 (UTL)

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/77
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/800
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only	-	0/693
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231

Electrical Characteristics Summary:

Electrical characteristics available upon request.

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).

Part Number	New Part Number	Qualification Vehicle
NLSV4T3144MUTAG	NL3V4T3144MU2TAG	NL3V4T244MU2TAG
NLSV4T244MUTAG	NL3V4T244MU2TAG	NL3V4T244MU2TAG
NLSV4T244EMUTAG	NL3V4T244MU2TAG	NL3V4T244MU2TAG
NLSV4T240MUTAG	NL3V4T240MU2TAG	NL3V4T244MU2TAG
NLSV4T240EMUTAG	NL3V4T240MU2TAG	NL3V4T244MU2TAG