

<b>Title of Change:</b>	Update to <b>FPCN25572X</b> - To include the reliability data of PCA Translator 9306 in US8 for the Qualification of Vanguard Fab and Assembly related changes for Logic part.
<b>Proposed First Ship date:</b>	22 Jun 2024 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local Onsemi Sales Office or <a href="mailto:logic.fpcn@onsemi.com">logic.fpcn@onsemi.com</a>
<b>PCN Samples Contact:</b>	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.
<b>Additional Reliability Data:</b>	Contact your local Onsemi Sales Office or <a href="mailto:ChangKit.Mok@onsemi.com">ChangKit.Mok@onsemi.com</a>
<b>Type of Notification:</b>	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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>
<b>Marking of Parts/ Traceability of Change:</b>	Custom source on label will show TW instead of US to indicate new die source from Vanguard. Changed material may be identified by plant code or lot code too.
<b>Change Category:</b>	Wafer Fab Change, Assembly Change
<b>Change Sub-Category(s):</b>	Marking change, Material Change, Manufacturing Site Transfer, Datasheet/Product Doc change

**Sites Affected:**

**onsemi Sites**

onsemi Seremban, Malaysia

**External Foundry/Subcon Sites**

Vanguard International Semiconductor, Taiwan

**Description and Purpose:**

With respect to **FPCN25572X**, this represents information for US8 I2C Bus Translators Only

	From	To
<b>Fab Site</b>	Tower Semiconductor	Vanguard International Semiconductor
<b>Wafer size</b>	150 mm	200 mm

	From	To
<b>Assembly Site</b>	Stars	onsemi Seremban
<b>Lead Frame</b>	Cu with Ag spot	PPF
<b>Die Attach</b>	Epoxy 8900NC	WBC 8006NS
<b>Bond Wire</b>	0.8 mil Au	0.8 Mil Cu

	From	To
<b>Product marking change</b>		<p>XXXX = Device specific code A5</p>



## Final Product/Process Change Notification

Document #:FPCN25572X27

Issue Date:15 Mar 2024

### Reliability Data Summary:

QV DEVICE NAME : NLVA9306USG  
 RMS : S45607, S60916, S74735  
 PACKAGE : US8

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	0/800
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
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	-	0/30
Solderability	JSTD002	Ta = 245°C, 5 sec	-	0/45

### Electrical Characteristics Summary:

	From	To
Ci/O(on): ON-State I/O Pin Capacitance SCLn, SDAn	12.5 pF max	13.1 pF max
ESD Withstand Voltage Human Body Mode	>4000 V	>2000 V
Machine Model (Tested to EIA / JESD22-A115-A)	> 400V	NA
Charged Device Model (Tested to EIA / JESD22-A115-A)	NA	>1000 V

### 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](#).

Current Part Number	New Part Number	Qualification Vehicle
PCA9306USG	NLA9306USG	NLVA9306USG