



# Final Product/Process Change Notification

Document #:FPCN25572X21

Issue Date: 13 Dec 2023

<b>Title of Change:</b>	Update to <b>FPCN25572X</b> - To include the reliability data of US8 package for the Qualification of Vanguard Fab and Assembly related changes for Logic part.	
<b>Proposed First Ship date:</b>	31 Mar 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/JP 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, Test Change	
<b>Change Sub-Category(s):</b>	Manufacturing Site Transfer	
<b>Sites Affected:</b>		
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>	
None	STARS Microelectronics, Thailand	
	Vanguard International Semiconductor, Taiwan	
<b>Description and Purpose:</b>		
With reference to <b>FPCN25572X</b> , this FPCN presents the updated reliability results for US8.		
	<b>From</b>	<b>To</b>
<b>Fab Site</b>	TPSCo, Tower and Diodes Maine	Vanguard
<b>Assembly Site</b>	Stars, onsemi Seremban, Hana	Stars
<b>Test Site</b>	Stars, onsemi Seremban, Hana	Stars
<b>Wire</b>	PCC, PCC, Au, Au	PCC
<b>Lead frame</b>	PPF, PPF, CuAg, CuAg	PPF
<b>Mold Compound</b>	EME G600, EME-G600FB, EME-G600 HF	EME G600
<b>Die Attach</b>	HR-5104, 8006NS, 8900NC, ABLESTIK 84-1	HR-5104



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### Reliability Data Summary:

**QV DEVICE NAME: NC7WZ132K8X**

**RMS: S87355 / S92279**

**PACKAGE: US8**

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hours	0/231
Earlier Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hours	0/2400
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hours	0/231
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 cycles	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hours	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours	0/231
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec	-	0/30

### 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](#).

Current Part Number	New Part Number	Qualification Vehicle
NC7NZ04K8X-L22236	NC7NZ04K8X	NC7WZ132K8X
NC7NZ34K8X-L22236	NC7NZ34K8X	NC7WZ132K8X
NC7SZ74K8X-L22236	NC7SZ74K8X	NC7WZ132K8X
NC7WZ00K8X-L22236	NC7WZ00K8X	NC7WZ132K8X
NC7WZ08K8X-L22236	NC7WZ08K8X	NC7WZ132K8X
NC7WZ132K8X-L22236	NC7WZ132K8X	NC7WZ132K8X
NC7WZ240K8X-L22236	NC7WZ240K8X	NC7WZ132K8X
NC7WZ241K8X-L22236	NC7WZ241K8X	NC7WZ132K8X
NC7WZ32K8X-L22236	NC7WZ32K8X	NC7WZ132K8X
NC7WZ38K8X-L22236	NC7WZ38K8X	NC7WZ132K8X
NL17SZ74USG-L22190	NL17SZ74USG	NC7WZ132K8X
NL27WZ00USG-F22190	NL27WZ00USG	NC7WZ132K8X



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NL27WZ02USG-L22190	NL27WZ02USG	NC7WZ132K8X
NL27WZ08USG-L22190	NL27WZ08USG	NC7WZ132K8X
NL27WZ125USG-F22190	NL27WZ125USG	NC7WZ132K8X
NL27WZ32USG-L22190	NL27WZ32USG	NC7WZ132K8X
NL37WZ17USG-L22190	NL37WZ17USG	NC7WZ132K8X
NC7NZ04K8X	No Change	NC7WZ132K8X
NC7NZ14K8X	No Change	NC7WZ132K8X
NC7NZ17K8X	No Change	NC7WZ132K8X
NC7NZ34K8X	No Change	NC7WZ132K8X
NC7SZ74K8X	No Change	NC7WZ132K8X
NC7WZ00K8X	No Change	NC7WZ132K8X
NC7WZ02K8X	No Change	NC7WZ132K8X
NC7WZ08K8X	No Change	NC7WZ132K8X
NC7WZ125K8X	No Change	NC7WZ132K8X
NC7WZ126K8X	No Change	NC7WZ132K8X
NC7WZ132K8X	No Change	NC7WZ132K8X
NC7WZ240K8X	No Change	NC7WZ132K8X
NC7WZ241K8X	No Change	NC7WZ132K8X
NC7WZ32K8X	No Change	NC7WZ132K8X
NC7WZ38K8X	No Change	NC7WZ132K8X
NC7WZ86K8X	No Change	NC7WZ132K8X
NL17SZ74USG	No Change	NC7WZ132K8X
NL27WZ00USG	No Change	NC7WZ132K8X
NL27WZ02USG	No Change	NC7WZ132K8X
NL27WZ08USG	No Change	NC7WZ132K8X
NL27WZ125USG	No Change	NC7WZ132K8X
NL27WZ126USG	No Change	NC7WZ132K8X
NL27WZ32USG	No Change	NC7WZ132K8X
NL27WZ86USG	No Change	NC7WZ132K8X
NL37WZ04USG	No Change	NC7WZ132K8X
NL37WZ17USG	No Change	NC7WZ132K8X
NL37WZ16USG	No Change	NC7WZ132K8X
NL37WZ14USG	No Change	NC7WZ132K8X
NL37WZ07USG	No Change	NC7WZ132K8X