Final Product/Process Change Notification

Document #:FPCN25572X33
Issue Date:02 Jun 2024

Title of Change:	Update to **FPCN25572X** - To include the reliability data for 5V MicroPak 8lds package Qualification of Vanguard Fab and Assembly related changes for Logic parts.
Proposed First Ship date:	09 Sep 2024 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):	Manufacturing Site Transfer

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	STARS Microelectronics, Thailand
	Vanguard International Semiconductor, Taiwan

Description and Purpose:

With reference to **FPCN25572X**, this FPCN presents the information solely for 5V MicroPak 8lds package and the pertinent reliability data.

	From	**To**
Fab Site	TPSCo and Diodes Maine	Vanguard International Semiconductor (VIS)
Assembly Site	Stars, Hana, UTAC	Stars
Wire	PCC, Au, Au	PCC
Mold Compound	EME G700LTD, CEL9220HF13H, G770HCD	EME G700LTD
Die Attach	HR-5104, 8006NS, 8006NS	HR-5104

Reliability Data Summary:

QV DEVICE NAME : NC7WZ132L8X
RMS : S91332
PACKAGE : MicroPAk 8L (UQFN-8)

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	0/77
Preconditioning	J-STD-020 JESD-A113	MSL 1@ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only	-	0/77
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/77
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/77
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec	-	0/77

Electrical Characteristics Summary:

Electrical characteristics are not impacted and 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	Qualification Vehicle
NC7WZ132L8X	NC7WZ132L8X
NC7WZ126L8X	NC7WZ132L8X
NC7WZ125L8X	NC7WZ132L8X
NC7WZ08L8X	NC7WZ132L8X
NC7WZ02L8X	NC7WZ132L8X
NC7WZ00L8X	NC7WZ132L8X
NC7SZ74L8X	NC7WZ132L8X
NC7NZ34L8X	NC7WZ132L8X
NC7NZ17L8X	NC7WZ132L8X
NC7NZ14L8X	NC7WZ132L8X
NC7NZ04L8X	NC7WZ132L8X
NC7WZ240L8X	NC7WZ132L8X
NC7WZ241L8X	NC7WZ132L8X

NC7WZ32L8X	NC7WZ132L8X
NC7WZ38L8X	NC7WZ132L8X
NC7WZ86L8X	NC7WZ132L8X