



Final Product/Process Change Notification

Document #:FPCN25572Z25

Issue Date: 05 Mar 2024

Title of Change:	Update to FPCN25572Z -To include the reliability data of SOICW-20 package parts for the Qualification of Vanguard Fab and Assembly related changes for Logic parts.
Proposed Changed Material First Ship Date:	12 Sep 2024 or earlier if approved by customer
Current Material Last Order Date:	20 Nov 2023 <i>Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.</i>
Current Material Last Delivery Date:	N/A <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>
Product Category:	Active components – Integrated circuits
Contact information:	Contact your local onsemi Sales Office or logic.fpcn@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Sample Availability Date:	31 Mar 2024
PPAP Availability Date:	05 Apr 2024
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. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com .
Change Category	
Category	Type of Change
Process - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor, New wafer diameter
Equipment	Production from a new equipment/tool which uses a different basic technology or which due to its unique form or function can be expected to influence the integrity of the final product
Data Sheet	Change of datasheet parameters/electrical specification (min./max./typ. values) and/or AC/DC specification
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Die attach material, Change of wire bonding

Description and Purpose:

With reference to **FPCN25572Z**, this FPCN presents the information solely for SOICW-20 package and the pertinent reliability data.

	From	To
Fab Site	Tower Semiconductor	Vanguard International Semiconductor (VIS)
Wafer Size	150 mm	200 mm

Assembly changes as shown in the table below:

	From	To	
Assembly Site	onsemi Carmona	onsemi Carmona	Greatek
Bond Wire	0.8 mil Au, 0.8 mil Cu	1 mil PCC	1 mil PCC
Die Attach	CRM-1076WB	CRM-1076WB	EN4900GC
Mold Compound	G600	G600	G600F
Case Outline	751D-05	751D-05	751BJ

Reason / Motivation for Change:

Source/Supply/Capacity Changes Process/Materials Change

Anticipated impact on fit, form, function, reliability, product safety or manufacturability:

The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded.

No anticipated impacts.

Sites Affected:

onsemi Sites

onsemi Carmona, Philippines

External Foundry/Subcon Sites

Greatek Electronics Inc., Taiwan

Vanguard International Semiconductor, Taiwan

Marking of Parts/ Traceability of Change:

Custom source on label will show TW instead of US/IL to indicate new die source from Vanguard. Changed material may be identified by plant code or lot code too.

Reliability Data Summary:

➤ Refer to embedded excel RMS O89396 and O89402.

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.

Electrical Characteristics Summary:

	From	To
Datasheet	Current Revision	New Revision
Absolute Max Voltage Rating	7 V	6.5 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
NLV74HC541ADWR2G	MC74HC541ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLVHCT574ADWR2G	MC74HCT574ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLVHCT541ADWR2G	MC74HCT541ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLVHCT373ADWR2G	MC74HCT373ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLVHCT273ADWR2G	MC74HCT273ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLVACT541DWR2G	MC74ACT541DWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HCT574ADWRG	MC74HCT574ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HCT573ADWRG	MC74HCT573ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HCT541ADWRG	MC74HCT541ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HC574ADWR2G	MC74HC574ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HC573ADWR2G	MC74HC573ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HC374ADWR2G	MC74HC374ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HC373ADWR2G	MC74HC373ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HC273ADWR2G	MC74HC273ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HC245ADWR2G	MC74HC245ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G



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NLV74ACT244DWR2G	MC74ACT244DWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLVACT573DWR2G	MC74ACT573DWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G
NLV74HC244ADWR2G	MC74HC244ADWR2G-Q	MC74HC244ADWR2G, NLV74HC244ADWR2G