

Final Product/Process Change Notification

Document #:FPCN25572XA Issue Date: 31 Oct 2023

Title of Change:	Qualification of Vanguard Fab and Some Assembly Related Changes for Logic part.	
Proposed First Ship date:	07 Feb 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	
Change Sub-Category(s):	Manufacturing Site Transfer	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
None	Vanguard International Semiconductor, Taiwan	

Description and Purpose:

The purpose of this notification is to notify customers of the qualification of Vanguard as a wafer supplier for these logic product portfolio.

QV DEVICE NAME: NL27WZ14DFT2G, MC74VHC1G14DFT1G

PACKAGE: SC88/A

	From	То
Fab Site	TPSCo	Vanguard

Reliability Summary: Refer to embedded excel RMS L85492, L82712 and S85493.

For below part numbers, the recommended replacement part number is having the same datasheet specifications as the existing part number except the ESD performance. Current part number is having 4kV HBM performance while the recommended part number is having 2kV HBM performance.

MPN	Replacement part
MC74VHC1G08EDFT2G	MC74VHC1G08DFT2G
MC74VHC1G09EDFT2G	MC74VHC1G09DFT2G
MC74VHC1G32EDFT2G	MC74VHC1G32DFT2G
MC74VHC1GT08EDFT2G	MC74VHC1GT08DFT2G
NL17SZ06EDFT2G	NL17SZ06DFT2G
NL17SZ07EDFT2G	NL17SZ07DFT2G
NL17SZ08EDFT2G	NL17SZ08DFT2G

TEM001793 Rev. F Page 1 of 2



Final Product/Process Change Notification

Document #:FPCN25572XA Issue Date: 31 Oct 2023

For NC7WZ14EP6X, the recommended replacement part number is having specification from -40 to 85C unlike the original part number which is having specification from -40 to 125C.

MPN	Replacement part
NC7WZ14EP6X	NC7WZ14P6X

Reliability Data Summary:

Please refer to the Reliability Summary Table.

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:

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 <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle
MC74VHC1G08EDFT2G	NL27WZ14DFT2G, MC74VHC1G14DFT1G
MC74VHC1G09EDFT2G	NL27WZ14DFT2G, MC74VHC1G14DFT1G
NC7WZ14EP6X	NL27WZ14DFT2G, MC74VHC1G14DFT1G
NL17SZ08EDFT2G	NL27WZ14DFT2G, MC74VHC1G14DFT1G
NL17SZ07EDFT2G	NL27WZ14DFT2G, MC74VHC1G14DFT1G
NL17SZ06EDFT2G	NL27WZ14DFT2G, MC74VHC1G14DFT1G
MC74VHC1GT08EDFT2G	NL27WZ14DFT2G, MC74VHC1G14DFT1G
MC74VHC1G32EDFT2G	NL27WZ14DFT2G, MC74VHC1G14DFT1G

TEM001793 Rev. F Page 2 of 2