



Final Product/Process Change Notification

Document #:FPCN25070ZD

Issue Date:06 Feb 2024

Title of Change:	Qualification of Alternate Lead Frame with C7025 base material for Specific QFN Devices at onsemi Seremban, Malaysia.		
Proposed Changed Material First Ship Date:	13 Aug 2024 or earlier if approved by customer		
Current Material Last Order Date:	N/A <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 Nanthiya.Krishnasamy@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:	01 Mar 2024		
PPAP Availability Date:	01 Feb 2024		
Additional Reliability Data:	Contact your local onsemi Sales Office or MohdAzizi.Azman@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 - Assembly	Change of direct material supplier, Change of leadframe base material		
Description and Purpose:			
onsemi is announcing the qualification of C7025 Base Material and adding HDS (HEASUNG DS) supplier for selected QFN devices in onsemi Seremban, Malaysia.			
This change is implemented to mitigate potential supply disruption; customers are encouraged to urgently review this change in order to minimize any potential impact to their supply chain.			
Upon implementation of this change, any of the qualified suppliers will be used to support demand.			
	From (DCI)	To (DCI or HDS)	
Lead Frame Supplier	DCI	DCI	HDS
Base Material	EFTEC64T	EFTEC64T	C7025
Roughening	Non-Roughed	Non-Roughed	Roughed



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Due to the recent fire in a critical area of the PPF tool & operation cease at DCI, onsemi requires that customers approve this FPCN much faster than the standard notification period.

There is limited material currently available assembled with the current DCI lead frame. Therefore, the orders will be placed on hold as soon as the inventory of DCI lead frame material is depleted.

We are looking for your early approval to release orders and ship HDS lead frames prior to the proposed first ship date.

Customers should work with their local sales contacts to cancel or push orders as needed.

NOTE: There is no product marking change and product traceability will be maintained by lot and date code.

Reason / Motivation for Change:	Process/Materials Change,Source/Supply/Capacity Changes
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	External Foundry/Subcon Sites
onsemi Seremban, Malaysia	None
Marking of Parts/ Traceability of Change:	Product traceability will be maintained by date code.

Reliability Data Summary:

QV DEVICE NAME: NLSV4T244MUTAG

RMS: S92834

PACKAGE: UQFN12 1.7x2.0, 0.4P

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/84
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, HAST for surface mount pkgs only		0/84
Temperature Cycling	JESD22-A104	Ta= -65°C to + 150°C	500 cyc	0/84
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	264 hrs	0/84
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/10
Solderability	JSTD002	Ta = 245°C, 5 sec		0/15
Physical Dimensions	JESD22-B120			

NOTE: AEC-1pager is attached.

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/s



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Electrical Characteristics Summary:

Electrical characteristics are not impacted.

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
NLV SX4014MUTAG	#NONE	NLSV4T244MUTAG
NLSV4T244MUTAG	#NONE	NLSV4T244MUTAG

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NLVSX4014MUTAG		NLSV4T244MUTAG	#NONE	