



Final Product/Process Change Notification

Document #:FPCN24526ZA

Issue Date:11 Apr 2024

Title of Change:	Qualification of Alternate Lead Frame with C7025 base material for UQFN12 1.7 x 2.0									
Proposed Changed Material First Ship Date:	18 Oct 2024 or earlier if approved by customer									
Current Material Last Order Date:	03 Jun 2024 <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:	17 Oct 2024 <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 Cyrus.Velasquez@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:	04 Apr 2024									
PPAP Availability Date:	04 Apr 2024									
Additional Reliability Data:	Contact your local onsemi Sales Office or Andy.Esteva@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 Tarlac, Philippines is announcing the qualification of C7025 Base Material and HDS (HAESUNG DS CO., Ltd) as a new lead frame supplier for UQFN12 1.7 x 2.0 devices. This change will be implemented to mitigate supply disruption as the current supplier has ceased operation and can no longer support Last Time Buy. onsemi has a very limited supply of the current lead frame and customers are encouraged to review this change in order to minimize any potential impact to their supply chain. Once the existing inventory of the current lead frame has been depleted, onsemi will immediately implement the new lead frame. Customers not wishing to receive material assembled with the new lead frame will need to work with their local sales contact to push out orders. <table><tr><th></th><th>From</th><th>To</th></tr><tr><td>Lead frame Supplier</td><td>DCI</td><td>HDS</td></tr><tr><td>Base Material</td><td>EFTEC64 1/2H</td><td>C7025 1/2H</td></tr></table>			From	To	Lead frame Supplier	DCI	HDS	Base Material	EFTEC64 1/2H	C7025 1/2H
	From	To								
Lead frame Supplier	DCI	HDS								
Base Material	EFTEC64 1/2H	C7025 1/2H								
Note: There is no product marking change as a result of this change.										

Reason / Motivation for Change:	Source/Supply/Capacity Changes Process/Materials Change		
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	<p>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.</p> <p>No anticipated impacts.</p>		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Tarlac, Philippines		None	
Marking of Parts/ Traceability of Change:	Product traceability will be maintained by date code		

Reliability Data Summary:

QV DEVICE NAME: NLVSX5004MUTAG

RMS: S83680

PACKAGE: UQFN12

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST for surface mount pkgs only		0/480
Temperature Cycling	JESD22-A104	Ta= - 65°C to +150°C	500 cyc	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/30
Solderability	JSTD002	Ta = 245°C, 5 sec		0/45
Physical Dimensions	JESD22-B120			0/30

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



Final Product/Process Change Notification

Document #:FPCN24526ZA

Issue Date:11 Apr 2024

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
NLVSX5004MUTAG	#NONE	NLVSX5004MUTAG