

Final Product/Process Change Notification Document #:FPCN25070XD Issue Date: 06 Oct 2023

Title of Change:	Qualification of Alternate Lead Frame with C7025 base material for Specific QFN Devices at onsemi Seremban, Malaysia.		
Proposed First Ship date:	13 Jan 2024 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or <u>Nanthiya.Krishnasamy@onsemi.com</u>		
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 MohdAzizi.Azman@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:	Product traceability will be maintained by date code.		
Change Category:	Assembly Change		
Change Sub-Category(s):	Material Change		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Seremban, Malaysia		None	
Description and Description			

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 (DCl or HDS)	
Lead Frame Supplier	DCI	DCI	HDS
Base Material	EFTEC64T	EFTEC64T	C7025
Roughening	Non-Roughed	Non-Roughed	Roughed

Due to the recent fire in a critical area of the PPF tool 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.

If a customer does not wish to receive product assembled with the new HDS lead frame, they should take action to cancel or push out all future orders until such time that customer is willing to accept material assembled with HDS lead frame.



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. Since there is currently very limited inventory available of the current material, any future orders and shipments will be with the new material. Please take the necessary actions.

Reliability Data Summary:

QV DEVICE NAME: ESDR0502NMUTAG RMS: S83623 PACKAGE: UDFN6 1.2x1.0 - Au Wire

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, HAST for surface mount pkgs only		0/84
TC	JESD22-A104	Ta= -65°C to +150°C	500 сус	0/84
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/84
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/30
SD	JSTD002	Ta = 245°C, 5 sec		0/15

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 <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle
ESDR0502NMUTAG	ESDR0502NMUTAG
ESDR0502NMUTBG	ESDR0502NMUTAG
NCS2300MUTAG	ESDR0502NMUTAG