

Final Product/Process Change Notification Document #:FPCN25070XJ

Issue Date:25 Jun 2024

Title of Change:	Qualification of New Alternate Lead Frame with C7025 base material for Specific QFN Devices at onsemi Seremban, Malaysia.		
Proposed First Ship date:	30 Sep 2024 or earlier if approved by customer		
Contact Information:	Contact your local onse	Contact your local onsemi Sales Office or Nanthiya.Krishnasamy@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 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 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 will be implemented to mitigate supply disruption as the current supplier has ceased operation and can no longer support Last Time Buy. onsemi requires that customers approve this FPCN much faster than the standard notification period.

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.

Upon implementation of this change, any of the qualified suppliers will be used to support demand.

	From (DCI)	To (DCI o	r HDS)
Lead Frame Supplier	DCI	DCI	HDS
Base Material	EFTEC64T	EFTEC64T	C7025
Roughening	Non-Roughed	Non-Roughed	Roughed

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

# onsemi

**Reliability Data Summary:** 

# QV DEVICE NAME: NB3U23CMNTAG RMS: 89454 PACKAGE: UDFN6 1.2x1.4, 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	1000 cyc	0/84
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/84
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/ 15
Physical Dimensions	JESD22-B120			

# QV DEVICE NAME: TF412T5G RMS: 84908 PACKAGE: XDFN3, 1.0x0.6, 0.35P

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	1000 сус	0/84
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/84
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/ 15
Physical Dimensions	JESD22-B120			

## **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**.

Part Number	Qualification Vehicle
TF412ST5G	TF412T5G
TF412T5G	TF412T5G
NB3U23CMNTAG	NB3U23CMNTAG
LMV982MUTAG	NB3U23CMNTAG