



# Initial Product/Process Change Notification

Document #: IPCN25070Z

Issue Date: 14 Dec 2022

<b>Title of Change:</b>	Qualification of Alternate Lead Frame with either C7025 or A194ESH base material for Specific QFN Devices at onsemi Seremban, Malaysia.
<b>Proposed Changed Material First Ship Date:</b>	30 Sep 2023 or earlier if approved by customer
<b>Current Material Last Order Date:</b>	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>
<b>Current Material Last Delivery Date:</b>	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>
<b>Product Category:</b>	Active components – Integrated circuits
<b>Contact information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Nanthiya.Krishnasamy@onsemi.com">Nanthiya.Krishnasamy@onsemi.com</a>
<b>PCN Samples Contact:</b>	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.
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:MohdAzizi.Azman@onsemi.com">MohdAzizi.Azman@onsemi.com</a>
<b>Type of Notification:</b>	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 6 months prior to implementation of the change. In case of questions, contact < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> >.
<b>Change Category</b>	
<b>Category</b>	<b>Type of Change</b>
Process - Assembly	Change of direct material supplier, Change of leadframe base material

**Description and Purpose:**

onsemi is announcing the intent to qualify either C7025 or A194ESH as an alternative base material for specific QFN devices in onsemi Seremban, Malaysia.

FPCN may be issued by phases based in the timing of qualification completion.

	From		To	
Lead Frame Supplier	DCI	DCI	HDS	AAMI
Base Material	EFTEC64T	EFTEC64T	C7025	A194ESH
Roughening	Non-Roughed	Non-Roughed	Roughed	Roughed

<b>Reason / Motivation for Change:</b>	Process/Materials Change		
<b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability:</b>	The device will be qualified and validated based on the same Product Specification. No anticipated impacts.		
<b>Sites Affected:</b>			
<b>onsemi Sites</b>		<b>External Foundry/Subcon Sites</b>	
onsemi Seremban, Malaysia		None	
<b>Marking of Parts/ Traceability of Change:</b>	Product traceability will be maintained by date code.		

**Reliability Data Summary:**

**QV DEVICE NAME: NCV8715MX50TBG (Supplier: HDS)**

**PACKAGE: DFN-6**

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
TC	JESD22-A104	Ta= - 55°C to +150°C	1000 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

Estimated date for qualification completion: 31 December 2022

**QV DEVICE NAME: SZESD7451N2T5G (Supplier: HDS)**

**PACKAGE: XDFN-2**

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
TC	JESD22-A104	Ta= - 55°C to +150°C	1000 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

Estimated date for qualification completion: 31 December 2022

**QV DEVICE NAME: CAV25512HU5E-GT3 (Supplier: AAMI)**

**PACKAGE: UDFN-8**

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
TC	JESD22-A104	Ta= - 55°C to +150°C	1000 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

Estimated date for qualification completion: 28 February 2023

**QV DEVICE NAME: NLSV4T244MUTAG (Supplier: HDS)**

**PACKAGE: UQFN-12**

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
TC	JESD22-A104	Ta= - 55°C to +150°C	1000 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

Estimated date for qualification completion: 31 December 2022

**QV DEVICE NAME: NB3U23CMNTAG (Supplier: HDS)**

**PACKAGE: UDFN-6**

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
TC	JESD22-A104	Ta= - 55°C to +150°C	1000 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

Estimated date for qualification completion: 31 March 2023

**Electrical Characteristics Summary:**

Electrical characteristics are not impacted.



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## 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
NLVSX4014MUTAG	NA	NLSV4T244MUTAG
NCV8702MX28TCG	NA	NCV8715MX50TBG
NCV8702MX30TCG	NA	NCV8715MX50TBG
NCV8703MX18TCG	NA	NCV8715MX50TBG
NCV8703MX30TCG	NA	NCV8715MX50TBG
NCV8703MX33TCG	NA	NCV8715MX50TBG
NCV8715MX18TBG	NA	NCV8715MX50TBG
NCV8715MX33TBG	NA	NCV8715MX50TBG
NLSV4T244MUTAG	NA	NLSV4T244MUTAG
NCV8715MX30TBG	NA	NCV8715MX50TBG
CAV25512HU5E-GT3	NA	CAV25512HU5E-GT3
CAV24C512HU5EGT3-TE	NA	CAV25512HU5E-GT3
CAV24C512HU5EGT3	NA	CAV25512HU5E-GT3
NLVX1G74MUTCG	NA	NB3U23CMNTAG
NLVPCA9306AMUTCG	NA	NB3U23CMNTAG
NLVSX4373MUTAG	NA	NB3U23CMNTAG
SZESD7471N2T5G	NA	SZESD7451N2T5G
SZESD7461N2T5G	NA	SZESD7451N2T5G
SZESD7451N2T5G	NA	SZESD7451N2T5G
SZESD7421N2T5G	NA	SZESD7451N2T5G
NCV8752BMX33TCG	NA	NCV8715MX50TBG
NCV8752BMX28TCG	NA	NCV8715MX50TBG
NCV8752BMX18TCG	NA	NCV8715MX50TBG
NCV8752AMX28TCG	NA	NCV8715MX50TBG
NCV8752AMX18TCG	NA	NCV8715MX50TBG
NCV8715MX50TBG	NA	NCV8715MX50TBG