



Final Product/Process Change Notification

Document #:FPCN25070XC

Issue Date:11 Oct 2023

Title of Change:	Qualification of Alternate Lead Frame with A194ESH base material for Specific QFN Devices at onsemi Seremban, Malaysia.
Proposed First Ship date:	18 Jan 2024 or earlier if approved by customer
Contact Information:	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 A194ESH Base Material and adding AAMI (Advanced Assembly Materials (M) Sdn. Bhd.) 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 AAMI)	
Lead Frame Supplier	DCI	DCI	AAMI
Base Material	EFTEC64T	EFTEC64T	A194ESH
Plating Type	Ni, Pd & AuAg	Ni, Pd, AuAg	Ni, Pd & Au
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 AAMI 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 AAMI lead frame.



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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: NIS6420MT2TWG

RMS: S91494

PACKAGE: WQFN12 3.0x2.0, 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 cyc	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		0/10
SD	JSTD002	Ta = 245°C, 5 sec	1 hr	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 **PCN Customized Portal**.

Part Number	Qualification Vehicle
NIS6420MT1TWG	NIS6420MT2TWG
NIS6420MT2TWG	NIS6420MT2TWG
NIS6432MT1TWG	NIS6420MT2TWG
NIS6432MT2TWG	NIS6420MT2TWG
NIS6452MT1TWG	NIS6420MT2TWG
NIS6452MT2TWG	NIS6420MT2TWG

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NIS6420MT1TWG		NIS6420MT2TWG	NA	
NIS6432MT1TWG		NIS6420MT2TWG	NA	
NIS6432MT2TWG		NIS6420MT2TWG	NA	
NIS6452MT1TWG		NIS6420MT2TWG	NA	
NIS6452MT2TWG		NIS6420MT2TWG	NA	
NIS6420MT2TWG		NIS6420MT2TWG	NA	