

Description and Purpose:

Final Product/Process Change Notification

Document #:FPCN24526XC Issue Date:25 Oct 2022

Title of Change:	Qualification of Alterna	Qualification of Alternate Lead Frame with C7025 base material for XDFN 4 1x1		
Proposed First Ship date:	30 Jan 2023 or earlier i	30 Jan 2023 or earlier if approved by customer		
Contact Information:	Contact your local onse	Contact your local onsemi Sales Office or Jaroslav.Supina@onsemi.com		
PCN Samples Contact:	Sample requests are to Initial PCN or Final PCN Samples delivery timin	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 onse	Contact your local onsemi Sales Office or Andy.Esteva@onsemi.com		
Type of Notification:	days prior to implemer onsemi will consider th	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 wi	Product traceability will be maintained by date code		
Change Category:	Assembly Change	Assembly Change		
Change Sub-Category(s):	Material Change	Material Change		
Sites Affected:				
onsemi Sites		External Foundry/Subcon Sites		
onsemi Tarlac, Philippines		None		

onsemi is announcing the qualification of C7025 Base Material and adding AAMI (Advanced Assembly Materials International Ltd.) supplier for QFN devices in onsemi Tarlac, Philippines. 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	То	
Lead frame Supplier	Dynacraft Industries	Dynacraft Industries	Advanced Assembly Materials International Ltd.
Base Material	EFTEC64 1/2H	EFTEC64 1/2H	C7025 1/2H
Plating type	Ni, Pd, Au Ag	Ni, Pd, Au Ag	Ni, Pd, Au
Roughened	non-rough	non-rough	roughed

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

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Reliability Data Summary:

QV DEVICE NAME: NL3S2223MUTBG

RMS#: S42761

PACKAGE: UQFN10 1.4x1.8 Au wire

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C		0/240
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/720
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 5 sec		0/45

QV DEVICE NAME: NCP81258MNTBG

RMS#: 057784

PACKAGE: DFN8 2x2 PCC wire

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	2016 hrs	0/240
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/720
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 5 sec		0/45

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	
NCP161AMX180TBG	NL3S2223MUTBG	
NCP170BMX300TCG	NL3S2223MUTBG	
NCP170AMX285TCG	NL3S2223MUTBG	
NCP105AMX180TCG	NCP81258MNTBG	

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Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP161AMX180TBG		NL3S2223MUTBG		
NCP170BMX300TCG		NL3S2223MUTBG		
NCP170AMX285TCG		NL3S2223MUTBG		