

Final Product/Process Change Notification

Document #:FPCN24526XJ Issue Date:11 Apr 2024

Title of Change:		Qualification of Alternate Lead Frame with C7025 base material for XDFN8 1.6x1.2 and Wire Change from Au to PCC		
Proposed First Ship date:	18 Jul 2024 or earlier if	18 Jul 2024 or earlier if approved by customer		
Contact Information:	Contact your local onse	Contact your local onsemi Sales Office or Cyrus.Velasquez@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 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		

Description and Purpose:

onsemi Tarlac, Philippines is announcing the qualification of C7025 Base Material and AAM (Advanced Assembly Materials International Ltd.) as a new lead frame supplier for XDFN8 1.6x1.2 devices. 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 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.

	From	То	
Wire Material	Gold	PCC	
Lead frame Supplier	DCI	AAM	
Base Material	EFTEC64 1/2H	C7025 1/2H	

Note: There is no product marking change as a result of this change

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Reliability Data Summary:

QV DEVICE NAME: NCP186AMX120TAG

RMS: S89404/S63739_S64669

PACKAGE: XDFN 8

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD- A113	MSL 1 @ 260°C, Pre TC, uHAST for surface mount packages only		0/520
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
Highly Accelerated Stress Test	JESD22 A110	Ta= +130°C for 96 hours, RH = 85%, 18.8psig, bias	96 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Solderability	JSTD002	Ta = 245°C, 5 sec		0/ 45
Physical Dimensions	JESD22-B120			0/30

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	
NCP154MX150280TAG	NCP186AMX120TAG	
NCP154MX180290TAG	NCP186AMX120TAG	
NCP154MX280270TAG	NCP186AMX120TAG	
NCP154MX330300TAG	NCP186AMX120TAG	
NCP154MX330285TAG	NCP186AMX120TAG	
NCP154MX330280TAG	NCP186AMX120TAG	
NCP154MX280280TAG	NCP186AMX120TAG	

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