Final Product/Process Change Notification

Document #:FPCN24526XH
Issue Date:19 Mar 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:	26 Jun 2024 or earlier if approved by customer
Contact Information:	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 onsemi Sales Office or Andy.Esteva@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 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. onsemi has a very limited supply of the current lead frame and customers are encouraged to review this change in the next 90 days 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	To
Wire Bond Supplier	Tanaka	NMC
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

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* ***PCN Customized Portal.***

Part Number	Qualification Vehicle
NCP186AMX120TAG	NCP186AMX120TAG
NCP186AMX150TAG	NCP186AMX120TAG
NCP186AMX175TAG	NCP186AMX120TAG
NCP186AMX180TAG	NCP186AMX120TAG
NCP186AMX250TAG	NCP186AMX120TAG
NCP186AMX280TAG	NCP186AMX120TAG
NCP186BMX330TAG	NCP186AMX120TAG
NCP186BMX250TAG	NCP186AMX120TAG
NCP186BMX185TAG	NCP186AMX120TAG
NCP186BMX180TAG	NCP186AMX120TAG
NCP186BMX150TAG	NCP186AMX120TAG
NCP186AMX390TAG	NCP186AMX120TAG
NCP186AMX330TAG	NCP186AMX120TAG
NCP186AMX300TAG	NCP186AMX120TAG
NCP186AMX295TAG	NCP186AMX120TAG