ON Semiconductor®

Initial Product/Process Change Notification

Document # : IPCN22380X
Issue Date: 25 July 2018

Title of Change:	Planned assembly and test capacity expansion for eFuse DFN10, 3x3 packages at ON Semiconductor's factory in Tarlac, Philippines and planned change in lead frame for On semiconductor Seremban, Malaysia plant to PPF lead frame for standardization on all legacy eFuse devices.
Proposed First Ship date:	25 January 2019
Contact Information:	Contact your local ON Semiconductor Sales Office or <ffy3bt@onsemi.com>
Samples:	*Samples should be available after completion of qualification.* Contact your local ON Semiconductor Sales Office or <PCN.Samples@onsemi.com> 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.
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. IPCNs are typically issued 30 days prior to the issuance of the Final Change Notice (FPCN). 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 90 days prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>
Change Part Identification:	Change in marking identification for ON Seremban and OSPI Tarlac.

	From	To
Product marking change	*XX* *AYW* *Where* *XX : device marking* *A: R for SBN site* *YW: 2 digit date code*	*XX* *AYW* *Where* *XX : device marking* *A: R for SBN Malaysia / t for OSPI Tarlac Philippines* *YW: 2 digit date code*

Change Category:

☐ Wafer Fab Change ☑ Assembly Change ☑ Test Change ☐ Other _____

Change Sub-Category(s):

☑ Manufacturing Site Addition
☐ Manufacturing Site Transfer
☐ Manufacturing Process Change
☑ Material Change
☐ Product specific change
☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: _____

Sites Affected:	ON Semiconductor Sites: ON Seremban, Malaysia ON Tarlac City, Philippines	External Foundry/Subcon Sites: None

Description and Purpose:

	Before Change Description	After Change Description
LeadFrame	*DNP Cu Ag*	*PPF lead frame (SBN and Tarlac)*
Die Attach	*SR4*	*CRM1084P(SBN and Tarlac)*
Mold Compound	*EMEG760*	*G770HMD (SBN and Tarlac)*
Assembly Site	*SBN S1, Malaysia*	*SBN S1, Malaysia and OSPI Tarlac Philippines*
Test Site	*SBN S1, Malaysia*	*SBN S1, Malaysia and OSPI Tarlac Philippines*

	From	To
Product marking change	*XX* *AYW* *Where* *XX : device marking* *A: R for SBN site* *YW: 2 digit date code*	*XX* *AYW* *Where* *XX : device marking* *A: R for SBN Malaysia / t for OSPI Tarlac Philippines* *YW: 2 digit date code*

Qualification Plan:

OSPI Tarlac NIS5132MN1TXG Au wire PPF Lead Frame
QV DEVICE NAME: NIS5132MN1TXG
RMS#47127
PACKAGE: DFN10, 3x3, 0.5P

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Temp = 125C, bias = 80% of rated V	504 hrs
HTOL	JESD22-A108	Temp = see comments, bias = 1.2 x Vcc, not to exceed abs max voltage	
HTSL	JESD22-A103	Temp =150C	504 hrs
TC	JESD22-A104	Temp = -55°C to +150°C; for 500 cycles	500 cyc
HAST	JESD22-A110	Temp = 130C, RH=85%, ~18.8 psig bias = 100% of rated V or 100V max	48 hrs
uHAST	JESD22-A118	Temp = 130C, RH=85%, ~18.8 psig	48 hrs
PC	J-STD-020 JESD-A113	IR reflow at 260C	
RSH	JESD22- B106	Ta=265C 10 sec dwell B106	
SD	J STD 002B	Ta=245C 10 sec dwell B102	

SBN NIS5132MN1TXG Au wire PPF Lead Frame
QV DEVICE NAME: NIS5132MN1TXG
RMS#26688
PACKAGE: DFN10, 3x3, 0.5P

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=+125°C, for 1008 hours Vcc (max) at which dc and ac parametrics are guaranteed.	
HTSL	JESD22-A103	Ta =150°C for 1008 hrs	1008 hrs
TC	JESD22-A104	Temp = -55°C to +150°C; for 500 cycles	500 cyc
HAST	JESD22-A110	Temp = 130C, RH=85%, ~18.8 psig bias = 100% of rated V or 100V max	96 hrs
PC	J-STD-020 JESD-A113	J STD 020A , JA 113 IR reflow at 260°C, HAST, TC, AC	
SD	J STD 002B	Ta=245C 10 sec dwell B102	

Estimated date for qualification completion: 31 July 2018

List of Affected Parts:

Part Number	Qualification Vehicle
NIS5132MN1TXG	NIS5132MN1TXG
NIS5132MN2TXG	
NIS5132MN3TXG	
NIS5135MN1TXG	
NIS5135MN2TXG	
NIS5232MN1TXG	

NOTE:
Please be informed that there are Customer Specific parts impacted by this notice, thus MPN & CPN info will not be reflected in the parts list of this Generic document. Instead please click the link to the addendum copy provided in the email notification to see full list of affected products specific to your company.