Final Product/Process Change Notification

Document #:FPCN23819X
Issue Date:28 Dec 2021

Title of Change:	Qualify mold compound EME-G770HM type D for XDFN devices assembled in onsemi Leshan facility.
Proposed First Ship date:	04 Apr 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Jim.Peng@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 c.l.yang@lps.com.cn
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:	Assembly Lot Number
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
Leshan Phoenix Semiconductor, China	None

Description and Purpose:

Upon the expiration of this PCN, these devices will be built with existing or new mold compound at the same site. Datasheet specifications and product electrical performance remain unchanged. Reliability qualification and full electrical characterization over temperature was performed.

Material to be change	Before Change Description	After Change Description
Mold Compound	EME-G750N	EME-G750N EME-G770HM type D

There is no part number and product marking change as a result of this change.

Reliability Data Summary:

Qual Vehicle Device: NSVBAS21MX2WT5G
RMS: 77121
Package: X2DFN

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= max, V=100% rated V	1008 hrs	0/231
HTSL	JEDS22- A103	Temp.=150°C,no bias	2016 hrs	0/231
PC	JESD22-A113	MSL 1 @ 260 °C	Before TC, UHAST, HAST, IOL	0/924
HAST	JESD22 A110	130C/85%RH, 80% rated V or 100V max	192 hrs	0/231
TC	JESD22 A104	Ta= - 65°C to +150°C	1000 cyc	0/231
UHAST	JESD22 A118	Ta=130C, 85% RH, no bias	96 hrs	0/231
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C, On/off = 2 min	30000 cycs	0/231
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30

Qual Vehicle Device: SZNZ8F47VMX2WT5G
RMS: 76656 / 79361
Package: X2DFN

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= max, V=100% rated V	1008 hrs	0/231
HTSL	JEDS22- A103	Temp.=150°C,no bias	2016 hrs	0/231
SSOP	MILSTD750-1	Tj= max, V=100% rated IZ max	2016hrs	0/231
PC	JESD22-A113	MSL 1 @ 260 °C	Before H3TRB, TC, UHAST, IOL	0/924
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	2016 hrs	0/231
TC	JESD22 A104	Ta= - 65°C to +150°C	1000 cyc	0/231
UHAST	JESD22 A118	Ta=130C, 85% RH, no bias	96 hrs	0/231
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C, On/off = 2 min	30000 cycs	0/231
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30

Qual Vehicle Device: SNSR201MXT5G
RMS: 77684
Package: X2DFN

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= max, V=100% rated V, 1008 Hrs	1008 hrs	0/231

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
NSR0240MXWT5G	NSVBAS21MX2WT5G
NSR201MXT5G	NSVBAS21MX2WT5G + SNSR201MXT5G
ESD5581N2T5G	SZNZ8F47VMX2WT5G
ESD7241N2T5G	SZNZ8F47VMX2WT5G
ESD7410N2T5G	SZNZ8F47VMX2WT5G
ESD7462N2T5G	SZNZ8F47VMX2WT5G
ESD7551N2T5G	SZNZ8F47VMX2WT5G
ESD7571N2T5G	SZNZ8F47VMX2WT5G
ESD8551N2T5G	SZNZ8F47VMX2WT5G
ESDM3033N2T5G	SZNZ8F47VMX2WT5G
ESDU3121MXT5G	SZNZ8F47VMX2WT5G
ESDM3551N2T5G	SZNZ8F47VMX2WT5G
ESDM3051N2T5G	SZNZ8F47VMX2WT5G