

## Final Product/Process Change Notification

Document #:FPCN23819ZB Issue Date:30 Jun 2022

Title of Change:	Qualify mold compound EME-G770HM type D for XDFN devices assembled in onsemi Leshan, China.	
Proposed Changed Material First Ship Date:	01 Jan 2023 or earlier if approved by customer	
Current Material Last Order Date:	01 Oct 2022 Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.	
Current Material Last Delivery Date:	31 Dec 2022 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory	
Product Category:	Active components – Discrete components	
Contact information:	Contact your local onsemi Sales Office or Jim.Peng@onsemi.com	
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order.  Sample requests are to be submitted no later than 45 days after publication of this change notification.  Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
Sample Availability Date:	20 Aug 2022	
PPAP Availability Date:	31 Jul 2022	
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. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.	
Change Category		
Category	Type of Change	
Process - Assembly	Change of mold compound	

## **Description and Purpose:**

Upon the expiration of this PCN, these devices will be built with 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 for qualification vehicle device.

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

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

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Reason / Motivation for Change:	Process/Materials Change	
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded.  No anticipated impacts.	
Sites Affected:		
onsemi Sites		External Foundry/Subcon Sites
onsemi Leshan, China		None

Marking of Parts/ Traceability of Change:

Assembly Date Code

**Reliability Data Summary:** 

Qual Vehicle Device: NSVBAS21MX2WT5G

RMS: 77121 Package: X2DFN

Test	Specification	Condition	Interval	Results
HTRB	MIL-STD-750	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	MIL-STD750-1	Tj= max, V=100% rated V	1008 hrs	0/231
HTSL	JEDS22 A103	Temp.=150°C,no bias	2016 hrs	0/231
SSOP	MIL-STD750-1	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

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## Final Product/Process Change Notification

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Qual Vehicle Device: SNSR201MXT5G

RMS: 77684 Package: X2DFN

Test	Specification	Condition	Interval	Results
HTRB	MIL-STD750-1	Tj= max, V=100% rated V, 1008 Hrs	1008 hrs	0/231

## NOTE: AEC-1pager is attached.

To view attachments:

- 1. Download pdf copy of the PCN to your computer
- 2. Open the downloaded pdf copy of the PCN
- 3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
- 4. Then click on the attached file

## **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**.

Current Part Number	New Part Number	Qualification Vehicle
SZESDM3551N2T5G	NA	SZNZ8F47VMX2WT5G
SZESD8551N2T5G	NA	SZNZ8F47VMX2WT5G
SZESD7571N2T5G	NA	SZNZ8F47VMX2WT5G
SZESD7551N2T5G	NA	SZNZ8F47VMX2WT5G
SZESD7462N2T5G	NA	SZNZ8F47VMX2WT5G
SZESD7410N2T5G	NA	SZNZ8F47VMX2WT5G
SZESD7241N2T5G	NA	SZNZ8F47VMX2WT5G
NSVR201MXT5G	NA	NSVBAS21MX2WT5G + SNSR201MXT5G

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