



Final Product/Process Change Notification

Document #:FPCN23990Z

Issue Date:07 Feb 2022

Title of Change:	Wire conversion from 2.0 mil Au to 2.0 mil bare Cu wire and change of mold compound impacting Low VCE(sat) BJTs assembled in SOIC-8 package	
Proposed Changed Material First Ship Date:	12 Aug 2022 or earlier if approved by customer	
Current Material Last Order Date:	N/A <i>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.</i>	
Current Material Last Delivery Date:	N/A <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>	
Product Category:	Active components – Discrete components	
Contact information:	Contact your local onsemi Sales Office	
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:	N/A	
PPAP Availability Date:	N/A	
Additional Reliability Data:	Contact your local onsemi Sales Office or Nhel.Malonzo@onsemi.com	
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, Change of wire bonding	
Description and Purpose:		
Conversion of Copper wire from 2.0 mils Au wire into 2.0 mils Bare Cu wire and mold compound changes from EME G600 to EME G700LS.		
Purpose of the changes for material standardized.		
	Before Change Description	After Change Description
Bond Wire	2.0 mils Au	2.0 mils Bare Cu
Mold Compound	EME G600	EME G700LS
There is no product marking change as a result of this change.		

Reason / Motivation for Change:	Process/Materials Change			
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	<p>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.</p> <p>No anticipated impacts.</p>			
Sites Affected:				
onsemi Sites	External Foundry/Subcon Sites			
onsemi Carmona, Philippines	None			
Marking of Parts/ Traceability of Change:	Customers may receive these parts once FPCN expired. These parts can be identified through date code marking.			
Reliability Data Summary: QV DEVICE NAME : NSV40302PDR2G RMS: 077475 PACKAGE: SOIC 8				
Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	2016 hrs	0/240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30 000 cyc	0/237
TC	JESD22-A104	Ta= -55°C to +150°C	2000 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/240
AC	JESD22-A102	121°C, 100% RH, 15 PSIG	96 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/957
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 5 sec		0/45
PD	JESD22 B-100	Per POD		0/30
NOTE: AEC-1pager is attached. <i>To view attachments:</i> 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.				



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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
NSV40300MDR2G	NA	NSV40302PDR2G
NSV40301MDR2G	NA	NSV40302PDR2G
NSV40302PDR2G	NA	NSV40302PDR2G