

Final Product/Process Change Notification Document #:FPCN24789Z Issue Date:29 Sep 2022

Title of Change:	Au wire to Cu wire conversion for SC-70 Zener product			
Proposed Changed Material First Ship Date:	07 Apr 2023 or earlier if approved by customer			
Current Material Last Order Date:	31 Jan 2023 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:	06 Apr 2023 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 <u>Jim.Peng@onsemi.com</u>			
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 custom packing/label requirements.			
Sample Availability Date:	20 Nov 2022			
PPAP Availability Date:	31 Oct 2022			
Additional Reliability Data:	Contact your local onsemi Sales Office or <u>c.l.yang@lps.com.cn</u>			
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 wire bonding			

## **Description and Purpose:**

onsemi is notifying customer of its conversion from Au wire to bare Cu wire for SC-70 Zener product. Upon the expiration of this PCN, devices will be built with bare Cu wire at the same site. Datasheet specifications and product electrical performance remain unchanged. Reliability qualification and full electrical characterization over temperature were performed for qualification vehicle device. The Cu wire is with higher thermal conductivity and lower resistivity that benefits for customer application. This is to unify the wire material in assembly process to improve productivity also.

There is no change in fit, form or functions of the affected parts.

	From	То	
Bond Wire	0.8 mils Au wire	0.8 mils bare Cu wire	

## onsemi

	Motivation for Change:	Process/Materials Change	ls 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 Affe	ected:					
onsemi Sites External Foundry/Subcon Sites						
onsemi Leshan, China None			None			
Marking of Parts/ Traceability of Change:		Date Code	Date Code			
Reliabilit	ty Data Summary:					
QV DEVIC RMS: 853 PACKAGE	E NAME : SZNUP3125WTT 39 : SC-70	G				
Test	Specification	Con	dition	Interval	Result	
PC	J STD 020 , JESD22-A113	MSL 1 @ 260 °C		Before TC, UHAST, HAST	0/693	
UHAST	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 p	sig	96 hrs	0/231	
TC	JESD22-A104	Ta= - 65°C to +150°C		1000 сус	0/231	
HAST	JESD22-A110	110C/85%RH, ~3 psig, 80% rated	110C/85%RH, ~3 psig, 80% rated V, or 100V max			
HTRB	JESD22-A108	Tj = Max rate Tj for device, bias	= 100% of rated V for Q 101 Rev D	2016 hrs	0/231	
HISL	JEDS22- A103	Temp = $150^{\circ}$ C, no bias		2016 hrs	0/231	
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## Appendix A: Changed Products

## DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
SZNUP2125WTT3G		SZNUP3125WTT1G	NA	
SZNUP2125WTT1G		SZNUP3125WTT1G	NA	
SZNUP3125WTT1G		SZNUP3125WTT1G	NA	