



<b>Title of Change:</b>	Wire conversion from 0.8mils Au wire to 0.8mils bare Cu wire for SOT23 SL05 series device.						
<b>Proposed Changed Material First Ship Date:</b>	13 November 2018						
<b>Current Material Last Order Date:</b>	30 April 2018 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.						
<b>Current Material Last Delivery Date:</b>	28 September 2018 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.						
<b>Product Category:</b>	Active components – Discrete components						
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Coleen.Long@onsemi.com>						
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification.						
<b>Sample Availability Date:</b>	24 November 2017						
<b>PPAP Availability Date:</b>	22 November 2017						
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <Rui.Zhang@onsemi.com>.						
<b>Type of Notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor 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>.						
<b>Change Category:</b>	<b>Type of Change</b>						
Process – Assembly	Change of wire bonding						
<b>Description and Purpose:</b>  ON Semiconductor is notifying customer of its use 0.8mils bare Cu wire for SOT23 SL05 series device at ON Semiconductor's Leshan, China facility.  Upon the expiration of the PCN, devices will be built with 0.8mils bare Cu wire at the same site. Datasheet specifications and product electrical performance remain unchanged. Reliability Qualification and full electrical characterization over temperature have been performed.							
<table border="1"> <thead> <tr> <th>Material to be changed</th><th>Before Change Description</th><th>After Change Description</th></tr> </thead> <tbody> <tr> <td>Bonding Wire</td><td>0.8mil Au Wire</td><td>0.8mil Cu Wire</td></tr> </tbody> </table>		Material to be changed	Before Change Description	After Change Description	Bonding Wire	0.8mil Au Wire	0.8mil Cu Wire
Material to be changed	Before Change Description	After Change Description					
Bonding Wire	0.8mil Au Wire	0.8mil Cu Wire					
<b>Reason / Motivation for Change:</b>	<ul style="list-style-type: none"> <li><b>Change benefits for customer:</b> Copper wire with higher thermal conductivity and lower resistivity.</li> <li><b>Risk for late release for customer:</b> Longer lead time due to limited flexibility in terms of manufacturing and capacity planning.</li> </ul>						
<b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability</b>	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 ON Semiconductor in relation to the PCN, associated risks are verified and excluded.  No anticipated impacts.						



<b>Sites Affected:</b>	ON Semiconductor Sites: ON Leshan, China	External Foundry/Subcon Sites: None
<b>Marking of Parts/ Traceability of Change:</b>	Products assembled with 0.8mils bare Cu Wire from the ON Semiconductor facility will have a Finish Goods Date Code of WW27, 2018 or greater.	

**Reliability Data Summary:**

Qualification Vehicle: SZSL24T1G

PACKAGE: SOT23

Test	Specification	Condition	Interval	Results
PC	JESD22-A113	MSL 1 @ 260 °C	Before TC, AC, H3TRB, IOL	0/924
AC	JESD22-A102	121°C, 100% RH, ~15psig, unbiased	192 hrs	0/231
TC	JESD22-A104	Ta= - 65°C to +150°C	2000 cyc	0/231
H3TRB	JESD22-A101	85°C, 85% RH, V=80% rated V or 100V max.	2016 hrs	0/231
IOL	MIL-STD-750 (M1037)	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc	0/231
HTRB	MIL-STD750-1	Tj= max, V=100% rated V, 1008 Hrs	1008	0/231
HTSL	JESD22-A103	Temp.=165°C,no bias,2016hours	2016hrs	0/231
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30

**Note: AEC-1pager is attached.**

To access file attachments on pdf copy of PCN, please be guided by the steps below:

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/s

**Electrical Characteristic Summary:**

Three temperature characterization and ESD performance meet datasheet specification. Detail of Electrical characterization result is available upon request.

**List of Affected Parts:**

Current Part Number	Qualification Vehicle
SZSL05T1G	SZSL24T1G
SZSL15T1G	
SZSL24T1G	