



# Initial Product/Process Change Notification

Document #: IPCN24680X

Issue Date: 29 Jun 2022

<b>Title of Change:</b>	Pd-coated Cu wire qualification on SC74 transistor and Bias Resistor Transistor at onsemi Leshan, China facility.	
<b>Proposed First Ship date:</b>	30 Dec 2022 or earlier if approved by customer	
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Andy.Tao@onsemi.com">Andy.Tao@onsemi.com</a>	
<b>PCN Samples Contact:</b>	<p>Contact your local onsemi Sales Office.</p> <p>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.</p> <p>Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.</p>	
<b>Type of Notification:</b>	<p>This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact &lt;<a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>&gt;</p>	
<b>Marking of Parts/ Traceability of Change:</b>	Changed material will be identified by date code	
<b>Change Category:</b>	Assembly Change	
<b>Change Sub-Category(s):</b>	Material Change	
<b>Sites Affected:</b>		
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>	
Leshan Phoenix Semiconductor, China	None	
<b>Description and Purpose:</b>		
<p>onsemi is notifying customers of its use of 0.8 mils Pd-coated Cu wire for transistor devices assembled in SC74 at onsemi Leshan, China facility.</p> <p>Upon expiration of the FPCN, these devices will be built with 0.8 mils Pd-coated Cu wire.</p> <p>Datasheet specifications and product electrical performance remain unchanged.</p> <p>Reliability Qualification and full electrical characterization over temperature will be performed.</p>		
	<b>Before Change Description</b>	<b>After Change Description</b>
<b>Bond Wire</b>	0.8 mils bare Cu wire	0.8 mils Pd-coated Cu wire
There is no product marking change as a result of this change.		

**Qualification Plan:**

**QV DEVICE NAME: SMBT2001T1G/ SMBT2002T1G**

**PACKAGE: SC74**

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	2016 hrs
HTSL	JESD22-A103	Ta=150°C	2016 hrs
IOL	MIL-STD-750 Method 1037	Ta=+25°C, delta Tj=100°C On/off = 2 min	30K cyc
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	-
RSH	JESD22- B106	Ta = 265C, 10 sec	-
SD	JSTD002	Ta = 245C, 5 sec	-

Estimated date for qualification completion: **19 August 2022**

**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
HN1B01FDW1T1G	N/A