



Title of Change:	Pd-coated Cu wire qualification on SOT23 transistor and Bias Resistor Transistor at ON Semiconductor, Leshan, China facility
Proposed first ship date:	23 September 2016
Contact information:	Contact your local ON Semiconductor Sales Office or <andy.tao@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office or <andy.tao@onsemi.com>
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <S1016z@onsemi.com>
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 month prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.
Change Part Identification:	At the expiration of this FPCN devices will be assembled with Pd-coated Cu Wire at ON Semiconductor's existing Leshan facility. Products assembled with Pd-coated Cu Wire from the ON Semiconductor facility will have a Finish Goods Date Code of WW35, 2016 or greater
Change category:	☐ Wafer Fab Change ☒ Assembly Change ☐ Test Change ☐ Other _____

Change Sub-Category(s):
☐ Manufacturing Site Change/Addition

☐ Manufacturing Process Change

☒ Material Change

☐ Product specific change

☐ Datasheet/Product Doc change

☐ Shipping/Packaging/Marking

☐ Other: _____
Sites Affected:
☐ All site(s) applicable ☐ not applicable

☒ ON Semiconductor site(s) :
ON Leshan, China

☐ External Foundry/Subcon site(s)
Description and Purpose:

ON Semiconductor is notifying customer of its use of Pd-coated Cu wire for their impacted devices at ON Semiconductor's Leshan, China facility. Discrete products built with bipolar transistor are represented by this Process Change Notice.

At the expiration of this PCN, these devices will be built with Pd-coated Cu wire at the same site. Datasheet specifications and product electrical performance remain unchanged. Reliability Qualification and full electrical characterization over temperature has been performed.

Reliability Data Summary:**SOT23****BCX19LT1G**

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta= 150°C, 80% max rated V	1008 hrs	0/252
HTSL	JESD22-A103	Ta= 150C	1008 hrs	0/252
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C	15000 cyc	0/252
	(M1037)	On/off = 2 min		
	AEC-Q101			
TC	JESD22-A104	Ta= - 65°C to +150°C	1000 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/252
AC	JESD22-A102	121°C, 100% RH, ~15psig, unbiased	96 hrs	0/252
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90

**SOT23****MMBT2907ALT1G**

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta= 150°C, 80% max rated V	1008 hrs	0/252
HTSL	JESD22-A103	Ta= 150C	1008 hrs	0/252
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C	15000 cyc	0/252
	(M1037)	On/off = 2 min		
	AEC-Q101			
TC	JESD22-A104	Ta= - 65°C to +150°C	1000 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/252
AC	JESD22-A102	121°C, 100% RH, ~15psig, unbiased	96 hrs	0/252
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90

AEC 1 – Pager 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 Standard Parts:

Part Number	Qualification Vehicle
SBC817-16LT3G	BCX19LT1G
SBC807-16LT1G	MMBT2907ALT1G
SBC856ALT1G	MMBT2907ALT1G
SBC846ALT1G	BCX19LT1G
SMBT1231LT3G	MMBT2907ALT1G
SBC857CLT1G	MMBT2907ALT1G
SMMBT5089LT1G	BCX19LT1G
SMMBT5088LT1G	BCX19LT1G
SMMBT5401LT1G	MMBT2907ALT1G
SMMBT A14LT3G	BCX19LT1G
SMMBT A14LT1G	BCX19LT1G
SMMBT6427LT1G	BCX19LT1G
SMMBT6521LT1G	BCX19LT1G
SBCX19LT1G	MMBT2907ALT1G
NSVMMBT6520LT1G	MMBT2907ALT1G
NSVBC858BLT1G	MMBT2907ALT1G



SBC807-16LT3G	MMBT2907ALT1G
SMMBTA13LT1G	BCX19LT1G
SBC857ALT1G	MMBT2907ALT1G
NSVBC818-40LT1G	BCX19LT1G
NSVBSS63LT1G	MMBT2907ALT1G
SBCW33LT1G	BCX19LT1G
SBCW30LT1G	MMBT2907ALT1G
SMMBT5551LT3G	BCX19LT1G
SMMBT5551LT1G	BCX19LT1G
SMMBT4403LT1G	MMBT2907ALT1G
SMMBT4401LT1G	BCX19LT1G
SMMBT3906LT3G	MMBT2907ALT1G
SMMBT3906LT1G	MMBT2907ALT1G
SMMBT3904LT3G	BCX19LT1G
SMMBT3904LT1G	BCX19LT1G
SMMBT2907ALT3G	MMBT2907ALT1G
SMMBT2907ALT1G	MMBT2907ALT1G
SMMBTA64LT1G	MMBT2907ALT1G
SMMBTA56LT3G	MMBT2907ALT1G
SMMBTA56LT1G	MMBT2907ALT1G
SMMBTA06LT3G	BCX19LT1G
SMMBTA06LT1G	BCX19LT1G
SMBT1580LT1G	BCX19LT1G
SMBT1505T3G	MMBT2907ALT1G
SMBT1504T3G	BCX19LT1G
SBC857BLT1G	MMBT2907ALT1G
SBC856BLT3G	MMBT2907ALT1G
SBC856BLT1G	MMBT2907ALT1G
SBC848BLT1G	BCX19LT1G
SBC847CLT1G	BCX19LT1G
SBC847BLT1G	BCX19LT1G
SBC846BLT3G	BCX19LT1G
SBC846BLT1G	BCX19LT1G
SBC817-40LT3G	BCX19LT1G
SBC817-40LT1G	BCX19LT1G
SBC808-25LT1G	MMBT2907ALT1G
SBC807-40LT3G	MMBT2907ALT1G
SBC807-40LT1G	MMBT2907ALT1G
SBC807-25LT3G	MMBT2907ALT1G
SBC807-25LT1G	MMBT2907ALT1G
SBCW72LT1G	BCX19LT1G



SBCW66GLT1G	BCX19LT1G
NSVMMBT6429LT1G	BCX19LT1G
BC847CLT1G	BCX19LT1G
NSVBC858CLT1G	MMBT2907ALT1G
NSVBC848CLT1G	BCX19LT1G
SMMBT2222ALT1G	BCX19LT1G
SBC817-25LT3G	BCX19LT1G
SBC817-25LT1G	BCX19LT1G
SMMBT2222ALT3G	BCX19LT1G
SMMUN2216LT3G	BCX19LT1G
SMMUN2216LT1G	BCX19LT1G
SMMUN2215LT1G	BCX19LT1G
SMMUN2238LT1G	BCX19LT1G
SMMUN2234LT1G	BCX19LT1G
SMMUN2233LT1G	BCX19LT1G
NSVMMUN2232LT3G	BCX19LT1G
NSVMMUN2232LT1G	BCX19LT1G
NSVMMUN2212LT1G	BCX19LT1G
NSVMMUN2132LT1G	MMBT2907ALT1G
SMMUN2214LT1G	BCX19LT1G
SMMUN2213LT3G	BCX19LT1G
SMMUN2213LT1G	BCX19LT1G
SMMUN2211LT3G	BCX19LT1G
SMMUN2211LT1G	BCX19LT1G
SMMUN2134LT1G	MMBT2907ALT1G
SMMUN2116LT3G	MMBT2907ALT1G
SMMUN2116LT1G	MMBT2907ALT1G
SMMUN2114LT1G	MMBT2907ALT1G
SMMUN2113LT1G	MMBT2907ALT1G
SMMUN2111LT3G	MMBT2907ALT1G
SMMUN2111LT1G	MMBT2907ALT1G
NSVMMUN2133LT1G	MMBT2907ALT1G
NSVMMUN2131LT1G	MMBT2907ALT1G
NSVMMUN2112LT1G	MMBT2907ALT1G
NSVMMUN2217LT1G	BCX19LT1G



List of Customer Specific Parts:

Part Number	Qualification Vehicle
SMBT1229LT1G	MMBT2907ALT1G
SMBT1229LT3G	MMBT2907ALT1G
SMBT1469LT3G	BCX19LT1G
SMBT1353LT3G	MMBT2907ALT1G
SMBT1230LT1G	BCX19LT1G
SMBT1231LT1G	MMBT2907ALT1G
SMBT1230LT3G	BCX19LT1G
SMBT1234LT1G	BCX19LT1G
SMBT1583LT3G	BCX19LT1G
SMBT1576LT1G	MMBT2907ALT1G
SMBT1572LT1G	BCX19LT1G
SMBT1569LT1G	BCX19LT1G
SMBT1568LT1G	MMBT2907ALT1G
SMBT1512LT3G	MMBT2907ALT1G
SMBT1493LT3G	MMBT2907ALT1G
SMBT1388LT1G	BCX19LT1G
SMBT1361LT3G	MMBT2907ALT1G
SMBT1360LT3G	BCX19LT1G
SMBT1296LT3G	MMBT2907ALT1G
SMBT1294LT3G	BCX19LT1G
SMBT1232LT3G	BCX19LT1G
SMBT1232LT1G	BCX19LT1G
SMMUN1004LT1G	MMBT2907ALT1G
SMMUN1003LT1G	BCX19LT1G