



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:	17 December 2015		
Contact information:	Contact your local ON Semiconductor Sales Office or <andy.tao@onsemi.com>		
Samples:	Contact your local ON Semiconductor Sales Office		
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 90 days 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 <i>Pd-coated Cu</i> 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 WW51, 2015 or greater.		
Change category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____		
Change Sub-Category(s):	<input type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Manufacturing Process Change	<input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Product specific change	<input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____
Sites Affected:	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input checked="" type="checkbox"/> ON Semiconductor site(s) : ON Leshan, China	<input type="checkbox"/> External Foundry/Subcon site(s)	
Description and Purpose:			
<p>ON Semiconductor is notifying customers 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.</p> <p>Customers, that require to be sourced by automotive graded devices, have to change ordering code to automotive part number version prior the expiration of this PCN, which allows extended time for qualification and assures automotive PPAP coverage. The proposed change still needs to be qualified by customers affecting automotive devices as well. Change release for automotive versions is expected by WW35, 2016 or greater.</p> <p>In case customer will stay with standard device, general PCN rules are applied (90 days for PCN implementation), no PPAP coverage, and no site and change control. ON Semiconductor Customer service will provide assistance in the backlog transfer process.</p>			

**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

Electrical Characteristic Summary:

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

List of Affected Standard Parts:

Part Number	Qualification Vehicle
MMBT2484LT3G	BCX19LT1G
MMBTA64LT3G	MMBT2907ALT1G
MMBTA64LT1G	MMBT2907ALT1G
MMBTA63LT1G	MMBT2907ALT1G
MMBTA56LT3G	MMBT2907ALT1G
MMBTA56LT1G	MMBT2907ALT1G



MMBTA55LT1G	MMBT2907ALT1G
MMBTA14LT1G	BCX19LT1G
MMBTA13LT3G	BCX19LT1G
MMBTA13LT1G	BCX19LT1G
MMBTA06LT3G	BCX19LT1G
MMBTA06LT1G	BCX19LT1G
MMBTA05LT3G	BCX19LT1G
MMBTA05LT1G	BCX19LT1G
MMBT4126LT3G	MMBT2907ALT1G
MMBT4126LT1G	MMBT2907ALT1G
MMBT4124LT1G	BCX19LT1G
MMBT2484LT1G	BCX19LT1G
MMBT5551LT1G	BCX19LT1G
MMBT5550LT3G	BCX19LT1G
MMBT5550LT1G	BCX19LT1G
MMBT5401LT3G	MMBT2907ALT1G
MMBT5401LT1G	MMBT2907ALT1G
MMBT5089LT1G	BCX19LT1G
MMBT5088LT1G	BCX19LT1G
MMBT5087LT3G	MMBT2907ALT1G
MMBT5087LT1G	MMBT2907ALT1G
MMBT3416LT3G	BCX19LT1G
MMBT2222LT1G	BCX19LT1G
MMBT8099LT1G	BCX19LT1G
MMBT6521LT1G	BCX19LT1G
MMBT6428LT1G	BCX19LT1G
MMBT6427LT1G	BCX19LT1G
MMBT5551LT3G	BCX19LT1G
BSS64LT1G	BCX19LT1G
BSS63LT1G	MMBT2907ALT1G
BC858CLT3G	MMBT2907ALT1G
BC858CLT1G	MMBT2907ALT1G
BC858BLT3G	MMBT2907ALT1G
BC858BLT1G	MMBT2907ALT1G
BC858ALT1G	MMBT2907ALT1G
BC857CLT3G	MMBT2907ALT1G
BC857CLT1G	MMBT2907ALT1G



BC857BLT3G	MMBT2907ALT1G
BC857BLT1G	MMBT2907ALT1G
BC857ALT1G	MMBT2907ALT1G
BC856BLT3G	MMBT2907ALT1G
BC856BLT1G	MMBT2907ALT1G
BC856ALT1G	MMBT2907ALT1G
BC850CLT1G	BCX19LT1G
BC850BLT1G	BCX19LT1G
BC849CLT1G	BCX19LT1G
BC849BLT1G	BCX19LT1G
BC848CLT1G	BCX19LT1G
BC848BLT3G	BCX19LT1G
BC848BLT1G	BCX19LT1G
BC848ALT1G	BCX19LT1G
BC847CLT3G	BCX19LT1G
BC846ALT3G	BCX19LT1G
BC846ALT1G	BCX19LT1G
BC847BLT3G	BCX19LT1G
BC847ALT1G	BCX19LT1G
BC846BLT3G	BCX19LT1G
BC847BLT1G	BCX19LT1G
BC846BLT1G	BCX19LT1G
BC817-16LT3G	BCX19LT1G
BC817-16LT1G	BCX19LT1G
BC808-25LT1G	MMBT2907ALT1G
BC807-40LT3G	MMBT2907ALT1G
BC807-40LT1G	MMBT2907ALT1G
BC807-25LT3G	MMBT2907ALT1G
BCW33LT1G	BCX19LT1G
BCW32LT1G	BCX19LT1G
BCW30LT1G	MMBT2907ALT1G
BC807-25LT1G	MMBT2907ALT1G
BC807-16LT3G	MMBT2907ALT1G
BC807-16LT1G	MMBT2907ALT1G
BCX19LT1G	MMBT2907ALT1G
BCX17LT1G	MMBT2907ALT1G
BCW72LT1G	BCX19LT1G



BCW70LT1G	MMBT2907ALT1G
BCW68GLT3G	MMBT2907ALT1G
BCW68GLT1G	MMBT2907ALT1G
BCW66GLT3G	MMBT2907ALT1G
BCW66GLT1G	BCX19LT1G
BCW65CLT1G	BCX19LT1G
BCW65ALT1G	BCX19LT1G
BCW33LT3G	BCX19LT1G
MMBT4403LT3G	MMBT2907ALT1G
MMBT4403LT1G	MMBT2907ALT1G
MMBT4401LT3G	BCX19LT1G
MMBT4401LT1G	BCX19LT1G
MMBT3906LT3G	MMBT2907ALT1G
MMBT3906LT1G	MMBT2907ALT1G
MMBT2222ALT1G	BCX19LT1G
MMBT3904LT3G	BCX19LT1G
MMBT3904LT1G	BCX19LT1G
MMBT2907ALT3G	MMBT2907ALT1G
MMBT2907ALT1G	MMBT2907ALT1G
MMBT2222ALT3G	BCX19LT1G
BC817-40LT3G	BCX19LT1G
BC817-40LT1G	BCX19LT1G
BC817-25LT3G	BCX19LT1G
BC817-25LT1G	BCX19LT1G
MMUN2241LT1G	BCX19LT1G
MMUN2134LT1G	MMBT2907ALT1G
MMUN2131LT1G	MMBT2907ALT1G
MMUN2130LT1G	MMBT2907ALT1G
MMUN2211LT1G	BCX19LT1G
MMUN2114LT1G	MMBT2907ALT1G
MMUN2133LT1G	MMBT2907ALT1G
MMUN2132LT1G	MMBT2907ALT1G
MMUN2116LT1G	MMBT2907ALT1G
MMUN2115LT1G	MMBT2907ALT1G
MMUN2114LT3G	MMBT2907ALT1G
MMUN2238LT1G	BCX19LT1G
MMUN2112LT1G	MMBT2907ALT1G



MMUN2234LT1G	BCX19LT1G
MMUN2232LT1G	BCX19LT1G
MMUN2231LT1G	BCX19LT1G
MMUN2216LT1G	BCX19LT1G
MMUN2215LT1G	BCX19LT1G
MMUN2214LT1G	BCX19LT1G
MMUN2213LT1G	BCX19LT1G
MMUN2212LT1G	BCX19LT1G
MMUN2211LT3G	BCX19LT1G
MMBT6520LT1G	MMBT2907ALT1G
MMBT6429LT1G	BCX19LT1G
BC818-40LT1G	BCX19LT1G
MMUN2240LT1G	BCX19LT1G
MMUN2237LT1G	BCX19LT1G
MMUN2141LT1G	MMBT2907ALT1G
MMUN2140LT1G	MMBT2907ALT1G
MMUN2138LT1G	MMBT2907ALT1G
MMUN2137LT1G	MMBT2907ALT1G
MMUN2136LT1G	MMBT2907ALT1G
MMUN2135LT1G	MMBT2907ALT1G
MMUN2230LT1G	BCX19LT1G
MMUN2113LT3G	MMBT2907ALT1G
MMUN2113LT1G	MMBT2907ALT1G
MMUN2111LT3G	MMBT2907ALT1G
MMUN2111LT1G	MMBT2907ALT1G
MMUN2236LT1G	BCX19LT1G
MMUN2235LT1G	BCX19LT1G
MMUN2233LT1G	BCX19LT1G
MMUN2217LT1G	BCX19LT1G
MMBT3906LT1H	MMBT2907ALT1G