



Title of Change:	Qualification of Silan (Hangzhou, China) Wafer FAB for Bipolar Products.							
Proposed first ship date:	18 July 2019							
Contact information:	Contact your local ON Semiconductor Sales Office or <Seok-Ho.Choi@onsemi.com>							
Samples:	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com> 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.							
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Jacob.Saliba@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:	The label listed on the box and reel will contain the CS (Custom Source) or "Diffused In" for the wafer FAB location. CS or Diffused In = CN will be from Silan, China, CS or Diffused In = KR will be from Bucheon, Korea. Material from (2) different wafer FABs cannot be combined onto (1) reel per internal specifications. Please see sample label on Page 2 at the following URL http://www.onsemi.com/pub/Collateral/LABELRM-D.PDF to see the location of the Custom Source/Diffused in Reference.							
Change Category:	<input checked="" type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____							
Change Sub-Category(s):	<input checked="" type="checkbox"/> Manufacturing Site Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Transfer <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Other: _____							
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: Hangzhou Silan Integrated Circuit Co, Ltd						
Description and Purpose: ON Semiconductor would like to inform our customers about the qualification of our Bipolar technology products at the Silan (Hangzhou Silan Integrated Circuit Co, Ltd) FAB in Hangzhou, China. This qualification will enable expanded capacity for this technology. Upon expiration of the FPCN, all products listed here will be dual sourced from its current ON Semiconductor wafer fab in Bucheon, Korea or Silan, China.								
<table border="1"> <thead> <tr> <th></th><th>Before Change Description</th><th>After Change Description</th></tr> </thead> <tbody> <tr> <td>FAB Location</td><td>Bucheon, Korea</td><td>Silan, China or Bucheon, Korea</td></tr> </tbody> </table>				Before Change Description	After Change Description	FAB Location	Bucheon, Korea	Silan, China or Bucheon, Korea
	Before Change Description	After Change Description						
FAB Location	Bucheon, Korea	Silan, China or Bucheon, Korea						
Wafers produced in Silan are 5" while wafers produced in Bucheon are 6". This is a continuation a previous qualification already performed transferring other Bipolar products from Bucheon to Silan. There are no product material Changes as a result of this change. There is no product marking change as a result of this change.								

**Reliability Data Summary:****QV DEVICE NAME: KA5L0380RYDTU****RMS: K51378****PACKAGE: TO220**

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=85°C, Vcc=22V, HV=800V	1008 hrs	0/80
HTSL	JESD22-A103	Ta= 150°C	2016 hrs	0/240
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

QV DEVICE NAME: KA1H0165RTU**RMS: K51633****PACKAGE TO220**

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta= 85°C, Vcc=20V, HV=650V	1008 hrs	0/80

The qualification vehicles listed above were used in combination to qualify all of the devices listed in this notification. All products passed their respective reliability testing.

Electrical Characteristic Summary:

Electrical Characteristics were not impacted as a results of this change.

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
KA1H0165RTU	KA1H0165RTU KA7815ETU KA5L0380RYDTU
KA1M0565RTU	
KA1M0565RYDTU	