



Title of Change:	Add V-notch Lead frame to Improve Delamination on SOD323 at ON Semiconductor, Leshan, China factory.	
Proposed first ship date:	05 September 2017	
Contact information:	Contact your local ON Semiconductor Sales Office or <Coleen.Long@onsemi.com>	
Samples:	Contact your local ON Semiconductor Sales Office or <Coleen.Long@onsemi.com>	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < Rui. Zhang @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 produced with V-notch Lead frame at ON Semiconductor's existing Leshan facility. New products will have a Date Code of WW38, 2017 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) ☐ 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 V-notch Lead frame for SOD323 devices at ON Semiconductor's Leshan, China factory. Upon the expiration of this PCN, devices will be built with V-notch Lead frame at the same site. Datasheet specifications and product electrical performance remain unchanged. Reliability Qualification have been performed.		
Material to be changed	Before Change Description	After Change Description
Leadframe	Non V-notch	With V-notch

**Reliability Data Summary:**

Qualification Vehicle device: SZMM3Z18VST1G, BAS16HT1G

RMS: L36029/L36032

PACKAGE: SOD323

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/240
HTSL	JESD22-A103	Ta= <u>150</u> °C	1008 hrs	0/240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = <u>2</u> min	30000 cyc	0/240
TC	JESD22-A104	Ta= - <u>65</u> °C to + <u>150</u> °C	2000 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/240
AC	JESD22-A102	Ta = 121°C, P= 15 PSIG, RH = 100%, 192 Hours	192 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	Before TC, AC, HAST, IOL	0/960
RSH	JESD22- B106	Ta = 265°C	10 sec	0/90

Note:

- Above data come from L29666 which assembled with similar V-notch Lead Frame on SOT23 and passed all Rel testing.
- Qualification Vehicle device:** SZMM3Z18VST1G, BAS16HT1G only PC+SAT was performed for this change, result shows it has better delamination performance to V-notch Lead Frame than non V-notch Lead Frame.

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
BAS16HT1G	SZMM3Z18VST1G BAS16HT1G
BAS16HT3G	
BAS20HT1G	
BAS21AHT1G	
BAS21HT1G	
BAS21HT3G	
BAT54HT1G	
ESD7351HT1G	
ESD7361HT1G	
ESD7371HT1G	
ESD8351HT1G	
HBL5006HT1G	
MM3Z10VST1G	
MM3Z10VT1G	
MM3Z11VST1G	
MM3Z11VT1G	



MM3Z12VST1G	SZMM3Z18VST1G BAS16HT1G
MM3Z12VT1G	
MM3Z13VST1G	
MM3Z13VT1G	
MM3Z15VST1G	
MM3Z15VT1G	
MM3Z16VST1G	
MM3Z16VT1G	
MM3Z18VST1G	
MM3Z18VT1G	
MM3Z20VST1G	
MM3Z20VT1G	
MM3Z22VST1G	
MM3Z22VT1G	
MM3Z24VST1G	
MM3Z24VT1G	
MM3Z27VST1G	
MM3Z27VT1G	
MM3Z27VT3G	
MM3Z2V4ST1G	
MM3Z2V4T1G	
MM3Z2V7ST1G	
MM3Z2V7T1G	
MM3Z30VST1G	
MM3Z30VT1G	
MM3Z33VST1G	
MM3Z33VT1G	
MM3Z33VT3G	
MM3Z36VST1G	
MM3Z36VT1G	
MM3Z39VST1G	
MM3Z39VT1G	
MM3Z3V0ST1G	
MM3Z3V0T1G	
MM3Z3V3ST1G	
MM3Z3V3ST3G	
MM3Z3V3T1G	
MM3Z3V6ST1G	
MM3Z3V6T1G	
MM3Z3V9ST1G	
MM3Z3V9T1G	



MM3Z43VT1G	SZMM3Z18VST1G BAS16HT1G
MM3Z47VT1G	
MM3Z4V3ST1G	
MM3Z4V3T1G	
MM3Z4V7ST1G	
MM3Z4V7T1G	
MM3Z51VT1G	
MM3Z56VT1G	
MM3Z5V1ST1G	
MM3Z5V1T1G	
MM3Z5V6ST1G	
MM3Z5V6T1G	
MM3Z62VT1G	
MM3Z68VT1G	
MM3Z6V2ST1G	
MM3Z6V2T1G	
MM3Z6V8ST1G	
MM3Z6V8T1G	
MM3Z75VT1G	
MM3Z7V5ST1G	
MM3Z7V5T1G	
MM3Z8V2ST1G	
MM3Z8V2ST3G	
MM3Z8V2T1G	
MM3Z9V1ST1G	
MM3Z9V1T1G	
MM3Z9V1T3G	
MMDL101T1G	
MMDL301T1G	
MMDL6050T1G	
MMDL770T1G	
MMDL914T1G	
MMDL914T3G	
NSD350HT1G	
NSR0170HT1G	
NSR02100HT1G	
NSR0240HT1G	
NSR0340HT1G	
NSR0530HT1G	
RB751V40T1G	
SD12T1G	