



Title of Change:	Transfer of wafer fabrication operations for ON Semiconductor Zener products to ON Niigata, Japan, and change top metal to AlSiCu.
Proposed Changed Material First Ship Date:	2 September 2019
Current Material Last Order Date:	7 July 2019 Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.
Current Material Last Delivery Date:	7 July 2019 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.
Product Category:	Active components – Discrete components
Contact information:	Contact your local ON Semiconductor Sales Office or < Hiroshi.Koizumi@onsemi.com >
Samples:	Contact your local ON Semiconductor Sales Office to place sample order or < PCN.samples@onsemi.com > Sample requests are to be submitted no later than 45 days after publication of this change notification.
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < Nicky.Siu@onsemi.com >.
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. IPCNs are issued at least 30 days prior to the issuance of the Final Change Notice (FPCN). 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 12 months prior to implementation of the change. In case of questions, contact < PCN.Support@onsemi.com >.
Change Category	Type of Change
Process – Wafer Production	New / change of metallization (specifically chip frontside)" Move of all or part of wafer fab to a different location/site/subcontractor (qualification of an additional manufacturing site)

Description and Purpose:

This is the Initial Notification by ON Semiconductor notifying customers of its plan to transfer fab site from ISMF(Malaysia) to Niigata(Japan) as qualified wafer source for NZener, and change top metal to 2um AlSiCu.

Niigata Fab facility is an ON Semiconductor owned wafer fab that has been producing products for ON Semiconductor. Several existing technologies within ON Semiconductor’s product families are currently sourced from Niigata Fab. ON Semiconductor Niigata Wafer Fab is an internal factory that is ISO/TS16949 and ISO-9001 certified.

Material to be changed	Before Change Description	After Change Description
Wafer fab	ON Semiconductor ISMF FAB, Malaysia	ON Semiconductor Niigata, Japan
Top metal	AlSi 2um	AlSiCu 2um

There is no product marking change as a result of this change



Reason / Motivation for Change:	<ul style="list-style-type: none"> - <i>Change benefits for customer:</i> <ul style="list-style-type: none"> • <i>unconstraint capacity</i> - <i>Risk for late release for customer</i> <ul style="list-style-type: none"> • <i>No ISMF supply after Proposed Changed Material First Ship Date</i> • <i>Limited ability to support bridge build availability.</i> 	
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	<p>The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by ON Semiconductor in relation to the PCN, associated risks are verified and excluded.</p> <p>No anticipated impacts.</p>	
Sites Affected:	ON Semiconductor Sites: ON ISMF, Malaysia ON Leshan, China ON Niigata, Japan	External Foundry/Subcon Sites: None
Marking of Parts/ Traceability of Change:	Affected devices from ON Semiconductor with date code First Ship Date and greater is sourced from ON Semiconductor Niigata, Japan.	

Reliability Data Summary:

QV DEVICE NAME: SZMM3Z75VT1G

PACKAGE: SOD323

Test	Specification	Condition	Interval
SSOP (SSOL)	AEC-Q101-REV-D1 (JESD22-A108)	IZ max, Ta to rated Tj=150°C	2016hrs
HTSL	JESD22-A103	Ta= 150°C	2016hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc
TC	JESD22-A104	Temp = -55°C to +150°C	1000 cycles
HAST	JESD22-A110	Temp = 130°C, 85% RH, ~ 18.8 psig, bias = 80% of rated V	192hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs
PC	J-STD-020 JESD-A113	MSL 1 @260°C	
RSH	JESD22- B106	Ta = 265C, 10 sec	

Electrical Characteristic Summary:

Electrical characteristics will be performed and updated per FPCN.



List of Affected Parts:

Current Part Number	Qualification Vehicle
SZMM3Z75VT1G	
SZMM3Z68VT1G	
SZMM3Z62VT1G	
SZMM3Z56VT1G	
SZMM3Z51VT1G	
SZMM3Z47VT1G	
SZMM3Z36VT1G	
SZMM3Z36VST1G	
SZMM3Z33VT1G	
SZMM3Z27VT1G	
SZMM3Z27VST1G	
SZMM3Z24VT1G	
SZMM3Z22VT1G	
SZMM3Z22VST1G	SZMM3Z75VT1G
SZMM3Z20VT1G	
SZMM3Z18VT1G	
SZMM3Z18VST1G	
SZMM3Z16VT3G	
SZMM3Z16VT1G	
SZMM3Z16VST1G	
SZMM3Z15VT1G	
SZMM3Z13VT1G	
SZMM3Z13VST1G	
SZMM3Z12VST1G	
SZMM3Z11VT1G	
SZMM3Z10VT1G	
SZMM3Z10VST1G	