



Initial Product/Process Change Notification

Document #: IPCN25010Z

Issue Date: 15 Dec 2022

Title of Change:	Bare Copper Clip qualification for Zener SMA/SMB packages – OSV.	
Proposed Changed Material First Ship Date:	01 Oct 2023 or earlier if approved by customer	
Current Material Last Order Date:	N/A <i>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.</i>	
Current Material Last Delivery Date:	N/A <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>	
Product Category:	Active components – Discrete components	
Contact information:	Contact your local onsemi Sales Office or TP.Phung@onsemi.com	
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
Additional Reliability Data:	Contact your local onsemi Sales Office or Khoa.Tran2@onsemi.com	
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. 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 6 months prior to implementation of the change. In case of questions, contact < PCN.Support@onsemi.com >.	
Change Category		
Category	Type of Change	
Process - Assembly	Change of lead frame finishing material / area (internal)	
Description and Purpose:		
	From	To
Clip	Ni plated copper clip	Bare copper clip
There is no product marking change as a result of this change		
Reason / Motivation for Change:	Quality improvement	
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device will be qualified and validated based on the same Product Specification. No anticipated impacts.	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
onsemi Vietnam	None	



Initial Product/Process Change Notification

Document #: IPCN25010Z

Issue Date: 15 Dec 2022

Marking of Parts/ Traceability of Change:	Changed material may be identified by date code or lot code.
--	--

Reliability Data Summary:

QV DEVICE NAME: SZ1SMA5924BT3G

RMS: 83412, 85474

PACKAGE: SMA

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs
SSOP	AEC-Q101, Mil-Std-750 M1038 Cond B	Rated IZmax, Tj=150C.	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 80% of rated V	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec	
SD	JSTD002	Ta = 245°C, 10 sec	

QV DEVICE NAME: SZ1SMB5924BT3G

RMS: 84079, 85475

PACKAGE: SMB

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs
SSOP	AEC-Q101, Mil-Std-750 M1038 Cond B	Rated IZmax, Tj=150C.	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 80% of rated V	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec	
SD	JSTD002	Ta = 245°C, 10 sec	

QV DEVICE NAME: SZ1SMA5945BT3G

RMS: 86596, 86574

PACKAGE: SMA

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs
SSOP	AEC-Q101, Mil-Std-750 M1038 Cond B	Rated IZmax, Tj=150C.	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 80% of rated V	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec	
SD	JSTD002	Ta = 245°C, 10 sec	



Initial Product/Process Change Notification

Document #: IPCN25010Z

Issue Date: 15 Dec 2022

QV DEVICE NAME: SZ1SMB5956BT3G

RMS: 86597, 86575

PACKAGE: SMB

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs
SSOP	AEC-Q101, Mil-Std-750 M1038 Cond B	Rated IZmax, Tj=150C.	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 80% of rated V	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec	
SD	JSTD002	Ta = 245°C, 10 sec	

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

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](#).

Current Part Number	New Part Number	Qualification Vehicle
S1Z1SMB5919BT3G	NA	SZ1SMB5924BT3G
SZ1SMA5913BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5914BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5915BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5916BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5917BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5918BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5919BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5920BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5921BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5922BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5923BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5924BT3G	NA	SZ1SMA5924BT3G
SZ1SMA5925BT3G	NA	SZ1SMA5945BT3G
SZ1SMA5926BT3G	NA	SZ1SMA5945BT3G
SZ1SMB5913BT3G	NA	SZ1SMB5924BT3G



Initial Product/Process Change Notification

Document #: IPCN25010Z

Issue Date: 15 Dec 2022

SZ1SMB5925BT3G	NA	SZ1SMB5956BT3G
SZ1SMB5923BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5922BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5921BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5920BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5919BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5918BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5917BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5916BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5915BT3G	NA	SZ1SMB5924BT3G
SZ1SMB5914BT3G	NA	SZ1SMB5924BT3G