

Final Product/Process Change Notification

Document # : FPCN21496ZA Issue Date: 11 July 2017

Transfer of Automotive Assembly and Test operations of SMA packaged products to On Semiconductor Vietnam (OSV).	
01 October 2018 or earlier upon customer approval	
1 July 2018 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.	
1 October 2018 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.	
Active components – Discrete components	
Contact your local ON Semiconductor Sales Office or < <u>Phuong.Hoang@onsemi.com</u> >	
Contact your local ON Semiconductor Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification.	
1 July 2017	
31 July 2017	
Contact your local ON Semiconductor Sales Office or < <u>cheanching.sim@onsemi.com</u> >.	
This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact < <u>PCN.Support@onsemi.com</u> >.	
tegory Type of Change	
Move of all or part of assembly to a different location/site/subcontractor.	
Change of product marking.	
Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor.	
Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.	

Description and Purpose:

This Final Notification announces the transfer of Assembly and Test of SMA products from ON Semiconductor Malaysia (SBN) to ON Semiconductor Vietnam (OSV).

The OSV part numbers are available to early adaptors for immediate SBN demand conversion. Customer can view a list of those OSV part numbers, cross referenced to the transferring SBN part numbers listed in the attached Excel file.

Upon completion of this transfer, SMA demand will be sourced solely from OSV and will no longer be available from SBN. At that time, either the transferring SBN or the current OSV part numbers can be utilized to order these products from OSV.

ON Semiconductor Vietnam (OSV) is qualified site for SMA Standard discrete packaged products and is ISO TS16949 certified.

Products sourced from OSV have been qualified to Automotive requirements and continue remain as Pb -free, Halide free and RoHS compliant.



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 Change benefits for customer(s): Unconstrained Automotive Sourcing; Mfg floor space for future expansion Sustained TS16949 Certification with the Same BOM / Equipment / Processes Allow for increased support for Seremban packages that are currently constrained OSV has been audited to VDA6.3 Risks for delayed conversion: No Seremban supply after May 30, 2017 Limited ability to support bridge build availability. 						
•		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. No anticipated impacts.				
Sites Affec	ted:	icable D	ON Semiconductor site(s):	l Foundry/Subcon site	:(s)	
Marking of Parts/ Product from ON Semiconductor Vietnam (OSV) will be marked with site code "VN" prior to the date code while the Seremban device does not have site code marking. Reliability Data Summary: Reliability Data Summary:						
Traceability	-	while the Sere	mban device does not have site code marking.			
Traceability o Reliability Da QV DEVIC PACKAGE:	ata Summary: E NAME: MBRA2H : SMA	100T3G (Schottk	ky Rectifier)	Internal	Result	
Traceability of Reliability Da QV DEVIC PACKAGE: Test	ata Summary: E NAME: MBRA2H : SMA Specificat	100T3G (Schottk ion	cy Rectifier) Condition	Interval		
Traceability of Reliability Da QV DEVIC PACKAGE: Test HTRB	ata Summary: E NAME: MBRA2H : SMA Specificat JESD22-A	100T3G (Schottk ion	xy Rectifier) Condition Ta = 90 °C, bias = 80% of rated V	1008 hrs	0/252	
Traceability of Reliability Da QV DEVIC PACKAGE: Test	ata Summary: E NAME: MBRA2H : SMA Specificat	100T3G (Schottk ion 108 103 750 ')	cy Rectifier) Condition			
Traceability of Reliability Da QV DEVIC PACKAGE Test HTRB HTSL	ata Summary: E NAME: MBRA2H : SMA Specificat JESD22-A JESD22-A MIL-STD-7 (M1037	100T3G (Schottk ion ////////////////////////////////////	cy Rectifier) Condition Ta = 90 °C, bias = 80% of rated V Ta = 175 °C Ta=+25°C, deltaTj=100°C max,	1008 hrs 1008 hrs	0/252 0/252	
Traceability of Reliability Da QV DEVICE PACKAGE:	ata Summary: E NAME: MBRA2H : SMA Specificat JESD22-A JESD22-A MIL-STD-7 (M1037 AEC-Q10	100T3G (Schottk ion	cy Rectifier) Condition Ta = 90 °C, bias = 80% of rated V Ta = 175 °C Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	1008 hrs 1008 hrs 15000 cyc	0/252 0/252 0/252	
Traceability of Reliability Da QV DEVIC PACKAGE: Test HTRB HTSL IOL TC	ata Summary: E NAME: MBRA2H : SMA JESD22-A JESD22-A MIL-STD-7 (M1037 AEC-Q10 JESD22-A	100T3G (Schottk ion ////////////////////////////////////	cy Rectifier) Condition Ta = 90 °C, bias = 80% of rated V Ta = 175 °C Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min Temp = -65°C to +150°C	1008 hrs 1008 hrs 15000 cyc 1000 cyc	0/252 0/252 0/252 0/252	
Traceability C Reliability Da QV DEVIC PACKAGE HTRB HTRB HTSL IOL TC AC	ata Summary: E NAME: MBRA2H : SMA Specificat JESD22-A JESD22-A MIL-STD-7 (M1037 AEC-Q10 JESD22-A JESD22-A	100T3G (Schottk ion 2010 108 103 750 7) 11 104 102 101 201 201 201 201 201 201	cy Rectifier) Condition Ta = 90 °C, bias = 80% of rated V Ta = 175 °C Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min Temp = -65°C to +150°C 121°C, 100% RH, 15psig, unbiased	1008 hrs 1008 hrs 15000 cyc 1000 cyc 96 hrs	0/252 0/252 0/252 0/252 0/252	
Traceability C Reliability Da QV DEVIC PACKAGE Test HTRB HTSL IOL IOL TC AC H3TRB	ata Summary: E NAME: MBRA2H : SMA Specificat JESD22-A JESD22-A MIL-STD-7 (M1037 AEC-Q10 JESD22-A JESD22-A JESD22-A	100T3G (Schottk ion	cy Rectifier) Condition Ta = 90 °C, bias = 80% of rated V Ta = 175 °C Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min Temp = -65°C to +150°C 121°C, 100% RH, 15psig, unbiased Temp = 85°C, RH=85%, bias = 80% of rated V	1008 hrs 1008 hrs 15000 cyc 1000 cyc 96 hrs	0/252 0/252 0/252 0/252 0/252 0/252	



QV DEVICE NAME: MURA260T3G (Ultrafast Rectifier) PACKAGE: SMA

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, Tj(est) = 175 °C, bias = 80% of rated V	1008 hrs	0/252
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/252
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	15000 cyc	0/252
тс	JESD22-A104	Temp = -65°C to +150°C	1000 сус	0/252
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/252
H3TRB	JESD22-A101	Temp = 85°C, RH=85%, bias = 100V max	1008 hrs	0/252
РС	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/1008
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45

Note: AEC-1pager is attached.

To access file attachments on pdfcopy of PCN, please be guided by the steps below:

1. Download pdfcopy of the PCN to your computer

2. Open the downloaded pdf copy of the PCN

3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachm ent field

4. Then click on the attached file/s

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Transferring (SBN) Malaysia part number	Qualification Vehicle
NRVBA120ET3G	
NRVBA130LT3G	
NRVBA140T3G	
NRVBA160T3G	
NRVBA1H100T3G	
NRVBA210LT3G	MBRA2H100T3G
NRVBA2H100T3G	
NRVBA320T3G	
NRVBA340T3G	
SBRA401T3G	
SBRA8160T3G	



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SURA8105T3G	
SURA8130T3G	
SURA8205T3G	MURA260T3G
SURA8215T3G	MORAZOUISC
SURA8240T3G	
SURA8260T3G	