

### Final Product/Process Change Notification

Document #:FPCN22912XB Issue Date:11 Jun 2021

Title of Change:	Contact mask change for TIGBT technology mask sets (Phase 2)		
Proposed First Ship date:	18 Sep 2021 or earlier if approved by customer		
Contact Information:	Contact your local ON S	Semiconductor Sales Office or <u>norsahida.sahman@onsemi.com</u>	
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> >.  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.  Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.		
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or xiaohu.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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>		
Marking of Parts/ Traceability of Change:	Parts will be identified with date code		
Change Category:	Wafer Fab Change		
Change Sub-Category(s):	Contact mask change		
Sites Affected:			
ON Semiconductor Sites		External Foundry/Subcon Sites	
ON Semiconductor Niigata, Japan		None	
ON Semiconductor Roznov, Czech Republic			

#### **Description and Purpose:**

This FPCN is to inform that, ON Semiconductor is resizing gate pad contacts from 1.3x1.3um to 1.5x1.5um for all the devices listed in this FPCN. This change is an effort of a continuous improvement to the robustness of the wafer process allowing better gate pad contact, while maintaining the current performances of the affected parts.

	Before Change Description	After Change Description
Gate pad contact	1.3um x 1.3um	1.5um x 1.5um

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

### **Reliability Data Summary:**

QV DEVICE NAME: NGTB40N120FL2WG

RMS: <u>68658</u> PACKAGE: <u>TO-247</u>

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= - 55 to + 150°C	1000 cyc	0/80

#### **Electrical Characteristics Summary:**

Electrical characteristics are not impacted.

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#### **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 <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle
NGTB15N120FL2WG	NGTB40N120FL2WG
NGTB15N120IHRWG	NGTB40N120FL2WG
NGTB15N135IHRWG	NGTB40N120FL2WG
NGTB25N120FL2WG	NGTB40N120FL2WG
NGTB30N65IHL2WG	NGTB40N120FL2WG
NGTB35N65FL2WG	NGTB40N120FL2WG
NGTB40N120FL2WG	NGTB40N120FL2WG
NGTB40N65FL2WG	NGTB40N120FL2WG
NGTB40N65IHL2WG	NGTB40N120FL2WG
NGTG40N120FL2WG	NGTB40N120FL2WG
NGTG25N120FL2WG	NGTB40N120FL2WG
NGTB50N65FL2WG	NGTB40N120FL2WG
NGTB50N120FL2WG	NGTB40N120FL2WG
NGTB30N120SWG	NGTB40N120FL2WG

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# **Appendix A: Changed Products**

PCN#: FPCN22912XB Issue Date: Jun 10, 2021

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NGTB15N120FL2WG		NGTB40N120FL2WG		
NGTB15N120IHRWG		NGTB40N120FL2WG		
NGTB25N120FL2WG		NGTB40N120FL2WG		
NGTB35N65FL2WG		NGTB40N120FL2WG		
NGTB40N120FL2WG		NGTB40N120FL2WG		
NGTB40N65FL2WG		NGTB40N120FL2WG		
NGTB40N65IHL2WG		NGTB40N120FL2WG		
NGTG40N120FL2WG		NGTB40N120FL2WG		
NGTG25N120FL2WG		NGTB40N120FL2WG		
NGTB50N120FL2WG		NGTB40N120FL2WG		