

# Final Product/Process Change Notification

Document #:FPCN22912X Issue Date:17 Dec 2020

Title of Change:	Contact mask change for TIGBT technology mask sets.			
Proposed First Ship date:	24 Mar 2021 or earlier if approved by customer			
Contact Information:	Contact your local ON	Contact your local ON Semiconductor Sales Office or <u>Huan.Tran@onsemi.com</u>		
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < PCN.samples@onsemi.com >.  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	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:	N/A			
Change Category:	Wafer Fab Change	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: 68658 PACKAGE: TO-247

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

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Electrical	Characteristics	Summary	v:
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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**.

Part Number	Qualification Vehicle
NGTD20T120F2SWK	NGTB40N120FL2WG
NGTD20T120F2WP	NGTB40N120FL2WG
NGTD21T65F2WP	NGTB40N120FL2WG
NGTD21T65F2SWK	NGTB40N120FL2WG
NGTD13T120F2WP	NGTB40N120FL2WG
NGTD13T120F2SWK	NGTB40N120FL2WG
NGTB35N60FL2WG	NGTB40N120FL2WG

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### **Appendix A: Changed Products**

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NGTD20T120F2SWK		NGTB40N120FL2WG		
NGTD21T65F2WP		NGTB40N120FL2WG		
NGTD21T65F2SWK		NGTB40N120FL2WG		
NGTB35N60FL2WG		NGTB40N120FL2WG		