



<b>Title of Change:</b>	Transfer of Assembly and Test operations of Cebu former Fairchild SC70 package to ON Semiconductor Leshan, China and change the backmetal site from Bucheon, Korea to ON Niigata, Japan.
<b>Proposed Changed Material First Ship Date:</b>	01 March 2020
<b>Current Material Last Order Date:</b>	5 September 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.
<b>Current Material Last Delivery Date:</b>	1 February 2020 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.
<b>Product Category:</b>	Active components – Discrete components
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or < <a href="mailto:Joan.Abigail.Enriquez@onsemi.com">Joan.Abigail.Enriquez@onsemi.com</a> >
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office to place sample order or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> > Sample requests are to be submitted no later than 45 days after publication of this change notification.
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or < <a href="mailto:ChangKit.Mok@onsemi.com">ChangKit.Mok@onsemi.com</a> >.
<b>Type of Notification:</b>	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 < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> >.
<b>Change Category</b>	<b>Type of Change</b>
Process – Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor (qualification of an additional manufacturing site)
Process – Wafer Production	New / change of metallization (specifically chip backside)
Process – Assembly	Change in leadframe dimensions
Process – Assembly	Change of lead frame finishing material / area (internal)
Process – Assembly	Change of mold compound
Process – Assembly	Manufacturing site transfer
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor



**Description and Purpose:**

	Before Change Description	After Change Description
LeadFrame	Ag Plated LF	Cu Plated LF
Molding compaound	CK5000A	Henkel GR640 HV L1
Backmetal scheme	TiNiAgSn	Au sinter
Package Substrate	ON Cebu, Philipines	ON Leshan, China
Assembly Site/Testing Site	ON Cebu,	ON Leshan, China
Other Changes(BGBM site)	ON Bucheon, Korea	ON Niigata, Japan
Case outline	419AD	419B-02

	From	To
Product marking change	Ex-FCS Format	ON Semiconductor format

**Reason / Motivation for Change:**

- The motivation of change is to have better capacity support mass production
- Late release from customer has potential supply issue.

**Anticipated impact on fit, form, function, reliability, product safety or manufacturability:**

The device will be qualified and validated based on the same Product Specification.

**Sites Affected:**

ON Semiconductor Sites:  
ON Leshan, China  
ON Cebu, Philippines  
ON Niigata, Japan

External Foundry/Subcon Sites:  
None

**Marking of Parts/ Traceability of Change:**

Customer may receive the parts from ON Semiconductor Leshan, China from month of Mar 2020 onwards once FPCN expire. Parts from ON Semiconductor Leshan, China can be identified through product marking which follow ON Semiconductor marking format.

**Reliability Data Summary:**

Device FDG6301N\_F085, FDG6332C\_F085  
RMS L48568,L48570  
PKG SC70-5L

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	2016 hrs
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	2016 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
IOL+PC	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc
TC+PC	JESD22-A104	Ta= -55°C to +150°C	2000 cyc
H3TRB+PC	JESD22-A110	Ta=85°C, 85% RH, 80% max rated BV	1008 hrs
uHAST	JESD22-A118	Ta=130°C, 85% RH, 18.8psig, unbiased	96hrs
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 10 sec	



**Electrical Characteristic 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	Qualification Vehicle
FDG6301N-F085	FDG6301N-F085 FDG6332C-F085
FDG6301N-F085P	
FDG6332C-F085	