



Title of Change:	Mold Compound Change attributed to an End of Life of Samsung SDI EMC for products in TO220 package.
Proposed Changed Material First Ship Date:	13 Nov 2020 or earlier if approved by customer
Current Material Last Order Date:	30 Apr 2020 <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:	12 Nov 2020 <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 ON Semiconductor Sales Office or <Bokyun.Seo@onsemi.com>
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office to place sample order or <PCN.samples@onsemi.com>. 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.
Sample Availability Date:	06 Dec 2019
PPAP Availability Date:	06 Dec 2019
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Frank.Tuan@onsemi.com>
Type of Notification:	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 PCN.Support@onsemi.com.

Change Category

Category	Type of Change
Process - Assembly	Change of encapsulation/sealing material

Description and Purpose:

ON Semiconductor wishes to inform our customers of a change in mold compound used for the devices listed in this PCN.

This is the final product change notification (FPCN) of IPCN22647. This change is a result of an End of Life notification received from Samsung for several of their SDI Mold Compounds.

Due to the discontinuance of the SDI mold compounds, ON Semiconductor will only have limited supplies of the existing material and in some cases this may not allow for the normal change notification period.

All other aspects of the impacted products (form, fit, function) will remain unchanged.

	Before Change Description	After Change Description
Mold compound	SL7300HFM, Supplier: Samsung SDI SG8200DL, Supplier: Samsung SDI	KTMC1050GFB

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



Reason / Motivation for Change:	Source/Supply/Capacity Changes Process/Materials Change
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	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 Affected:	
ON Semiconductor Sites	External Foundry/Subcon Sites
ON Semiconductor Suzhou, China	None

Marking of Parts/ Traceability of Change:	Marking of Parts/ Traceability of Change:Customer may receive the parts from ON Semiconductor from month of 30 August 2020onwards once FPCN expire. Parts from ON Semiconductor can be identified through product marking which follow ON Semiconductor marking format.
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Reliability Data Summary:

QV DEVICE NAME : RURP15100-F085P
RMS : U56673
PACKAGE : TO220

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Tj=175°C, 100% max rated V	1,008 hrs	0/231
HTSL	JESD22-A108	Tj=175°C	1,008 hrs	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V or 100V max	1,008 hrs	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/231
RSH	JESD22-B106	Ta=265C 10 sec dwell B106	96 hrs	0/30
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V or 100V max	96 hrs	0/154
SD	J STD 002B	Ta=245°C 5 sec dwell	5s	0/45
PD		Per Case Outline		0/30
CDPA TCDT	AEC Q101, rev D, test 7A (alt)	Custom Destructive Physical Analysis - TC Delamination Test, Post 1000 cyc TC		0/66
CDPA SAT	AEC-006	Post HTRB,HTGB		0/66
DPA	AEC-Q101-004 Section 4	Destructive Physical Analysis Post TC, H3TRB, HTRB, HTGB		0/6
CDPA WP BS	MIL 883E, AEC -006	Custom Destructive Physical Analysis - Wire Pull, Ball Shear Post TC, HTRB, HTGB		0/18
CDPA X Section	AEC -006	Post TC, HTRB, HTGB		0/9
CDPA Xray	N39A	Post TC, HTRB, HTGB		0/9
Shift	AEC Q101, 12MSB17722C	Post stress testing		All samples

NOTE AEC-1pager is attached:

To view attachments:

1. Download pdf copy 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 Attachment field
4. Then click on the attached file/s

**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
RURP15100-F085P	NA	RURP15100-F085P
ISL9R1560P2-F085	NA	RURP15100-F085P
RURP15100-F085	NA	RURP15100-F085P
RURP1560-F085	NA	RURP15100-F085P
RURP1560-F085P	NA	RURP15100-F085P



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
ISL9R1560P2-F085		RURP15100-F085P	NA	
RURP15100-F085		RURP15100-F085P	NA	
RURP1560-F085		RURP15100-F085P	NA	