ON Semiconductor®

Final Product/Process Change Notification

Document #:FPCN22647XBD
Issue Date:20 Jul 2021

Title of Change:	Mold compound change due to discontinue of Samsung SDI EMC-Takcheong TO-220F
Proposed First Ship date:	27 Oct 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Lisa.Wang@onsemi.com
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 Semiconductor Sales Office or Lalan.Ortega@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 PCN.Support@onsemi.com
Marking of Parts/ Traceability of Change:	Date Code
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

ON Semiconductor Sites	**External Foundry/Subcon Sites**
None	Tak Cheong Electronics Shanwei, China

Description and Purpose:

ON Semiconductor wishes to inform our customers of a change in mold compounds 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	Samsung SG8300HK	KCC KTMC3097GXD

Reliability Data Summary:

QV DEVICE NAME: FCPF165N65S3L1
RMS: U74597, O75312
PACKAGE: TO-220F

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008hrs	0 / 240
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008hrs	0 / 240
HTSL	JESD22-A103	Ta=150°C	1008hrs	0 / 240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 3.5 min	8572 Cyc	0 / 120
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0 / 240
H3TRB	JEDS22 A101	Ta = 85°C, 85% RH, V=80% rated V	1008 hrs	0 / 240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 240
RSH	JESD22-B106	Ta = 265C, 10 sec	0hr	0 / 90
SD	JSTD002	Ta = 245C, 5 sec	0hr	0 / 45
PD	JESD22-B100	POD, Case outline 340BF	0hr	0 / 30
SAT	J-STD-035	Scanning Acoustic Tomography	0hr	0 / 25

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**.*

Part Number	Qualification Vehicle
FCPF190N65S3R0L	FCPF165N65S3L1
FCPF190N65S3L1	FCPF165N65S3L1
FCPF165N65S3R0L	FCPF165N65S3L1
FCPF165N65S3L1	FCPF165N65S3L1