



Title of Change:	Mold compound change due to End of Life of Samsung SDI molding compound - Batch 8									
Proposed Changed Material First Ship Date:	1 October 2020									
Current Material Last Order Date:	NA									
Current Material Last Delivery Date:	NA									
Product Category:	Active components – Discrete components									
Contact information:	Contact your local ON Semiconductor Sales Office or <PCN.Support@onsemi.com>									
Samples:	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.									
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < Frank.Tuan@onsemi.com>									
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. 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 <PCN.Support@onsemi.com>.									
Change Category	Type of Change									
Process – Assembly	Change of mold compound									
Description and Purpose: ON Semiconductor would like to inform its customers of a change in the mold compound for the devices listed in this IPCN. This change is a result of an end of life notification received for Samsung SDI EMC. The replacement mold compound is still being decided for many packages and will be declared on the Final Product Change Notification.										
	<table border="1"> <thead> <tr> <th></th><th>Before Change Description</th><th>After Change Description</th></tr> </thead> <tbody> <tr> <td>Mold Compound (TO220-2L, 3L, 4L Package)</td><td>Samsung SL7300HFM/SG8200DL</td><td>TBD</td></tr> <tr> <td>Mold Compound (TO247-2L, 3L, 4L Package)</td><td>Samsung SG8200DL/SL7300HFM</td><td>TBD</td></tr> </tbody> </table>		Before Change Description	After Change Description	Mold Compound (TO220-2L, 3L, 4L Package)	Samsung SL7300HFM/SG8200DL	TBD	Mold Compound (TO247-2L, 3L, 4L Package)	Samsung SG8200DL/SL7300HFM	TBD
	Before Change Description	After Change Description								
Mold Compound (TO220-2L, 3L, 4L Package)	Samsung SL7300HFM/SG8200DL	TBD								
Mold Compound (TO247-2L, 3L, 4L Package)	Samsung SG8200DL/SL7300HFM	TBD								
The qualifications will be completed as quickly as possible, but due to the number of qualifications being performed, multiple Final Product Change Notifications (FPCNs) will be released to customers as the various packages/locations are qualified. There is no product marking change as a result of this change.										
Reason / Motivation for Change:	This change is required as a result of Samsung's decision to discontinue production of the mold compounds identified above. ON Semiconductor will no longer be able to produce the impacted products with this mold compound after the current supply has been utilized.									
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	No functional, form, fit, product safety, or manufacturability changes. The device will be qualified and validated based on the same Product Specification.									



Sites Affected:	ON Semiconductor Sites: ON Suzhou, China	External Foundry/Subcon Sites: None																																													
Marking of Parts/ Traceability of Change:	Product with date code TBD or newer will be assembled with a new mold compound.																																														
Reliability Data Summary:																																															
All Packages will follow the generic plans shown below based on Package type and application:																																															
<table border="1"> <thead> <tr> <th>Qual vehicle</th> <th>Package</th> <th>Qual vehicle</th> <th>Package</th> </tr> </thead> <tbody> <tr> <td>FDP020N06B-SN00330</td> <td rowspan="16">TO220(2L,3L,4L)</td> <td>FGY160T65SPD-F085</td> <td rowspan="16">TO247(2L,3L,4L)</td> </tr> <tr> <td>FDP8440</td> <td>HUF75852G3</td> </tr> <tr> <td>MTP3055VL</td> <td>FGH75N60UFTU</td> </tr> <tr> <td>FDP12N60NZ</td> <td>FGH30N60LSDTU</td> </tr> <tr> <td>FDP42AN15A0-SB82024A</td> <td>FGH30S150P</td> </tr> <tr> <td>FCP104N60</td> <td>RHRG75120</td> </tr> <tr> <td>FDP8D5N10C</td> <td>FFSH40120ADN-F085</td> </tr> <tr> <td>FDP8030L</td> <td>SVHL080N120SC1</td> </tr> <tr> <td>RURP15100-F085P</td> <td>FGY75T120SQDN</td> </tr> <tr> <td>HGTP20N60A4</td> <td>NVHL040N65S3F</td> </tr> <tr> <td>KSC5603DTU</td> <td>FCH023N65S3-F155</td> </tr> <tr> <td>TIP42CTU-F129</td> <td>FCH041N60F-F085</td> </tr> <tr> <td>NDP6020P</td> <td></td> </tr> <tr> <td>FFSP3065B-F085</td> <td></td> </tr> <tr> <td>FYP2010DNTU</td> <td></td> </tr> </tbody> </table>	Qual vehicle	Package	Qual vehicle	Package	FDP020N06B-SN00330	TO220(2L,3L,4L)	FGY160T65SPD-F085	TO247(2L,3L,4L)	FDP8440	HUF75852G3	MTP3055VL	FGH75N60UFTU	FDP12N60NZ	FGH30N60LSDTU	FDP42AN15A0-SB82024A	FGH30S150P	FCP104N60	RHRG75120	FDP8D5N10C	FFSH40120ADN-F085	FDP8030L	SVHL080N120SC1	RURP15100-F085P	FGY75T120SQDN	HGTP20N60A4	NVHL040N65S3F	KSC5603DTU	FCH023N65S3-F155	TIP42CTU-F129	FCH041N60F-F085	NDP6020P		FFSP3065B-F085		FYP2010DNTU												
Qual vehicle	Package	Qual vehicle	Package																																												
FDP020N06B-SN00330	TO220(2L,3L,4L)	FGY160T65SPD-F085	TO247(2L,3L,4L)																																												
FDP8440		HUF75852G3																																													
MTP3055VL		FGH75N60UFTU																																													
FDP12N60NZ		FGH30N60LSDTU																																													
FDP42AN15A0-SB82024A		FGH30S150P																																													
FCP104N60		RHRG75120																																													
FDP8D5N10C		FFSH40120ADN-F085																																													
FDP8030L		SVHL080N120SC1																																													
RURP15100-F085P		FGY75T120SQDN																																													
HGTP20N60A4		NVHL040N65S3F																																													
KSC5603DTU		FCH023N65S3-F155																																													
TIP42CTU-F129		FCH041N60F-F085																																													
NDP6020P																																															
FFSP3065B-F085																																															
FYP2010DNTU																																															
<table border="1"> <thead> <tr> <th>Test</th> <th>Specification</th> <th>Condition</th> <th>Interval</th> <th>Results</th> </tr> </thead> <tbody> <tr> <td>HTRB</td> <td>JESD22-A108</td> <td>Tj = Max rate Tj for device, bias = 100% of max rated</td> <td>1008 hrs</td> <td>TBD</td> </tr> <tr> <td>HTGB(MOSFET/IGBT only, not applicable to diode and BJT)</td> <td>JESD22-A108</td> <td>Ti = Maximum rated junction temperature for 1008 hrs, Vgss Bias = 100% of max rated</td> <td>1008 hrs</td> <td>TBD</td> </tr> <tr> <td>HTSL</td> <td>JESD22-A103</td> <td>Ta = Maximum storage temperature for 1008 hrs</td> <td>1008 hrs</td> <td>TBD</td> </tr> <tr> <td>IOL</td> <td>M 1037 M 1037</td> <td>Ta=+25°C, deltaTj=100°C max, Ton=Toff is 3.5min</td> <td></td> <td>TBD</td> </tr> <tr> <td>TC</td> <td>JESD22-A104</td> <td>Ta = -55°C to +150°C</td> <td>1000 cyc</td> <td>TBD</td> </tr> <tr> <td>H3TRB or HAST</td> <td>JESD22-A110</td> <td>Temp = 85C, RH=85%, bias = 100V max or 96 hours at TA=130°C/85%RH, or 264hrs TA=110°C /85%RH with part reverse bias at 80% of rated voltage upto a voltage above which arcing in the chamber will likely occur (typically 42V).</td> <td>1008 hrs or 96hrs</td> <td>TBD</td> </tr> <tr> <td>RSH</td> <td>JESD22- B106</td> <td>Ta = 265C, 10 sec</td> <td>NA</td> <td>TBD</td> </tr> <tr> <td>SD</td> <td>JSTD002</td> <td>Ta = 245C, 10 sec</td> <td>NA</td> <td>TBD</td> </tr> </tbody> </table>		Test		Specification	Condition	Interval	Results	HTRB	JESD22-A108	Tj = Max rate Tj for device, bias = 100% of max rated	1008 hrs	TBD	HTGB(MOSFET/IGBT only, not applicable to diode and BJT)	JESD22-A108	Ti = Maximum rated junction temperature for 1008 hrs, Vgss Bias = 100% of max rated	1008 hrs	TBD	HTSL	JESD22-A103	Ta = Maximum storage temperature for 1008 hrs	1008 hrs	TBD	IOL	M 1037 M 1037	Ta=+25°C, deltaTj=100°C max, Ton=Toff is 3.5min		TBD	TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	TBD	H3TRB or HAST	JESD22-A110	Temp = 85C, RH=85%, bias = 100V max or 96 hours at TA=130°C/85%RH, or 264hrs TA=110°C /85%RH with part reverse bias at 80% of rated voltage upto a voltage above which arcing in the chamber will likely occur (typically 42V).	1008 hrs or 96hrs	TBD	RSH	JESD22- B106	Ta = 265C, 10 sec	NA	TBD	SD	JSTD002	Ta = 245C, 10 sec	NA	TBD
Test	Specification	Condition	Interval	Results																																											
HTRB	JESD22-A108	Tj = Max rate Tj for device, bias = 100% of max rated	1008 hrs	TBD																																											
HTGB(MOSFET/IGBT only, not applicable to diode and BJT)	JESD22-A108	Ti = Maximum rated junction temperature for 1008 hrs, Vgss Bias = 100% of max rated	1008 hrs	TBD																																											
HTSL	JESD22-A103	Ta = Maximum storage temperature for 1008 hrs	1008 hrs	TBD																																											
IOL	M 1037 M 1037	Ta=+25°C, deltaTj=100°C max, Ton=Toff is 3.5min		TBD																																											
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	TBD																																											
H3TRB or HAST	JESD22-A110	Temp = 85C, RH=85%, bias = 100V max or 96 hours at TA=130°C/85%RH, or 264hrs TA=110°C /85%RH with part reverse bias at 80% of rated voltage upto a voltage above which arcing in the chamber will likely occur (typically 42V).	1008 hrs or 96hrs	TBD																																											
RSH	JESD22- B106	Ta = 265C, 10 sec	NA	TBD																																											
SD	JSTD002	Ta = 245C, 10 sec	NA	TBD																																											
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	New Part Number	Qualification Vehicle
FCH041N60F-F085	NA	FCH041N65F-F085
FCH041N65F-F085	NA	FCH041N65F-F085
FCH072N60F-F085	NA	FCH041N65F-F085
FCH077N65F-F085	NA	FCH041N65F-F085
FCH104N60F-F085	NA	FCH041N65F-F085
FFH50US60S-F085	NA	RHRG75120
FFSH10120A-F085	NA	FFSH40120ADN-F085
FFSH1065B-F085	NA	FFSH40120ADN-F085
FFSH20120ADN-F085	NA	FFSH40120ADN-F085
FFSH20120A-F085	NA	FFSH40120ADN-F085
FFSH2065BDN-F085	NA	FFSH40120ADN-F085
FFSH2065B-F085	NA	FFSH40120ADN-F085
FFSH3065B-F085	NA	FFSH40120ADN-F085
FFSH40120ADN-F085	NA	FFSH40120ADN-F085
FFSH4065BDN-F085	NA	FFSP3065B-F085
FFSH5065B-F085	NA	FFSH5065B-F085
FFSP1065B-F085	NA	FFSP3065B-F085
FFSP2065BDN-F085	NA	FFSH2065BDN-F085
FFSP2065B-F085	NA	FFSP3065B-F085
FFSP3065B-F085	NA	FFSP3065B-F085
FFSP4065BDN-F085	NA	FFSP3065B-F085
FGY120T65SPD-F085	NA	FGY160T65SPD-F085
FGY160T65SPD-F085	NA	FGY160T65SPD-F085
ISL9R1560G2-F085	NA	RHRG75120
ISL9R1560P2-F085	NA	RURP15100-F085P
ISL9R3060G2-F085	NA	RHRG75120
NVHL080N120SC1	NA	SVHL080N120SC1
NVHL025N65S3	NA	NVHL040N65S3F
NVHL027N65S3F	NA	NVHL040N65S3F



NVHL040N65S3F	NA	NVHL040N65S3F
NVHL072N65S3	NA	NVHL040N65S3F
NVHL080N120SC1	NA	SVHL080N120SC1
NVHL082N65S3F	NA	NVHL040N65S3F
NVHL110N65S3F	NA	NVHL040N65S3F
RHRG1560CC-F085	NA	RHRG75120
RHRG1560-F085	NA	RHRG75120
RHRG3060-F085	NA	RHRG75120
RHRG5060-F085	NA	RHRG75120
RURG3060CC-F085	NA	RHRG75120
RURG3060-F085	NA	RHRG75120
RURG5060-F085	NA	RHRG75120
RURG80100-F085	NA	RHRG75120
RURG8060-F085	NA	RHRG75120
RURP15100-F085	NA	RURP15100-F085P
RURP15100-F085P	NA	RURP15100-F085P
RURP1560-F085	NA	RURP15100-F085P
RURP1560-F085P	NA	RURP15100-F085P

Japanese translation of the notification starts here.
通知の日本語訳はここから始まります。

Note: *The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.*

注：日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます。



初回製品 / プロセス変更通知

文書番号 : IPCN22647Z

発行日 : 14 June 2019

変更件名:	Samsung SDI 製モールドコンパウンドの生産終了に伴うモールドコンパウンドの変更- パッチ 8										
初回出荷予定日:	1 October 2020										
現在の材料の最終注文日:	該当なし										
現在の材料の最終出荷日:	該当なし										
製品カテゴリ:	アクティブなコンポーネント – 個別コンポーネント										
連絡先情報:	現地のオン・セミコンダクター営業所または <PCN.Support@onsemi.com> にお問い合わせください。										
サンプル:	現地のオン・セミコンダクター営業所に注文するか、または<PCN.samples@onsemi.com>にお問い合わせください。 サンプルは、この変更通知の発行から 45 日以内に要求してください。 サンプル納入時は、依頼日、数量、特別梱包材/ラベル条件によって異なります。										
追加の信頼性データ:	お客さまの地域のオン・セミコンダクター営業所または<Frank.Tuan@onsemi.com>にお問い合わせください。										
通知種別:	これは、お客様宛の初回製品 / プロセス変更通知 (IPCN) です。IPCN は、近日中に実施される変更に関する事前通知であり、変更の詳細および影響を受けるデバイスについての一般情報が記載されます。また、暫定的な信頼性認証計画も記載されます。 最終的な認定データおよび特性データは最終製品 / プロセス変更通知 (FPCN) に含まれます。この IPCN は、変更実施から少なくとも 12 か月前に発行される最終製品 / プロセス変更通知 (FPCN) に先だって通知されます。ご不明な点がありましたら、<PCN.Support@onsemi.com> にお問い合わせください。										
変更カテゴリ:	変更種別										
プロセス – 組み立て	モールドコンパウンドの変更										
説明および目的:											
オン・セミコンダクターは、本 IPCN に記載された製品におけるモールドコンパウンドの変更をお客様にお知らせいたします。 この変更は、Samsung SDI EMC から受領した生産終了の通知によるものです。 代替のモールド コンパウンドは、多くのパッケージ用に使用すると決定されているもので、最終製品変更通知にて公表されます。											
	<table><tr><th></th><th>変更前の表記</th><th>変更後の表記</th></tr><tr><td>モールド・コンパウンド (TO220- 2L, 3L, 4L パッケージ)</td><td>Samsung SL7300HFM/SG8200DL</td><td>TBD</td></tr><tr><td>モールド・コンパウンド (TO247- 2L, 3L, 4L パッケージ)</td><td>Samsung SG8200DL/SL7300HFM</td><td>TBD</td></tr></table>			変更前の表記	変更後の表記	モールド・コンパウンド (TO220- 2L, 3L, 4L パッケージ)	Samsung SL7300HFM/SG8200DL	TBD	モールド・コンパウンド (TO247- 2L, 3L, 4L パッケージ)	Samsung SG8200DL/SL7300HFM	TBD
	変更前の表記	変更後の表記									
モールド・コンパウンド (TO220- 2L, 3L, 4L パッケージ)	Samsung SL7300HFM/SG8200DL	TBD									
モールド・コンパウンド (TO247- 2L, 3L, 4L パッケージ)	Samsung SG8200DL/SL7300HFM	TBD									
認定に関してはできる限り早急に完了する予定ですが、各種パッケージ/場所が認定されることになり、実施される認定が多数になるため、複数の最終製品変更通知 (FPCNs) がお客様に発行されることとなります。											
今回の変更に伴う製品マーキングの変更はありません。											
変更の理由 / 動機:	この変更は、Samsung が上記のモールドコンパウンドの製造中止を決定した結果として必要になりました。現在の供給分を使用し終えた後は、オン・セミコンダクターは、影響を受ける製品をこのモールド コンパウンドで製造できなくなります。										
適合性、形状、機能、信頼性、製品安全性、または製造可能性に関して見込まれる影響	機能、形状、適合性、製品安全性、または製造性には変更はありません。製品は同じ製品規格に基づいて認定および検証されます。										



初回製品 / プロセス変更通知

文書番号: IPCN22647Z

発行日: 14 June 2019

影響を受ける拠点：	オン・セミコンダクター拠点： ON Suzhou, China	外部製造工場 / 下請業者拠点： なし		
部品の表示 / 変更の追跡可能性：	日付コード TBD 以降の製品は、新しいモールドコンパウンドで組み立てられます。			
信頼性データの要約：				
すべてのパッケージは、パッケージタイプおよびアプリケーションに基づき以下に示す一般計画に従います。				
デバイス名	パッケージ	デバイス名	パッケージ	
FDP020N06B-SN00330	TO220(2L,3L,4L)	FGY160T65SPD-F085	TO247(2L,3L,4L)	
FDP8440		HUF75852G3		
MTP3055VL		FGH75N60UFTU		
FDP12N60NZ		FGH30N60LSDTU		
FDP42AN15A0-SB82024A		FGH30S150P		
FCP104N60		RHRG75120		
FDP8D5N10C		FFSH40120ADN-F085		
FDP8030L		SVHL080N120SC1		
RURP15100-F085P		FGY75T120SQDN		
HGTP20N60A4		NVHL040N65S3F		
KSC5603DTU		FCH023N65S3-F155		
TIP42CTU-F129		FCH041N60F-F085		
NDP6020P				
FFSP3065B-F085				
FYP2010DNTU				
テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj = Max rate Tj for device, bias = 100% of max rated	1008 hrs	TBD
HTGB(MOSFET/IGBT only, not applicable to diode and BJT)	JESD22-A108	Ti = Maximum rated junction temperature for 1008 hrs, Vgss Bias = 100% of max rated	1008 hrs	TBD
HTSL	JESD22-A103	Ta = Maximum storage temperature for 1008 hrs	1008 hrs	TBD
IOL	M 1037 M 1037	Ta=+25°C, deltaTj=100°C max, Ton=Toff is 3.5min		TBD
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	TBD
H3TRB or HAST	JESD22-A110	Temp = 85C, RH=85%, bias = 100V max or 96 hours at TA=130°C/85%RH, or 264hrs TA=110°C /85%RH with part reverse bias at 80% of rated voltage upto a voltage above which arcing in the chamber will likely occur (typically 42V).	1008 hrs or 96hrs	TBD
RSH	JESD22- B106	Ta = 265C, 10 sec	NA	TBD
SD	JSTD002	Ta = 245C, 10 sec	NA	TBD
電気的特性の要約：				
電気的特性への影響はありません。				



影響を受ける部品の一覧:

注: 標準の部品番号(既製品)のみが部品一覧に記載されます。本 PCN に影響を受けるカスタム 部品は、PCN メールの顧客の特定の PCN の付属文書、または PCN カスタマイズポータルに記載されています。

現在の部品番号	新部品番号	認定試験用ピークル
FCH041N60F-F085	NA	FCH041N65F-F085
FCH041N65F-F085	NA	FCH041N65F-F085
FCH072N60F-F085	NA	FCH041N65F-F085
FCH077N65F-F085	NA	FCH041N65F-F085
FCH104N60F-F085	NA	FCH041N65F-F085
FFH50US60S-F085	NA	RHRG75120
FFSH10120A-F085	NA	FFSH40120ADN-F085
FFSH1065B-F085	NA	FFSH40120ADN-F085
FFSH20120ADN-F085	NA	FFSH40120ADN-F085
FFSH20120A-F085	NA	FFSH40120ADN-F085
FFSH2065BDN-F085	NA	FFSH40120ADN-F085
FFSH2065B-F085	NA	FFSH40120ADN-F085
FFSH3065B-F085	NA	FFSH40120ADN-F085
FFSH40120ADN-F085	NA	FFSH40120ADN-F085
FFSH4065BDN-F085	NA	FFSP3065B-F085
FFSH5065B-F085	NA	FFSH5065B-F085
FFSP1065B-F085	NA	FFSP3065B-F085
FFSP2065BDN-F085	NA	FFSH2065BDN-F085
FFSP2065B-F085	NA	FFSP3065B-F085
FFSP3065B-F085	NA	FFSP3065B-F085
FFSP4065BDN-F085	NA	FFSP3065B-F085
FGY120T65SPD-F085	NA	FGY160T65SPD-F085
FGY160T65SPD-F085	NA	FGY160T65SPD-F085
ISL9R1560G2-F085	NA	RHRG75120
ISL9R1560P2-F085	NA	RURP15100-F085P
ISL9R3060G2-F085	NA	RHRG75120
NVHL080N120SC1	NA	SVHL080N120SC1
NVHL025N65S3	NA	NVHL040N65S3F
NVHL027N65S3F	NA	NVHL040N65S3F



初回製品 / プロセス変更通知

文書番号# : IPCN22647Z

発行日 :: 14 June 2019

NVHL040N65S3F	NA	NVHL040N65S3F
NVHL072N65S3	NA	NVHL040N65S3F
NVHL080N120SC1	NA	SVHL080N120SC1
NVHL082N65S3F	NA	NVHL040N65S3F
NVHL110N65S3F	NA	NVHL040N65S3F
RHRG1560CC-F085	NA	RHRG75120
RHRG1560-F085	NA	RHRG75120
RHRG3060-F085	NA	RHRG75120
RHRG5060-F085	NA	RHRG75120
RURG3060CC-F085	NA	RHRG75120
RURG3060-F085	NA	RHRG75120
RURG5060-F085	NA	RHRG75120
RURG80100-F085	NA	RHRG75120
RURG8060-F085	NA	RHRG75120
RURP15100-F085	NA	RURP15100-F085P
RURP15100-F085P	NA	RURP15100-F085P
RURP1560-F085	NA	RURP15100-F085P
RURP1560-F085P	NA	RURP15100-F085P