



<b>Title of Change:</b>	Qualification of mold compound G700HF in DPAK package in both ON Semiconductor Vietnam (OSV) and ON Semiconductor Seremban Malaysia (SBN).							
<b>Proposed first ship date:</b>	6 December 2017							
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Trung.Dang@onsemi.com>							
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office							
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <cheanching.sim@onsemi.com>							
<b>Type of notification:</b>	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>.							
<b>Change Part Identification:</b>	The change will be identified by date code. Units with date code W49 2017 or later may be assembled with new material.							
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____							
<b>Change Sub-Category(s):</b>	<input type="checkbox"/> Manufacturing Site Change/Addition <input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____							
<b>Sites Affected:</b>	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input checked="" type="checkbox"/> ON Semiconductor site(s) : ON Dong Nai Province, Vietnam ON Seremban, Malaysia <input type="checkbox"/> External Foundry/Subcon site(s)							
<b>Description and Purpose:</b>								
<p>This Final Product Change Notification (FPCN) announces the plan to qualify mold compound G700HF on DPAK packaged devices in ON Semiconductor Vietnam (OSV) and ON Semiconductor Seremban Malaysia (SBN). This change is to improve product package robustness.</p> <p>Upon the expiration of this FPCN, these affected products will be assembled with the new mold compound.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #92d050;"> <th style="text-align: center;">Material to be changed</th> <th style="text-align: center;">Before Change</th> <th style="text-align: center;">After Change</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Mold Compound</td> <td style="text-align: center;">EMC-GE8000CH4ES</td> <td style="text-align: center;">EMC-G700HF</td> </tr> </tbody> </table>			Material to be changed	Before Change	After Change	Mold Compound	EMC-GE8000CH4ES	EMC-G700HF
Material to be changed	Before Change	After Change						
Mold Compound	EMC-GE8000CH4ES	EMC-G700HF						
<p>ON Semiconductor OSV and SBN are qualified site for DPAK Standard discrete packaged products and is ISO TS16949 certified.</p> <p>Products have been qualified to industrial requirements and continue remain as Pb-free, Halide free and RoHS compliant.</p>								

**Reliability Data Summary:****QV DEVICE NAME:** STD110N02RT4G (Mosfet)**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 175 °C, bias = 100% of rated V	1008 hrs	0/84
HTGB	JESD22-A108	Ta = 175°C, 100% max rated Vgss	1008 hrs	0/84
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/84
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	15000 cyc	0/84
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	0/84
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/84
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V	1008 hrs	0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/336
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

**QV DEVICE NAME:** NJVMJD350T4G (Bipolar)**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, bias = 100% of rated V	1008 hrs	0/84
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/84
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	15000 cyc	0/84
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/84
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/84
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs	0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/336
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15



**QV DEVICE NAME:** SURHD8560W1T4G (Ultrafast)

**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150°C, Tj(est)= 175°C, bias = 100% of rated V	1008 hrs	0/252
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/252
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	15000 cyc	0/252
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/252
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/252
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/1008
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45

**QV DEVICE NAME:** NBRD5H100T4G (Schottky)

**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 90°C, bias = 100% of rated V	1008 hrs	0/84
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/84
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	15000 cyc	0/84
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/84
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/84
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V	1008 hrs	0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/336
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

**Electrical Characteristic Summary:**

Electrical characteristics are not impacted.



## List of Affected Standard Parts:

Part Number	Qualification Vehicle	Part Number	Qualification Vehicle
MBRD1035CTLG	NBRD5H100T4G	MBRD660CTRLG	NBRD5H100T4G
MBRD1035CTLT4G	NBRD5H100T4G	MBRD660CTT4G	NBRD5H100T4G
MBRD1045T4G	NBRD5H100T4G	MBRD660CTT4H	NBRD5H100T4G
MBRD320G	NBRD5H100T4G	MBRD835LG	NBRD5H100T4G
MBRD320RLG	NBRD5H100T4G	MBRD835LT4G	NBRD5H100T4G
MBRD320RLH	NBRD5H100T4G	MBRD835LT4H	NBRD5H100T4G
MBRD320T4G	NBRD5H100T4G	MJD112G	NJVMJD350T4G
MBRD320T4H	NBRD5H100T4G	MJD112RLG	NJVMJD350T4G
MBRD330G	NBRD5H100T4G	MJD112T4G	NJVMJD350T4G
MBRD330RLG	NBRD5H100T4G	MJD117G	NJVMJD350T4G
MBRD330T4G	NBRD5H100T4G	MJD117T4G	NJVMJD350T4G
MBRD340G	NBRD5H100T4G	MJD122G	NJVMJD350T4G
MBRD340RLG	NBRD5H100T4G	MJD122T4G	NJVMJD350T4G
MBRD340T4G	NBRD5H100T4G	MJD127G	NJVMJD350T4G
MBRD350G	NBRD5H100T4G	MJD127T4G	NJVMJD350T4G
MBRD350RLG	NBRD5H100T4G	MJD128T4G	NJVMJD350T4G
MBRD350T4G	NBRD5H100T4G	MJD148T4G	NJVMJD350T4G
MBRD360G	NBRD5H100T4G	MJD200G	NJVMJD350T4G
MBRD360RLG	NBRD5H100T4G	MJD200RLG	NJVMJD350T4G
MBRD360T4G	NBRD5H100T4G	MJD200T4G	NJVMJD350T4G
MBRD5H100T4G	NBRD5H100T4G	MJD210G	NJVMJD350T4G
MBRD620CTT4G	NBRD5H100T4G	MJD210RLG	NJVMJD350T4G
MBRD630CTT4G	NBRD5H100T4G	MJD210T4G	NJVMJD350T4G
MBRD640CTT4G	NBRD5H100T4G	MJD243G	NJVMJD350T4G
MBRD640CTT4H	NBRD5H100T4G	MJD243T4G	NJVMJD350T4G
MBRD650CTG	NBRD5H100T4G	MJD253T4G	NJVMJD350T4G
MBRD650CTT4G	NBRD5H100T4G	MJD295G	NJVMJD350T4G
MBRD660CTG	NBRD5H100T4G	MJD295T4G	NJVMJD350T4G
MJD3055T4G	NJVMJD350T4G	MJD47T4G	NJVMJD350T4G
MJD31CG	NJVMJD350T4G	MJD50G	NJVMJD350T4G
MJD31CRLG	NJVMJD350T4G	MJD50T4G	NJVMJD350T4G
MJD31CT4G	NJVMJD350T4G	MJD5731T4G	NJVMJD350T4G
MJD31T4G	NJVMJD350T4G	MJD6039T4G	NJVMJD350T4G
MJD32CG	NJVMJD350T4G	MSRD620CTG	SURHD8560W1T4G
MJD32CRLG	NJVMJD350T4G	MSRD620CTRG	SURHD8560W1T4G
MJD32CT4G	NJVMJD350T4G	MSRD620CTT4G	SURHD8560W1T4G
MJD32RLG	NJVMJD350T4G	MSRD620CTT4RG	SURHD8560W1T4G
MJD32T4G	NJVMJD350T4G	MURD320T4G	SURHD8560W1T4G
MJD340G	NJVMJD350T4G	MURD330T4G	SURHD8560W1T4G
MJD340RLG	NJVMJD350T4G	MURD340T4G	SURHD8560W1T4G



MJD340T4G	NJVMJD350T4G	MURD530T4G	SURHD8560W1T4G
MJD350T4G	NJVMJD350T4G	MURD550PFT4G	SURHD8560W1T4G
MJD41CRLG	NJVMJD350T4G	MURD620CTG	SURHD8560W1T4G
MJD41CT4G	NJVMJD350T4G	MURD620CTH	SURHD8560W1T4G
MJD42CG	NJVMJD350T4G	MURD620CTT4G	SURHD8560W1T4G
MJD42CRLG	NJVMJD350T4G	MURHD560T4G	SURHD8560W1T4G
MJD42CT4G	NJVMJD350T4G	MURHD560W1T4G	SURHD8560W1T4G
MJD44E3T4G	NJVMJD350T4G	NDD02N60ZT4G	STD110N02RT4G
MJD44H11G	NJVMJD350T4G	NDD03N60ZT4G	STD110N02RT4G
MJD44H11RLG	NJVMJD350T4G	NDD03N80ZT4G	STD110N02RT4G
MJD44H11T4G	NJVMJD350T4G	NDD04N50ZT4G	STD110N02RT4G
MJD44H11T5G	NJVMJD350T4G	NDD04N60ZT4G	STD110N02RT4G
MJD45H11G	NJVMJD350T4G	NDD05N50ZT4G	STD110N02RT4G
MJD45H11RLG	NJVMJD350T4G	NDD60N360U1-35G	STD110N02RT4G
MJD45H11T4G	NJVMJD350T4G	NDD60N360U1T4G	STD110N02RT4G
MJD47G	NJVMJD350T4G	NDD60N550U1-35G	STD110N02RT4G
NDD60N550U1T4G	STD110N02RT4G	NTD4805NT4G	STD110N02RT4G
NDD60N745U1-35G	STD110N02RT4G	NTD4806NT4H	STD110N02RT4G
NDD60N745U1T4G	STD110N02RT4G	NTD4809N-35H	STD110N02RT4G
NDD60N900U1-35G	STD110N02RT4G	NTD4809NAT4H	STD110N02RT4G
NDD60N900U1T4G	STD110N02RT4G	NTD4809NT4G	STD110N02RT4G
NJD1718T4G	NJVMJD350T4G	NTD4813NHT4G	STD110N02RT4G
NJD2873T4G	NJVMJD350T4G	NTD4813NT4H	STD110N02RT4G
NJD35N04G	NJVMJD350T4G	NTD4815N-35G	STD110N02RT4G
NJD35N04T4G	NJVMJD350T4G	NTD4858N-35G	STD110N02RT4G
NSS1C300ET4G	NJVMJD350T4G	NTD4858NT4G	STD110N02RT4G
NSS1C301ET4G	NJVMJD350T4G	NTD4860NT4G	STD110N02RT4G
NTD110N02RT4G	STD110N02RT4G	NTD4904N-35G	STD110N02RT4G
NTD14N03RT4G	STD110N02RT4G	NTD4904NT4G	STD110N02RT4G
NTD18N06LT4G	STD110N02RT4G	NTD4909N-35H	STD110N02RT4G
NTD20N03L27T4G	STD110N02RT4G	NTD4909NA-35G	STD110N02RT4G
NTD20N06LT4G	STD110N02RT4G	NTD4909NA-35H	STD110N02RT4G
NTD20N06T4G	STD110N02RT4G	NTD4909NT4G	STD110N02RT4G
NTD20P06LT4G	STD110N02RT4G	NTD4909NT4H	STD110N02RT4G
NTD24N06LT4G	STD110N02RT4G	NTD4965NT4G	STD110N02RT4G
NTD24N06T4G	STD110N02RT4G	NTD4969NT4G	STD110N02RT4G
NTD25P03LT4G	STD110N02RT4G	NTD4979N-35G	STD110N02RT4G
NTD2955T4G	STD110N02RT4G	NTD5802NT4G	STD110N02RT4G
NTD3055-094T4G	STD110N02RT4G	NTD5862NT4G	STD110N02RT4G
NTD3055-150T4G	STD110N02RT4G	NTD5865NLT4G	STD110N02RT4G
NTD3055L104T4G	STD110N02RT4G	NTD5867NLT4G	STD110N02RT4G
NTD3055L170T4G	STD110N02RT4G	NTD6414ANT4G	STD110N02RT4G
NTD4302T4G	STD110N02RT4G	NTD6415ANLT4G	STD110N02RT4G



NTD4804NT4G	STD110N02RT4G	NTD6416ANLT4G	STD110N02RT4G
NDD60N360U1-1G	STD110N02RT4G	NTD6416ANT4G	STD110N02RT4G
NDD60N550U1-1G	STD110N02RT4G	NDDL01N60Z-1G	STD110N02RT4G
NDD60N745U1-1G	STD110N02RT4G	NDDL01N60ZT4G	STD110N02RT4G
NDD60N900U1-1G	STD110N02RT4G	XDD04N60ZT4G	STD110N02RT4G
NTD2955-1G	STD110N02RT4G	NTD4808N-1G	STD110N02RT4G
NTD3055L104-1G	STD110N02RT4G	STD4963NT4G	STD110N02RT4G
NDD03N40ZT4G	STD110N02RT4G	NTD4970N-35G	STD110N02RT4G
NDD02N40-1G	STD110N02RT4G	MJD112-1G	NJVMJD350T4G
NDD02N40T4G	STD110N02RT4G	MJD117-1G	NJVMJD350T4G
NDD03N40Z-1G	STD110N02RT4G	MJD253-1G	NJVMJD350T4G
NDD04N50Z-1G	STD110N02RT4G	MJD42C1G	NJVMJD350T4G
NDD02N60Z-1G	STD110N02RT4G	MJD44H11-1G	NJVMJD350T4G
NDD03N60Z-1G	STD110N02RT4G	MJD45H11-1G	NJVMJD350T4G
NDD03N80Z-1G	STD110N02RT4G	NSI50350ADT4G	NJVMJD350T4G
NDD04N60Z-1G	STD110N02RT4G	MJD31C1G	NJVMJD350T4G
MBRD640CTG	NBRD5H100T4G	NHPD660T4G	SURHD8560W1T4G

**List of Affected Customer Specific Part:**

*NOTE: Please be informed that parts impacted by this PDN/PCN are Special/Customer specific parts, thus MPN & CPN info will be available to affected customers only by clicking the ["Custom PCN for Selected Company Button"](#) in the Document Analysis page of PCMS/PCN Alert.*