



Final Product/Process Change Notification

Document #:FPCN24765XA

Issue Date:27 Dec 2024

Title of Change:	Qualification of mold compound second source GR710F at onsemi Suzhou, China for D2PAK devices
Proposed First Ship date:	05 Apr 2025 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office
PCN Samples Contact:	Contact your local onsemi Sales Office. 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 onsemi Sales Office
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. onsemi 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:	Keep same marking. Changed material will be identified by lot code.
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:	
onsemi Sites	External Foundry/Subcon Sites
onsemi Suzhou, China	None

Description and Purpose:		
This FPCN is to inform customers that onsemi has qualified new green mold compound GR710F from China supplier Hysol, as alternative source on selected D2PAK Discrete products in onsemi Suzhou, China. This will help improve supply chain flexibility.		
	Before Change Description	After Change Description
Mold Compound	CEL8240HF10FC	CEL8240HF10FC & GR710F
Mold Compound	KTMC5900GM F01	KTMC5900GM F01 & GR710F
There is no product marking change because of this change.		
There are no changes in product electrical specifications.		



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Reliability Data Summary:

QV DEVICE NAME: FDB2552-SB82178

PACKAGE: D2PAK

RMS: U86662

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 80% max rated V	1008hrs	0/231
HTGB	JESD22-A108	Tj=175°C, 100% max rated Vgss	1008hrs	0/231
HTSL	JESD22-A103	Ta= 175°C	1008hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 245 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
TC+PC	JESD22-A104	Ta= -55°C to +150°C	1000cyocs	0/231
HAST+PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/231
UHAST+PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/231
IOL+PC	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5min	8572cyocs	0/231
SD	JSTD002	Ta = 245°C, 5 sec		0/45

QV DEVICE NAME: NVB082N65S3F

PACKAGE: D2PAK

RMS: U86433

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 100% max rated V	1008hrs	0/231
HTGB	JESD22-A108	Tj=150°C, 100% max rated Vgss	1008hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1008hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 245 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
TC+PC	JESD22-A104	Ta= -55°C to +150°C	1000cyocs	0/231
HAST+PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/231
UHAST+PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/231
IOL+PC	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5min	8572cyocs	0/231
SD	JSTD002	Ta = 245°C, 5 sec		0/45

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
NTB190N65S3HF	NVB082N65S3F
NTB150N65S3HF	NVB082N65S3F
NTB110N65S3HF	NVB082N65S3F
NTB095N65S3HF	NVB082N65S3F



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NTB082N65S3F	NVB082N65S3F
HUF76639S3ST	FDB2552-SB82178
HUF76439S3ST	FDB2552-SB82178
HUF76429S3ST	FDB2552-SB82178
HUF75639S3ST	FDB2552-SB82178
HUF75631S3ST	FDB2552-SB82178
FQB8N90CTM	FDB2552-SB82178
FDB86102LZ	FDB2552-SB82178
FDB5800	FDB2552-SB82178
FDB3502	FDB2552-SB82178
FDB2532	FDB2552-SB82178
FDB390N15A	FDB2552-SB82178
FDB110N15A	FDB2552-SB82178
FDB082N15A	FDB2552-SB82178
FDB12N50TM	FDB2552-SB82178

Appendix A: Changed Products

PCN#: FPCN24765XA
Issue Date: Dec 26, 2024

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
HUF75631S3ST		FDB2552-SB82178	#NONE	
FDB082N15A		FDB2552-SB82178	#NONE	
FDB5800		FDB2552-SB82178	#NONE	
HUF76439S3ST		FDB2552-SB82178	#NONE	
HUF75639S3ST		FDB2552-SB82178	#NONE	
FDB2532		FDB2552-SB82178	#NONE	
NTB095N65S3HF		NVB082N65S3F	#NONE	
NTB082N65S3F		NVB082N65S3F	#NONE	
HUF76639S3ST		FDB2552-SB82178	#NONE	
FDB390N15A		FDB2552-SB82178	#NONE	
FDB3502		FDB2552-SB82178	#NONE	
FDB110N15A		FDB2552-SB82178	#NONE	
FDB12N50TM		FDB2552-SB82178	#NONE	
NTB150N65S3HF		NVB082N65S3F	#NONE	
FDB86102LZ		FDB2552-SB82178	#NONE	
NTB190N65S3HF		NVB082N65S3F	#NONE	
NTB110N65S3HF		NVB082N65S3F	#NONE	
HUF76429S3ST		FDB2552-SB82178	#NONE	