Final Product/Process Change Notification

Document #: FPCN24561ZA2
Issue Date: 28 Feb 2023

Title of Change:	Update of **FPCN24561ZA** with qualification results of FRD Rectifiers, UniFET's, and other discrete products at onsemi Roznov, Czech Republic.
Proposed Changed Material First Ship Date:	27 Mar 2023 or earlier if approved by customer
Current Material Last Order Date:	N/A *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*.
Current Material Last Delivery Date:	N/A *The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory*
Product Category:	Active components – Discrete components
Contact information:	Contact your local onsemi Sales Office or Joeri.Klutsch@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. 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:	N/A
PPAP Availability Date:	26 Feb 2023
Additional Reliability Data:	Contact your local onsemi Sales Office or songyong.sim@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi 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 - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor, New wafer diameter
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.

Description and Purpose:

This notification is to inform the customers that onsemi qualified their FRD Rectifiers, UniFET's, and other discrete products at onsemi Roznov, Czech Republic.

NOTE: Due to priority changes, some parts have been removed from this qualification, also communicated through update notice **FPCN24561ZA1**.

A new notice will be communicated later in 2023 with the modified plans for these parts.

	Before Change Description	After Change Description
Wafer fab	onsemi Bucheon, Korea	onsemi Roznov, Czech Republic onsemi Bucheon, Korea
Wafer size	6 inch (150 mm) / 8 inch (200 mm)	8 inch (200 mm)

There are no product material changes and no product marking changes as a result of this change.

Reason / Motivation for Change:	Capacity improvement
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 onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi Roznov, Czech Republic	None

Marking of Parts/ Traceability of Change:	Date Code

Reliability Data Summary:

QV DEVICE NAME: NFVA35065L32 (QV8-1)
RMS: 83762, 84035
PACKAGE: ASPM27

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108, AQG324	Tj=175°C, 100% max rated V	1008 hrs	0/78
TC	JESD22-A104, AQG324	Ta= -40°C to +125°C	1000 cyc	0/39
TS1	AQG324	Ta= -40°C to +125°C, transition <30sec	1000 cyc	0/18
TS2	AQG324	Ta= -40°C to +125°C, transition <30sec, with heat sink	1000 cyc	0/6
H3TRB	JESD22-A110	85°C, 85% RH, 18.8psig, bias 100V	1008 hrs	0/78
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/36

QV DEVICE NAME: FGHL75T65MQD (QV8-2)
RMS: S85126
PACKAGE: TO-247

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 80% rated V	1008hrs	0/231
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta=175°C	1008hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 5min	6000cyc	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	1000cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/231
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/30

QV DEVICE NAME: FGA60N65SMD (QV8-3)
RMS: V85129
PACKAGE: TO-247

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 80% rated V	1008hrs	0/231
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta=175°C	1008hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 5min	6000cyc	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	1000cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/231
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/30

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.

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
RHRG5060-F085	N/A	NFVA35065L32, FGHL75T65MQD
NFVA36065L42	N/A	NFVA35065L32
NFVA35065L42	N/A	NFVA35065L32
NFVA35065L32	N/A	NFVA35065L32
NFVA34065L32	N/A	NFVA35065L32
NFVA33065L42	N/A	NFVA35065L32
NFVA33065L32	N/A	NFVA35065L32
NFVA25012NP2T	N/A	NFVA35065L32
NFVA23512NP2T-Z014	N/A	NFVA35065L32

NFVA23512NP2T	N/A	NFVA35065L32
NFVA22512NP2T	N/A	NFVA35065L32
ISL9R1560P2-F085	N/A	NFVA35065L32, FGHL75T65MQD
FGH40N60SMD-F085	N/A	NFVA35065L32, FGHL75T65MQD
FGB40T65SPD-F085	N/A	NFVA35065L32,FGA60N65SMD
FGB20N60SFD-F085	N/A	NFVA35065L32,FGA60N65SMD
FAM65CR51XZ2	N/A	NFVA35065L32
FAM65CR51XZ1	N/A	NFVA35065L32
FAM65CR51DZ2	N/A	NFVA35065L32
FAM65CR51DZ1	N/A	NFVA35065L32
AFGHL75T65SQDT	N/A	NFVA35065L32, FGHL75T65MQD
AFGHL75T65SQD	N/A	NFVA35065L32, FGHL75T65MQD