



## Final Product/Process Change Notification

Document #:FPCN24693Z

Issue Date:03 Jul 2023

<b>Title of Change:</b>	Qualification of Wafer Fab Transfer for RP3/PT3 MOSFET Technology to onsemi Bucheon, Korea facility.	
<b>Proposed Changed Material First Ship Date:</b>	01 Jan 2024 or earlier if approved by customer	
<b>Current Material Last Order Date:</b>	28 Feb 2022 <i>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.</i>	
<b>Current Material Last Delivery Date:</b>	31 Dec 2023 <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>	
<b>Product Category:</b>	Active components – Discrete components	
<b>Contact information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Daryl.Cruz@onsemi.com">Daryl.Cruz@onsemi.com</a>	
<b>PCN Samples Contact:</b>	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.	
<b>Sample Availability Date:</b>	05 May 2023	
<b>PPAP Availability Date:</b>	10 May 2023	
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:songyong.sim@onsemi.com">songyong.sim@onsemi.com</a>	
<b>Type of Notification:</b>	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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> .	
<b>Change Category</b>		
<b>Category</b>	<b>Type of Change</b>	
Process - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor	
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.	
<b>Description and Purpose:</b>		
<p>This Product Change Notification is intended to increase capacity for Automotive RP3, PT3 MOSFET technology products by transferring wafer fabrication to onsemi Bucheon Korea. The changes include transferring wafer fabrication and the orderable part number only. Other probe/ATO site are remaining as it is.</p> <p>There is no product marking change as a result of this change.</p>		
	<b>From</b>	<b>To</b>
<b>Fab Site</b>	TowerJazz Israel	onsemi Bucheon Korea

<b>Reason / Motivation for Change:</b>	Source/Supply/Capacity Changes,Supply disruption,Capacity improvement		
<b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability:</b>	<p>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.</p> <p>No anticipated impacts.</p>		
<b>Sites Affected:</b>			
<b>onsemi Sites</b>		<b>External Foundry/Subcon Sites</b>	
onsemi Bucheon, Korea		None	
<b>Marking of Parts/ Traceability of Change:</b>	Changed material can be identified by lot code.		

## Reliability Data Summary:

**QV DEVICE NAME:** FDD4141-F085

**RMS:** S77837

**PACKAGE:** DPAK3 (TO-252 3 LD)

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= 150°C, 100% max rated V	1008 hrs	0/252
HTGB	JESD22-A108	Tj= 150°C, 100% max rated Vgss	1008 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only	-	-
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/252
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/252
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252

Refer to the attached AEC1 Pager for more details.

## 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
FDD4141-F085	FDD4141-F085BK	FDD4141-F085