



Final Product/Process Change Notification

Document #:FPCN23755Z

Issue Date:11 May 2022

Title of Change:	Fabrication Site Transfer from Oudenaarde (Belgium 6”) to onsemi Pocatello, Id (USA 8”) with Added Passivation, and JCAP Bumping Site Change, with Polyimide Change.	
Proposed Changed Material First Ship Date:	18 Nov 2022 or earlier if approved by customer	
Current Material Last Order Date:	01 Sep 2021 This date was carried forward from IPCN23749ZA. <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>	
Current Material Last Delivery Date:	17 Nov 2022 <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>	
Product Category:	Active components – Discrete components	
Contact information:	Contact your local onsemi Sales Office or ffyj9h@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:	24 May 2022	
PPAP Availability Date:	31 May 2022	
Additional Reliability Data:	Contact your local onsemi Sales Office or Nicky.Siu@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 / change of passivation or die coating (without bare die), 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:		
<p>This is the final notification of the wafer fabrication site transfer of the ESD dies from Fab2, Oudenaarde (Belgium 6”) to onsemi Pocatello (USA 8”), and new bump site qualification in JCAP of the CMF dies. The details of the changes are outlined in the tables below.</p> <p>The transfer of the ESD dies is due to the sale of the Oudenaarde facility and the new JCAP site qualification is for products continuance. Datasheet specifications and product electrical performance remain unchanged.</p> <p>Transfer of the ESD dies:</p>		
	From	To
Fab Site	Wafer manufacturing in Fab2, Oudenaarde, Belgium	Wafer manufacturing in Pocatello, USA
Wafer size	Wafer diameter 6”	Wafer diameter 8”
Passivation	Wafer without passivation	Wafer with passivation

JCAP new bump site qualification for CMF dies:

	From	To
Fab Site	8" wafers are processed at site B1 No.275 Binjiang Road, Jiangyin, Jiangsu, China, 214432	8" wafers are processed at site B2 No.78 Changshan Road, Jiangyin, Jiangsu, China, 214433
Polymer material	I-8124ER	HD4100

Affected parts with this change will be identified by date code.

Reason / Motivation for Change:	Source/Supply/Capacity Changes Process/Materials Change
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 Pocatello Idaho, United States	JCAP, China

Marking of Parts/ Traceability of Change:	Affected parts with this changing will be identified by the date code
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Reliability Data Summary:

QV DEVICE NAME : EMI2124MTTAG
 RMS : S76743
 PACKAGE : WDFN-8

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta = 150°C, 100% max rated V	2016 hrs	0/231
HTSL	JESD22-A103	Ta = 150°C	1008 hrs	0/231
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020, JESD22-A113	MSL 1 @ 260°C	-	-
RSH	JESD22-B106	Ta = 265°C, 10 sec	-	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/s

Electrical Characteristics Summary:

Electrical characteristics are not impacted.



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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
SZEMI2121MTTAG	N/A	EMI2124MTTAG

Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
SZEMI2121MTTAG		EMI2124MTTAG		