

Final Product/Process Change Notification

Document #:FPCN23668X Issue Date:20 Apr 2022

Title of Change:	JCAP Bumping Site, and Polyimide Change [Batch 1]		
Proposed First Ship date:	27 Jul 2022 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or NoorArdila.Shaharuddin@onsemi.com		
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 or Nicky.Siu@onsemi.com		
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:	Affected parts with this change will be identified by date code.		
Change Category:	Assembly Change		
Change Sub-Category(s):	Manufacturing Site Transfer, Material Change		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
None		JCAP, China	

Description and Purpose:

This is the final notification of the new bump site qualification in JCET (formerly known as JCAP) of the CMF dies. The details of the changes are outlined in the tables below.

Change of polyimide is for product continuance. I-8124ER will no longer be produced by supplier.

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

Datasheet specifications and product electrical performance remain unchanged.

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

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Reliability Data Summary:

QV DEVICE NAME: EMI8133MUTAG (TH3)

RMS : \$74989

PACKAGE : XDFN-16, 3.5x1.5mm, 0.5P

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 cycs	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

QV DEVICE NAME: EMI8133MUTAG (PHA)

RMS : \$74554

PACKAGE : XDFN-16, 3.5x1.5mm, 0.5P

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta = 150°C, 100% max rated V	1008 hrs	0/77
HTSL	JESD22-A103	Ta = 150°C	1008 hrs	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cycs	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/77
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
PC	J-STD-020, JESD22-A113	MSL 1 @ 260°C	=	-
RSH	JESD22-B106	Ta = 265°C, 10 sec	-	0/10

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 <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle		
EMI8143MUTAG	EMI8133MUTAG		
EMI8142MUTAG	EMI8133MUTAG		
EMI8141MUTAG	EMI8133MUTAG		
EMI8133MUTAG	EMI8133MUTAG		
EMI8132MUTAG	EMI8133MUTAG		
EMI8131MUTAG	EMI8133MUTAG		
EMI8043MUTAG	EMI8133MUTAG		
EMI8042MUTAG	EMI8133MUTAG		
EMI8041MUTAG	EMI8133MUTAG		
EMI8041BMUTAG EMI8133MUTAG			

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Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
EMI8143MUTAG		EMI8133MUTAG	NA	
EMI8141MUTAG		EMI8133MUTAG	NA	
EMI8133MUTAG		EMI8133MUTAG	NA	
EMI8132MUTAG		EMI8133MUTAG	NA	
EMI8131MUTAG		EMI8133MUTAG	NA	
EMI8042MUTAG		EMI8133MUTAG	NA	
EMI8041MUTAG		EMI8133MUTAG	NA	
EMI8142MUTAG		EMI8133MUTAG	NA	