Final Product/Process Change Notification

Document #:FPCN23755X
Issue Date:04 May 2022

Title of Change:	Fabrication Site Transfer from Oudenaarde (Belgium 6”) to onsemi Pocatello, Id (USA 8”), and JCAP Bumping Site Change, with Additional Polyimide Change.
Proposed First Ship date:	11 Aug 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 the date code
Change Category:	Assembly Change, Wafer Fab Change
Change Sub-Category(s):	Material Change, Manufacturing Site Transfer

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi Pocatello Idaho, United States	JCAP, China

Description and Purpose:

This is the final notification of the wafer fabrication site transfer of the ESD dies from Oudenaarde (Belgium 6”) to onsemi Pocatello (USA 8”), and 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.

The transfer of the ESD dies is due to the sale of the Oudenaarde facility and the new JCET site qualification is for products continuance.

Datasheet specifications and product electrical performance remain unchanged.

Transfer of the ESD dies:

	From	To
Fab Site	Wafer manufacturing in Oudenaarde, Belgium	Wafer manufacturing in Pocatello, USA
Wafer size	Wafer diameter 6”	Wafer diameter 8”

JCET new bump site qualification for CMF dies:

	From	To
Bumping 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.

Reliability Data Summary:

Fab transfer (ESD die)

QV DEVICE NAME : EMI4193MTTAG
RMS# : S77112
PACKAGE : WQFN-16

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta = 150°C, 100% max rated V	1008 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

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

JCAP site transfer (CMF die)

QV DEVICE NAME : EMI4193MTTAG (MY1)
RMS # : S74552
PACKAGE : WDFN-16, 4x2mm, 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 : EMI4193MTTAG (TH3)
RMS # : S74987
PACKAGE : WDFN-16, 4x2mm, 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* ***PCN Customized Portal.***

Part Number	Qualification Vehicle
EMI4193MTTAG	Fab transfer: EMI4193MTTAG; JCAP bump transfer: EMI4193MTTAG
EMI4192MTTAG	Fab transfer: EMI2124MTTAG, EMI4193MTTAG; JCAP bump transfer: EMI4193MTTAG