ON Semiconductor®

Final Product/Process Change Notification

Document #:FPCN22966XL
Issue Date: 26 Jul 2021

Title of Change:	Wafer Fab Capacity Expansion for FS3 Trench IGBT 12inch Technology at Global Foundries in New York, US and FRD 8inch Technology at Roznov in Czech Republic.
Proposed First Ship date:	30 Oct 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Sungdae.Shin@onsemi.com
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com>. 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 ON Semiconductor Sales Office or Jayoung.Hong@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. ON Semiconductor 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:	Material will be traceable with ONs lot trace code & tracking
Change Category:	Wafer Fab Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

ON Semiconductor Sites	**External Foundry/Subcon Sites**
ON Semiconductor Roznov, Czech Republic	Global Foundries East Fishkill, New York, United States

Description and Purpose:

Qualify 2 different FAB site with 2 different wafer technology as a below table;

The purpose of notification is increase wafer loading capacity.

	FAB Site	
	Before	**After**
FS3 TIGBT	ON semiconductor Aizu, Japan ON semiconductor Bucheon, Korea	ON semiconductor Aizu, Japan ON semiconductor Bucheon, Korea Global Foundries East Fishkill, New York, United States
FRD	ON semiconductor Bucheon, Korea	ON semiconductor Bucheon, Korea ON semiconductor Roznov, Czech Republic

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

There is no product marking change as a result of this change.

Reliability Data Summary:

QV DEVICE NAME: FGH75T65SHD-F155, FGH60T65SHD-F155, FGY160T65SPD-F085
RMS: U78532, U78534, U78535, U78536, U76790, U74188, U74191, U72040
PACKAGE: TO247

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=175°C, 100 % max rated V	1008 hrs	0/240
HTGB	JESD22-A108	Ta=175°C, 100 % max Vge	1008 hrs	0/240
HTSL	JESD22-A103	Ta=175°C, No bias	1008hrs	0/240
TC	JESD22-A104	Ta= -55°C to + 150 °C	1000 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psia, bias	96 hrs	0/240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/240
IOL	ML-STD-750	Ta=25°C, delta Tj=100°C On/Off = 5min	6000cyc	0/240

QV DEVICE NAME: FNB51560TD1, FNA41560T2, FNB80560T3
RMS: U74113, U74114, U74115,
PACKAGE: IPM55, IPM45H, IPM8

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80 % max rated V	1008 hrs	0/39
HTSL	JESD22-A103	Ta=150°C, No bias	1008hrs	0/39
TC	JESD22-A104	Ta= -55°C to + 150 °C	1000 cyc	0/69
HAST	JESD22-A110	130°C, 85% RH, 18.8psia, bias	96 hrs	0/45

QV DEVICE NAME: FFA60UA60DN
RRF: 68327, 68386
PACKAGE: TO3P

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Tj = 175°C , 80% max rated V	1008 hrs	0/77
HAST	JESD22-A110	130°C, 85%RH, 18.8 psig, bias	96hrs	0/77
UHAST	JESD22-A118	130°C, 85%RH, 18.8 psig, unbiased	96hrs	0/77
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	0/77
HTSL	JESD22-A103	Ta = 175°C	1008 Hrs	0/77
IOL	MIL STD750 (M 1037) AEC Q101	Ta=+25°C, delta Tj=100°C,on/off =2 min	15000 cyc	0/77
RSH	JESD22- B106	Ta=265°C, 10 sec		0/30

QV DEVICE NAME: FFH30S60STU
RRF: 68326, 68387
PACKAGE: TO247

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Tj = 175°C , 80% max rated V	1008 hrs	0/77
HAST	JESD22-A110	130°C, 85%RH, 18.8 psig, bias	96hrs	0/77
UHAST	JESD22-A118	130°C, 85%RH, 18.8 psig, unbiased	96hrs	0/77
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	0/77
HTSL	JESD22-A103	Ta = 175°C	1008 Hrs	0/77
IOL	MIL STD750 (M 1037) AEC Q101	Ta=+25°C, delta Tj=100°C,on/off =5 min	6000 cyc	0/77
RSH	JESD22- B106	Ta=265°C, 10 sec		0/30

QV DEVICE NAME: FNA41560T2
RRF: 68330, 68385
PACKAGE: SPM45

Test	Specification	Condition	Interval	Result
UHAST	JESD22-A118	130°C, 85%RH, 18.8 psig, unbiased	96hrs	0/36
TC	JESD22-A104	Ta = -40°C to +125°C	200 cyc	0/36
HTSL	JESD22-A103	Ta = 150°C	1008 Hrs	0/36
H3TRB	JESD22-A101	85°C, 85%RH, 18.8 psig, bias	1008 Hrs	0/36

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
FNA41560T2	FGY160T65SPD-F085, FNA41560T2, FFA60UA60DN, FFH30S60STU
FNB43060T2	FGY160T65SPD-F085, FNA41560T2, FFA60UA60DN, FFH30S60STU
FND43060T2	FGY160T65SPD-F085, FNA41560T2, FFA60UA60DN, FFH30S60STU