



Final Product/Process Change Notification

Document #:FPCN22966XK

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 Gate driver IC 8inch Technology at Maine in South Portland US.
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

ON Semiconductor Maine, United States

External Foundry/Subcon Sites

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
HDG4DA & HDJ4 gate driver IC	ON semiconductor Bucheon, Korea	ON semiconductor Bucheon, Korea ON Semiconductor Maine, United States

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: FAN73912MX

RMS O57762

PACKAGE SOICW16

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/240
HTSL	JESD22-A103	Ta= 150°C	2016 hrs	0/240
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C		

QV DEVICE NAME: FSBB10CH120D

RMS K57911

PACKAGE SPM3

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	2016 hrs	0/36
TC	JESD22-A104	Ta= -40°C to +125°C	1000 cyc	0/66
THU	JESD22-A101	85°C, 85% RH, unbiased	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
FNB80460T3	FGY160T65SPD-F085, FNB80560T3, FAN73912MX, FSBB10CH120D
FNB80560T3	FGY160T65SPD-F085, FNB80560T3, FAN73912MX, FSBB10CH120D
FNB81060T3	FGY160T65SPD-F085, FNB80560T3, FAN73912MX, FSBB10CH120D



Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FNB80560T3		FGY160T65SPD-F085, FNB80560T3, FAN73912MX, FSBB10CH120D		
FNB81060T3		FGY160T65SPD-F085, FNB80560T3, FAN73912MX, FSBB10CH120D		