ON Semiconductor®



Title of Change:	Qualification of Field Stop 4(FS4) Trench IGBT Technology in ON Semiconductor Aizu, Japan.		
Proposed First Ship date:	28 Mar 2021 or earlier if approved by customer		
Contact Information:	Contact your local ON Semiconductor Sales Office or Bokyun.Seo@onsemi.com		
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < <u>PCN.samples@onsemi.com</u> >. 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 <u>xiaohu.zhang@onsemi.com</u>		
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 <u>PCN.Support@onsemi.com</u>		
Marking of Parts/ Traceability of Change:	Marking of parts no change and traceability of change with Product date code.		
Change Category:	Wafer Fab Change		
Change Sub-Category(s):	Manufacturing Site Addition		
Sites Affected:			
ON Semiconductor Sites		External Foundry/Subcon Sites	
ON Semiconductor Aizu, Japan		None	
ON Semiconductor Bucheon, Korea			

Description and Purpose:

ON Semiconductor would like to inform its customers of additional wafer fabrication facility for FS4 TIGBT technology in Aizu Fujitsu Semiconductor Manufacturing (AFSM) located in Aizu, Japan for the devices listed in this IPCN.

All products listed here will be dual sourced from its current wafer fab facility in ON Semiconductor wafer fab in Bucheon, Korea and AFSM, Japan.

	Before Change Description	After Change Description
Wafer Fab Site	Bucheon, Korea	Bucheon, Korea and AFSM, Japan



Reliability Data Summary:

QV DEVICE NAME : <u>FGY75T95SQDT</u> RMS : <u>64426 & 72192</u> PACKAGE : <u>TP247</u>

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Tj = 175°C, bias = 100% of rated V	1008 hours	0/231
HTGB	JESD22-A108	Temp = 175C, bias = 100% Vgss	1008 hours	0/231
HTSL	JESD22-A103	Ta = 175°C	1008 Hrs	0/231
HAST	JESD22-A101	Ta = 130°C, RH=85%, Pressure: 18.8 psig, bias = 80% of rated V or 100V max	1008 hours	0/231
TC	JESD22-A104	Ta = -65°C to +150°C; for 1000 cycles (JA104)	1000 cyc	0/231
UHAST	JESD22-A118	Ta=130°C/85% RH/18.8 PSIG for 96 hrs (JA118)	96 hours	0/231
IOL	MIL STD750, M 1037 AEC Q101	Ta=+25°C, deltaTj=100°C max,Ton=Toff 5.0 min	6000 сус	0/231
RSH	JESD22-B106	Ta=265C 10 sec dwell B106		0/90
DPA	AEC Q101-004	Post 1008 hours H3TRB (+PC) or 96 hrs HAST (+PC)		0/6
DPA	AEC Q101-004	Post 1000 cyc TC (+PC)		0/6

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
FGY75T95SQDT	FGY75T95SQDT



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FGY75T95SQDT		FGY75T95SQDT	NA	