ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN20937XF
Issue Date: 15 February 2017

Title of Change:	Trench 6 Technology Capacity Expansion by Qualification of Aizu Fujitsu Semiconductor Manufacturing, Japan
Proposed first ship date:	22 May 2017 *or earlier upon customer approval.*
Contact information:	Contact your local ON Semiconductor Sales Office or <SewSeng.Tam@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office or <Cheryl.Nudo@onsemi.com>
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or Office or <Don.Knudsen@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>.
Change Part Identification:	Affected parts will be identified with a date code of WW11'17 or later
Change category:	☒ Wafer Fab Change ☐ Assembly Change ☐ Test Change ☐ Other ________________

Change Sub-Category(s):

☒ Manufacturing Site Change/Addition
☐ Manufacturing Process Change

☐ Material Change
☐ Product specific change

☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: ________________________

Sites Affected:

☐ All site(s)

☐ not applicable

☐ ON Semiconductor site(s) :

☒ External Foundry/Subcon site(s)
Aizu Fujitsu Semiconductor
Manufacturing, Japan

Description and Purpose:

This is a final change notification to customers on the qualification of additional wafer fabrication capacity of 40V and 60V Trench (T6) MOSFET technology in Aizu Fujitsu Semiconductor Manufacturing (AFSM) located in Aizu, Japan. At the expiration of this notification, all products listed here will be dual sourced from its current ON Semiconductor wafer fab in Gresham and AFSM.

Reliability Data Summary:

NTMFS5C604NLT1G (60V LL)

Package: S08FL HEFET

Test	Specification	Condition	Interval	Sample Size	Results
HTRB	MILSTD750-1 method M1038A	Ta = 175°C, 100% max rated Bvdss	1008 hrs	84pcs/3 lots	0/252
HTGB	JESD22 A108	Ta = 175°C, 100% rated Vgss	1008 hrs	84pcs/3 lots	0/252
HTSL	JESD22-A103	Ta=175°C	2016 hrs	84pc/3 lots	0/252
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc	84pc/3 lots	0/252
TC	JESD22-A104	Ta=-55°C to +150°C	1000 cyc	84pc/3 lots	0/252
HAST	JESD22-A110	130°C, 85% RH, 80% Vds, 18.8psig	192 hrs	84pc/3 lots	0/252
Uhast	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	192 hrs	84pc/3 lots	0/252

NTMFS5C404NT1G (40V SG)

Package: S08FL HEFET

Test	Specification	Condition	Interval	Sample Size	Results
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	84pc/3 lots	0/252

NTMFS5C410NLT1G (40V LL)

Package: S08FL

Test	Specification	Condition	Interval	Sample Size	Results
HTRB	MILSTD750-1 method M1038A	Ta = 175°C, 100% max rated Bvdss	1008 hrs	84pcs/3 lots	0/252
HTGB	JESD22 A108	Ta = 175°C, 100% rated Vgss	1008 hrs	84pcs/3 lots	0/252
HTSL	JESD22-A103	Ta=175°C	1008 hrs	84pc/3 lots	0/252
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	84pc/3 lots	0/252
TC	JESD22-A104	Ta=-55°C to +150°C	1000 cyc	84pc/3 lots	0/252
HAST	JESD22-A110	130°C, 85% RH, 80% Vds, 18.8psig	96 hrs	84pc/3 lots	0/252
Uhast	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	84pc/3 lots	0/252

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qual Vehicle
NTMFS5C410NT1G	**NTMFS5C404NT1G**
NTMFS5C410NT3G	