



Title of Change:	Trench 6 Technology Capacity Expansion by Qualification of Aizu Fujitsu Semiconductor Manufacturing, Japan
Proposed first ship date:	29 March 2017 <i>or earlier upon customer approval.</i>
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:	<input checked="" type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____
Change Sub-Category(s):	<input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____
Sites Affected:	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input type="checkbox"/> ON Semiconductor site(s) : <input checked="" type="checkbox"/> External Foundry/Subcon site(s) Aizu Fujitsu Semiconductor Manufacturing, Japan
Description and Purpose:	<p>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.</p>

**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

NTTF5C658NLTAG (60V LL)

Package: u8FL

Test	Specification	Condition	Interval	Sample Size	Results
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
NTMFS5C604NLT1G	NTMFS5C604NLT1G
NTMFS5C604NLT3G	
NTMFS5C612NLT1G	
NTMFS5C612NLT3G	
NTMFS5C609NLT1G	
STMFS5C609NLT1G	
NTMFS5C628NLT1G	
NTMFS5C628NLT3G	
STMFS5C628NLT1G	
STMFS5C628NLT3G	
NTMFS5C645NLT1G	
NTMFS5C645NLT3G	
NTMFS5C646NLT1G	
NTMFS5C646NLT3G	
NTMFS5C670NLT1G	
NTMFS5C670NLT3G	
NTTF5C670NLTAG	
NTTF5C670NLTWG	
NTMFS5C673NLT1G	
NTMFS5C673NLT3G	
NTTF5C673NLTAG	
NTTF5C673NLTWG	
NTTF5C453NLTAG	
NTTF5C453NLTWG	
NTTF5C454NLTAG	
NTTF5C454NLTWG	
NTMFS5C404NLT1G	NTMFS5C410NLT1G
NTMFS5C404NLT3G	
NTMFS5C404NLT1G	
NTMFS5C404NLT3G	
NTMFS5C410NLTWFT1G	
NTMFS5C410NLTWFT3G	



NTMFS5C410NLT1G	NTMFS5C410NLT1G
NTMFS5C410NLT3G	
NTMFS5C410NLTT1G	
NTMFS5C410NLTT3G	
NTMFS5C423NLT1G	
NTMFS5C423NLT3G	
NTMFS5C430NLT1G	
NTMFS5C430NLT3G	
NTMFS5C442NLT1G	
NTMFS5C442NLT3G	
NTMFS5C442NLTT1G	
NTMFS5C442NLTT3G	
NTMFS5C442NLTWFT1G	
NTMFS5C442NLTWFT3G	
NTMFS5C450NLT1G	
NTMFS5C450NLT3G	
NTMFS5C456NLT1G	
NTMFS5C456NLT3G	
NTMFS5C460NLT1G	
NTMFS5C460NLT3G	
NTMFS5C468NLT1G	
NTMFS5C468NLT3G	
NTMFS5C404NT1G	NTMFS5C404NT1G
NTMFS5C404NT3G	
NTMFS5C426NT1G	
NTMFS5C426NT3G	
NTMFS5C430NT1G	
NTMFS5C430NT3G	
NTMFS5C442NT1G	
NTMFS5C442NT3G	
NTMFS5C450NT1G	
NTMFS5C450NT3G	