ON Semiconductor®



Final Product/Process Change Notification Document #: FPCN20937XG

Issue Date: 3 August 2018

| Title of Change: | Trench 6 Technology Capacity Expansion by Qualification of Aizu Fujitsu Semiconductor Manufacturing, Japan. | | | |
|---|---|--|--|--|
| Proposed first ship date: | 10 November 2018 or earlier after customer approval | | | |
| Contact information: | Contact your local ON Semiconductor Sales Office or < <u>guokun.yeng@onsemi.com</u> > | | | |
| Samples: | 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. | | | |
| Additional Reliability Data: | Contact your local ON Semiconductor Sales Office or < <u>Don.Knudsen@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> | | | |
| Change Part Identification: | Affected parts will be identified with a date code of WW45'18 or later | | | |
| Change Category: | ☑ Wafer Fab Change | | | |
| Change Sub-Category(s): Manufacturing Site Add Manufacturing Site Tran Manufacturing Process | nsfer Product specific change | Datasheet/Product Doc change Shipping/Packaging/Marking Other: | | |
| Sites Affected: | ON Semiconductor Sites: None | External Foundry/Subcon Sites: Aizu Fujitsu, Japan | | |
| Description and Purpose: | | | | |
| This is a final change notification to customers on the qualification of additional wafer fabrication capacity of 30V Trench (T6) MOSFET technology in Aizu Fujitsu Semiconductor Manufacturing (AFSM) located in Aizu, Japan. At the expiration of this notification, product listed here will be dual sourced from its current ON Semiconductor wafer fab in Gresham and AFSM. There are no product material changes as a result of this change. | | | | |
| There is no product marking change as a result of this change. | | | | |
| Device quality and reliability will continue to meet ON Semiconductors high standards. | | | | |
| Reliability Data Summary: QV: NVMFD5C650NL | | | | |

| Test | Specification | Condition | Interval | Results |
|-------|------------------------------------|--|-----------|---------|
| HTRB | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs | 0/240 |
| HTGB | JESD22-A108 | Ta=150°C, 100% max rated Vgss | 1008 hrs | 0/240 |
| HTSL | JESD22-A103 | Ta=175°C | 2016 hrs | 0/240 |
| IOL | MIL-STD-750 (M1037) AEC-Q101 | Ta=+25°C, delta Tj=100°C On/off = 2 min | 30000 сус | 0/240 |
| TC | JESD22-A104 | Ta=-55°C to +150°C | 1000 cyc | 0/240 |
| HAST | JESD22-A110 | 131°C, 85% RH, 18.8psig, bias | 192 hrs | 0/240 |
| uHAST | JESD22-A118 | 131°C, 85% RH, 18.8psig, unbiased | 96 hrs | 0/240 |



Electrical Characteristic Summary:

There is no change in electrical parametric performance. Characterization data is available upon request.

| List of Affected Parts: | | | | |
|-------------------------|-----------------------|--|--|--|
| Part Number | Qualification Vehicle | | | |
| NTMFD4C20NT1G | NVMFD5C650NLT1G | | | |
| NTMFD4C20NT3G | | | | |
| NTMFD4C50NT1G | | | | |
| NTMFD4C50NT3G | | | | |



Appendix A: Changed Products

| Product | Customer Part Number | Qualification Vehicle |
|---------------|----------------------|-----------------------|
| NTMFD4C20NT1G | | NVMFD5C650NLT1G |
| NTMFD4C20NT3G | | NVMFD5C650NLT1G |
| NTMFD4C50NT1G | | NVMFD5C650NLT1G |
| NTMFD4C50NT3G | | NVMFD5C650NLT1G |