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Final Product/Process Change Notification Document #: FPCN20888X

Issue Date: 21 May 2015

| Title of Change: | Wafer Capacity Expansion for Trench 3 Schottky MOSFETs | | | | |
|--|--|--|--|--|--|
| Proposed first ship date: | 28 August 2015 | | | | |
| Contact information: | Contact your local ON Semiconductor Sales Office or Melyssa Hutchins <melyssa.hutchins@onsemi.com></melyssa.hutchins@onsemi.com> | | | | |
| Samples: | Contact your local ON Semiconductor Sales Office or Brian Goodburn <brian.goodburn@onsemi.com></brian.goodburn@onsemi.com> | | | | |
| Additional Reliability Data: | Contact your local ON Semiconductor Sales Office or Donna Scheuch <d.scheuch@onsemi.com></d.scheuch@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 approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <pcn.support@onsemi.com>.</pcn.support@onsemi.com> | | | | |
| Change Part Identification: | There will be change to the finished good part marking on product assembled with the Trench Die fabricated from the UMC Wafer Fab facility. Full traceability of the die manufacturing facility will be available through the lot number recorded on the shipping labels. | | | | |
| Change category(s): ☐ Wafer Fab Change ☐ Assembly Change ☐ Test Change | ☐ Product specific change ☐ Manufacturing Site Change/Addition ☐ Datasheet/Product Doc change ☐ Manufacturing Process Change ☐ Shipping/Packaging/Marking ☐ Material Change ☐ Other: | | | | |
| Sites Affected: ☐ All site(s) ☐ not applicable ☐ ON Semiconductor site(s): ☐ External Foundry/Subcon site | | | | | |
| Description and Purpose: | | | | | |
| technology silicon platforms. ON | o announce that ON Semiconductor is adding wafer fabrication capacity for their Trench 3 schottky MOSFET Semiconductor has qualified United Microelectronics Corp (UMC), a wafer fabrication facility located in Taiwan. I Semiconductor will supply parts utilizing the UMC fab. Device quality and reliability will continue to meet ON | | | | |

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Reliability Data Summary:

| Test | Name | Test Conditions | Test Results | (rej/ss) | (rej/ss) | (rej/ ss) | (rej/ ss) |
|--------------------|---|---|-------------------------|-----------|-----------|-----------|-----------|
| | | | Read Point | NTMFS4933 | NTMFS4933 | NTMFS4935 | NTMFS4935 |
| Prep | Sample preparation and initial part testing | various | Initial Electrical | done | done | done | done |
| HTRB | High Temp Reverse Bias | TA = 150°C , Vgss = 100% of max rated | 504 Hrs | 0/77 | 0/77 0/77 | | 0/77 |
| HTGB | High Temp Gate Bias | TA = 150°C , Vdss = 80% of max rated | I 504 Hrs I 0/77 I 0/77 | | 0/77 | 0/77 | |
| MSL 1 PC - IOL | Intermittent Operating Life + PC | Ta=+25°C, delta Tj=100°C On/of = 2 min | 7500 Hrs | 0/77 | 0/77 | 0/77 | 0/77 |
| MSL 1 PC - TC | Temperature Cycling + PC | -55 °C to + 150°C | 500 Cyc | 0/77 | 0/77 | 0/77 | 0/77 |
| MSL 1 PC - AC | Autoclave + PC | 121°C/100% RH/15psig | 96 Hrs | 0/77 | 0/77 | 0/77 | 0/77 |
| MSL 1 PC - HAST | Highly Accelerated Stress Test | Temp= +131°C, RH=85% , p = 18.8 psig, bias | 96 Hrs | 0/77 | 0/77 | 0/77 | 0/77 |

| Test | Name | Test Conditions | End Point Req's | Test Results | (rej/ ss) | (rej/ ss) | (rej/ ss) | (rej/ ss) |
|------|--|------------------------------|-----------------------|--------------------|----------------------|----------------------|----------------------|------------------------|
| | | | | Read Point | Lot A NTMFS4982NF | Lot B NTMFS4982NF | Lot C NTMFS4982NF | NTMFS4982NF Control |
| Prep | Sample preparation and initial part testing | various | | Initial Electrical | done | done | done | done |
| HTRB | High Temp Reverse Bias | Tj = 150°C for 1008 hours | c = 0, Room | 168 hr | 0/84 | 0/84 | 0/84 | 0/84 |
| | | | | 504 Hrs | 0/84 | 0/84 | 0/84 | 0/84 |
| | | | | 1008 Hrs | 0/84 | 0/84 | 0/84 | 0/84 |

Electrical Characteristic Summary:

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

List of affected Standard Parts:

NTMFD4901NFT1G

NTMFD4902NFT1G

NTMFS4982NFT1G

NTMFS4983NFT1G

NTMFS4985NFT1G

NTMFS4985NFT3G

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