



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16891

Generic Copy

Issue Date: 15 Aug 2012

TITLE: Wafer Capacity Expansion for Trench 3 MOSFETs

PROPOSED FIRST SHIP DATE: 15 Dec 2012

AFFECTED CHANGE CATEGORY(S): Wafer Fabrication

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Brian Goodburn <brian.goodburn@onsemi.com>

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change.

DESCRIPTION AND PURPOSE:

This is an Initial Process Change Notification.

ON Semiconductor is adding wafer fabrication capacity for their Trench 3 MOSFET technology silicon platforms. This will be accomplished by qualifying United Microelectronics Corp (UMC), a wafer fabrication facility located in Taiwan. By the middle of 2013, Wafer starts of Trench 3 Silicon technologies will begin at UMC.



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QUALIFICATION PLAN:

Device	Test	Test Condition	Final Read Pt	Sample Size
NTMFS4933	HTGB	Tj = 150°C	504 hr	3 lots X 77 pc
NTMFS4933	HTRB	Tj = 150°C	504 hr	3 lots X 77 pc
NTMFS4933	IOL - PC	Delta T=100°C, Ton/off=2 min	7,500 cyc	3 lots X 77 pc
NTMFS4933	TC - PC	-55°C to +150°C	500 cyc	3 lots X 77 pc
NTMFS4933	HAST-PC	Ta=130°C, RH=85%, 18.8 psig	96 hr	3 lots X 77 pc
NTMFS4933	AC-PC	Ta = 121°C, 100% RH, 15psig	96 hr	3 lots X 77 pc
NTMFS4935	HTGB	Tj = 150°C	504 hr	3 lots X 77 pc
NTMFS4935	HTRB	Tj = 150°C	504 hr	3 lots X 77 pc
NTMFS4935	IOL - PC	Delta T=100°C, Ton/off=2 min	7,500 cyc	3 lots X 77 pc
NTMFS4935	TC - PC	-55°C to +150°C	500 cyc	3 lots X 77 pc
NTMFS4935	HAST-PC	Ta=130°C, RH=85%, 18.8 psig	96 hr	3 lots X 77 pc
NTMFS4935	AC-PC	Ta = 121°C, 100% RH, 15psig	96 hr	3 lots X 77 pc
NTMFS4927	HTGB	Tj = 150°C	504 hr	1 lots X 77 pc
NTMFS4927	HTRB	Tj = 150°C	504 hr	1 lots X 77 pc
NTMFS4927	IOL - PC	Delta T=100°C, Ton/off=2 min	7,500 cyc	1 lots X 77 pc
NTMFS4927	TC - PC	-55°C to +150°C	500 cyc	1 lots X 77 pc
NTMFS4927	HAST-PC	Ta=130°C, RH=85%, 18.8 psig	96 hr	1 lots X 77 pc
NTMFS4927	AC-PC	Ta = 121°C, 100% RH, 15psig	96 hr	1 lots X 77 pc

Device	Test	Test Condition	Final Read Pt	Sample Size
NTTFS4932	HTGB	Tj = 150°C	504 hr	1 lot X 77 pc
NTTFS4932	HTRB	Tj = 150°C	504 hr	1 lot X 77 pc
NTTFS4932	IOL - PC	Delta T=100°C, Ton/off=2 min	7,500 cyc	1 lot X 77 pc
NTTFS4932	TC - PC	-55°C to +150°C	500 cyc	1 lot X 77 pc
NTTFS4932	HAST-PC	Ta=130°C, RH=85%, 18.8 psig	96 hr	1 lot X 77 pc
NTTFS4932	AC-PC	Ta = 121°C, 100% RH, 15psig	96 hr	1 lot X 77 pc
NTTFS4929	HTGB	Tj = 150°C	504 hr	1 lot X 77 pc
NTTFS4929	HTRB	Tj = 150°C	504 hr	1 lot X 77 pc
NTTFS4929	IOL - PC	Delta T=100°C, Ton/off=2 min	7,500 cyc	1 lot X 77 pc
NTTFS4929	TC - PC	-55°C to +150°C	500 cyc	1 lot X 77 pc
NTTFS4929	HAST-PC	Ta=130°C, RH=85%, 18.8 psig	96 hr	1 lot X 77 pc
NTTFS4929	AC-PC	Ta = 121°C, 100% RH, 15psig	96 hr	1 lot X 77 pc



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List of affected General Parts:

NC4901NT3G
NTMFS4923NET1G
NTMFS4923NET3G
NTMFS4925NET1G
NTMFS4925NET3G
NTMFS4925NT1G
NTMFS4925NT3G
NTMFS4926NET1G
NTMFS4926NET3G
NTMFS4926NT1G
NTMFS4927NCT1G
NTMFS4927NT1G
NTMFS4927NT3G
NTMFS4933NT1G
NTMFS4935NBT1G
NTMFS4935NBT3G
NTMFS4935NCT1G
NTMFS4935NCT3G
NTMFS4935NT1G
NTMFS4935NT3G
NTMFS4936NCT1G
NTMFS4936NT1G
NTMFS4936NT3G
NTMFS4937NT1G
NTMFS4937NT3G
NTMFS4939NT1G
NTMFS4939NT3G
NTMFS4955NT1G
NTTFS4928NTAG
NTTFS4928NTWG
NTTFS4932NTAG
NTTFS4932NTWG
NTTFS4937NTAG
NTTFS4937NTWG
NTTFS4939NTAG
NTTFSC4937NTAG