

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16750

Generic Copy

Issue Date: 05-Dec-2011

<u>TITLE</u>: Additional Wafer Capacity Expansion at ON Semiconductor (Roznov, Czech Republic)

PROPOSED FIRST SHIP DATE: 05-Mar-2012

AFFECTED CHANGE CATEGORY(S): Wafer Fabrication

AFFECTED PRODUCT DIVISION: PowerFET Business Unit

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Larry DeLuca<larry.deluca@onsemi.com>

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

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Donna Scheuch< d.scheuch@onsemi.com >

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

ON Semiconductor plans to consolidate their manufacturing efforts by closing their Wafer facility in Aizu, Japan. This Aizu facility has been the source for our High Cell Density (TMOS7 and HD+) MOSFET Die. These MOSFET Die types are currently being transferred, and will be sourced from the ON Semiconductor's Wafer facility in Roznov, Czech Republic.

Reliability Qualification and full electrical characterization over temperature have been performed.

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RELIABILITY DATA SUMMARY:

Product built with TMOS7 Silicon Platform Die:

Reliability Test Results	Test	Test Conditions	Read points	MMBF170L	NTMD6601	NTD3055	NTD20P06L
1	AC-PC	Ta = 121°C/ 100% RH/ 15psig	96hrs	0/80	0/80	0/80	0/80
2	HAST- PC	130°C/85% RH for 96 hrs	96hrs	0/80	0/80	0/80	0/80
3	HTGB	TA = Max rated for 1008 hrs Vgs=100% of max rated	1008 Hrs	0/80	0/80	0/160	0/80
4	HTRB	TA = Max rated for 1008 hrs Vds=80% of max rated	1008 Hrs	0/80	0/80	0/160	0/80
5	IOL	Ta=25'C, delta Tj=100'C, 2- min on/off, 15K- cy	15,000 Cyc	0/80	0/80	0/80	0/80
6	TC-PC	-55°C to +150°C	1000 Cycles	0/80	0/80	0/80	0/80

Product built with HD+ Silicon Platform Die:

Reliability Test Results	Test	Test Conditions	Read points	NTS4001NT 1G	NTJD1155L	NCV8401	NCV8403
1	AC-PC	Ta = 121°C/ 100% RH/ 15psig	96hrs	0/80	0/80	0/160	0/80
2	HAST- PC	130°C/85% RH for 96 hrs	96hrs	0/80	0/80	0/160	0/80
3	HTGB	TA = Max rated for 1008 hrs Vgs=100% of max rated	1008 Hrs	0/80	0/80		
4	HTRB	TA = Max rated for 1008 hrs Vds=80% of max rated	1008 Hrs	0/80	0/80	0/160	0/80
5	IOL	Ta=25'C, delta Tj=100'C, 2- min on/off, 15K- cy	15,000 Cyc	0/80	0/80	0/160	0/80
6	TC-PC	-55°C to +150°	1000 Cycles	0/80	0/80	0/160	0/80
7	HTOL	Tj = 125°C	1008 Hrs	0/80	0/80	0/160	0/80

ELECTRICAL CHARACTERISTIC SUMMARY:

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

CHANGED PART IDENTIFICATION:

There will be no physical change to the Devices assembled with ON Semiconductor Die from Roznov, CR. There will be Wafer Lot traceability from the manufacturing Lot to determine the Die origin. Product assembled with the Die fabricated from the Roznov wafer facility will have a Finish Good Date Code no earlier than '1210'.

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List of affected General Parts:

2N7002LT1H	NTC3055L104WP	NTDV3055L104-1G
2N7002LT3H	NTD18N06LT4G	NTF2955PT1G
2V7002LT1G	NTD18N06T4G	NTF2955T1G
2V7002LT3G	NTD20N06LT4G	NTF3055-100T1G
BS170G	NTD20N06T4G	NTF3055-100T3G
BS170RLRAG	NTD20P06LG	NTF3055L108T1G
BSS138LT1G	NTD20P06LT4G	NTGD1100LT1G
BSS138LT3G	NTD24N06LT4G	NTJD1155LT1G
BSS138LT3H	NTD24N06T4G	NTK3043NT1G
BVSS138LT1G	NTD2955-1G	NTK3043NT1H
MMBF170LT1G	NTD2955G	NTK3043NT5H
MMBFV170LT1G	NTD2955PT4G	NTP2955G
MMBFV170LT3G	NTD2955T4G	NVF2955PT1G
NSTA4001NT1G	NTD2955T4H	NVF2955T1G
NSTJD1155LT1G	NTD3055-094-1G	NVF3055-100T1G
NTA4001NT1G	NTD3055-094T4G	NVF3055L108T1G
NTA4001NT1H	NTD3055-150T4G	NVF3055L108T3G
NTA7002NT1G	NTD3055-150T4H	NVR4003NT3G
NTB25P06T4G	NTD3055L104-1G	NVTA7002NT1G
NTB45N06LT4G	NTD3055L104G	NVTJD4001NT1G
NTB45N06T4G	NTD3055L104T4G	NVTJD4001NT2G
NTB5605PT4G	NTD3055L170T4G	NVTJD4158CT1G
NTB60N06T4G	NTDV18N06LT4G	NVTP2955G
NTBV25P06T4G	NTDV20N06LT4G	SBVS138LT1G
NTBV5605T4G	NTDV20P06LT4G	SMBF1035LT3G
NTBV75N06T4G	NTDV2955-1G	STD20N06T4G
NTC18N06LF	NTDV2955PT4G	STD24N06LT4G

List of Customer Specific Parts

SBSS138LT1G	STD20P07LT4G	STD6789T4
SMBF1060LT1G	STD3055L104T4G	STD6789T4G
STD18N06LT4G	STD6789NT4G	

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