

# FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 20210

Generic Copy

### Issue Date: 20-Sep-2013

**<u>TITLE</u>**: Qualification of ON Semiconductor Vietnam (OSV) for the Assembly and Test of Trench 2 and Trench 3 Mosfet packaged in DPAK.

PROPOSED FIRST SHIP DATE: 20-Dec-2013

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Assembly & Test

### FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Product Engineer Tam Sew Seng<<u>t.sew-seng@onsemi.com</u>>

**SAMPLES:** Contact your local ON Semiconductor Sales Office

### ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Reliability Engineer Chean Ching Sim <<u>cheanching.sim@onsemi.com</u>>

### 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:

This FPCN announces the planned capacity expansion of ON Semiconductor's assembly and test operations of DPAK discrete packaged products, currently built at ON Semiconductor Seremban, Malaysia facility to ON Semiconductor Vietnam (OSV).

Upon the expiration of this FPCN, Trench 2 & Trench 3 MOSFET devices may be processed at either location. These products have been qualified to commodity/commercial requirements. These products will continue being Pb-free, Halide free and RoHS compliant.

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### **RELIABILITY DATA SUMMARY:**

Reliability Test Results:

### Device NTD5862NT4G

Test:	Conditions:	Interval:	<b>Results</b>
HTRB	Ta=175°C 80% Rated Voltage	1008 hrs	0/84
HTGB	Ta=175°C 100% Rated Voltage	1008 hrs	0/84
Autoclave	Ta=121°C RH=100% 15 psig	96 hrs	0/84
H3TRB	Ta=85°C RH=85%	1008 hrs	0/84
	bias=80% rated V or 100V Max		
IOL	Ta=25°C, Delta TJ = 100°C,	15,000 cycles	0/84
	Ton/off = 2 min.	-	
ТС	Ta= -55°C to 150°C	1000 cycles	0/84
HTSL	Ta = 150°C	1008 hrs	0/84
RSH	Ta=260°C, 10 sec dwell		0/30
Solderability	Ta=245°C, 10 sec dwell		0/15

### Device NTD4904NT4G

Test:	Conditions:	Interval:	<b>Results</b>
HTRB	Ta=175°C 80% Rated Voltage	1008 hrs	0/84
HTGB	Ta=175°C 100% Rated Voltage	1008 hrs	0/84
Autoclave	Ta=121°C RH=100% 15 psig	96 hrs	0/84
H3TRB	Ta=85°C RH=85%	1008 hrs	0/84
	bias=80% rated V or 100V Max		
IOL	$Ta=25^{\circ}C$ , Delta $TJ = 100^{\circ}C$ ,	15,000 cycles	0/84
	Ton/off = $2 \text{ min.}$		
TC	Ta= -55°C to 150°C	1000 cycles	0/84
HTSL	Ta = 150°C	1008 hrs	0/84
RSH	Ta=260°C, 10 sec dwell		0/30
Solderability	Ta=245°C, 10 sec dwell		0/15

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### **ELECTRICAL CHARACTERISTIC SUMMARY:**

There are no changes in electrical characteristics; product performance meets data sheet specifications. Characterization data is available upon request.

### **CHANGED PART IDENTIFICATION:**

Product from On Semiconductor Vietnam will be marked with site code VN prior to date code.

### List of affected General Parts:

NTD4963NT4G NTD4906NT4G