

# FINAL PRODUCT/PROCESS CHANGE NOTIFICATION

## 17 Dec 2007

SUBJECT: ON Semiconductor Final Product/Process Change Notification # FPCN16079

TITLE: Qualification of 32LQFP 7x7x1.4mm packaged product NCP5318FTR2G at second source assembly site, subcontractor Unisem

PROPOSED FIRST SHIP DATE: 17 Mar 2008

AFFECTED CHANGE CATEGORY(S): Assembly subcontractor site

AFFECTED PRODUCT DIVISION(S): Analog Products Division – Power Switching Business Unit

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION: Contact your local ON Semiconductor Sales Office or Rob Swanson< <u>Rob.Swanson@onsemi.com</u>>

SAMPLES: Contact your local ON Semiconductor Sales Office

## ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Rob Swanson<<u>Rob.Swanson@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 your local ON Semiconductor Sales Office.

## **DESCRIPTION AND PURPOSE:**

Qualification of a second source assembly site as an assembly capacity expansion for the NCP5318FTR2G product in the 32LQFP 7x7x1.4mm package at Unisem, which was formerly known as AIT or Advanced Interconnect Technologies located in Batam, Indonesia.

Note, there are already other 32LQFP 7x7x1.4mm packaged products being assembled at Unisem so there is earlier reliability data available for those parts also. The NCP5318FTR2G will use the Ag-ring plated leadframe instead of the Ag-spot plated leadframe used by previous products.

Qualification tests have been designed to insure that the reliability of all transferred devices will continue to meet or exceed ON Semiconductor standards.

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## **RELIABILITY DATA SUMMARY:**

#### **Reliability Test Results:**

Test	Name	Conditions	<b>Read Point</b>	Fails / Samples
PC	Moisture Pre-Conditioning	MSL3 @ 260°C	Post MSL PC	0 / 240 units
SAT	Scanning Acoustic Tomography	Compare Pre & Post PC for delamination	After 3 times IR reflow	0 / 30 units
тс	Temperature Cycling	-65°C to +150°C	500 cycles	0 / 240 units
AC	Autoclave	Ta = 121°C RH = 100%, PSIG = 15	96 hours	0 / 240 units

# **ELECTRICAL CHARACTERISTIC SUMMARY:**

Normal test performance has been found with Unisem assembled devices with additional electrical characterization data available as well.

## CHANGED PART IDENTIFICATION:

The date code on the topside laser mark for Unisem assembled units will start with 0805 meaning, assembled during Work Week 5 of the year 2008.





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AFFECTED DEVICE LIST

NCP5318FTR2G