



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 20096Generic Copy

Issue Date: 28-Jun-2013**TITLE:** Assembly Qualification of uDFN and uQFN Analog Switch Family at ATP3 for expansion.**PROPOSED FIRST SHIP DATE:** 28-Sep-2013**AFFECTED CHANGE CATEGORY(S):** Assembly Location AmKor-P3 (ATP-3)**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or Todd.Manes@onsemi.com.**SAMPLES:** Contact your local ON Semiconductor Sales Office or Ricardo.Avila@onsemi.com**ADDITIONAL RELIABILITY DATA:** AvailableContact your local ON Semiconductor Sales Office or Edmond.Gallard@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 is pleased to announce additional assembly capacity at AmKor-Philippines.

The device family is Analog Switches which are currently produced at ON Semiconductor's Seremban Malaysia location and subcontractor UTAC Bangkok Thailand location.

The Analog Switch product family will continue to be assembled in qualified locations as the qualification of AmKor Philippines is for additional capacity. No changes to packaging will occur as a result of this assembly qualification.

Upon expiration (or approval) of this Final PCN, devices may be supplied by either assembly location to include AmKor Philippines, ON Semiconductor's Seremban Malaysia location and UTAC Bangkok Thailand.

**FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 20096****RELIABILITY DATA SUMMARY:****Reliability Test Results:**

The Analog Switch Products assembled at AmKor Philipines have been qualified based on the following test results:

Test	Conditions	Results
High Temp Op Life	Ta= +125C; 504hrs, 1008hrs DPA	0/80 3 lots
High Temp Storage	Ta=150C; 504hrs, 1008hrs, 2016hrs	0/80 3 lots
Preconditioning + Temperature Cycling	MSL1 @ 260C; -65C/ +150C; Air to Air; 500cy, 1000Cy DPA CDPA	0/80 3 lots
Preconditioning + Highly Accelerated Stress Test	MSL @ 260C, 130C/ 85% RH/ PSIG=18.8 bias 96hrs	0/80 3 lots
Preconditioning + Unbiased Highly Accelerated Stress Test	MSL @ 260C, 130C/ 85% RH/ PSIG=18.8 no bias 96hrs	0/80 3 lots
Ball Shear Test	CPK > 1.33 on 30 Bonds from 5 units	Pass
Wire Pull Strength	Cpk > 1.67 on 30 Bonds from 5 units	Pass
Electrical Distribution	3Temps -40°, 25°, 80°C. Cpk > 1.67	Pass

ELECTRICAL CHARACTERISTIC SUMMARY:

Electrical characterization test data has been obtained on ATP3 assembled product. No significant changes in part performance as compared to the existing SBN or UTAC assembled product were observed. Electrical characteristics meet or exceed the device specification.

CHANGED PART IDENTIFICATION:

Devices with date codes of 2013 work week31 or later may be sourced from either assembly location ATP3, SBN or UTAC.



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List of affected General Parts:

NLAS4717EPMTR2G
NLAS5123MNR2G
NLAS5123MUR2G
NLAS5124MUR2G
NLAS5157MUTCG
NLAS5213AMUTAG
NLAS5213BMUTAG
NLAS52231MUR2G
NLAS5223AMNR2G
NLAS5223BLMNR2G
NLAS5223BMUR2G
NLAS5223MNR2G
NLAS7213MUTBG
NLAS7222AMTR2G
NLAS7222AMUR2G
NLAS7222AMUTAG
NLAS7222BMUTAG
NLAS7222BMUTBG
NLAS7222CMUTBG
NLAS7223BMUTBG
NLAS7223CMUTBG
NLAS7242MUTBG
NLAS9031MTR2G
NLAS9051MNR2G