

# FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 20472

Generic Copy

## Issue Date: 29-May-2014

**<u>TITLE</u>**: Final Notification for Transfer of LCX devices from TS60 wafer technology to TS18 Wafer Technology

#### PROPOSED FIRST SHIP DATE: 29-Aug-2014

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Fab Site

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

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

#### ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or <jose.aguilar@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:

This is a Final Process Change Notice informing ON Semiconductor customers that Logic Devices under the LCX family are now qualified to be manufactured in the TS18 wafer technology line of Tower Semiconductor Ltd in Migdal Haemek, Israel. This device family is currently being fabricated in the TS60 wafer technology line of the said wafer fabrication facility.

The Tower Semiconductor Ltd Migdal Haemek, Israel fab is certified according to ISO/TS16949 standard; and has been the wafer fab source of majority of the Logic Devices of On Semiconductors Inc.

Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed ON Semiconductor standards. ON Semiconductor recommends that customers evaluate sample units in each associated application circuit to ensure there are no unexpected electrical incompatibilities.



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## **RELIABILITY DATA SUMMARY:**

**Reliability Test Results:** 

| Test      | Conditions                                     | Interval | Results |
|-----------|--|----------|---------|
| MSL1@260C | 24hr bake at 125C+168hr 85/85<br>+3 IR at 260C |          | 0/240   |
| Autoclave | Ta: 121C; RH: 100; Pressure: 15psig            | 96hr     | 0/240   |
| HAST      | Ta=130C; RH=85%; 18.8psig                      | 168hr    | 0/240   |
| HTSL      | Ta: 150C                                       | 504hr    | 0/240   |
| тс        | Ta: -65C to 150C air to air                    | 504cyc   | 0/160   |
| PD        |  | -        | 0/30    |
| SD        | Ta: 245C                                       |          | 0/45    |
|           |  |          |         |

## ELECTRICAL CHARACTERISTIC SUMMARY:

The integrated circuits electrical specifications will remain identical. A full electrical characterization over the temperature range will be performed for each product to check the device functionality and electrical specifications.

## CHANGED PART IDENTIFICATION:

There will be no changes to standard device markings. Normal assembly lots traceability codes will identify the wafer fab source.

## List of affected General Parts:

| MC74LCX240DTR2G  | MC74LCX373DTG   | MC74LCX573DTR2G  |
|------------------|-----------------|------------------|
| MC74LCX240DWR2G  | MC74LCX373DTR2G | MC74LCX573DTR2GH |
| MC74LCX244DTG    | MC74LCX373DWR2G | MC74LCX573DWG    |
| MC74LCX244DTR2G  | MC74LCX374DTR2G | MC74LCX573DWR2G  |
| MC74LCX244DTR2GH | MC74LCX374DWR2G | MC74LCX574DTG    |
| MC74LCX244DWG    | MC74LCX540DTG   | MC74LCX574DTR2G  |
| MC74LCX244DWR2G  | MC74LCX540DTR2G | MC74LCX574DTR2GH |
| MC74LCX244MNTWG  | MC74LCX540DWR2G | MC74LCX574DWR2G  |
| MC74LCX245DTG    | MC74LCX541DTG   | NLV74LCX244DTR2G |
| MC74LCX245DTR2G  | MC74LCX541DTR2G | NLV74LCX245DTR2G |
| MC74LCX245DWG    | MC74LCX541DWG   | NLV74LCX373DTR2G |
| MC74LCX245DWR2G  | MC74LCX541DWR2G | NLV74LCX573DTR2G |
| MC74LCX245MNTWG  | MC74LCX573DTG   |                  |