

### FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16961

Generic Copy

Issue Date: 08-Jan-2013

TITLE: Change from 4" wafer to 6" wafer for TCA0372 and TCA0372B Device family

**PROPOSED FIRST SHIP DATE**: 0-Jul-2012

AFFECTED CHANGE CATEGORY(S): Process Enhancement

### FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or < Shannon.Riggs@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or <Shannon.Riggs@onsemi.com>

#### **ADDITIONAL RELIABILITY DATA:** Available

Contact your local ON Semiconductor Sales Office or <Shannon.Riggs@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 the Final PCN announcing ON Semiconductor's transfer of the TCA0372 and TCA0372B Device families from the 4" wafer process to the 6" wafer process. This change is to bring the design up to compliance with the current standards for the process technology. The device designs were revised to match the latest design rules for the wafer process.

As of the effective date, material assembled after W27, 2012 may be assembled with the 6" material. Please note this change has already occurred.

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### **RELIABILITY DATA SUMMARY:**

**Qualification vehicle: NCP1536** 

| Test | Standard                     | Description and Read Points   | Test<br>Conditions                            | (rej/<br>ss) |
|------|------------------------------|---|---|--------------|
| PC   | JESD22<br>A113 J-<br>STD-020 | Preconditioning: (Test @Rm) Moist. Precond.                                 | Peak reflow<br>temp=260degC                   | 0/693        |
| HAST | JESD22<br>A110               | High Accel Stress Test: (Test @R) 130°C/85% RH for 96hrs                    |   | 0/231        |
| AC   | JESD22<br>A102               | Autoclave: (Test @R) 121°C/100% RH/ 15 PSIG for 96hrs                       |   | 0/231        |
| TC   | JESD22<br>A104               | Temp Cycle: (Test @R) -65°C to+150°C; for 500 cycles                        |   | 0/231        |
| HTSL | JESD22<br>A103               | High Temp Storage Life (Test @R) TA= 150°C for 1000 hrs.                    |   | 0/45         |
|      |                              | Test Group B- Accelerated LifeTime Simulation Tests                         |   |              |
| HTOL | JESD22<br>A108               | High Temp Op Life: (Test @ R) TA=125°C for 1008 hrs.                        | Vcc=Max                                       | 0/231        |
| ELFR | AEC-<br>Q100-<br>008         | Early Life Fail Rate: (Test @R) TA= 125°C for 48hrs of TA= 150°C for 24hrs. | Used existing data and data from present HTOL | 0/2400       |

## **ELECTRICAL CHARACTERISTIC SUMMARY:**

Electrical characterization has been completed with changes noted in Product Bulletin #16895. ON Semiconductor recommends samples are obtained for application specific review.

### **List of affected General Parts:**

TCA0372DWR2G TCA0372BDWR2G

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