INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16424

Generic Copy

11-Mar-2010

TITLE: Qualification of Gresham Fab to Source Device 20241 (0POEA)

PROPOSED FIRST SHIP DATE: 12-Nov-2010

AFFECTED CHANGE CATEGORY(S): Wafer Fab

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or Richard Tan < Richard.Tan@onsemi.com >

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change.

DESCRIPTION AND PURPOSE:

Qualification ON Semiconductor wafer Fab (USGR1) at Gresham, Oregon to source device 20241 (0POEA).

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QUALIFICATION PLAN:

Estimated Date for Qualification Completion: 13-August-2010
Samples should be available after completion of Qualification.

Qualification plan for I3T80U Technology

- IntrinsicTests: to be performed on stand alone structures from three lots.
    - Electromigration
    - Hot Carrier
    - Gate Oxide Integrity
    - TDDB
    - NBTI
    - Stress Migration

- Extrinsic Level Tests: to be performed on Product – three lots each
    - Extrinsic qualification vehicle: Product 20241-xxx.
    - Early Life Failure Rate (ELFR): 125°C, 48 hours on 3*800 devices.
    - High Temp Operating Life test (HTOL): 125°C, 1000 hours on 3*77 devices.
    - Temperature Humidity Bias test (THB): 85°C/85%RH for 1000 hours on 3*77 devices.
    - Autoclave (AC): 121°C/100%RH for 96 hours on 3*77 devices.
    - Temperature Cycling (TC): 500 cycles -65/+150°C on 3*77 devices.
    - High Temperature Storage Life (HTSL): 150°C, 1000 hours on 3*77 devices.
    - ESD and Latch-up tests.

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<u>List of affected Customer Specific Parts</u>:

20241-009-XTD
20241-010-XTD
20241-011-XTD
20241-012-XUD