



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

11-APR-2002

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #12093

TITLE: Initial Notification for CS51031 and CS51033 Device Series Wafer Fab Transfer from EG to Tesla

EFFECTIVE DATE: 10-Aug-2002

AFFECTED CHANGE CATEGORY: ON Semiconductor Fab Site

AFFECTED PRODUCT DIVISION: Analog Products

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Bob Marquis <FC88FC@onsemi.com>

SAMPLES: Contact information for samples will be provided in the Final PCN.

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Mike Moylan <FC8RHC@onsemi.com>

DISCLAIMER:

Initial Product/Process Change Notification (IPCN) - First Notification distributed to customers. Distributed at least 120 days from the effective date of the change.

This is an 'early warning' about an upcoming change and contains general information regarding the change details and devices affected. It also contains at least a reliability qualification plan, but the actual qualification data will be identified in the Final Product/Process Change Notification (FPCN). This notification will be followed by a Final Product/Process Change Notification (FPCN) at least 60 days from effective date of change.

DESCRIPTION AND PURPOSE:

This is an initial PCN to notify customers of the intent to transfer and qualify the CS51031 and CS51033 family of part types from manufacturing on the 14V bipolar process (Die design D695-3) at ON Semiconductors East Greenwich facility in Rhode Island to manufacturing on the EPI-92 MMSH process (Die design DL51C) at ON Semiconductors Tesla facility in the Czech Republic.

Tesla is a certified QS-9000 and ISO-9000 factory qualified for the manufacturing of automotive products. The EPI-92 MMSH version of the part has been verified in an application circuit to have the same electrical performance as the existing 14V bipolar part. Full electrical characterizations is being performed to insure no change to device functionality or data sheet electrical specifications, and customers will be notified of any perceived differences. The listed devices, which all utilize the same core die design, are being transferred as part of an internal plan to improve die manufacturability and the availability of product for customer deliveries. The electrical performance, specifications, and designs of the devices being transferred will be unchanged; however, there will be a layout difference from the 14V bipolar process to match the technology rules of the EPI-92 MMSH process, resulting in a die size change. The EPI-92 MMSH process is a qualified technology that has produced and continues to produce significant volumes of product of other device types. As this is an initial PCN only, a final PCN will be issued at least 60 days prior to the beginning of shipping parts that are manufactured at Tesla. The anticipated time frame for this transfer will begin in August 2002.

**Initial Product/Process Change Notification #12093****QUALIFICATION PLAN:**

The DL51C die type is being qualified on the EPI-92 MMSH wafer fabrication process at Tesla via the following tests:

(1) HTOL - High Temperature Operating Life (+150C Ambient Temperature, Biased) being performed on 3 lots out to 456 hours.

Subsequent qualification of each device type to be transferred is being performed to the following requirements:

- (1) ESD Testing (18 devices from 1 lot),
- (2) Latch-up testing (6 devices from 1 lot),
- (3) Three-temperature electrical characterization on 3 lots
(100 devices per lot), and
- (4) Package approvals will primarily be based upon generic data

AFFECTED DEVICE LIST (WITHOUT SPECIALS):**PART**

CS51031GD8
CS51031GDR8
CS51031YD8
CS51031YDR8
CS51033GD8
CS51033GDR8
CS51033YD8
CS51033YDR8