



PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

27-MAR-2000

SUBJECT: ON Semiconductor Product/Process Change Notification #10157

TITLE: New Mask Set for TL431/TL431A Series from Tesla

EFFECTIVE DATE: 05-Jul-2000

AFFECTED CHANGE CATEGORY:

Wafer Process
Die Shrink

AFFECTED PRODUCT DIVISION: Analog Products Div

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Don Warring <RRGA60@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Marie Capron <R22878@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Thomas Grinter <R41768@onsemi.com>

DISCLAIMER:

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 your local ON Semiconductor sales office.

DESCRIPTION AND PURPOSE:

Tesla is an ON Semiconductor qualified fab in the Czech Republic and has been producing bipolar products in EPI80 and EPI44 technologies since 1995. ON Semiconductor has qualified mask set J51K for the TL431/431A series in EPI44 at Tesla. This was done to meet an increase in wafer capacity demand.

The mask set J51K is a slightly modified version of the current TL431A mask set (G41J), as it was developed for the new technology.

Please note that the device specification, function, and performance will not change.

QUALIFICATION PLAN: See Reliability Data

**Product/Process Change Notification #10157****RELIABILITY DATA SUMMARY:**

TEST	TIME	CONDITIONS	SAMPLE SIZE
OP-LIFE	504 hrs	145DegC	76 units per Lot/3Lots

RESULT: All 3 lots have successfully completed 504 hours (0 reject)

TC	500 cycles	-65DegC to 150DegC	76 units per Lot/3Lots
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RESULT: All 3 lots have successfully completed 500 cycles (0 reject)

ESD (HUMAN BODY MODEL) has successfully passed +/-2000V

ESD (MACHINE MODEL) has successfully passed +/-200V

ELECTRICAL CHARACTERISTIC SUMMARY:

Specific device characterization data available upon request. There is no 'Device Specific' change.

CHANGED PART IDENTIFICATION:

Devices with a date code of 0028 may be manufactured in EPI44 at Tesla.

AFFECTED DEVICE LIST (WITHOUT SPECIALS)

PART
TL431IP