



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION

Generic Copy

01-Dec-2005

SUBJECT: ON Semiconductor Final Product/Process Change Notification #15121

TITLE: OP AMP and Comparator Process Enhancement at CZ4

EFFECTIVE DATE: 01-Feb-2006

AFFECTED CHANGE CATEGORY(S): Design Change

AFFECTED PRODUCT DIVISION(S): Analog Power Management

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Vladislav Hrachovec <ffbc3t@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Brian Pickard
<r17360@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Brian Pickard <r17360@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 60 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 your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

This is the Final PCN to IPCN 13848 available at www.onsemi.com announcing ON Semiconductor's plan to redesign the wafer process for fabricating high volume Operational Amplifier (Op Amp) and Comparator devices in ON Semiconductor's Roznov wafer fab. The device designs were revised to match the latest design rules for the wafer process.

RELIABILITY DATA SUMMARY:

Qualification Vehicle: LM124

Temp Cycle (TC) - 0/240

High Temp Operational Life (HTOL) - 0/240

DPA (post Temp Cycle) - 0/6

**Final Product/Process Change Notification #15121****ELECTRICAL CHARACTERISTIC SUMMARY:**

Electrical characterization has been completed with no changes to the AC/DC specifications. ON Semiconductor recommends samples be obtained for application specific review. Further analysis of ESD capability resulted in some device specifications changing as listed below:

LM224 - No Change

LM239 - HBM from 2kV to 1.5kV

LM2901 - HBM from 2kV to 1.5kV

LM2902 - No Change

LM2903 - HBM from 2kV to 1.5kV and MM from 200V to 150V

LM293 - HBM from 2kV to 1.5kV and MM from 200V to 150V

LM324 - No Change

LM339 - HBM from 2kV to 1.5kV

LM393 - HBM from 2kV to 1.5kV and MM from 200V to 150V

MC3302 - HBM from 2kV to 1.5kV

CHANGED PART IDENTIFICATION:

No physical changes or part marking changes will be made. The change will take effect on product assembled on or after WW02 2006

AFFECTED DEVICE LIST**PART**

LM224D
LM224DG
LM224DR2
LM224DR2G
LM224DTB
LM224DTBG
LM224DTBR2
LM224DTBR2G
LM224N
LM224NG
LM239D
LM239DG
LM239DR2
LM239DR2G
LM239DTBR2
LM239DTBR2G
LM239N
LM239NG

**Final Product/Process Change Notification #15121****AFFECTED DEVICE LIST cont****PART**

LM2901D
LM2901DG
LM2901DR2
LM2901DR2G
LM2901DTBR2
LM2901DTBR2G
LM2901N
LM2901NG
LM2901VD
LM2901VDG
LM2901VDR2
LM2901VDR2G
LM2901VDTBR2
LM2901VDTBR2G
LM2901VN
LM2901VNG
LM2902D
LM2902DG
LM2902DR2
LM2902DR2G
LM2902DTB
LM2902DTBG
LM2902DTBR2
LM2902DTBR2G
LM2902N
LM2902NG
LM2902VD
LM2902VDG
LM2902VDR2
LM2902VDR2G
LM2902VDTB
LM2902VDTBG
LM2902VDTBR2
LM2902VDTBR2G
LM2902VN
LM2902VNG
LM2903D
LM2903DG
LM2903DR2
LM2903DR2G
LM2903N
LM2903NG
LM2903VD
LM2903VDG
LM2903VDR2
LM2903VDR2G
LM2903VN

**Final Product/Process Change Notification #15121****AFFECTED DEVICE LIST cont****PART**

LM2903VNG
LM293D
LM293DG
LM293DR2
LM293DR2G
LM324AD
LM324ADG
LM324ADR2
LM324ADR2G
LM324ADTB
LM324ADTBG
LM324ADTBR2
LM324ADTBR2G
LM324AN
LM324ANG
LM324D
LM324DG
LM324DR2
LM324DR2G
LM324DTB
LM324DTBG
LM324DTBR2
LM324DTBR2G
LM324N
LM324NG
LM339D
LM339DG
LM339DR2
LM339DR2G
LM339DTBR2
LM339DTBR2G
LM339N
LM339NG
LM393D
LM393DG
LM393DR2
LM393DR2G
LM393N
LM393NG
LMW324
LMW393
MC3302D
MC3302DG
MC3302DR2
MC3302DR2G
MC3302DTBR2
MC3302DTBR2G
MC3302P
MC3302PG