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**INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION**  
Generic Copy

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**08-DEC-2004**

**SUBJECT: ON Semiconductor Initial Product/Process Change Notification #13848**

**TITLE: OP AMP and Comparator Process Enhancement at CZ4**

**EFFECTIVE DATE: 08-Apr-2005**

**AFFECTED CHANGE CATEGORY:**

Wafer Process  
Die Shrink  
Design Change

**AFFECTED PRODUCT DIVISION:** Logic Products

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact Sales Office or Brian Pickard <r17360@onsemi.com>

**NOTIFICATION TYPE:**

Initial Product/Process Change Notification (IPCEN)

First change notification sent to customers. IPCENs are issued at least 120 days prior to implementation of the change. An IPCEN 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 (FPCEN).

This IPCEN notification will be followed by a Final Product/Process Change Notification (FPCEN) at least 60 days prior to implementation of the change.

**DESCRIPTION AND PURPOSE:**

ON Semiconductor's continuous improvement programs have led to the enhancement of the wafer process for fabricating high volume Operational Amplifier (Op Amp) and Comparator devices in ON Semiconductor's Roznov wafer fab. The device designs will be revised to match the latest design rules for the wafer process. Parts will be pin-for-pin replacements for existing devices, with no change in datasheet parameters or part nomenclature.

**QUALIFICATION PLAN:**

Qualification Vehicle: LM124

Test plan:

Temp Cycle (TC) - 3 lots x 80 pieces  
High Temp Operational Life (HTOL) - 3 lots x 80 pieces  
ESD (HBM, MM, CDM) - 1 lot x 5 pieces  
Tri-Temp characterization - 1 lot x 30 pieces  
DPA (post Temp Cycle) - 3 lots x 2 pieces





**Initial Product/Process Change Notification #13848**

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

**PART**

FLM2904D  
FLM2904DR2  
LM224D  
LM224DG  
LM224DR2  
LM224DR2G  
LM224DTB  
LM224DTBR2  
LM224N  
LM224NG  
LM239D  
LM239DG  
LM239DR2  
LM239DR2G  
LM239DTBR2  
LM239N  
LM239NG  
LM258D  
LM258DMR2  
LM258DR2  
LM258DR2G  
LM258N  
LM258NG  
LM2901D  
LM2901DR2  
LM2901DR2G  
LM2901DTBR2  
LM2901N  
LM2901NG  
LM2901VD  
LM2901VDG  
LM2901VDR2  
LM2901VDR2G  
LM2901VDTBR2  
LM2901VN  
LM2902D  
LM2902DG  
LM2902DR2  
LM2902DR2G  
LM2902DTB  
LM2902DTBR2  
LM2902N  
LM2902NG  
LM2902VD  
LM2902VDR2  
LM2902VDR2G  
LM2902VDTB  
LM2902VDTBR2  
LM2902VN  
LM2903D  
LM2903DG  
LM2903DMR2  
LM2903DMR2G



**Initial Product/Process Change Notification #13848**

LM2903DR2  
LM2903DR2G  
LM2903N  
LM2903NG  
LM2903VD  
LM2903VDG  
LM2903VDR2  
LM2903VDR2G  
LM2903VN  
LM2904ADMR2  
LM2904AN  
LM2904ANG  
LM2904D  
LM2904DG  
LM2904DMR2  
LM2904DMR2G  
LM2904DR2  
LM2904DR2G  
LM2904N  
LM2904NG  
LM2904VD  
LM2904VDG  
LM2904VDMR2  
LM2904VDMR2G  
LM2904VDR2  
LM2904VN  
LM293D  
LM293DMR2  
LM293DR2  
LM293DR2G  
LM324AD  
LM324ADR2  
LM324ADR2G  
LM324ADTB  
LM324ADTBR2  
LM324AN  
LM324ANG  
LM324D  
LM324DG  
LM324DR2  
LM324DR2G  
LM324DTB  
LM324DTBR2  
LM324N  
LM324NG  
LM339D  
LM339DG  
LM339DR2  
LM339DR2G  
LM339DTBR2  
LM339N  
LM339NG  
LM358D  
LM358DG  
LM358DMR2  
LM358DMR2G



**Initial Product/Process Change Notification #13848**

LM358DR2  
LM358DR2G  
LM358N  
LM358NG  
LM393D  
LM393DG  
LM393DMR2  
LM393DMR2G  
LM393DR2  
LM393DR2G  
LM393N  
LM393NG  
LMW324  
LMW358  
LMW393  
MC3302D  
MC3302DR2  
MC3302DTBR2  
MC3302P  
NCV2903DMR2  
NCV2904DMR2  
NCV2904DMR2G  
SC258N  
SC2901DR2  
SC2902DR2  
SC2903DR2  
SC2903N  
SC2904DR2  
SC2904DR2G  
SC2904N  
SC2904VN  
SC393N  
TY30533R2  
TY30577DR2  
TY30578DR2