



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

25-MAR-2005

SUBJECT: ON Semiconductor Final Product/Process Change Notification #13998

TITLE: Qualification of NCP300_301_302 and 303 on AC MOS2 Technology Platform

EFFECTIVE DATE: 25-May-2005

AFFECTED CHANGE CATEGORY: Die Shrink

AFFECTED PRODUCT DIVISION: Analog

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Representative or
Rick Luevanos <R32737@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Representative or
Bett Lofts <FFBGFX@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Representative or Bett Lofts <FFBGFX@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 Product Change Notification (follow up to IPCN 13535) to make customers aware of the qualification of NCP300, NCP301, NCP302 and NCP303 series of Voltage Detector products on the AC MOS2 Technology Platform from the current AC MOS1 Technology Platform for the benefit of increased capacity. Die fabrication will continue at the current wafer fab site, ON Semiconductor MOS7A, in Aizu, Japan.

Device parameters will continue to meet all Datasheet specifications, and reliability will continue to meet or exceed ON Semiconductor standards.

**Final Product/Process Change Notification #13998****RELIABILITY DATA SUMMARY:**

This qualification had reliability stresses completed on four device lots (lot each of NCP302LSN27T1, NCP302LSN21T1, NCP302LSN21T1 and NCP301LSN28T1).

Test	Condition	Interval	SS	Results
HTOL	Ta = 145degC	1008 hours	3x80	0/240
PC	IR @ 260degC	3x	3x80	0/240
TC-PC	-65/+150C	500 cyc	2x80	0/160
HASTPC	Ta = +130C, RH = 85%, PSIG=18.8	96 hrs	3x80	0/240
AC-PC	Ta=121C, RH=100%, PSIG=15	96 hrs	1x80	0/80
ESD	HBM			Passed 4000V
	MM			Passed 300V
	CDM			Passed 500V
LU				Passed +/-200 mA

ELECTRICAL CHARACTERISTIC SUMMARY:

Samples and characterization data are available upon request.

No datasheet specifications are impacted with the exception to the following improvements:

Operating Ambient Temperature Range has been increased to -40C to +125C. Also, the Maximum Junction Temperature change to +150C.

CHANGED PART IDENTIFICATION:

Product with a date code after WW22 may be sourced from either AC MOS1 or AC MOS2 die.

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

NCP300HSN09T1
 NCP300HSN18T1
 NCP300HSN27T1
 NCP300HSN30T1
 NCP300HSN45T1
 NCP300HSN47T1
 NCP300LSN09T1
 NCP300LSN10T1
 NCP300LSN11T1
 NCP300LSN12T1
 NCP300LSN13T1
 NCP300LSN14T1

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NCP300LSN15T1
NCP300LSN17T1
NCP300LSN185T1
NCP300LSN18T1
NCP300LSN20T1
NCP300LSN21T1
NCP300LSN22T1
NCP300LSN23T1
NCP300LSN24T1
NCP300LSN25T1
NCP300LSN26T1
NCP300LSN27T1
NCP300LSN28T1
NCP300LSN29T1
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NCP300LSN42T1
NCP300LSN43T1
NCP300LSN44T1
NCP300LSN45T1
NCP300LSN46T1
NCP300LSN47T1
NCP300LSN48T1
NCP300LSN49T1
NCP301HSN09T1
NCP301HSN18T1
NCP301HSN20T1
NCP301HSN22T1

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NCP301HSN27T1
NCP301HSN30T1
NCP301HSN45T1
NCP301LSN09T1
NCP301LSN10T1
NCP301LSN11T1
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NCP301LSN48T1

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NCP301LSN49T1
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NCP302HSN45T1
NCP302HSN47T1
NCP302LSN09T1
NCP302LSN10T1
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