



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

15-MAR-2004

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #13360

TITLE: Analog ICS Wafer Fab Transfer to Roznov

EFFECTIVE DATE: 15-JUL-2004

AFFECTED CHANGE CATEGORY: ON Semiconductor Fab Site

AFFECTED PRODUCT DIVISION: Analog Products

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Representative or Patrick Rousset <TTT252@onsemi.com>

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN 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 (FPCN).

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

DESCRIPTION AND PURPOSE:

This initial PCN is to notify customers of the transfer and qualification of the 17 Volt, 30 Volt, and 40 Volt Analog Bipolar Technologies and the associated integrated circuits, from the ON Semiconductor East Greenwich facility in Rhode Island (USA) to the ON Semiconductor Tesla wafer fab located in Roznov, Czech Republic. This is the second IPCN for these technologies. The first IPCN, (13298), can be found at www.onsemi.com.

ON Semiconductor has already successfully completed the transfer and qualification of integrated circuits processed with the 14 Volt and 50 Volt technologies from the ON Semiconductor East Greenwich facility in Rhode Island (USA) to the ON Semiconductor Tesla wafer fab located in Roznov, Czech Republic, (refer to FPCN # 12511 and FPCN# 12512).

The integrated circuits design, electrical specifications, and mask sets will remain identical. A full electrical characterization over the temperature range will be performed for each product to check the device functionality and electrical specifications.

Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed ON Semiconductor standards. ON Semiconductor recommends that customers evaluate sample units in each associated application circuit to ensure there are no unexpected electrical incompatibilities.

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Multiple final PCNs will be published, starting in the third quarter of 2004, providing the qualification results and effective planned production release dates at Tesla for the specified devices.

QUALIFICATION PLAN:

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

- 1) Three temperature electrical characterization (2 to 3 lots, 50 units each lot)
- 2) ESD testing (1 lot), Human Body Model and Machine Model
- 3) Latch up testing (1 lot)

Reliability testing will be performed on qualification vehicles chosen based on die size, complexity and run rates. The number of qualification vehicles being used to qualify each process is based upon the number of part types actually running on the process.

Analog integrated circuits processed with the 17 Volt technology

CS45008D14	3 Lots	HTOL, ELFR, PC, THB
CS9002LFT48	3 Lots	HTOL, PC, AC, TC
CS42046D8	3 Lots	HTOL
CS42076D8	3 Lots	HTOL

Analog integrated circuits processed with the 30 Volt technology

CS61012DW28	3 Lots	HTOL, ELFR, PC, THB, AC, TC
CS51411D8	3 Lots	HTOL, ELFR, PC, TC
CS8190N16	3 Lots	HTOL
CS41115D8	3 Lots	HTOL
CS44116T7	3 Lots	HTOL

Analog integrated circuits processed with the 40 Volt technology

CS68059DW24	3 Lots	HTOL, ELFR, PC, THB, AC, TC
CS68004DW16	3 Lots	HTOL

Planned reliability tests are:

Test	Conditions	Duration
Early Life (ELFR)	Ta=+125C, Bias	48hrs
High Temp. Operating Life (HTOL)	Ta=+125C, Bias	1008hrs
Temp. Cycle (TC)*	-65C to +150C	500 cycles
Autoclave (AC) *	+121C /15psig/100%RH	96hrs
Temp. Humidity bias (THB)*	+85C /85%RH	1008hrs
Wire Bond Pull Strength (BPS)*	After TC, 30 bonds/5 units	
Wire Bond Shear Strength (BS)	30 bonds/5 units	

*Note : These tests may be performed with preconditioned parts depending upon the device type used.

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

CS3361YD14
 C S3361YDR14
 CS5101EDW16
 CS5101EDWR16
 CS5101EN14
 CS51021AEDR16
 CS51022AEDR16
 CS51031GD8



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CS51031GDR8
CS51031YD8
CS51031YDR8
CS51033GD8
CS51033GDR8
CS51033YD8
CS51033YDR8
CS51221EDR16
CS5157HGD16
CS5157HGDR16
CS5253-1GDP5
CS5253-1GDPR5
CS5253B-1GDP5
CS5253B-1GDPR5
CS5253B-8GDP5
CS5253B-8GDPR5
CS8161YT5
CS8161YTHA5
CS8161YTVA5
NCP1086ST-33T3
NCP1086ST-ADJT3
NCP1086T-033
NCP1086T-ADJ
NCP1442FR4
NCP1442T
NCP1443FR4
NCP1443T
NCP1444FR4
NCP1444T
NCP1445FR4
NCP1445T
NCP5424D
NCP5424DR2
NCV1009D
NCV1009DR2
NCV1009Z
NCV4279BD1
NCV4279BD1R2
NCV4279BD2
NCV4279BD2R2
NCV4279BDW
NCV4279BDWR2
NCV8141D2TR4
NCV8184D
NCV8184DR2
NCV8501D100
NCV8501D100R2
NCV8501D25
NCV8501D25R2
NCV8501D33
NCV8501D33R2
NCV8501D50
NCV8501D50R2
NCV8501D80
NCV8501D80R2
NCV8501DADJ



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NCV8501DADJR2
NCV8501PDW100
NCV8501PDW100R2
NCV8501PDW25
NCV8501PDW25R2
NCV8501PDW33
NCV8501PDW33R2
NCV8501PDW50
NCV8501PDW50R2
NCV8501PDW80
NCV8501PDW80R2
NCV8501PDWADJ
NCV8501PDWADJR2
NCV8502D100
NCV8502D100R2
NCV8502D25
NCV8502D25R2
CV8502D33
NCV8502D33R2
NCV8502D50
NCV8502D50R2
NCV8502D80
NCV8502D80R2
NCV8502DADJ
NCV8502DADJR2
NCV8502PDW100
NCV8502PDW100R2
NCV8502PDW25
NCV8502PDW25R2
NCV8502PDW33
NCV8502PDW33R2
NCV8502PDW50
NCV8502PDW50R2
NCV8502PDW80
NCV8502PDW80R2
NCV8502PDWADJ
NCV8502PDWADJR2
NCV8503PW25
NCV8503PW25R2
NCV8503PW33
NCV8503PW33R2
NCV8503PW50
NCV8503PW50R2
NCV8503PW50R2G
NCV8503PWADJ
NCV8503PWADJR2
NCV8504PW25
NCV8504PW25R2
NCV8504PW33
NCV8504PW33R2
NCV8504PW50
NCV8504PW50R2
NCV8504PWADJ
NCV8504PWADJR2
NCV8505D2T25
NCV8505D2T25R4



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NCV8505D2T33
NCV8505D2T33R4
NCV8505D2T50
NCV8505D2T50R4
NCV8505D2T50R4G
NCV8505D2TADJ
NCV8505D2TADJR4
NCV8506D2T25
NCV8506D2T25R4
NCV8506D2T33
NCV8506D2T33R4
NCV8506D2T50
NCV8506D2T50R4
NCV8506D2TADJ
NCV8506D2TADJR4
NCV8509PDW18
NCV8509PDW18R2
NCV8509PDW25
NCV8509PDW25R2
NCV8509PDW26
NCV8509PDW26R2