
FINAL PRODUCT/PROCESS CHANGE NOTIFICATION

Generic Copy

30-Oct-2008

SUBJECT: ON Semiconductor Final Product/Process Change Notification #16169 (Ref: IPCN #16147)

TITLE: Product (Die) Replacement and Manufacturing Flow change for ADP3419, ADP3207, ADP3207A, ADP3208, and ADP3209

PROPOSED FIRST SHIP DATE: 30-Jan-2009

AFFECTED CHANGE CATEGORY(S): Die, Wafer Fab Process/Location

AFFECTED PRODUCT DIVISION(S): Computing Products group

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or David Chu <david.chu@onsemi.com> or Brian Pickard <brian.pickard@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or David Chu or Brian Pickard

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or Mark Wasilewski <m.wasilewski@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 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:

- ON Semiconductor has acquired the voltage regulation and thermal monitoring products (ADI-PTC) for computing applications from Analog Devices, Inc. Per contractual agreement, Analog Devices will continue to supply the subject products until end of 2008.
- To eliminate supply constraints for the subject products, ON Semiconductor will integrate product manufacturing flow into ON manufacturing systems; specifically, wafer fabrication of these products will be transferred from ADI internal wafer fab to ON Semiconductor qualified external foundry, TSMC located in Hsin-chu Science park, Hsinchu Taiwan. TSMC is a ISO9001 and ISO/TS16949 certified facililty.

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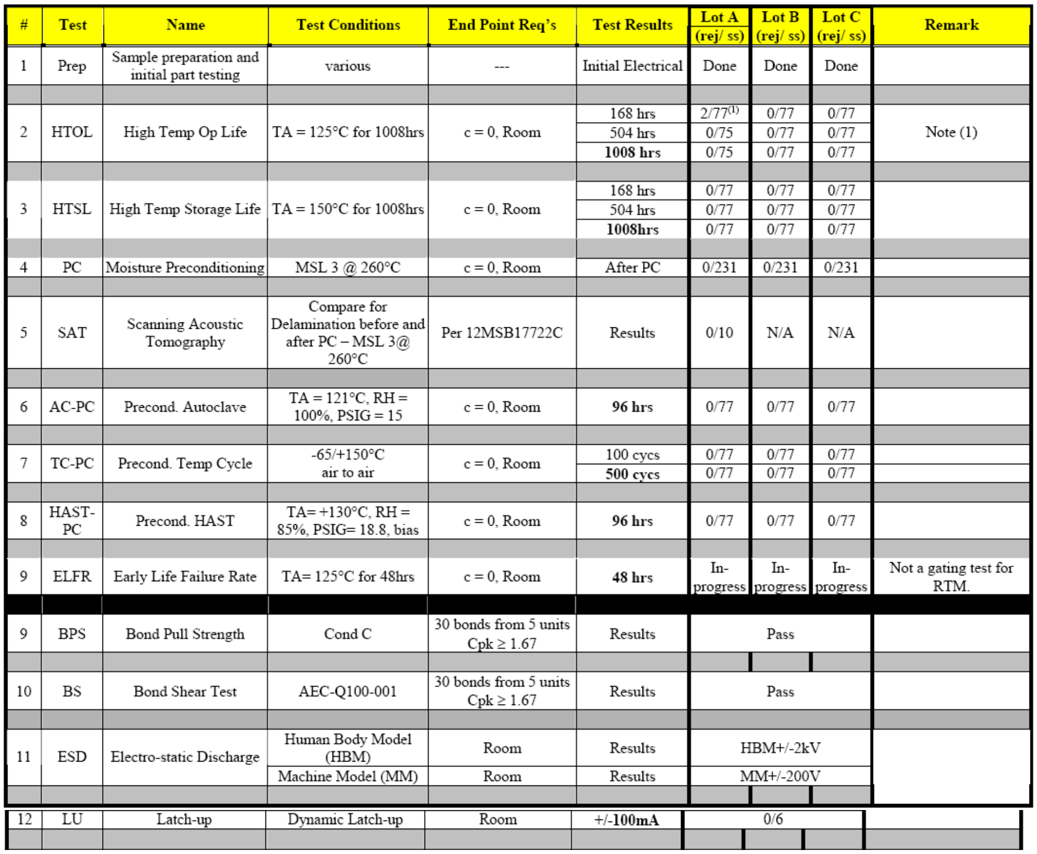
- The subject products will have change in die and manufacturing process. The new parts will be differentiated via part number change as follows:
    - ADP3207 → ADP3207**C**
    - ADP3207A → ADP3207**C**
    - ADP3208 → ADP3208**C**
    - ADP3209 → ADP3209**C**
    - ADP3419 → ADP3611
- There are minor pin out changes associated with this change. However, the pin out changes will not require customer PCB layout change and will be limited to only BOM changes of small signal R's and C's. These changes are specified on the respective product data sheets and/or working closely with ON Semiconductor FAE team member.

RELIABILITY DATA SUMMARY:

Design/Process Technology is qualified via ADP3611 qual data. However, product specific Reliability data may be requested at the time product releases in Jan 09.



#	Test	Name	Test Conditions	End Point Req's	Test Results	Lot A (rej/ ss)	Lot B (rej/ ss)	Lot C (rej/ ss)	Remark
1	Prep	Sample preparation and initial part testing	various	---	Initial Electrical	Done	Done	Done	
2	HTOL	High Temp Op Life	TA = 125°C for 1008hrs	c = 0, Room	168 hrs	2/77(1)	0/77	0/77	Note (1)
					504 hrs	0/75	0/77	0/77	
					1008 hrs	0/75	0/77	0/77	
3	HTSL	High Temp Storage Life	TA = 150°C for 1008hrs	c = 0, Room	168 hrs	0/77	0/77	0/77	
					504 hrs	0/77	0/77	0/77	
					1008hrs	0/77	0/77	0/77	
4	PC	Moisture Preconditioning	MSL 3 @ 260°C	c = 0, Room	After PC	0/231	0/231	0/231	
5	SAT	Scanning Acoustic Tomography	Compare for Delamination before and after PC – MSL 3@ 260°C	Per 12MSB17722C	Results	0/10	N/A	N/A	
6	AC-PC	Precond. Autoclave	TA = 121°C, RH = 100%, PSIG = 15	c = 0, Room	**96 hrs**	0/77	0/77	0/77	
7	TC-PC	Precond. Temp Cycle	-65/+150°C air to air	c = 0, Room	100 cycs	0/77	0/77	0/77	
					500 cycs	0/77	0/77	0/77	
8	HAST-PC	Precond. HAST	TA= +130°C, RH = 85%, PSIG= 18.8, bias	c = 0, Room	**96 hrs**	0/77	0/77	0/77	
9	ELFR	Early Life Failure Rate	TA= 125°C for 48hrs	c = 0, Room	**48 hrs**	In-progress	In-progress	In-progress	Not a gating test for RTM.
9	BPS	Bond Pull Strength	Cond C	30 bonds from 5 units Cpk ≥ 1.67	Results	Pass			
10	BS	Bond Shear Test	AEC-Q100-001	30 bonds from 5 units Cpk ≥ 1.67	Results	Pass			
11	ESD	Electro-static Discharge	Human Body Model (HBM)	Room	Results	HBM+/-2kV			
			Machine Model (MM)	Room	Results	MM+/-200V			
12	LU	Latch-up	Dynamic Latch-up	Room	**+/-100mA**	0/6			

Note 1: 2 units removed at 168 hrs due to ATE induced EOS

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ELECTRICAL CHARACTERISTIC SUMMARY:

Electrical characterization will be available upon request.

CHANGED PART IDENTIFICATION:

The products will be differentiated via top marking that will comply with standard ON marking scheme:

< ON Logo >
< Product name >
< AWLYYWW >

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AFFECTED DEVICE LIST

ADP32070091CPZR
ADP3207A0091CPZR
ADP3207JCPZ-RL
ADP3207AJCPZ-RL
ADP32080001CPZR
ADP3208JCPZ-RL
ADP3208AJCPZ-RL
ADP3209JCPZ-RL
ADP32090091CPZR
ADP34190091RMZR
ADP3419JRMZ-REEL
ADP3419JRM-REEL