



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16485

Generic Copy

Issue Date: 17-Jun-2010

TITLE: QSOP 24 Lead Package Moisture Sensitivity Level Change

PROPOSED FIRST SHIP DATE: 17-Sep-2010

AFFECTED CHANGE CATEGORY(S):

Computer Products – Power Switching Group

24 lead QSOP package 0585

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or <david.short@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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

The package kit for the current 24ld QSOP BOM has been changed to “Green” - Halogen Free mold compound and as a result the Moisture Sensitivity Level (MSL) rating will change to MSL3 from MSL1. The package will be rated at MSL-3 at 260°C solder reflow temperature as opposed to MSL-1 at 260°C per J-STD-020 requirements. Thus dry packing will be required for shipments.

This new package kit will be effective from date code 1036 (year 2010, work week 36) onwards. There is no change to physical dimensions for the package.



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RELIABILITY DATA SUMMARY:

#	Test	Name	Test Conditions	End Point Req's	Test Results	Lot A	Lot B	Lot C	Remark
						(rej/ss)	(rej/ss)	(rej/ss)	
1	Prep	Sample preparation and initial part testing	various	---	Initial Electrical	Done	Done	Done	
2	HTSL	High Temp Storage Life	TA = 150°C for 1008hrs	c = 0, Room	504 hrs 1008hrs	0/80 0/80	0/80 0/80	0/80 0/80	
3	SAT	Scanning Acoustic Tomography	Compare for Delamination before and after PC – MSL 3 @260°C	Per 12MSB17722C	Results	0/5	0/5	0/5	
4	PC	Moisture Preconditioning	MSL 3 @ 260°C	c = 0, Room	After PC	0/240	0/240	0/240	
5	AC-PC	Precond. Autoclave	TA = 121°C, RH = 100%, PSIG = 15	c = 0, Room	96 hrs	0/80	0/80	0/80	
6	TC-PC	Precond. Temp Cycle	-65/+150°C air to air	c = 0, Room	500 cycs 1000 cycs	0/80 0/78	0/80 0/77	0/80 0/80	Info readpoint.
7	HAST-PC	Precond. HAST	TA= +130°C, RH = 85%, PSIG= 18.8, Bias	c = 0, Room	96 hrs	0/80	0/80	0/80	
8	BPS	Bond Pull Strength	M883 Method 2011 Cond C	30 bonds from 5 units Cpk ≥ 1.67	Results	0/30	0/30	0/30	
9	BS	Bond Shear Test	AEC-Q100-001	30 bonds from 5 units Cpk ≥ 1.67	Results	0/30	0/30	0/30	
10	PD	Physical Dimension	JB100	Per case outline Ppk>1.66, Cpk>1.33	Result	Pass	Pass	Pass	
11	RSH	Resistance to Solder Heat	JESD22 – B106 260°C Immersion	c = 0, Room	Results	0/30	0/30	0/30	



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List of affected General Parts:

ADM1029ARQZ
ADM1029ARQZ-R7
ADT7463ARQZ
ADT7463ARQZ-R7
ADT7463ARQZ-REEL
ADT7476AARQZ
ADT7476AARQZ-R
ADT7476AARQZ-RL7
ADT7476ARQZ
ADT7476ARQZ-R7
ADT7476ARQZ-REEL
ADT7490ARQZ
ADT7490ARQZ-R7
ADT7490ARQZ-REEL
ADT7476ARQH-REEL