



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 16823Generic Copy

Issue Date: 28-Feb-2012**TITLE:** Assembly Site addition for Voltage Supervisors in SOT-23 packages and Marking Change for all Voltage Supervisors.**PROPOSED FIRST SHIP DATE:** 28-May-2012 or sooner upon customer approval**AFFECTED CHANGE CATEGORY(S) for ASSEMBLY SITES:**

- CAT803, CAT853, CAT863
- CAT809, CAT859, CAT869
- CAT810

AFFECTED CHANGE CATEGORY(S) -- CHANGED PART IDENTIFICATION:

- CAT803, CAT809,
- CAT810, CAT811, CAT812
- CAT823, CAT824, CAT825
- CAT853, CAT859
- CAT863, CAT869

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:Contact your local ON Semiconductor Sales Office or Thruston Awalt <thruston.awalt@onsemi.com>**SAMPLES:** Contact your local ON Semiconductor Sales Office**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:**

This Process Change Notice informs customers that ON Semiconductor is adding ON Semiconductor Seremban as a manufacturing location for the CAT8x3, CAT8x9, CAT810, & CAT82x product families.

In addition, to unify package marking specifications between assembly sites the device code marking on the topside will be modified to show all identification information. The bottom side mark is to be eliminated.

The devices listed in this FPCN have historically been assembled & tested in Thailand. Due to recent flooding in Thailand some assembly facilities are temporarily out of operation. Moving forward, these devices will be processed at either of the locations as determined solely by ON Semiconductor's production planners. There will be no changes in device functionality. Reliability will continue to meet or exceed ON Semiconductor's highest standards. All devices are RoHS compatible.



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RELIABILITY DATA SUMMARY:

Device Description:

Device	CAT853TTBI-T3	Wafer Fab Site	CSMC Tech	China
Package	SOT-23 3 EPOXY PB FREE	Assembly Site	ONSBN	Seremban, Malaysia
MSL Level	MSL1 @ 260C	Final Test Site	ONSBN	Seremban, Malaysia
Technology	6CMOSP6	S13939		
Final Lead Finish	Matte Tin	Package Code	0224	

Qualification Results and Analysis:

#	Test	Name	Test Conditions	End Point Req's	Test Results	(rej/ ss)	(rej/ ss)
					Read Point	Lot A	CTRL
1	Prep	Sample preparation and initial part testing	various	---	Initial Electrical	done	done
	HTSL	High Temp Storage Life	TA = 150°C	c = 0, Room	Initial	0/80	0/80
					504 Hrs	0/80	0/80
					1008 Hrs	0/80	0/80
	HAST-PC	High Acceleration Stress Test - PC	TA =130 °C, RH=85%, V=80% rated Volts.	c = 0, Room	Initial	0/80	0/80
					96 Hrs	0/80	0/80
	TC-PC	Temperature Cycling-PC	Ta= -65/150 C	c = 0, Room	Initial	0/80	0/80
					500 Cyc	0/80	0/80
					1000 Cyc	0/80	0/80
	AC-PC	Autoclave	121°C/100% RH/15psig	c = 0, Room	Initial	0/80	0/80
					96 Hrs	0/80	0/80
	DPA	Destructive Physical Analysis	Following TC -PC	Compare to AEC Criteria		0/5	0/5
	ED	Electrical Distribution	Tri Temperature	Room, Hot, Cold		0/30	0/30
	ESD	Electro-static Discharge	Human Body Model (HBM)	Room		Class 1C	
	ESD	Electro-static Discharge	Machine (MM)	Room		Class A	
	LU	LatchUp	-150mA, +1.5xVcc	Room, Hot (+125C)		0/6	

Table 1: Reliability Evaluation Results for Device CAT853TTBI-T3

Conclusion:

The CAT853TTBI-T3 manufactured at the CSMC Tech and assembled at ONSBN has met or exceeded the qualification requirements per ON Semiconductor Product Qualification Specification, 12MSB17722C. CAT853TTBI-T3 and CAT80X/CAT81X/CAT85X/CAT86X Family is considered fully qualified. This is a NON-AUTO qual.

ELECTRICAL CHARACTERISTIC SUMMARY: N/A



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Appendix – PART IDENTIFICATION

Package Marking

Format for the new “topside” only marking code

XXXM

“XXX” = product identification

“M” = date code

PART IDENTIFICATION – Appendix of Changes:

	Product ID	SOT-23 lead	Old Marking Code	New Marking Code	Product ID	SOT-23 lead	Old Marking Code	New Marking Code
		CAT803JTBI-GT3	3	RN	VKA	CAT803JTBI-T3	3	RP
	CAT803LTBI-GT3	3	RN	VKA	CAT803LTBI-T3	3	RP	VKL
	CAT803MTBI-GT3	3	RN	VKA	CAT803MTBI-T3	3	RP	VKL
	CAT803RTBI-GT3	3	RN	VKA	CAT803RTBI-T3	3	RP	VKL
	CAT803STBI-GT3	3	RN	VKA	CAT803STBI-T3	3	RP	VKL
	CAT803TTBI-GT3	3	RN	VKA	CAT803TTBI-T3	3	RP	VKL
	CAT803ZTBI-GT3	3	RN	VKA	CAT803ZTBI-T3	3	RP	VKL
803	Product ID	SC-70 lead	Old Marking Code	New Marking Code	Product ID	SC-70 lead	Old Marking Code	New Marking Code
	CAT803JSDI-GT3	3	RN	VKA	CAT803JSDI-T3	3	RP	VKL
	CAT803LSDI-GT3	3	RN	VKA	CAT803LSDI-T3	3	RP	VKL
	CAT803MSDI-GT3	3	RN	VKA	CAT803MSDI-T3	3	RP	VKL
	CAT803RSDI-GT3	3	RN	VKA	CAT803RSDI-T3	3	RP	VKL
	CAT803SSDI-GT3	3	RN	VKA	CAT803SSDI-T3	3	RP	VKL
	CAT803TSDI-GT3	3	RN	VKA	CAT803TSDI-T3	3	RP	VKL
	CAT803ZSDI-GT3	3	RN	VKA	CAT803ZSDI-T3	3	RP	VKL



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809	Product ID	SOT-23 lead	Old Marking Code	New Marking Code	Product ID	SOT-23 lead	Old Marking Code	New Marking Code
	CAT809HTBI-GT3	3	NR	VLA	CAT809HTBI-T3	3	PB	VLD
	CAT809JTBI-GT3	3	NR	VLA	CAT809JTBI-T3	3	PB	VLD
	CAT809LTBI-GT3	3	NR	VLA	CAT809LTBI-T3	3	PB	VLD
	CAT809MTBI-GT3	3	NR	VLA	CAT809MTBI-T3	3	PB	VLD
	CAT809RTBI-GT3	3	NR	VLA	CAT809RTBI-T3	3	PB	VLD
	CAT809STBI-GT3	3	NR	VLA	CAT809STBI-T3	3	PB	VLD
	CAT809TTBI-GT3	3	NR	VLA	CAT809TTBI-T3	3	PB	VLD
	CAT809VTBI-GT3	3	SK	VLA				
	CAT809ZTBI-GT3	3	NR	VLA	CAT809ZTBI-T3	3	PB	VLD
	Product ID	SC-70 lead	Old Marking Code	New Marking Code	Product ID	SC-70 lead	Old Marking Code	New Marking Code
	CAT809JSDI-GT10	3	NR	VLA				
	CAT809JSDI-GT3	3	NR	VLA	CAT809JSDI-T3	3	PB	VLD
	CAT809LSDI-GT10	3	NR	VLA				
	CAT809LSDI-GT3	3	NR	VLA	CAT809LSDI-T3	3	PB	VLD
	CAT809MSDI-GT10	3	NR	VLA				
	CAT809MSDI-GT3	3	NR	VLA	CAT809MSDI-T3	3	PB	VLD
	CAT809RSDI-GT10	3	NR	VLA				
	CAT809RSDI-GT3	3	NR	VLA	CAT809RSDI-T3	3	PB	VLD
	CAT809SSDI-GT10	3	NR	VLA				
	CAT809SSDI-GT3	3	NR	VLA	CAT809SSDI-T3	3	PB	VLD
	CAT809TSDI-GT10	3	NR	VLA				
	CAT809TSDI-GT3	3	NR	VLA	CAT809TSDI-T3	3	PB	VLD
	CAT809ZSDI-GT10	3	NR	VLA				
	CAT809ZSDI-GT3	3	NR	VLA	CAT809ZSDI-T3	3	PB	VLD



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810	Product ID	SOT-23 lead	Old Marking Code	New Marking Code	Product ID	SOT-23 lead	Old Marking Code	New Marking Code
	CAT810JTBI-GT3	3	NS	VHA	CAT810JTBI-T3	3	PD	VHT
CAT810LTBI-GT3	3	NS	VHA	CAT810LTBI-T3	3	PD	VHT	
CAT810MTBI-GT3	3	NS	VHA	CAT810MTBI-T3	3	PD	VHT	
CAT810RTBI-GT3	3	NS	VHA	CAT810RTBI-T3	3	PD	VHT	
CAT810STBI-GT3	3	NS	VHA	CAT810STBI-T3	3	PD	VHT	
CAT810TTBI-GT3	3	NS	VHA	CAT810TTBI-T3	3	PD	VHT	
CAT810ZTBI-GT3	3	NS	VHA	CAT810ZTBI-T3	3	PD	VHT	
810	Product ID	SC-70 lead	Old Marking Code	New Marking Code	Product ID	SC-70 lead	Old Marking Code	New Marking Code
CAT810JSDI-GT3	3	NS	VHA	CAT810JSDI-T3	3	PD	VHT	
CAT810LSDI-GT3	3	NS	VHA	CAT810LSDI-T3	3	PD	VHT	
CAT810MSDI-GT3	3	NS	VHA	CAT810MSDI-T3	3	PD	VHT	
CAT810RSDI-GT3	3	NS	VHA	CAT810RSDI-T3	3	PD	VHT	
CAT810SSDI-GT3	3	NS	VHA	CAT810SSDI-T3	3	PD	VHT	
CAT810TSDI-GT3	3	NS	VHA	CAT810TSDI-T3	3	PD	VHT	
CAT810ZSDI-GT3	3	NS	VHA	CAT810ZSDI-T3	3	PD	VHT	

811	Product ID	SOT-143 lead	Old Marking Code	New Marking Code	Product ID	SOT-143 lead	Old Marking Code	New Marking Code
	CAT811JTBI-GT3	4	ER	VEA	CAT811JTBI-T3	4	CK	VES
CAT811LTBI-GT3	4	ER	VEA	CAT811LTBI-T3	4	DH	VES	
CAT811MTBI-GT3	4	ET	VEA	CAT811MTBI-T3	4	DJ	VES	
CAT811RTBI-GT3	4	ET	VEA	CAT811RTBI-T3	4	DN	VES	
CAT811STBI-GT3	4	ET	VEA	CAT811STBI-T3	4	DM	VES	
CAT811TTBI-GT3	4	ET	VEA	CAT811TTBI-T3	4	DL	VES	
CAT811ZTBI-GT3	4	ER	VEA	CAT811ZTBI-T3	4	CP	VES	

812	Product ID	SOT-143 lead	Old Marking Code	New Marking Code	Product ID	SOT-143 lead	Old Marking Code	New Marking Code
	CAT812JTBI-GT3	4	ES	VTA	CAT812JTBI-T3	4	DU	VTS
CAT812LTBI-GT3	4	ES	VTA	CAT812LTBI-T3	4	DR	VTS	
CAT812MTBI-GT3	4	ES	VTA	CAT812MTBI-T3	4	DT	VTS	
CAT812RTBI-GT3	4	ES	VTA	CAT812RTBI-T3	4	DX	VTS	
CAT812STBI-GT3	4	ES	VTA	CAT812STBI-T3	4	DW	VTS	
CAT812TTBI-GT3	4	ES	VTA	CAT812TTBI-T3	4	DV	VTS	
CAT812ZTBI-GT3	4	ES	VTA	CAT812ZTBI-T3	4	DY	VTS	



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	Product ID	TSOT-23 lead	Old Marking Code	New Marking Code
823	CAT823LTDI-GT3	5	TS	ETA
	CAT823MTDI-GT3	5	TS	ETA
	CAT823RTDI-GT3	5	TS	ETA
	CAT823STDI-GT3	5	TS	ETA
	CAT823TTDI-GT3	5	TS	ETA
	CAT823YTDI-GT3	5	TS	ETA
	CAT823ZTDI-GT3	5	TS	ETA
	Product ID	SC-70 lead	Old Marking Code	New Marking Code
	CAT823LSDI-GT3	5	RG	ETA
	CAT823MSDI-GT3	5	RG	ETA
	CAT823RSDI-GT3	5	RG	ETA
	CAT823SSDI-GT3	5	RG	ETA
	CAT823TSDI-GT3	5	RG	ETA
CAT823YSDI-GT3	5	RG	ETA	
CAT823ZSDI-GT3	5	RG	ETA	



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824	Product ID	TSOT-23 lead	Old Marking Code	New Marking Code
	CAT824LTDI-GT3	5	TB	EFA
	CAT824MTDI-GT3	5	TB	EFA
	CAT824RTDI-GT3	5	TB	EFA
	CAT824STDI-GT3	5	TB	EFA
	CAT824TTDI-GT3	5	TB	EFA
	CAT824UTDI-GT3	5	TB	EFA
	CAT824YTDI-GT3	5	TB	EFA
	CAT824ZTDI-GT3	5	TB	EFA
Product ID	SC-70 lead	Old Marking Code	New Marking Code	
CAT824LSDI-GT3	5	TB	EFA	
CAT824RSDI-GT3	5	TB	EFA	
CAT824SSDI-GT3	5	TB	EFA	
CAT824TSDI-GT3	5	TB	EFA	
CAT824YSDI-GT3	5	TB	EFA	
CAT824ZSDI-GT3	5	TB	EFA	

825	Product ID	TSOT-23 lead	Old Marking Code	New Marking Code
	CAT825LTDI-GT3	5	TD	ECA
	CAT825MTDI-GT3	5	TD	ECA
	CAT825RTDI-GT3	5	TD	ECA
	CAT825STDI-GT3	5	TD	ECA
	CAT825TTDI-GT3	5	TD	ECA
	CAT825YTDI-GT3	5	TD	ECA
	CAT825ZTDI-GT3	5	TD	ECA
	Product ID	SC-70 lead	Old Marking Code	New Marking Code
	CAT825LSDI-GT3	5	TD	ECA
	CAT825MSDI-GT3	5	TD	ECA
	CAT825RSDI-GT3	5	TD	ECA
	CAT825SSDI-GT3	5	TD	ECA
	CAT825TSDI-GT3	5	TD	ECA
	CAT825YSDI-GT3	5	TD	ECA
CAT825ZSDI-GT3	5	TD	ECA	



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	Product ID	SOT-23 lead	Old Marking Code	New Marking Code		Product ID	SOT-23 lead	Old Marking Code	New Marking Code
853	CAT853CTBI-GT3	3	RU	VPA					
	CAT853FTBI-GT3	3	RU	VPA					
						CAT853JTBI-T3	3	none	VPR
						CAT853LTBI-T3	3	none	VPR
	CAT853MTBI-GT3	3	RU	VPA		CAT853MTBI-T3	3	none	VPR
						CAT853RTBI-T3	3	none	VPR
	CAT853STBI-GT3	3	RU	VPA		CAT853STBI-T3	3	none	VPR
					CAT853TTBI-T3	3	none	VPR	
					CAT853ZTBI-T3	3	none	VPR	

	Product ID	SOT-23 lead	Old Marking Code	New Marking Code
859 863 869	CAT859CTBI-GT3	3	RS	VNA
	CAT859FTBI-GT3	3	RS	VNA
	CAT859MTBI-GT3	3	RS	VNA
	CAT859STBI-GT3	3	RS	VNA
	CAT859TTBI-GT3	3	RS	VNA
	CAT863MTBI-GT3	3	RV	VNB
	CAT863STBI-GT3	3	RV	VNB
	CAT863TTBI-GT3	3	RV	VNB
	CAT869MTBI-GT3	3	RT	VNC
	CAT869STBI-GT3	3	RT	VNC
CAT869TTBI-GT3	3	RT	VNC	