



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16834Generic Copy

Issue Date: 11-Jul-2012**TITLE:** Qualification of new assembly location for CAT4101 at CARSEM after transfer from CEI.**PROPOSED FIRST SHIP DATE:** 11-Oct-2012 or earlier upon customer approval**AFFECTED CHANGE CATEGORY(S):** New assembly site**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or Fabien Franc <fabien.franc@onsemi.com>**SAMPLES:** Contact your local ON Semiconductor Sales Office or John Wainright <john.wainright@onsemi.com>**ADDITIONAL RELIABILITY DATA:** AvailableContact your local ON Semiconductor Sales Office or Francis Lualhati <ffxczy@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:**

This Process Change Notice is to notify customers of the transfer of the CAT4101TV assembly site from Circuit Electronic Industries (CEI) -Thailand to Carsem -Malaysia.

There is no change in the die or the electrical characteristics of the device. Carsem package is a JEDEC 11.10-443 TO-263 5-lead with the ON Semiconductor case outline 418AH. Reliability will continue to meet or exceed ON Semiconductor's highest standards.

The Moisture Sensitivity Level 3 (MSL 3) rating has been assigned to the CAT4101TV device.


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RELIABILITY DATA SUMMARY:
Device Description:

Device	CAT4101TV-T75	Wafer Fab Site	Vanguard	Taiwan, China
Package	D2PAK-5L	Assembly Site	CARSEM-M	Malaysia
MSL Level	MSL3	Final Test Site	CARSEM-M	Malaysia
Technology	0.50UM CMOS	S14722		
Final Lead Finish	Matte Tin	Package Code	C072	

Qualification Results and Analysis:

#	Test	Name	Test Conditions	End Point Req's	Test Results	(rej/ss)	(rej/ss)	(rej/ss)	
					Read Point	Lot A	Lot B	Lot C	
1	Prep	Sample preparation and initial part testing	various	---	Initial Electrical	done	done	done	done
2	HTOL	High Temp Operating Life	TA = 150°C	Test at Rm	Initial	0/77	0/77	0/77	Generic Data Performed on CAT4101/CAT4103
					504 Hrs	0/77	0/77	0/77	
					1008 Hrs	0/77	0/77	0/77	
3	ELFR	Early Life Failure Rate	TA = 150°C	Test at Rm	Initial	0/800	---	---	Performed on CAT4101TV-T75
					48Hrs	0/800	---	---	
7	HTSL	High Temp Storage Life	TA = 150°C	Test at Rm	Initial	0/80	---	---	
					504 Hrs	0/80	---	---	
					1008 Hrs	0/80	---	---	
6	PC	Preconditioning: ;	Moisture Preconditioning for HAST, AC, TC; MSL1, Peak Reflow Temp = 260C	---	Initial Electrical	done	done	done	
8	HAST-PC	High Acceleration Stress Test - PC	TA =130 °C, RH=85%, V=80% rated Volts	Test at Rm	Initial	0/80	0/80	0/80	
					96 Hrs	0/80	0/80	0/80	
9	TC-PC	Temperature Cycling-PC	Ta= -65/150 C	Test at Rm	Initial	0/80	0/80	0/80	
					500 Cyc	0/80	0/80	0/80	
					1000 Cyc	0/80	0/80	0/80	
10	AC-PC	Autoclave	121°C/100% RH/15psig	Test at Rm	Initial	0/80	0/80	0/80	
					96 Hrs	0/80	0/80	0/80	
11	SD	Solderability Test				0/15	0/15	0/15	
12	DPA	Destructive Physical Analysis	Following TC -PC 500cycle			0/5	0/5	0/5	
13	ED	Electrical Distribution	Tri Temperature	Test at Rm		0/30	0/30	0/30	
14	ESD	Electro-static Discharge	Human Body Model (2KV HBM)	Test at Rm		Pass	---	---	
15	ESD	Electro-static Discharge	Machine (200V MM)	Test at Rm		Pass	---	---	
16	LU	LatchUp	±150mA, +1.5xVcc	Test at Rm		Pass	---	---	

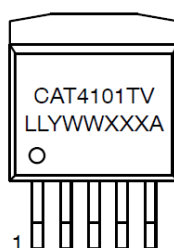
Table 1: Reliability Evaluation Results for Device CAT4101TV-T75

**FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16834****ELECTRICAL CHARACTERISTIC SUMMARY:**

No changes in the device functionality and electrical characteristics.

CHANGED PART IDENTIFICATION:

No change in the ON Semiconductor part number CAT4101TV-T75.
The assembly location code will change to "M1" (for Carsem) in the part marking.

MARKING DIAGRAM

CAT4101TV = Specific Device Code
LL = Assembly Location Code
Y = Production Year (Last Digit)
WW = Production Week (Two Digit)
XXX = Last Three Digits of
Assembly Lot Number
A = Product Revision (Fixed as "A")

List of affected General Parts:

CAT4101TV-T75