ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20350

Generic Copy

Issue Date: 28-Dec-2013

TITLE: CAT4109V-GT2 Assembly and Test Transfer to ON Semiconductor Carmona, Philippines (OSPI)

PROPOSED FIRST SHIP DATE: 28-Mar-2014

AFFECTED CHANGE CATEGORY(S): Assembly Location, Test Location

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or <Charlie.Yu@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or <Francis.Lualhati@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:

ON Semiconductor is qualifying replacement assembly and test capacity for CAT4109V-GT2 in the SOIC16 package in our Carmona, Philippines (OSPI) facility. OSPI is a fully qualified manufacturing facility and is currently qualified for SOIC16 assembly and test. This is the final PCN providing the details pertinent to the change. Upon effectivity of the PCN, or early customer acceptance, the CAT4109V-GT2 will be sourced from OSPI. The previous manufacturing facility is no longer able to produce this device.

In parallel with this facility change additional ESD characterization has been completed. The product datasheet will be amended as shown below and in parallel with the manufacturing facility change in order to provide improved clarification of the actual product performance.

There are no changes to the die design or wafer fabrication facility.

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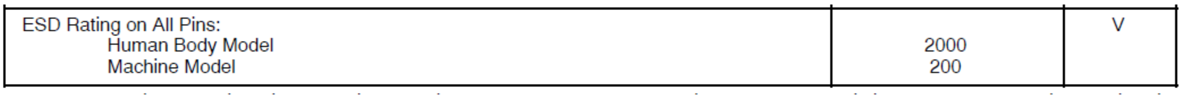
Current Datasheet:



ESD Rating on All Pins:		V
Human Body Model	2000	
Machine Model	200	

Revised Datasheet:

ESD Rating	Rating	Units
HBM (note x)		
LV pins (non LEDn pins # 3,4,5,6,7,8,15 and 16)	1500	V
HV pins(LEDn pins #9,10 and 11)	750	
MM (note y)		
LV pins (non LEDn pins # 3,4,5,6,7,8,15 and 16)	200	V
HV pins (LEDn pins #9,10 and 11)	175	

x. JESD22-A114C

y. JESD625-A

RELIABILITY DATA SUMMARY:

Reliability Test Results:

Test	Conditions	Interval	Results
HTOL	Ta=125C,80% Rated Voltage	504 hrs	0/231
UHAST+PC	Ta=130C RH=85% ~28 psig	96 hrs	0/231
HAST+PC	Ta=130C RH=85%, bias=80% rated V or100V Max	96 hrs	0/231
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/231
HTSL	Ta=150C	168 hrs	0/231
RSH	Ta=260C, 10 sec dwell		0/30

ELECTRICAL CHARACTERISTIC SUMMARY:

Product performance continues to meet datasheet specifications.
Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

The new manufacturing location will result in a change of the Pb-free 2nd level interconnect (lead finish); the lead finish will change from NiPdAu to 100% matte Sn. Product bar code labeling will denote the lead finish as per JESD97, May 2004, section 5 and the ‘e3’ designator will be used to properly identify this material.

List of affected General Parts:

CAT4109V-GT2