ON Semiconductor

INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16469

Generic Copy

Issue Date: 26-May-2010

TITLE: Initial Notification for SOD123 assembly in ON Leshan as 2nd source

PROPOSED FIRST SHIP DATE: 26-Sep-2010

AFFECTED CHANGE CATEGORY(S): ON Semiconductor assembly location

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or Suei Huey Wong<SueiHuey.Wong@onsemi.com>

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change.

DESCRIPTION AND PURPOSE:

ON Semiconductor is notifying customers of its plan to qualify SOD-123 assembly in ON Semiconductor's Leshan facility.

The mold compound, die attach, and lead frame materials used in the SOD-123 package will remain the same. A qualification vehicle has been selected for each of the device functions and full electrical characterization over temperature will be performed on each qualification vehicle to ensure device functionality and electrical specifications are met.

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QUALIFICATION PLAN:

Estimated Date for Qualification Completion: 07/16/2010
Samples should be available after completion of Qualification.

Reliability testing will be performed on qualification vehicles chosen based on die size, voltage rating, and run rates.

Planned reliability tests are:

#	Test	Name	Test Conditions	End Point Req's	Read Point
1	HTSL	High Temp Storage Life	Ta=150°C	c = 0, Room	1008 Hrs.
2	AC+PC	Autoclave+PC	Ta=121°C, RH=100%, Pressure=15psig	c = 0, Room	96 Hrs
3	TC+PC	Temperature Cycle+PC	Ta=-65°C to 150°C, Air-to-air, Dwell = 10 min	c = 0, Room	1000 Cycs
4	H3TRB+PC	High Humidity High Temp Rev Bias+PC	Ta=85°C, RH=85%, bias=80% rated V or 100V Max.	c = 0, Room	1008 Hrs.
5	IOL+PC	Intermittent Operational Life+PC	Ta=25°C, ΔTJ=100°C, On/Off = 2 mins	c = 0, Room	15000 Cycs.
6	RSH	Resistance to Solder Heat	Ta=260°C, 10 sec dwell	c = 0, Room	n/a
7	HTRB	High Temp Reverse Bias	Ta=150°C, 80% Rated Voltage	c = 0, Room	1008 Hrs

Electrical Characterization Plan:
Datasheet specifications and product electrical performance will remain unchanged

Characterization of each qual vehicle device will be performed to the following requirements:

1) ESD performance (HBM, MM) on 20 units from 3 lots
2) Three temperature characterization on 40 units from 3 lots
3) Surge test based on datasheet requirements on 10 units from 3 lots

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List of affected General Parts:

PART			
BAT54T1G	MMSZ4686T1G	MMSZ5235BT1G	MMSZ5261BT1G
MMSD301T1	MMSZ4687T1G	MMSZ5235BT1H	MMSZ5262BT1G
MMSD301T1G	MMSZ4688T1G	MMSZ5235ET1G	MMSZ5262BT1H
MMSD301T1H	MMSZ4689ET1G	MMSZ5236BT1G	MMSZ5263BT1G
MMSD701T1G	MMSZ4689T1G	MMSZ5236BT1H	MMSZ5264BT1G
MMSZ10T1G	MMSZ4689T3G	MMSZ5236BT3G	MMSZ5265BT1G
MMSZ10T1H	MMSZ4690T1G	MMSZ5237BT1G	MMSZ5266BT1G
MMSZ10T3G	MMSZ4690T3G	MMSZ5237BT1H	MMSZ5267BT1G
MMSZ11T1	MMSZ4691T1G	MMSZ5237ET1G	MMSZ5268BT1G
MMSZ11T1G	MMSZ4692T1G	MMSZ5238BT1G	MMSZ5270BT1G
MMSZ12T1G	MMSZ4693T1G	MMSZ5239BT1G	MMSZ5272BT3G
MMSZ12T1H	MMSZ4694T1G	MMSZ5240BT1G	MMSZ56T1G
MMSZ12T3G	MMSZ4696T1G	MMSZ5240BT1H	MMSZ5V1T1G
MMSZ13T1G	MMSZ4697T1G	MMSZ5240ET1G	MMSZ5V1T3G
MMSZ13T1H	MMSZ4698T1G	MMSZ5241BT1G	MMSZ5V6T1G
MMSZ15T1G	MMSZ4699T1G	MMSZ5242BT1G	MMSZ5V6T3G
MMSZ15T1H	MMSZ4700T1G	MMSZ5242BT1H	MMSZ6V2T1G
MMSZ15T3G	MMSZ4701ET1G	MMSZ5242BT3G	MMSZ6V8T1G
MMSZ16T1G	MMSZ4701T1G	MMSZ5242ET1G	MMSZ6V8T3G
MMSZ16T1H	MMSZ4702T1G	MMSZ5243BT1G	MMSZ7V5T1G
MMSZ18ET1G	MMSZ4703T1G	MMSZ5243BT1H	MMSZ8V2ET1G
MMSZ18T1G	MMSZ4704T1G	MMSZ5244BT1G	MMSZ8V2T1G
MMSZ18T1H	MMSZ4705T1G	MMSZ5244BT1H	MMSZ8V2T1H
MMSZ18T3G	MMSZ4706T1G	MMSZ5244ET1G	MMSZ8V2T3G
MMSZ20T1G	MMSZ4707T1G	MMSZ5245BT1G	MMSZ9V1T1G
MMSZ22T1G	MMSZ4708T1G	MMSZ5245BT1H	SMF10AT1G
MMSZ22T1H	MMSZ4709T1G	MMSZ5245ET1G	SMF11AT1G
MMSZ24T1G	MMSZ4710T1G	MMSZ5246BT1G	SMF12AT1G
MMSZ24T1H	MMSZ4711T1G	MMSZ5246ET1G	SMF12AT1H
MMSZ27T1G	MMSZ4713T1G	MMSZ5247BT1G	SMF13AT1G
MMSZ27T3G	MMSZ4714T1G	MMSZ5247BT1H	SMF14AT1G
MMSZ2V4ET1G	MMSZ4715T1G	MMSZ5248BT1G	SMF15AT1G
MMSZ2V4T1G	MMSZ4717T1G	MMSZ5248BT1H	SMF15AT1H
MMSZ2V4T3G	MMSZ47T1G	MMSZ5248ET1	SMF18AT1G

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MMSZ2V7T1G	MMSZ4V3T1G	MMSZ5249BT1G	SMF20AT1G
MMSZ2V7T3G	MMSZ4V7T1G	MMSZ5250BT1G	SMF22AT1G
MMSZ30T1G	MMSZ51T1G	MMSZ5250BT1H	SMF24AT1G
MMSZ33T1G	MMSZ5221BT1G	MMSZ5250ET1G	SMF26AT1G
MMSZ33T3G	MMSZ5221BT1H	MMSZ5251BT1G	SMF28AT1G
MMSZ36T1G	MMSZ5221ET1G	MMSZ5251ET1G	SMF30AT1G
MMSZ39T1	MMSZ5222BT1G	MMSZ5252BT1	SMF33AT1G
MMSZ39T1G	MMSZ5222BT3G	MMSZ5252BT1G	SMF36AT1G
MMSZ3V0T1G	MMSZ5223BT1G	MMSZ5252ET1G	SMF48AT1G
MMSZ3V3T1G	MMSZ5223BT1H	MMSZ5252ET3G	SMF5.0AT1G
MMSZ3V3T1H	MMSZ5225BT1G	MMSZ5253BT1G	SMF5.0AT1H
MMSZ3V6T1G	MMSZ5226BT1G	MMSZ5254BT1	SMF58AT1G
MMSZ3V6T3G	MMSZ5226BT1H	MMSZ5254BT1G	SMF6.0AT1G
MMSZ3V9T1G	MMSZ5226BT3G	MMSZ5254BT1H	SMF6.5AT1G
MMSZ3V9T3G	MMSZ5227BT1G	MMSZ5254ET1G	SMF7.0AT1G
MMSZ43T1G	MMSZ5227BT1H	MMSZ5255BT1G	SMF7.5AT1G
MMSZ4678T1G	MMSZ5228BT1G	MMSZ5255ET1G	SMF8.0AT1G
MMSZ4679T1G	MMSZ5229BT1G	MMSZ5256BT1G	SMF9.0AT1G
MMSZ4680ET1G	MMSZ5230BT1G	MMSZ5256ET1G	MMSD103T1G
MMSZ4680T1G	MMSZ5231BT1G	MMSZ5257BT1G	MMSD4148T1
MMSZ4681T1G	MMSZ5231BT1H	MMSZ5257ET1G	MMSD4148T1G
MMSZ4681T1H	MMSZ5232BT1G	MMSZ5258BT1G	MMSD4148T3G
MMSZ4682T1G	MMSZ5232BT1H	MMSZ5258BT3G	MMSD914T1
MMSZ4683T1G	MMSZ5233BT1G	MMSZ5259BT1G	MMSD914T1G
MMSZ4684T1G	MMSZ5234BT1G	MMSZ5259ET1G	MMSD914T1H
MMSZ4685T1G	MMSZ5234BT1H	MMSZ5260BT1G	MMSD914T3G