



PRODUCT BULLETIN
Generic Copy

11 Jul 2008

SUBJECT: ON Semiconductor Product Bulletin #16134

TITLE: SOT-23 Possible Adhesion Issue using Glue Mount Process

PROPOSED FIRST SHIP DATE: 11 Jul 2008

AFFECTED PRODUCT DIVISION: SOT-23 Products

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor sales office or Mark Wasilewski <m.wasilewski@onsemi.com>

NOTIFICATION TYPE:

Product Alert

DESCRIPTION AND PURPOSE:

ON Semiconductor wishes to notify you of a potential manufacturability concern with SOT-23 devices. This problem is very customer board mounting specific and you may not experience any issue with these parts. ON Semiconductor believes in proactively notifying our customers of any potential issue.

Background of potential manufacturing concern:

This issue is very process specific and is not a reliability concern as it only affects the initial board mount process for those customers using double-sided boards with wave solder. A few of ON Semiconductor's customers have reported an issue with SOT-23 devices under these conditions only. The reported issue may occur during board mounting using wave solder after gluing the devices to the bottom side of the board resulting in components falling off of the board.

Date codes affected:

SOT-23 devices from date code 0814

ON Semiconductor actions:

ON Semiconductor has identified the issue to be related to:

1. Customer mounting process

Again, this issue only affects customers using SOT-23 components for bottom side board placement that are glued into place prior to wave solder. Any components used for top side placement or normal IR Furnace pass will not be affected by this issue. Glue types used also have an impact.

2. Mold compound variability from date code 0814

ON Semiconductor has performed adhesion testing and has verified transient variability in adhesion strength since the original qualification of the mold compound. ON Semiconductor is working with our mold compound supplier to understand this variability and correct it.

**Product Bulletin #16134**

3. Surface finish of parts

Parts with a smooth bottom surface finish have been attributed with higher failure rates as compared to failure rates of parts with a matte finish. A matte finish has more surface area for the glue to adhere to as compared to a part with a smooth surface. As a containment action, ON Semiconductor has placed shipment holds on any inventories of smooth parts and has notified some customers who have received smooth parts.

We also suspended manufacturing on mold systems that produce smooth parts to have those mold systems enhanced to produce parts with a matte surface finish. These containment actions have temporarily affected our capacity but have been resolved and we have returned to full capacity.

The enhanced matte surface is designed to overcome any variability of the mold compound and aids in a containment action until we can eliminate that variability.

What to do next?

If you have consumed product starting from date code 0814 and have not experienced any component placement issues on your boards, you should not be affected. Product reliability is not a concern as parts either solder normally or they don't.

If you have a manufacturing process that consists of gluing these components to the bottom side of a board in a wave solder process and have experienced components falling off boards with a greater than normal frequency, please contact your ON Semiconductor Customer Service Representative or Salesperson to facilitate product replacement or contact a technical representative to further discuss the issue for containment or other actions.

For technical assistance, please contact:

Asia Pacific/Japan:

Stephen Ng
ON Semiconductor Quality
Phone: +852 26890209
Email: stephen.ng@onsemi.com

United States:

Mark Wasilewski
ON Semiconductor Quality
Phone: 602-244-5114
Email: m.wasilewski@onsemi.com

Europe:

Herve Marchionini
ON Semiconductor Quality,
Phone: +49 89 930 808 36
Email: herve.marchionini@onsemi.com



Product Bulletin #16134

AFFECTED DEVICE LIST

PART
2N7002ET1G
2N7002LT1
2N7002LT1G
BAS116LT1G
BAS16LT1
BAS16LT1G
BAS19LT1G
BAS20LT1G
BAS21LT1
BAS21LT1G
BAS21LT1H
BAS21LT3
BAS21LT3G
BAS40-04LT1
BAS40-04LT1G
BAS40-06LT1G
BAS40LT1
BAS40LT1G
BAS70-04LT1
BAS70-04LT1G
BAS70LT1G
BAT54ALT1
BAT54ALT1G
BAT54CLT1G
BAT54LT1
BAT54SLT1
BAT54SLT1G
BAV199LT1
BAV199LT1G
BAV70LT1
BAV70LT1G
BAV70LT3G
BAV74LT1G
BAV99LT1G
BAV99LT3G
BAW56LT1
BAW56LT1G
BAW56LT3G
BC807-16LT1
BC807-16LT1G
BC807-16LT3G
BC807-25LT1
BC807-25LT1G
BC807-25LT3G
BC807-40LT1
BC807-40LT1G
BC807-40LT3G
BC817-16LT1
BC817-16LT1G
BC817-16LT3G
BC817-25LT1
BC817-25LT1G
BC817-25LT1H



Product Bulletin #16134

BC817-25LT3G
BC817-40LT1G
BC817-40LT3G
BC818-40LT1G
BC846ALT1G
BC846ALT3G
BC846BLT1
BC846BLT1G
BC846BLT3G
BC847ALT1G
BC847BLT1
BC847BLT1G
BC847BLT3G
BC847CLT1G
BC847CLT3G
BC848ALT1G
BC848BLT1G
BC848BLT3G
BC848CLT1G
BC849CLT1G
BC850BLT1G
BC850CLT1G
BC856BLT1G
BC856BLT3G
BC857ALT1G
BC857BLT1G
BC857BLT3G
BC857CLT1G
BC858ALT1G
BC858BLT1G
BC858BLT3G
BC858CLT1G
BC859BLT3G
BCW32LT1G
BCW33LT1G
BCW33LT3G
BCW65ALT1G
BCW65CLT1G
BCW66GLT1G
BCW66GLT3G
BCW68GLT1G
BCW70LT1G
BCW72LT1G
BCX17LT1G
BCX19LT1G
BSS138LT1G
BSS63LT1G
BSS64LT1G
BSS84LT1G
BSV52LT1G
BZX84B12LT1G
BZX84B15LT1G
BZX84B16LT1G
BZX84B18LT1G
BZX84B5V1LT1G
BZX84B5V6LT1



Product Bulletin #16134

BZX84B5V6LT1G
BZX84B6V2LT1G
BZX84B6V8LT1G
BZX84B8V2LT1G
BZX84B9V1LT1G
BZX84C10LT1
BZX84C10LT1G
BZX84C11LT1G
BZX84C12LT1G
BZX84C13LT1G
BZX84C15LT1
BZX84C15LT1G
BZX84C15LT3G
BZX84C16LT1G
BZX84C18LT1
BZX84C18LT1G
BZX84C18LT3G
BZX84C20LT1G
BZX84C22LT1G
BZX84C24LT1G
BZX84C24LT3G
BZX84C27LT1G
BZX84C27LT3
BZX84C27LT3G
BZX84C2V4LT1G
BZX84C2V7LT1G
BZX84C30LT1G
BZX84C33LT1G
BZX84C36LT1G
BZX84C36LT3G
BZX84C39LT1
BZX84C39LT1G
BZX84C3V0LT1G
BZX84C3V3LT1G
BZX84C3V6LT1G
BZX84C3V9LT1
BZX84C3V9LT1G
BZX84C43LT1G
BZX84C47LT1G
BZX84C47LT3
BZX84C4V3LT1G
BZX84C4V3LT3
BZX84C4V7LT1
BZX84C4V7LT1G
BZX84C4V7LT3G
BZX84C51LT1G
BZX84C56LT1G
BZX84C5V1ET3G
BZX84C5V1LT1G
BZX84C5V1LT3G
BZX84C5V6ET3G
BZX84C5V6LT1
BZX84C5V6LT1G
BZX84C5V6LT3G
BZX84C68LT1G
BZX84C6V2ET1G



Product Bulletin #16134

BZX84C6V2LT1
BZX84C6V2LT1G
BZX84C6V2LT3G
BZX84C6V8LT1
BZX84C6V8LT1G
BZX84C75LT1G
BZX84C7V5LT1G
BZX84C8V2LT1G
BZX84C9V1LT1G
BZX84C9V1LT3G
MA3075WALT1G
MMBD101LT1G
MMBD2835LT1G
MMBD2836LT1G
MMBD2837LT1G
MMBD2838LT1G
MMBD301LT1
MMBD301LT1G
MMBD352LT1
MMBD352LT1G
MMBD354LT1G
MMBD355LT1G
MMBD6050LT1
MMBD6050LT1G
MMBD6050LT3
MMBD6100LT1
MMBD6100LT1G
MMBD7000LT1
MMBD7000LT1G
MMBD701LT1G
MMBD914LT1
MMBD914LT1G
MMBD914LT1H
MMBD914LT3G
MMBF0201NLT1G
MMBFJ310LT1G
MMBT2222ALT1G
MMBT2222ALT3
MMBT2222ALT3G
MMBT2222LT1G
MMBT2369ALT1G
MMBT2369LT1G
MMBT2484LT1G
MMBT2907ALT1
MMBT2907ALT1G
MMBT2907ALT3G
MMBT3416LT3G
MMBT3904LT1G
MMBT3904LT3G
MMBT3906LT1G
MMBT4401LT1
MMBT4401LT1G
MMBT4401LT1H
MMBT4401LT3G
MMBT4403LT1G
MMBT4403LT1H



Product Bulletin #16134

MMBT5087LT1G
MMBT5088LT1G
MMBT5089LT1G
MMBT5401LT1
MMBT5401LT1G
MMBT5401LT3G
MMBT5550LT1
MMBT5550LT1G
MMBT5551LT1
MMBT5551LT1G
MMBT6427LT1G
MMBT6428LT1G
MMBT6517LT1
MMBT6517LT1G
MMBT6517LT3G
MMBT6520LT1
MMBT6520LT1G
MMBT6521LT1G
MMBT8099LT1G
MMBT918LT1
MMBT918LT1G
MMBTA05LT1G
MMBTA06LT1
MMBTA06LT1G
MMBTA06LT3G
MMBTA13LT1
MMBTA13LT1G
MMBTA14LT1
MMBTA14LT1G
MMBTA42LT1
MMBTA42LT1G
MMBTA42LT3G
MMBTA43LT1G
MMBTA55LT1
MMBTA55LT1G
MMBTA56LT1
MMBTA56LT1G
MMBTA56LT3
MMBTA56LT3G
MMBTA63LT1G
MMBTA64LT1G
MMBTA70LT1G
MMBTA92LT1G
MMBTA92LT3G
MMBTH10-4LT1G
MMBTH10LT1G
MMBZ12VALT1G
MMBZ15VALT1
MMBZ15VALT1G
MMBZ15VDLT1G
MMBZ18VALT1
MMBZ18VALT1G
MMBZ20VALT1
MMBZ20VALT1G
MMBZ27VALT1
MMBZ27VALT1G



Product Bulletin #16134

MMBZ27VALT3G
MMBZ27VCLT1G
MMBZ33VALT1
MMBZ33VALT1G
MMBZ5221BLT1G
MMBZ5222BLT1G
MMBZ5225BLT1G
MMBZ5226BLT1
MMBZ5226BLT1G
MMBZ5227BLT1G
MMBZ5228BLT1G
MMBZ5229BLT1G
MMBZ5230BLT1G
MMBZ5231BLT1
MMBZ5231BLT1G
MMBZ5231BLT3G
MMBZ5232BLT1G
MMBZ5232ELT1G
MMBZ5233BLT1
MMBZ5233BLT1G
MMBZ5234BLT1
MMBZ5234BLT1G
MMBZ5234ELT1G
MMBZ5235BLT1
MMBZ5235BLT1G
MMBZ5236BLT1G
MMBZ5237BLT1G
MMBZ5238BLT1G
MMBZ5239BLT1
MMBZ5239BLT1G
MMBZ5240BLT1
MMBZ5240BLT1G
MMBZ5241BLT1G
MMBZ5242BLT1
MMBZ5242BLT1G
MMBZ5242ELT1G
MMBZ5243BLT1
MMBZ5243BLT1G
MMBZ5244BLT1G
MMBZ5245BLT1
MMBZ5245BLT1G
MMBZ5245BLT3
MMBZ5246BLT1G
MMBZ5246ELT1G
MMBZ5247BLT1G
MMBZ5248BLT1
MMBZ5248BLT1G
MMBZ5248BLT3G
MMBZ5248ELT1G
MMBZ5249BLT1
MMBZ5249BLT1G
MMBZ5250BLT1G
MMBZ5251BLT1G
MMBZ5252BLT1G
MMBZ5252ELT1G
MMBZ5253BLT1G



Product Bulletin #16134

MMBZ5254BLT1
MMBZ5254BLT1G
MMBZ5255BLT1G
MMBZ5256BLT1G
MMBZ5257BLT1G
MMBZ5257BLT3G
MMBZ5257ELT1G
MMBZ5258BLT1G
MMBZ5259BLT1G
MMBZ5261BLT1
MMBZ5261BLT1G
MMBZ5261BLT3G
MMBZ5261ELT1G
MMBZ5263BLT1
MMBZ5268BLT1G
MMBZ5270BLT1G
MMBZ5V6ALT1
MMBZ5V6ALT1G
MMBZ5V6ALT3G
MMBZ6V2ALT1
MMBZ6V2ALT1G
MMBZ6V8ALT1
MMBZ6V8ALT1G
MMBZ9V1ALT1G
MMUN2111LT1G
MMUN2111LT3G
MMUN2112LT1G
MMUN2113LT1G
MMUN2113LT3G
MMUN2114LT1G
MMUN2115LT1G
MMUN2116LT1G
MMUN2132LT1G
MMUN2133LT1G
MMUN2211LT1G
MMUN2211LT3G
MMUN2212LT1G
MMUN2213LT1G
MMUN2214LT1G
MMUN2215LT1G
MMUN2216LT1G
MMUN2231LT1G
MMUN2232LT1G
MMUN2233LT1G
MMUN2234LT1
MMUN2234LT1G
MMUN2238LT1G
NSVBAS70LT1G
NSVMMBD353LT1G
NSVMMUN2232LT1G
NTR4101PT1G
NTR4501NT1
NUP1301ML3T1G
NUP2105LT1
NUP2105LT1G
S1ZMBZ5234BLT1DG



Product Bulletin #16134

S1ZMMBZ5245BLT1D
S1ZMMBZ5246BLT1D
SBAS16LT1G
SBAS16LT3
SBAS16LT3G
SBAS21LT1
SBAS21LT1G
SBAS21LT3
SBAS21LT3G
SBAT54ALT3G
SBAV199LT1
SBAV199LT1G
SBAV70LT1
SBAV70LT1G
SBAV70LT3
SBAV70LT3G
SBAV99LT1
SBAV99LT1G
SBAV99LT3
SBAV99LT3G
SBAW56LT3
SBAW56LT3G
SBC807-16LT3G
SBC807-25LT1G
SBC807-25LT3G
SBC807-40LT3G
SBC817-25LT1
SBC817-25LT1G
SBC817-40LT1G
SBC817-40LT3G
SBC846BLT1G
SM05T1G
SM12T1G
SMBD1007LT1G
SMBD1022LT1G
SMBD1058T
SMBD1122LT1
SMBD1466LT3
SMBD1472LT1
SMBD1472LT1G
SMBD1488LT1
SMBD1488LT1G
SMBD1488LT3
SMBD56LT1
SMBD70LT1
SMBD99LT1
SMBT1109LT1G
SMBT1201LT1G
SMBT1229LT1
SMBT1229LT1G
SMBT1229LT3
SMBT1229LT3G
SMBT1230LT1
SMBT1230LT1G
SMBT1230LT3
SMBT1230LT3G



Product Bulletin #16134

SMBT1231LT1
SMBT1231LT1G
SMBT1231LT3G
SMBT1232LT1
SMBT1232LT1G
SMBT1294LT3
SMBT1294LT3G
SMBT1296LT3
SMBT1296LT3G
SMBT1353LT3
SMBT1360LT3
SMBT1388LT1
SMBT1469LT3
SMBT1493LT3
SMBT1504T3
SMBT1504T3G
SMBT1505T3
SMBT1505T3G
SMBT1512LT3
SMBT1516LT3
SMBT1565LT1G
SMBT1568LT1
SMBT1568LT1G
SMBT1569LT1G
SMBT1576LT1G
SMBT1578LT1G
SMBT1580LT1G
SMBZ1036LT1
SMBZ1036LT3G
SMBZ1102LT3DS
SMBZ1443LT3
SMBZ1443LT3DSG
SMBZ1449-10LT3G
SMBZ1449-20LT3
SMBZ1449-33LT3
SMBZ1458LT1
SMBZ1458LT3G
SMBZ1460LT1G
SMBZ1461LT1
SMBZ1461LT1G
SMBZ1461LT3G
SMBZ1466LT3DS
SMBZ1475LT3G
SMBZ1477-1LT1
SMBZ1477LT1G
SMBZ1480LT1
SMBZ1480LT1G
SMBZ1481LT1G
SMBZ1483LT1
SMBZ1484LT1
SMBZ1484LT1G
SMBZ1496LT1
SMBZ1496LT1G
SMBZ1509LT1G
SMBZ1516LT1
SMBZ1516LT1G



Product Bulletin #16134

SMBZ1611BT1
SMBZ1611BT1G
SMBZ1652LT3
SMBZ1660LT1G
SMBZ2606-15LT1G
SMBZ2606-22LT3G
SMBZ2606-24LT1
SMBZ2606-30LT3
SMBZ2606-38LT1
SMBZ2606-41LT3
SMBZ2606-7LT1
SMBZ2606-7LT3
SMBZ2606-8LT3
SMMBD2837LT1G
SMMBD914LT1G
SMMBD914LT3G
SMMBT2222ALT1G
SMMBT3904LT1G
SMMBT3906LT1G
SMMBT5551LT1G
SMMBTA06LT1
SMMBTA06LT1G
SMMBTA06LT3
SMMBTA06LT3G
SMMBTA42LT1
SMMBTA42LT1G
SMMBTA56LT1
SMMBTA56LT1G
SMMBTA56LT3G
SMMBTA92LT1
SMMBTA92LT1G
SMMBTA92LT3G
SMMUN1003LT1G
SMMUN1004LT1G
SMMUN2111LT1
SMMUN2111LT1G
SMMUN2111LT3
SMMUN2111LT3G
SMMUN2211LT1G
SMMUN2211LT3
SMMUN2213LT1G
SMMUN2213LT3
SMMUN2214LT1
SMMUN2214LT1G
SMMUN2216LT1
SMMUN2216LT1G
SSV1BAW56LT1G
SSV1MMBTA92LT1G
SZBZX84C10LT1G
SZBZX84C10LT3
SZBZX84C11LT1
SZBZX84C11LT1G
SZBZX84C12LT1
SZBZX84C12LT1G
SZBZX84C12LT3
SZBZX84C12LT3G



Product Bulletin #16134

- SZBZX84C13LT1
- SZBZX84C13LT1G
- SZBZX84C15LT1
- SZBZX84C15LT1G
- SZBZX84C15LT3G
- SZBZX84C16LT1
- SZBZX84C16LT1G
- SZBZX84C16LT3G
- SZBZX84C18LT1G
- SZBZX84C22LT1
- SZBZX84C22LT1G
- SZBZX84C27LT1
- SZBZX84C27LT1G
- SZBZX84C27LT3
- SZBZX84C27LT3G
- SZBZX84C2V4LT1
- SZBZX84C2V4LT1G
- SZBZX84C2V7LT1
- SZBZX84C30LT1
- SZBZX84C33LT1G
- SZBZX84C33LT3
- SZBZX84C36LT1
- SZBZX84C3V3LT1
- SZBZX84C3V3LT1G
- SZBZX84C3V6LT1
- SZBZX84C3V6LT1G
- SZBZX84C43LT1
- SZBZX84C47LT1
- SZBZX84C47LT1G
- SZBZX84C4V3LT1G
- SZBZX84C4V7LT1
- SZBZX84C4V7LT1G
- SZBZX84C56LT1G
- SZBZX84C5V1LT1
- SZBZX84C5V1LT1G
- SZBZX84C5V1LT3
- SZBZX84C5V6LT1
- SZBZX84C6V2LT1
- SZBZX84C6V2LT1G
- SZBZX84C6V8LT1
- SZBZX84C6V8LT1G
- SZBZX84C8V2LT1
- SZBZX84C8V2LT1G
- SZBZX84C8V2LT3
- SZBZX84C9V1LT1
- SZBZX84C9V1LT1G
- SZMMBZ15VALT1
- SZMMBZ15VALT1G
- SZMMBZ18VALT1
- SZMMBZ18VALT1G
- SZMMBZ18VALT3G
- SZMMBZ20VALT1
- SZMMBZ20VALT1G
- SZMMBZ20VALT3G
- SZMMBZ27VALT1
- SZMMBZ27VALT1G



Product Bulletin #16134

SZMMBZ27VCLT1
SZMMBZ27VCLT1G
SZMMBZ33VALT1
SZMMBZ33VALT1G
SZMMBZ33VALT3G
SZMMBZ5229BLT1
SZMMBZ5229BLT1G
SZMMBZ5241BLT1
SZMMBZ5242BLT1
SZMMBZ5245BLT1G
SZMMBZ5259BLT1G
SZMMBZ5261BLT1
SZMMBZ5V6ALT1
SZMMBZ6V2ALT1