ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20487

Generic Copy

Issue Date: 25-Sep-2014

TITLE: Final Notification of SOT-553 and SOT- 563 package/devices qualification for Assembly & Test in Leshan, China

PROPOSED FIRST SHIP DATE: 01-Jan-2015

AFFECTED CHANGE CATEGORY(S): Assembly and test site

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

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

First 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 notifying customers of the qualification and transfer the assembly and test of SOT553 and SOT563 packages from ON Semiconductor Seremban facility to ON Semiconductor Leshan facility.

The ON Semiconductor Leshan facility is certified with ISO/TS 16949:2009.

The bill of materials used in the SOT553 and SOT563 packages will remain the same between both ON Semiconductor's Seremban and Leshan's facilities.

Reliability qualification and full electrical characterization over temperature has been performed to ensure device functionality and electrical specifications are met.

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Reliability Data Summary:

Package: SOT563
Qual Vehicles: Cu Wire

BC847CDXV6T1G

Test:	Conditions:	Interval:	Results
HAST+PC	Ta=130C, RH=85%, ~18.8psig, bias	96 hrs	0/156
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/156
RSH	Ta=260C, 10 sec, elec test		0/60
Solderabiltiy	Ta = 245C, 10 sec		0/30
DPA	per AEC Q101 post HAST	96 hrs	0/6

NST3906DXV6T1G

Test:	Conditions:	Interval:	Results
HAST+PC	Ta=130C, RH=85%, ~18.8psig, bias	96 hrs	0/78
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/78
RSH	Ta=260C, 10 sec, elec test		0/30
DPA	per AEC Q101 post HAST	96 hrs	0/4

NSV12100XV6T1G

Test:	Conditions:	Interval:	Results
HAST+PC	Ta=130C, RH=85%, ~18.8psig, bias	96 hrs	0/93
HTRB	Ta=150C, 80% Rated Voltage	1008 hrs	0/78
RSH	Ta=260C, 10 sec, elec test		0/30
DPA	per AEC Q101 post HAST	96 hrs	0/4

NTZD3155CT1H

Test:	Conditions:	Interval:	Results
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HTGB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HAST+PC	Ta=130C RH=85%, ~18.8psig, bias	96 hrs	0/89
HTSL	Ta=150C	1512 hrs	0/89
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/84
TempCycle	Ta= -65/150C	2000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test		0/30
Solderabiltiy	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC	1K cyc	0/2
DPA	per AEC Q101 post HAST	96 hrs	0/2

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NUF2230XV6T1G

Test:	Conditions:	Interval:	Results
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HTSL	Ta=150C	1512 hrs	0/89
IOL	Ta=25C, delta TJ = 100C		
	Ton=Toff = 2min	15000 cyc	0/84
TempCycle	Ta= -55/150C	2000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test		0/30
Solderabiltiy	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC	1K cyc	0/2
DPA	per AEC Q101 post HAST	96 hrs	0/2

NUP5120X6T1G

Test:	Conditions:	Interval:	Results
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HAST+PC	Ta=130 C RH=85%, ~18.8 psig, bias	96 hrs	0/89
HTSL	Ta=150C	1512 hrs	0/89
TempCycle	Ta= -65/150C	2000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test		0/30
Solderability	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC	1K cyc	0/2
DPA	per AEC Q101 post HAST	96 hrs	0/2

NTZS3151PT1G

Test:	Conditions:	Interval:	Results
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HTGB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HAST+PC	Ta130C RH=85%, ~18.8 psig, bias	96 hrs	0/104
IOL	Ta=25C, delta TJ = 100C		
	Ton=Toff = 2min	15000 cyc	0/84
HTSL	Ta=150C	1008 hrs	0/84
TempCycle	Ta= -65/150C	1000 cyc	0/101
RSH	Ta=260C, 10 sec, elec test		0/30
Solderabiltiy	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC	1K cyc	0/2
DPA	per AEC Q101 post HAST	96 hrs	0/2

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Package: SOT553
Qual Vehicles: Au Wire

NL17SZ126XV5T2G

Test:	Conditions:	Interval:	Results
HTOL	Tj=150C, Vcc=5.5V	1008 hrs	0/84
HAST+PC	Ta130C RH=85%, ~18.8 psig, bias	96 hrs	0/84
UHAST+PC	Ta130C RH=85%, ~18.8 psig, unbias	96 hrs	0/84
HTSL	Ta=150C	1008 hrs	0/84
TempCycle	Ta= -65/150C	1000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test		0/30
Solderability	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC	500 cyc	0/2
DPA	per AEC Q101 post HAST	96hrs	0/5

ELECTRICAL CHARACTERISTIC SUMMARY:

Available upon request

CHANGED PART IDENTIFICATION:

Affected products from ON semiconductor with date code 1501 representing WW01, 2015 and greater may be sourced from either the Seremban factory or the Leshan factory.

List of affected General Parts:

BAS16DXV6T1G	NSVEMD4DXV6T5G	NSVBA114YDXV6T1G
BAV70DXV6T5G	NSBC114TDXV6T5G	NSVBC114EDXV6T1G
BC847BPDXV6T1G	NSBC114TPDXV6T1G	NSVBC114EPDXV6T1G
BC847CDXV6T1G	NSBC114YDXV6T1G	NSVBC114YDXV6T1G
BC847CDXV6T1H	NSBC114YDXV6T5G	NSVBC124EDXV6T1G
BC858CDXV6T1G	NSBC114YPDXV6T1G	NSVEMC2DXV5T1G
EMC2DXV5T1G	NSBC114YPDXV6T5G	NSVEMX1DXV6T1G
EMC3DXV5T1G	NSBC115EDXV6T1G	NSVR0320XV6T1G
EMC3DXV5T5G	NSBC123EDXV6T1G	NSVT30010MXV6T1G
EMC4DXV5T1G	NSBC123EPDXV6T1G	NSVT3904DXV6T1G
EMC5DXV5T1G	NSBC123JDXV6T1G	NSVT3906DXV6T1G
EMD4DXV6T1G	NSBC123JDXV6T5G	NSVT3946DXV6T1G
EMD4DXV6T5G	NSBC123JPDXV6T1G	NTZD3152PT1G
EMD5DXV6T5G	NSBC123JPDXV6T5G	NTZD3152PT1H
EMF18XV6T5G	NSBC124EDXV6T1G	NTZD3154NT1G
EMF5XV6T5G	NSBC124EDXV6T5G	NTZD3154NT1H
EMG2DXV5T5G	NSBC124EPDXV6T1G	NTZD3154NT2H

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EMT1DXV6T1G	NSBC124EPDXV6T5G	NTZD3154NT5G
EMT1DXV6T5G	NSBC124XDXV6T1G	NTZD3154NT5H
EMX1DXV6T1G	NSBC124XPDXV6T1G	NTZD3155CT1G
EMX1DXV6T5G	NSBC143EDXV6T1G	NTZD3155CT1H
EMX2DXV6T5G	NSBC143EPDXV6T1G	NTZD3155CT2G
NCS2003XV53T2G	NSBC143TDXV6T1G	NTZD3155CT2H
NL17SV00XV5T2G	NSBC143TDXV6T5G	NTZD3155CT5H
NL17SV02XV5T2G	NSBC143TPDXV6T1G	NTZD3158PT1G
NL17SV04XV5T2G	NSBC143ZDXV6T1G	NTZD5110NT1G
NL17SV08XV5T2G	NSBC143ZDXV6T5G	NTZS3151PT1G
NL17SV16XV5T2G	NSBC143ZPDXV6T1G	NTZS3151PT1H
NL17SV32XV5T2G	NSBC144EDXV6T1G	NUF2042XV6T1G
NSBA113EDXV6T1G	NSBC144EDXV6T5G	NUF2230XV6T1G
NSBA114EDXV6T1G	NSBC144EPDXV6T1G	NUP2114UPXV5T1G
NSBA114TDXV6T1G	NSBC144EPDXV6T5G	NUP4060AXV6T1G
NSBA114TDXV6T5G	NSBC144WDXV6T1G	NUP4102XV6T1G
NSBA114YDXV6T1G	NSDEMP11XV6T1G	NUP4114UPXV6T1G
NSBA115EDXV6T1G	NSDEMP11XV6T5G	NUP5120X6T1G
NSBA123EDXV6T1G	NSR0320XV6T1G	NUP5120X6T2G
NSBA123JDXV6T5G	NSR0320XV6T5G	NZQA5V6AXV5T1G
NSBA124EDXV6T1G	NSS12100XV6T1G	NZQA5V6XV5T1G
NSBA124XDXV6T1G	NST30010MXV6T1G	NZQA6V2XV5T1G
NSBA143EDXV6T1G	NST3904DXV6T1G	NZQA6V8AXV5T1G
NSBA143TDXV6T1G	NST3904DXV6T5G	NZQA6V8AXV5T2G
NSBA143TDXV6T5G	NST3906DXV6T1G	NZQA6V8AXV5T3G
NSBA143ZDXV6T1G	NST3946DXV6T1G	NZQA6V8XV5T1G
NSBA144EDXV6T1G	NST3946DXV6T5G	NZQA6V8XV5T2G
NSBA144EDXV6T5G	NSTB1002DXV5T1G	SBAS16DXV6T1G
NSBA144WDXV6T1G	NSTB1005DXV5T1G	SBC847BPDXV6T1G
NSBC113EDXV6T1G	NSV12100XV6T1G	SBC847CDXV6T1G
NSBC113EPDXV6T1G	NSVB114YPDXV6T1G	SNST3904DXV6T5G
NSBC114EDXV6T1G	NSVB123JPDXV6T1G	SNUF2042XV6T1G
NSBC114EDXV6T5G	NSVB124XPDXV6T1G	STZD3152PT1G
NSBC114EPDXV6T1G	NSVB143TPDXV6T1G	STZD3154NT1G
NSBC114EPDXV6T5G	NSVB143ZPDXV6T1G	STZD3155CT2G
NSBC114TDXV6T1G	NSVB144EPDXV6T1G	SZQA6V8XV5T1G