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FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20349A
Generic Copy

Issue Date: 26-Nov-2014

TITLE: Qualification of Niigata Fab (Japan) as the additional wafer source for Small Signal General Purpose Transistors and Bias Resistor Transistors.

PROPOSED FIRST SHIP DATE: 03-Mar-2015

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Fab Site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or Farrah Omar <farrah.omar@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or Laura Rivers <laura.rivers@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 is the Final Notification by ON Semiconductor notifying customers of its plan to add Niigata Fab (Japan) as the qualified wafer source for Small Signal General Purpose Transistors and Bias Resistor Transistors.

The Niigata Fab facility is an ON Semiconductor owned wafer fab that has been producing products for ON Semiconductor. Several existing technologies within ON Semiconductor's product families are currently sourced from Niigata Fab. ON Semiconductor Niigata Wafer Fab is an internal factory that is TS16949, ISO-9001 and ISO-14000 certified.

Qualification tests are designed to show that the reliability of the transferred devices will continue to meet or exceed ON Semiconductor standards.

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RELIABILITY DATA SUMMARY:

Small Signal General Purpose Transistor

Package: SOT23
BCX19LT1G (NPN)

Test:	Conditions:	Interval:	Results
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/240
HAST+PC	Ta=130C RH=85% bias=80% rated V or100V Max	96 hrs	0/240
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/240
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/240
HTSL	Ta = 150C	1008 hrs	0/240
RSH	Ta=260C, 10 sec dwell		0/30
DPA	per AEC Q101-004 post TC		0/2
DPA	per AEC Q101-004 post HAST		0/2

Package: SOT23
MMBT589LT1G (PNP)

Test:	Conditions:	Interval:	Results
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
UHAST+PC	Ta=130C RH=85%	96 hrs	0/240
HAST+PC	Ta=130C RH=85% bias=80% rated V or100V Max	96 hrs	0/240
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/240
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/240
HTSL	Ta = 150C	1008 hrs	0/240
RSH	Ta=260C, 10 sec dwell		0/30
DPA	per AEC Q101-004 post TC		0/2
DPA	per AEC Q101-004 post HAST		0/2

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Bias Resistor Transistor

Package: SC70
DTC115EM3T5G (NPN)

Test:	Conditions:	Interval:	Results
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/80
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/80
HAST+PC	Ta=130C RH=85% bias=80% rated V or100V Max	96 hrs	0/80
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/80
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/80
HTSL	Ta = 150C	1008 hrs	0/80
RSH	Ta=260C, 10 sec dwell		0/30
DPA	per AEC Q101-004 post TC		0/2
DPA	per AEC Q101-004 post HAST		0/2

Package: SC75
DTA114EYT1G (PNP)

Test:	Conditions:	Interval:	Result
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/80
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/80
HAST+PC	Ta=130C RH=85% bias=80% rated V or100V Max	96 hrs	0/80
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/80
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/80
HTSL	Ta = 150C	1008 hrs	0/80
RSH	Ta=260C, 10 sec dwell		0/30
DPA	per AEC Q101-004 post TC		0/2
DPA	per AEC Q101-004 post HAST		0/2

Package: SC70
MUN5230T1G (NPN)

Test:	Conditions:	Interval:	Results
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/80
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/80
HAST+PC	Ta=130C RH=85% bias=80% rated V or100V Max	96 hrs	0/80
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/80
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/80
HTSL	Ta = 150C	1008 hrs	0/80
RSH	Ta=260C, 10 sec dwell		0/30
DPA	per AEC Q101-004 post TC		0/2
DPA	per AEC Q101-004 post HAST		0/2

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Package: SOT23
SMMUN2214LT1G (NPN)

Test:	Conditions:	Interval:	Results
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/240
HAST+PC	Ta=130C RH=85% bias=80% rated V or100V Max	96 hrs	0/240
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/240
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/240
HTSL	Ta = 150C	1008 hrs	0/240
DPA	per AEC Q101-004 post TC		0/2
DPA	per AEC Q101-004 post HAST		0/2

ELECTRICAL CHARACTERISTIC SUMMARY:

There are no changes in electrical characteristics and product performance meets data sheet specifications. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

Affected products from ON Semiconductor with date code 1510 representing WW10, 2015 and greater may be sourced from either the Niigata Fab (Japan) or the ISMF Fab (Malaysia).

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List of affected General Parts:

Small Signal General Purpose Transistors

BC807-16LT1G	BC847CLT1G	BCW65ALT1G
BC807-16LT3G	BC847CLT3G	BCW65CLT1G
BC807-25LT1G	BC847CWT1G	BCW66GLT1G
BC807-25LT3G	BC847CWT3G	BCW66GLT3G
BC807-25WT1G	BC848BLT1G	BCW68GLT1G
BC807-40LT1G	BC848BLT3G	BCW68GLT3G
BC807-40LT3G	BC848BWT1G	BCW70LT1G
BC807-40WT1G	BC848CDW1T1G	BCW72LT1G
BC808-25LT1G	BC848CLT1G	BCX17LT1G
BC817-16LT1G	BC848CPDW1T1G	BCX19LT1G
BC817-16LT3G	BC848CWT1G	BSS64LT1G
BC817-25LT1G	BC849BLT1G	MMBT5087LT1G
BC817-25LT3G	BC849CLT1G	MMBT5087LT3G
BC817-40LT1G	BC850BLT1G	MMBT5401LT1G
BC817-40LT3G	BC850CLT1G	MMBT5401LT3G
BC818-40LT1G	BC856ALT1G	MMBT5401WT1G
BC846BDW1T1G	BC856BDW1T1G	MMBT5550LT1G
BC846BLT1G	BC856BDW1T3G	MMBT5550LT3G
BC846BLT3G	BC856BLT1G	MMBT5551LT1G
BC846BM3T5G	BC856BLT3G	MMBT5551LT3G
BC846BM3T5H	BC856BM3T5G	MMBT5551M3T5G
BC846BPDW1T1G	BC856BWT1G	MMBTA05LT1G
BC846BWT1G	BC857ALT1G	MMBTA05LT3G
BC847BDW1T1G	BC857BDW1T1G	MMBTA06LT1G
BC847BDW1T3G	BC857BLT1G	MMBTA06LT3G
BC847BLT1G	BC857BLT3G	MMBTA06WT1G
BC847BLT3G	BC857BTT1G	MMBTA55LT1G
BC847BM3T5G	BC857BWT1G	MMBTA56LT1G
BC847BPDW1T1G	BC858ALT1G	MMBTA56LT3G
BC847BPDW1T2G	BC858AWT1G	MMBTA56WT1G
BC847BPDW1T3G	BC858BLT1G	MMBTA70LT1G
BC847BPDXV6T1G	BC858BLT3G	MSD602-RT1G
BC847BTT1G	BC858BWT1G	NSM4002MR6T1G
BC847BWT1G	BCW30LT1G	NSM80100MT1G
BC847CDW1T1G	BCW32LT1G	NSM80101MT1G
BC847CDXV6T1G	BCW33LT1G	NST45010MW6T1G
BC847CDXV6T1H	BCW33LT3G	NSTB60BDW1T1G

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Bias Resistor Transistors

DTA114EET1G	EMG2DXV5T5G	MUN5111DW1T1G	MUN5313DW1T1G
DTA114EM3T5G	MMUN2111LT1G	MUN5111T1G	MUN5314DW1T1G
DTA114YET1G	MMUN2111LT3G	MUN5112DW1T1G	MUN5316DW1T1G
DTA114YM3T5G	MMUN2112LT1G	MUN5112T1G	MUN5330DW1T1G
DTA124EET1G	MMUN2113LT1G	MUN5113DW1T1G	MUN5332DW1T1G
DTA124EM3T5G	MMUN2113LT3G	MUN5113T1G	MUN5333DW1T1G
DTA144EET1G	MMUN2114LT1G	MUN5113T3G	MUN5334DW1T1G
DTA144EM3T5G	MMUN2114LT3G	MUN5114DW1T1G	MUN5335DW1T1G
DTC114EET1G	MMUN2211LT1G	MUN5114T1G	MUN5335DW1T2G
DTC114EM3T5G	MMUN2211LT3G	MUN5211DW1T1G	MUN5336DW1T1G
DTC114YET1G	MMUN2212LT1G	MUN5211T1G	NSB1706DMW5T1G
DTC114YM3T5G	MMUN2213LT1G	MUN5212DW1T1G	NSB4904DW1T1G
DTC115EET1G	MMUN2214LT1G	MUN5212T1G	NSBA114EDXV6T1G
DTC115EM3T5G	MMUN2216LT1G	MUN5213DW1T1G	NSBA114YDXV6T1G
DTC123JET1G	MMUN2230LT1G	MUN5213DW1T3G	NSBA124EDXV6T1G
DTC123JM3T5G	MMUN2232LT1G	MUN5213T1G	NSBA144EDXV6T1G
DTC124EET1G	MMUN2233LT1G	MUN5214DW1T1G	NSBC113EDXV6T1G
DTC124EM3T5G	MMUN2234LT1G	MUN5214T1G	NSBC114EDXV6T1G
DTC124XET1G	MMUN2236LT1G	MUN5216DW1T1G	NSBC114YDXV6T1G
DTC124XM3T5G	MUN2111T1G	MUN5216T1G	NSBC115EDXV6T1G
DTC143EET1G	MUN2112T1G	MUN5230DW1T1G	NSBC123JDXV6T1G
DTC143EM3T5G	MUN2113T1G	MUN5230T1G	NSBC124EDXV6T1G
DTC143TET1G	MUN2114T1G	MUN5232DW1T1G	NSBC124XDXV6T1G
DTC143TM3T5G	MUN2211JT1G	MUN5232T1G	NSBC124XPDXV6T1G
DTC143ZET1G	MUN2211T1G	MUN5233DW1T1G	NSBC143EDXV6T1G
DTC143ZM3T5G	MUN2211T3G	MUN5233T1G	NSBC143TDXV6T1G
DTC144EET1G	MUN2212T1G	MUN5234DW1T1G	NSBC143ZDXV6T1G
DTC144EM3T5G	MUN2213T1G	MUN5234T1G	NSBC143ZDXV6T5G
EMC2DXV5T1G	MUN2214T1G	MUN5235DW1T1G	NSBC144EDXV6T1G
EMC3DXV5T1G	MUN2214T3G	MUN5235T1G	NSTB1002DXV5T1G
EMC4DXV5T1G	MUN2216T1G	MUN5236DW1T1G	NSTB1005DXV5T1G
EMC5DXV5T1G	MUN2230T1G	MUN5236T1G	UMC3NT1G
EMD4DXV6T1G	MUN2232T1G	MUN5311DW1T1G	UMC5NT1G
EMD5DXV6T5G	MUN2233T1G	MUN5311DW1T2G	UMC5NT2G
EMF18XV6T5G	MUN2234T1G	MUN5312DW1T1G	
EMF5XV6T5G	MUN2236T1G	MUN5312DW1T2G	