

ON Semiconductor



Subject: ON SEMICONDUCTOR PRODUCT/PROCESS CHANGE NOTIFICATION 10149

TITLE: SMALL SIGNAL WAFER PROCESS CONVERSION

EFFECTIVE DATE: 23-JUN-00

AFFECTED CHANGE CATEGORIES

Wafer Process

Die Shrink

Design Change

AFFECTED PRODUCT DIVISIONS

BIPOLAR DISCRETES PRODUCTS DIV

ADDITIONAL RELIABILITY DATA: Available

Ref: R23125

Contact your local ON SEMICONDUCTOR Sales Office.

SAMPLES: Contact Below

Ref: R17360

Contact your local ON SEMICONDUCTOR Sales Office.

For any questions concerning this notification:

REFERENCE:NIRAJ KOHLI

PHONE: 602-244-6183

DISCLAIMER:

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 YOUR LOCAL ON
SEMICONDUCTOR SALES OFFICE.

GPCN FORMAT: CUSTOMER

DO NOT REPLY TO THIS MESSAGE.

PRODUCT/PROCESS CHANGE NOTIFICATION

ISSUE DATE: 15-Mar-2000

NOTIFICATION #:10149

EFFECTIVE DATE: 23-Jun-2000

ISSUING DIVISION:ON SEMICONDUCTOR

DESCRIPTION AND PURPOSE

This process change notification is to advise customers of the conversion of ON SEMICONDUCTOR's Small Signal family from 12um to 6um linewidth wafer process. The change methodology will be done in 3 phases and result in die shrink. The devices will be guaranteed to meet all the existing specs. Phase 1 design and Qualification has been completed and will be ready for production in June, 00. Phase 2 will be implemented in August and Phase 3 in December, 00.

Phase 1:

BC212
BC213
BC214
BC214RL1
BC307B
BC307BRL1
BC307BZL1
BC308B
BC308C
BC557
BC557ZL1
BC558B
BC558BRL
BC558BRL1
BC558BZL1
BC558ZL1
BC559BZL1
SPS8606E3RLRE
BCW30LT1
BCW30LT3
BCW70LT1
BC857BLT1
BC857BLT3
BC858BLT1
BC858BLT3
BC859BLT1
SMBT1578LT1
BC307C
BC307CZL1
BC557C
BC557CZL1
BC558C
BC558CRL1
BC558CZL1
BC559C
BC560C
BC560CZL1
BC858CLT1
BC858CLT3
BC859CLT1
LA733Q
BC557A

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BC557AZL1
BC857ALT1
BC858ALT1
MMBTA70LT1
SMBT1531LT1
LA733P
LA733PRLRA
LA733PRLRP
BC557B
BC557BRL1
BC557BZL1
MPSA70RLRM
MPS4126
MPS4126RLRA
BC556B
BC556BRL1
BC556BZL1
BC856BLT1
BC856BLT3
SMBT856BLT1
BC212B
BC212BRL1
BC212BZL1
LM9015C
BC856ALT1
BC856ALT3
SMBT1505T3
MMBT5087LT1
MMBT5087LT3
MPS4250
MPS4250ARLRM
MPS6523
MPS6523RLRM
2N5087
2N5087RLRA
LMMBA812M7LT1
LSMBT1005LT1
BCX71JLT1
BC857BDW1T1
BC858BDW1T1
BC857BWT1
BC858BWT1
BC857CDW1T1
BC858CDW1T1
BC857CWT1
BC858AWT1
BC856BWT1
MSB1218A-RT1
2SA1774
MSA1162YT1
LM9012G
LM9012H

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PHASE 2:

BC337-016
BC337-16RL1
BC337-16ZL1
BC817-16LT1
BC817-16LT3
BCW65ALT1
BCX19LT1
LM8050I
MSD602-RT1
MSD602-RT2
SMBT1282LT1
SMBT1516LT3
BC337
BC337-025
BC337-25RL1
BC337-25ZL1
BC337RL1
BC337ZL1
BC338-25ZL1
BC817-25LT1
BC817-25LT3
BCW66GLT1
SMBT1388LT1
SMBT1580LT1
SMBT1580LT3
BC818-40LT1
BCW65CLT1
LM8050J
LM9013H
2N4410
2N5550
2N5550RLRA
2N5550RLRP
2N5551
2N5551RL1
2N5551RLRA
2N5551RLRM
2N5551RLRP
2N5551ZL1
LMB106L1WP
MMBT5550LT1
MMBT5551LT1
MMBT5551LT3
SMBT1352LT3
SMBT1572LT1
SPS9550RLRA
SPS9558RLRA
BC327
BC327-025
BC327-25RL1
BC327-25ZL1
BC327RL1

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BC327ZL1
BC327-016
BC327-16RL1
BC327-16ZL1
BC807-16LT1
BC807-16LT3
MSB710-RT1
MSB710-RT2
SMBT1527LT3
SMBT1576LT1
BC808-40LT1
BCX18LT1
LM8550J
BC807-25LT1
BC807-25LT3
BC808-25LT1
BCW68GLT1
BCX17LT1
BCX17LT3
LMC807-25WP
SMBT1370LT1
SMBT1579LT1
PZT2907AT1
PZT2907AT3
SZT1003T1
SZT1005AT1
LPC2907AWP
MMBT2907AWT1
SMBT1248LT3
SMBT1335LT1
SMBT1568LT1
SMBT1589ALT1
MMBT4403LT1
MMBT4403LT3
SMBT1263LT1
SMBT1263LT3
SMBT1512LT3
MPS2907A
MPS2907ARL
MPS2907ARL1
MPS2907ARLRA
MPS2907ARLRE
MPS2907ARLRM
MPS2907ARLRP
MPS2907AZL1
P2N2907A
P2N2907ARL1
P2N2907AZL1
PN2907A
PN2907ARLRA

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PHASE 3:

BCW32LT1
BCW72LT1
BC848BLT1
BC848BLT3
BC847BLT1
BC847BLT3
BC849BLT1
BC850BLT1
BC847BWT1
BC848BWT1
BCW33LT1
BCW33LT3
BC847CLT1
BC847CLT3
BC848CLT1
SMBT1547LT1
BC849CLT1
BC850CLT1
SMBT1371LT1
SMBT1415LT1
BC847CWT1
BC848CWT1
SMBT1159-2T
SMBT1201LT1
BC846BLT1
BC846BLT3
BC846BWT1
SMBT1265LT1
SMBT1569LT1
MSC3904T1
SMBT2001T1
MMBT4124LT1
SMBT1170T
SMBT1190LT1
SMBT1360LT3
MMBT3904LT1
MMBT3904LT3
SMBT1170LT1
MBT3946DW1T1
MBT3904DW1T1
MBT3904DW1T3
MBT3904DW9T1
MBT3904DW9T3
MMBT3904WT1

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SMBT1001LT1
SMBT1001LT3
SMBT1013LT1
SMBT1169LT1
MMBT2484LT1
MMBT6428LT1
SMBT1124LT1
SMBT1234LT1
MMBT5088LT1
MMBT5089LT1
MMBT3906LT1
MMBT3906LT3
MMBT4126LT1
SMBT1191LT1
SMBT1361LT1
SMBT1361LT3
SMBT1539T
SMBT1493LT1
SMBT1493LT3
MMBT3906WT1
SMBT1231LT1

QUALIFICATION PLAN

See Rel Data

RELIABILITY DATA SUMMARY

1)Qual Vehicle: BC857BLT1

2) Test Results

Test	Item	Results
HTRB(@Ta=150 deg C w/bias	1000 hours	0 Rejects
IOL Tj=100 degC, Ta=25 deg C	1000 HOURS	0 Rejects
Temp Cycle Ta=65/150 deg C	1000 Cycles	0 Rejects
Autoclave (15PSI,121degc RH=100%)	192 HOURS	0 Rejects

ELECTRICAL CHARACTERISTIC SUMMARY

Electrical characterization indicates parameteric distribution remains unchanged. Data for Phase 1 currently available upon request with Phase 2 and 3 at a later date.

CHANGED PART IDENTIFICATION

No Physical change to the external portion of product.

FILE FORMAT: ASCII TEXT

FONT - Courier

SIZE - 12 Point

LINE - 70 characters/line

PAGE - 55 lines/page

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AFFECTED DEVICE LIST (WITHOUT SPECIALS)

2N4410	, 2N5087	, 2N5087RLRA	, 2N5550
2N5550RLRA	, 2N5550RLRP	, 2N5551	, 2N5551RL1
2N5551RLRA	, 2N5551RLRM	, 2N5551RLRP	, 2N5551ZL1
2SA1774	, BC212	, BC212B	, BC212BRL1
BC212BZL1	, BC213	, BC214	, BC214RL1
BC307B	, BC307BRL1	, BC307BZL1	, BC307C
BC307CZL1	, BC308B	, BC308C	, BC327
BC327-016	, BC327-025	, BC327-16RL1	, BC327-16ZL1
BC327-25RL1	, BC327-25ZL1	, BC327RL1	, BC327ZL1
BC337	, BC337-016	, BC337-025	, BC337-16RL1
BC337-16ZL1	, BC337-25RL1	, BC337-25ZL1	, BC337RL1
BC337ZL1	, BC338-25ZL1	, BC556B	, BC556BRL1
BC556BZL1	, BC557	, BC557A	, BC557AZL1
BC557B	, BC557BRL1	, BC557BZL1	, BC557C
BC557CZL1	, BC557ZL1	, BC558B	, BC558BRL
BC558BRL1	, BC558BZL1	, BC558C	, BC558CRL1
BC558CZL1	, BC558ZL1	, BC559BZL1	, BC559C
BC560C	, BC560CZL1	, BC807-16LT1	, BC807-16LT3
BC807-25LT1	, BC807-25LT3	, BC808-25LT1	, BC808-40LT1
BC817-16LT1	, BC817-16LT3	, BC817-25LT1	, BC817-25LT3
BC818-40LT1	, BC846BLT1	, BC846BLT3	, BC846BWT1
BC847BLT1	, BC847BLT3	, BC847BWT1	, BC847CLT1
BC847CLT3	, BC847CWT1	, BC848BLT1	, BC848BLT3
BC848BWT1	, BC848CLT1	, BC848CWT1	, BC849BLT1
BC849CLT1	, BC850BLT1	, BC850CLT1	, BC856ALT1
BC856ALT3	, BC856BLT1	, BC856BLT3	, BC856BWT1
BC857ALT1	, BC857BDW1T1	, BC857BLT1	, BC857BLT3
BC857BWT1	, BC857CDW1T1	, BC857CWT1	, BC858ALT1
BC858AWT1	, BC858BDW1T1	, BC858BLT1	, BC858BLT3
BC858BWT1	, BC858CDW1T1	, BC858CLT1	, BC858CLT3
BC859BLT1	, BC859CLT1	, BCW30LT1	, BCW30LT3
BCW32LT1	, BCW33LT1	, BCW33LT3	, BCW65ALT1
BCW65CLT1	, BCW66GLT1	, BCW68GLT1	, BCW70LT1
BCW72LT1	, BCX17LT1	, BCX17LT3	, BCX18LT1
BCX19LT1	, BCX71JLT1	, LA733P	, LA733PRLRA
LA733PRLRP	, LA733Q	, LM8050I	, LM8050J
LM8550J	, LM9012G	, LM9012H	, LM9013H
LM9015C	, LMB106L1WP	, LMC807-25WP	, LMMBA812M7LT1
LPC2907AWP	, MBT3904DW1T1	, MBT3904DW1T3	, MBT3904DW9T1
MBT3904DW9T3	, MBT3906DW1T1	, MBT3906DW1T3	, MBT3906DW9T1
MBT3906DW9T3	, MBT3946DW1T1	, MMBT2484LT1	, MMBT2907AWT1
MMBT3904LT1	, MMBT3904LT3	, MMBT3904WT1	, MMBT3906LT1
MMBT3906LT3	, MMBT3906WT1	, MMBT4124LT1	, MMBT4126LT1
MMBT4403LT1	, MMBT4403LT3	, MMBT5087LT1	, MMBT5087LT3
MMBT5088LT1	, MMBT5089LT1	, MMBT5550LT1	, MMBT5551LT1
MMBT5551LT3	, MMBT6428LT1	, MMBTA70LT1	, MPS2907A
MPS2907ARL	, MPS2907ARL1	, MPS2907ARLRA	, MPS2907ARLRE
MPS2907ARLRM	, MPS2907ARLRP	, MPS2907AZL1	, MPS4126
MPS4126RLRA	, MPS4250	, MPS4250ARLRM	, MPS6523
MPS6523RLRM	, MPSA70RLRM	, MSA1162GT1	, MSA1162YT1
MSB1218A-RT1	, MSB710-RT1	, MSB710-RT2	, MSC3904T1
MSD602-RT1	, MSD602-RT2	, P2N2907A	, P2N2907ARL1
P2N2907AZL1	, PN2907A	, PN2907ARLRA	, PZT2907AT1
PZT2907AT3	, SMBT1493LT1	, SMBT1493LT3	, SMBT1516LT3