



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION

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Issue Date
23-Dec-2006

SUBJECT: ON Semiconductor Final Product/Process Change Notification #15698

TITLE: Final Notification for ISMF to ZR Wafer Fab Transfer

PROPOSED FIRST SHIP DATE: 26-Feb-2007

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Fab Site

AFFECTED PRODUCT DIVISION(S): Standard Components

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Terry Galloway <terry.galloway @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 60 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 your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

The is a Final PCN to IPCN #15013 available at www.onsemi.com to notify customers of ON Semiconductor's addition of ON semiconductor's internal ZR fab in Phoenix, Arizona as a second source for Small Signal NPN Transistors and BAS116 Switching Diode. These devices will also continue to be manufactured in ON Semiconductor's ISMF facility in Seremban (Malaysia). This will provide ON Semiconductor with added flexibility to continue to satisfy customer requirements and growing demands. This FPCN is specific to the devices listed at the end of this notice. The device design, electrical specifications, and mask sets will remain identical. Full electrical characterization over temperature was performed for each qualification vehicle to insure device functionality and electrical performance.



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The N-High Voltage (NHIV) portion of the ISMF to ZR fab transfer will be delayed. That expansion will be pursued under a new IPCN at a later date. All NHIV devices listed immediately below will continue to be fab'd at ISMF only:

BF393ZL1	MPSA42RLRPG	SMBT1565LT1
BF393ZL1G	MPSA42ZL1	SMBT1565LT1G
MMBTA42LT1	MPSA43	SMMBTA42LT1
MMBTA42LT1G	MPSA43G	SMMBTA42LT1G
MMBTA42LT3	MPSA43RLRA	SMMBTA42LT3G
MMBTA42LT3G	MPSA43RLRAG	SZT1010T1
MMBTA43LT1	MPSA43ZL1	BF420ZL1
MMBTA43LT1G	MPSA43ZL1G	BF420ZL1G
MPSA42	MPSW42	BF422
MPSA42G	MPSW42G	BF422G
MPSA42RL1	MPSW42RLRA	BF422RL1
MPSA42RL1G	MPSW42RLRAG	BF422RL1G
MPSA42RLRA	MSD42SWT1	BF422ZL1
MPSA42RLRAG	MSD42SWT1G	BF422ZL1G
MPSA42RLRF	MSD42T1G	BF720T1
MPSA42RLRFG	MSD42WT1	BF720T1G
MPSA42RLRM	MSD42WT1G	BF720T3G

RELIABILITY DATA SUMMARY:

Reliability Test Results:

BCX19LT1 (GNPN)

Test	Conditions	Results
HTRBTa=150C, PreCon IOL + PC	VCEs=36V,1008 hrs MSL1 @ 260C Ta=25C, delta Tj=100C, Ton=Toff=2min 15000 cycles	0/240 0/941
TC+PC AC + PC H3TRB + PC HTSL	Ta= -65 to +150C 1000 cycles Ta=121C, RH=100%, ~ 15psig Ta=85C, RH=85%, VCEs=36V Ta=150C, 1008 hrs	0/240 0/240 0/231 0/240

BAS116LT1 (SWDI)

Test	Conditions	Results
HTRB PreCon IOL + PC	Ta=150C, Vr=60V,1008 hrs MSL1 @ 260C Ta=25C, delta Tj=100C, Ton=Toff=2min 15000 cycles	0/240 0/959
TC + PC AC + PC H3TRB + PC HTSL	Ta= -65 to +150C 1000 cycles Ta=121C, RH=100%, ~ 15psig Ta=85C, RH=85%, VCEs=36V Ta=150C, 1008 hrs	0/240 0/239 0/240 0/240

ELECTRICAL CHARACTERISTIC SUMMARY:

No changes in electrical characterization; all product performance meets current datasheet specifications.



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CHANGED PART IDENTIFICATION:

Date codes greater than 0907 or 2 will be from either ZR fab or ISMF fab (Except NHIV parts listed above. NHIV will remain at ISMF).

AFFECTED DEVICE LIST

2N5088	2N6426RLRAG	BC337-16RL1G	BC489AZL1G
2N5088G	2N6427	BC337-16ZL1	BC489BZL1
2N5088RLRA	2N6427G	BC337-16ZL1G	BC489BZL1G
2N5088RLRAG	2N6427RLRA	BC337-25RL1	BC489G
2N5089	2N6427RLRAG	BC337-25RL1G	BC489RL1
2N5089G	2SC2712GT1G	BC337-25ZL1	BC489RL1G
2N5089RLRA	2SC4081RT1	BC337-40RL1	BC517
2N5089RLRAG	2SC4617	BC337-40RL1G	BC517G
2N5089RLRE	2SC4617G	BC337-40ZL1	BC517RL1
2N5210RLRA	2SC4617T1	BC337-40ZL1G	BC517RL1G
2N5550	2SC4617T1G	BC337G	BC517ZL1
2N5550G	2SC5658M3T5G	BC337RL1	BC517ZL1G
2N5550RLRA	BAS116LT1	BC337RL1G	BC546B
2N5550RLRAG	BAS116LT1G	BC337ZL1	BC546BG
2N5550RLRP	BAV199LT1	BC337ZL1G	BC546BRL1
2N5550RLRPG	BAV199LT1G	BC338-25ZL1	BC546BRL1G
2N5551	BC182	BC338-25ZL1G	BC546BZL1
2N5551G	BC182A	BC368	BC546BZL1G
2N5551RL1	BC182AG	BC368G	BC547ARL
2N5551RL1G	BC182B	BC368ZL1	BC547ARL1
2N5551RLRA	BC182BG	BC368ZL1G	BC547ARL1G
2N5551RLRAG	BC182BRL1	BC372	BC547ARLG
2N5551RLRM	BC182BRL1G	BC372G	BC547AZL1
2N5551RLRMG	BC182G	BC373	BC547AZL1G
2N5551RLRP	BC237	BC373G	BC547B
2N5551RLRPG	BC237B	BC373RL1	BC547BG
2N5551ZL1	BC237BG	BC373RL1G	BC547BRL1
2N5551ZL1G	BC237BRL1	BC373ZL1	BC547BRL1G
2N6027	BC237BRL1G	BC373ZL1G	BC547BZL1
2N6027G	BC237BZL1	BC447	BC547BZL1G
2N6027RL1	BC237BZL1G	BC447G	BC547C
2N6027RL1G	BC237C	BC449	BC547CG
2N6027RLRA	BC237CG	BC449A	BC547CZL1
2N6027RLRAG	BC237G	BC449AG	BC547CZL1G
2N6028	BC239C	BC449G	BC548B
2N6028G	BC239CG	BC487	BC548BG
2N6028RLRA	BC337	BC487B	BC548BRL1
2N6028RLRAG	BC337-016	BC487BG	BC548BRL1G
2N6028RLRM	BC337-016G	BC487BRL1	BC548BZL1
2N6028RLRMG	BC337-025	BC487G	BC548BZL1G
2N6028RLRP	BC337-025G	BC489	BC548C
2N6028RLRPG	BC337-040	BC489A	BC548CG
2N6426	BC337-040G	BC489AG	BC548CZL1
2N6426RLRA	BC337-16RL1	BC489AZL1	BC548CZL1G



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BC549C	BC846BPDW1T1	BC848CDW1T1	BDC01DRL1G
BC549CG	BC846BPDW1T1G	BC848CDW1T1G	BSP52T1
BC550C	BC846BWT1	BC848CDXV6T1	BSP52T1G
BC550CG	BC846BWT1G	BC848CDXV6T1G	BSP52T3
BC618	BC847ALT1	BC848CDXV6T5	BSP52T3G
BC618G	BC847ALT1G	BC848CLT1	BSS64LT1
BC618RL1	BC847AM3T5G	BC848CLT1G	BSS64LT1G
BC618RL1G	BC847AWT1	BC848CPDW1T1	EMX1DXV6T1
BC635RL1	BC847AWT1G	BC848CPDW1T1G	EMX1DXV6T1G
BC635RL1G	BC847BDW1T1	BC848CWT1	EMX1DXV6T5
BC635ZL1	BC847BDW1T1G	BC848CWT1G	EMX1DXV6T5G
BC635ZL1G	BC847BDW1T3	BC849BLT1	EMX2DXV6T5
BC637	BC847BDW1T3G	BC849BLT1G	EMX2DXV6T5G
BC637G	BC847BLT1	BC849BLT3	EMZ1DXV6T1
BC639	BC847BLT1G	BC849BLT3G	EMZ1DXV6T1G
BC639-16ZL1	BC847BLT3	BC849CLT1	EMZ1DXV6T5
BC639-16ZL1G	BC847BLT3G	BC849CLT1G	EMZ1DXV6T5G
BC639G	BC847BM3T5G	BC850BLT1	HN1B01FDW1T1
BC639RL1	BC847BPDW1T1	BC850BLT1G	HN1B01FDW1T1G
BC639RL1G	BC847BPDW1T1G	BC850CLT1	LC945P
BC639ZL1	BC847BTT1	BC850CLT1G	LC945Q
BC639ZL1G	BC847BTT1G	BCP56-10T1	LM9014B
BC817-16LT1	BC847BWT1	BCP56-10T1G	LM9014D
BC817-16LT1G	BC847BWT1G	BCP56-16T1	LMB106L1WP
BC817-16LT3	BC847CDW1T1	BCP56-16T1G	LMCF102WP
BC817-16LT3G	BC847CDW1T1G	BCP56-16T3	LMCF103WP
BC817-25LT1	BC847CDXV6T1	BCP56-16T3G	LMCF123WP
BC817-25LT1G	BC847CDXV6T1G	BCP56T1	LMCF143WP
BC817-25LT3	BC847CDXV6T5	BCP56T1G	LMCF145WP
BC817-25LT3G	BC847CDXV6T5G	BCP56T3	LMCF1E5WP
BC817-40LT1	BC847CLT1	BCP56T3G	LMCF601RWP
BC817-40LT1G	BC847CLT1G	BCP68T1	LMCF817-16WP
BC817-40LT3	BC847CLT3	BCP68T1G	LMCF847BWP
BC817-40LT3G	BC847CLT3G	BCW32LT1	LMCFA14WP
BC818-40LT1	BC847CM3T5G	BCW32LT1G	LMCFA2BWP
BC818-40LT1G	BC847CPDW1T1	BCW33LT1	MBT6429DW1T1
BC846ALT1	BC847CTT1	BCW33LT1G	MBT6429DW1T1G
BC846ALT1G	BC847CWT1	BCW33LT3	MMBC1321Q4LT1G
BC846ALT3	BC847CWT1G	BCW33LT3G	MMBT2132T3
BC846ALT3G	BC848ALT1	BCW65ALT1	MMBT2132T3G
BC846AWT1	BC848ALT1G	BCW65ALT1G	MMBT2484LT1
BC846AWT1G	BC848AWT1	BCW65CLT1	MMBT2484LT1G
BC846BDW1T1	BC848AWT1G	BCW65CLT1G	MMBT2484LT3G
BC846BDW1T1G	BC848BLT1	BCW66GLT1	MMBT3416LT3
BC846BLT1	BC848BLT1G	BCW66GLT1G	MMBT3416LT3G
BC846BLT1G	BC848BLT3	BCW72LT1	MMBT489LT1
BC846BLT3	BC848BLT3G	BCW72LT1G	MMBT489LT1G
BC846BLT3G	BC848BWT1	BCX56-10R1	MMBT5088LT1
BC846BM3T5G	BC848BWT1G	BDC01DRL1	MMBT5088LT1G



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AFFECTED DEVICE LIST

MMBT5089LT1	MPS651RLRMG	MPSA06RL1G	MPSA29RLRP
MMBT5089LT1G	MPS6521	MPSA06RLG	MPSA29RLRPG
MMBT5550LT1	MPS6521G	MPSA06RLRA	MPSW01
MMBT5550LT1G	MPS6521RLRA	MPSA06RLRAG	MPSW01A
MMBT5550LT3G	MPS6521RLRAG	MPSA06RLRM	MPSW01AG
MMBT5551LT1	MPS6560	MPSA06RLRMG	MPSW01ARLRA
MMBT5551LT1G	MPS6560G	MPSA06RLRP	MPSW01ARLRAG
MMBT5551LT3	MPS6601	MPSA06RLRPG	MPSW01ARLRP
MMBT5551LT3G	MPS6601G	MPSA12	MPSW01ARLRPG
MMBT6427LT1	MPS6601RLRA	MPSA12G	MPSW01G
MMBT6427LT1G	MPS6601RLRAG	MPSA12RLRA	MPSW05
MMBT6427LT3	MPS6602	MPSA12RLRAG	MPSW05G
MMBT6427LT3G	MPS6602G	MPSA12RLRP	MPSW06
MMBT6428LT1	MPS6602RLRA	MPSA12RLRPG	MPSW06G
MMBT6428LT1G	MPS6602RLRAG	MPSA13	MPSW06RLRA
MMBT6429LT1	MPS6717	MPSA13G	MPSW06RLRAG
MMBT6429LT1G	MPS6717G	MPSA13RLRA	MPSW13RLRA
MMBT6521LT1	MPS6717RLRA	MPSA13RLRAG	MPSW13RLRAG
MMBT6521LT1G	MPS6717RLRAG	MPSA13RLRM	MPSW45
MMBT8099LT1	MPS6724	MPSA13RLRMG	MPSW45A
MMBT8099LT1G	MPS6724G	MPSA13RLRP	MPSW45AG
MMBTA05LT1	MPS6724RLRA	MPSA13RLRPG	MPSW45ARLRA
MMBTA05LT1G	MPS6724RLRAG	MPSA13ZL1	MPSW45ARLRAG
MMBTA05LT3	MPS6725	MPSA13ZL1G	MPSW45AZL1
MMBTA05LT3G	MPS6725G	MPSA14	MPSW45AZL1G
MMBTA06LT1	MPS6725RLRP	MPSA14G	MPSW45G
MMBTA06LT1G	MPS6725RLRPG	MPSA14RLRA	MPSW45RLRE
MMBTA06LT3	MPS8098	MPSA14RLRAG	MPSW45RLREG
MMBTA06LT3G	MPS8098G	MPSA14RLRP	MSC2712GT1
MMBTA06WT1	MPS8098RLRA	MPSA14RLRPG	MSC2712GT1G
MMBTA06WT1G	MPS8098RLRAG	MPSA18	MSC2712YT1
MMBTA13LT1	MPS8099	MPSA18G	MSC2712YT1G
MMBTA13LT1G	MPS8099G	MPSA18RLRA	MSD1328-RT1
MMBTA13LT3G	MPS8099RLRA	MPSA18RLRAG	MSD1328-RT1G
MMBTA14LT1	MPS8099RLRAG	MPSA18RLRM	MSD1328-ST1
MMBTA14LT1G	MPS8099RLRM	MPSA18RLRMG	MSD1328-ST1G
MMBTA20LT1	MPS8099RLRMG	MPSA18RLRP	MSD1819A-RT1
MMBTA20LT1G	MPS8099RLRP	MPSA18RLRPG	MSD1819A-RT1G
MPS650	MPS8099RLRPG	MPSA27	MSD601-RT1
MPS650G	MPSA05	MPSA27G	MSD601-RT1G
MPS650RLRA	MPSA05G	MPSA27RLRA	MSD601-ST1
MPS650RLRAG	MPSA05RLRA	MPSA27RLRAG	MSD601-ST1G
MPS650ZL1	MPSA05RLRAG	MPSA27RLRMG	MSD602-RT1
MPS650ZL1G	MPSA05RLRM	MPSA28	MSD602-RT1G
MPS651	MPSA05RLRMG	MPSA28G	NSCT817-25LT1G
MPS651G	MPSA06	MPSA28RLRP	NSCT817-25LT3G
MPS651RLRA	MPSA06G	MPSA28RLRPG	NSCT817-40LT1G
MPS651RLRAG	MPSA06RL	MPSA29	NSCT817-40LT3G
MPS651RLRM	MPSA06RL1	MPSA29G	NSS12201LT1G



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AFFECTED DEVICE LIST

NSS12501UW3T2G
NSS12601CF8T1G
NSS20201LT1G
NSS20201MR6T1G
NSS20501UW3T2G
NSS20601CF8T1G
NSS30071MR6T1G
NSS30101LT1G
NSS30201MR6T1G
NSS40201LT1G
NSS40501UW3T2G
NSS40601CF8T1G
NST489AMT1
NST489AMT1G
NST8099WP
NSVT489AMT1
NSVT489AMT1G
PZT651T1
PZT651T1G
TJ00742ZL1
TMBT0104LT1G
TP00247ZL1G
UMZ1NT1
UMZ1NT1G