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**FINAL PRODUCT/PROCESS CHANGE NOTIFICATION**  
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**03-OCT-2002**

**SUBJECT: ON Semiconductor Final Product/Process Change Notification #12462**

**TITLE: Final Notification for Qualification of Additional Assembly/Test Sites for ON Semiconductor**

**EFFECTIVE DATE: 02-Dec-2002**

**AFFECTED CHANGE CATEGORY: ON Semiconductor Assembly/Test Site**

**AFFECTED PRODUCT DIVISION: Bipolar Discretes & Logic Products Divisions**

**ADDITIONAL RELIABILITY DATA:** Available

Contact your local ON Semiconductor Sales Office or Laura Rivers <S20636@onsemi.com>

**SAMPLES:** Contact your local ON Semiconductor Sales Office  
or Barbara Matteson <RM2230@onsemi.com>

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact Sales Office or Dianne Vonborstel [RPDR20@onsemi.com](mailto:RPDR20@onsemi.com)

**DISCLAIMER:**

Final Product/Process Change Notification (FPCN) - Final Notification completing the notification process. Distributed at least 60 days from the effective date 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:**

To continuously improve and expand our manufacturing/test capacity, ON Semiconductor would like to announce the qualification of an additional assembly/test site for SC88 (SOT363) and SC88A (SOT353) Standard Component's devices. The additional site is Leshan (LPS) in Sichuan, China. Currently, Standard Component's SC88 (SOT363) and SC88A (SOT353) devices are produced in Seremban, Malaysia. LPS is ISO/QS9000 and TS16949 certified. LPS already manufactures Discrete devices. All physical, as well as electrical characteristics will not change and the reliability will continue to meet ON Semiconductor's high quality standards. This additional site will allow ON Semiconductor to continue to meet the high demand for our SC88 (SOT363) and SC88A (SOT353) device families.

**ADDITIONAL INFORMATION:**

Additional Notification Points of Contact:

Small Signal - Paul Lem - ffbfbm - 602-244-5720  
Bipolar - Donald Barlow - r39117 - 602-244-5776  
Logic - Dianne Von Borstel - rpdr20 - 602-244-6252



**Final Product/Process Change Notification #12462**

**RELIABILITY DATA SUMMARY :**

**Reliability Test Summary: Package SC88A (SOT353)**

**Device = MC74VHC1G02DFT2**

<b>Test</b>	<b>Conditions</b>	<b>Interval</b>	<b>SS</b>
UHASt +PC	Ta=130degC,P=18.8 psig, RH=85%	96 hours	0/80
A/clave +PC	Ta=121degC,P=15psig, RH=100%	96 hours	0/252
HAST +PC	Ta=130degC,P=18.8 psig, RH=85% Vcc=5V	96 hours	0/252
HTB	Ta = 150 deg C.	1008 hours	0/252
HTOL	Ta = 145 deg C, Vcc=5V	1008 hours	0/252
Temp Cyc +PC	Ta = -65 to +150 deg C	500 cycles	0/252
MSL1	24 hr bake@125degC +168 hr 85/85 +3IR @ 235 deg C + 1x Flux immersion + Alcohol + DI rinse + visual	Readout	0/252

**Reliability Test Summary: Package SC88A (SOT353)**

**Device = MSQA6V1W5T2**

<b>Test</b>	<b>Conditions</b>	<b>Interval</b>	<b>SS</b>
A/clave +PC	Ta=121degC,P=15psig,RH=100%	96 hours	0/80
H3TRB	Ta = 85deg C/ 85%RH, Vr=2.4V	504 hours	0/80
MSL1	24 hr bake@125degC +168 hr 85/85 +3IR @ 235 deg C + 1x Flux immersion + Alcohol + DI rinse + visual	Readout	0/80

**Reliability Test Summary: Package SC88 (SOT363)**

**Device = MUN5115DW1T1**

<b>Test</b>	<b>Conditions</b>	<b>Interval</b>	<b>SS</b>
A/clave +PC	Ta=121degC,P=15psig,RH=100%	96 hours	0/80
H3TRB	Ta=85degC,RH = 85%, VCEs=40V	504 hours	0/80
HTB	Ta = 150 deg C.	1008 hours	0/252
HTRB	Ta = 150 deg C, VCEs = 40V	1008 hours	0/252
Temp Cyc+PC	Ta = -65 to +150 deg C	500 cycles	0/252
IOL +PC	Ta=25degC, delta Tj => 100degC	15000 cycles	0/252
MSL1	24 hr bake@125degC +168 hr 85/85 +3IR @ 235 deg C + 1x Flux immersion + Alcohol + DI rinse + visual	Readout	0/252

**ELECTRICAL CHARACTERISTIC SUMMARY :**

No change in electrical performance.

**CHANGED PART IDENTIFICATION:**

The date code on SBN product is to the right of the device code in the same direction.

The date code of LPS product is to the right of the device code but is rotated counterclockwise.

**Final Product/Process Change Notification #12462****AFFECTED DEVICE LIST (WITHOUT SPECIALS):****PART**

BC846BDW1T1, BC846BPDW1T1, BC847BDW1T1, BC847BPDW1T1, BC847CDW1T1,  
BC847CPDW1T1, BC848BDW1T1, BC848BPDW1T1, BC848CDW1T1, BC848CPDW1T1,  
BC856BDW1T1, BC857BDW1T1, BC857CDW1T1, BC858BDW1T1, BC858CDW1T1,  
DF6A6.8FUT1, MBD110DWT1, MBD330DWT1, MBD54DWT1, MBD770DWT1,  
MBT222ADW1T1, MBT3904DW1T1, MBT3904DW1T3, MBT3906DW1T1,  
MBT3906DW1T3, MBT3946DW1T1, MBT3946DW1T2, MC74HC1G00DFT1,  
MC74HC1G00DFT2, MC74HC1G02DFT1, MC74HC1G02DFT2, MC74HC1G04DFT1,  
MC74HC1G04DFT2, MC74HC1G08DFT1, MC74HC1G08DFT2, MC74HC1G14DFT1,  
MC74HC1G14DFT2, MC74HC1G32DFT1, MC74HC1G32DFT2, MC74HC1GU04DFT1,  
MC74HC1GU04DFT2, MC74VHC1G00DFT1, MC74VHC1G00DFT2, MC74VHC1G01DFT1,  
MC74VHC1G01DFT2, MC74VHC1G02DFT1, MC74VHC1G02DFT2, MC74VHC1G03DFT1,  
MC74VHC1G03DFT2, MC74VHC1G04DFT1, MC74VHC1G04DFT2, MC74VHC1G05DFT1,  
MC74VHC1G05DFT2, MC74VHC1G07DFT1, MC74VHC1G07DFT2, MC74VHC1G08DFT1,  
MC74VHC1G08DFT2, MC74VHC1G09DFT1, MC74VHC1G09DFT2, MC74VHC1G125DFT1,  
MC74VHC1G125DFT2, MC74VHC1G126DFT1, MC74VHC1G126DFT2, MC74VHC1G132DFT1,  
MC74VHC1G132DFT2, MC74VHC1G135DFT1, MC74VHC1G135DFT2, MC74VHC1G14DFT1,  
MC74VHC1G14DFT2, MC74VHC1G32DFT1, MC74VHC1G32DFT2, MC74VHC1G50DFT1,  
MC74VHC1G50DFT2, MC74VHC1G66DFT1, MC74VHC1G66DFT2, MC74VHC1G86DFT1,  
MC74VHC1G86DFT2, MC74VHC1GT00DFT1, MC74VHC1GT00DFT2, MC74VHC1GT02DFT1,  
MC74VHC1GT02DFT2, MC74VHC1GT04DFT1, MC74VHC1GT04DFT2,  
MC74VHC1GT08DFT1, MC74VHC1GT08DFT2, MC74VHC1GT125DF1,  
MC74VHC1GT125DF2, MC74VHC1GT126DF1, MC74VHC1GT126DF2,  
MC74VHC1GT14DFT1, MC74VHC1GT14DFT2, MC74VHC1GT32DFT1,  
MC74VHC1GT32DFT2, MC74VHC1GT32DFT4, MC74VHC1GT50DFT1,  
MC74VHC1GT50DFT2, MC74VHC1GT66DFT1, MC74VHC1GT66DFT2,  
MC74VHC1GT86DFT1, MC74VHC1GT86DFT2, MC74VHC1GU04DFT1,  
MC74VHC1GU04DFT2, MDC5001T1, MSQA6V1W5T2,  
MUN5111DW1T1, MUN5112DW1T1, MUN5113DW1T1, MUN5114DW1T1,  
MUN5115DW1T1, MUN5116DW1T1, MUN5130DW1T1, MUN5131DW1T1,  
MUN5132DW1T1, MUN5133DW1T1, MUN5134DW1T1, MUN5135DW1T1,  
MUN5136DW1T1, MUN5137DW1T1, MUN5211DW1T1, MUN5212DW1T1,  
MUN5213DW1T1, MUN5214DW1T1, MUN5215DW1T1, MUN5216DW1T1,  
MUN5230DW1T1, MUN5231DW1T1, MUN5232DW1T1, MUN5233DW1T1,  
MUN5234DW1T1, MUN5235DW1T1, MUN5236DW1T1, MUN5237DW1T1,  
MUN5311DW1T1, MUN5312DW1T1, MUN5312DW1T2, MUN5313DW1T1,  
MUN5314DW1T1, MUN5315DW1T1, MUN5316DW1T1, MUN5330DW1T1,  
MUN5331DW1T1, MUN5332DW1T1, MUN5333DW1T1, MUN5334DW1T1,  
MUN5335DW1T1, MUN5335DW1T2, NL17SZ00DFT2, NL17SZ02DFT2,  
NL17SZ04DFT2, NL17SZ06DFT2, NL17SZ07DFT2, NL17SZ08DFT2,  
NL17SZ125DFT2, NL17SZ126DFT2, NL17SZ14DFT2, NL17SZ16DFT2,  
NL17SZ17DFT2, NL17SZ32DFT2, NL17SZ86DFT2, NL17SZU04DFT2,  
NLAS4501DFT2, NLAST4501DFT2, NSL12AWT1, NSR15DW1T1,  
NST2369ADW1T1, NSTB60ADW1T1, NSTB60BDW1T1, NZF220DFT1,  
UMA4NT1, UMA4NT2, UMA6NT1, UMA6NT2, UMC2NT1, UMC3NT1,  
UMC3NT2, UMC5NT1, UMC5NT2