

### Final Product/Process Change Notification

Document # : FPCN21043X Issue Date: 10 September 2015

Title of Change:	Transfer of the VHC1G, VHC1GT and SZ product family devices in the SC88A package to the TS18 wafer process at Tower Semiconductor and a change to the BOM for these same products to include Pd coated wire and Henkel mold compound.			
Proposed first ship date:	17 December 2015 or Earlier upon customer approval			
Contact information:	Contact your local ON Semiconductor Sales Office or <shero.gao@onsemi.com></shero.gao@onsemi.com>			
Samples:	Contact your local ON Semiconductor Sales Office			
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <jose.aguilar@onsemi.com>.</jose.aguilar@onsemi.com>			
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change.  ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <pcn.support@onsemi.com>.</pcn.support@onsemi.com>			
Change Part Identification:	There will be no change to standard device marking. Normal assembly lots traceability codes will identify the new change.			
Change category:				
Change Sub-Category(s):  Manufacturing Site Change/ Manufacturing Process Char				
Sites Affected:  All site(s) not ap	olicable Son Semiconductor site(s):  ON Leshan, China  Sexternal Foundry/Subcon site(s)  TOWER SEMICONDUCTOR LTD			
Description and Purpose:				
This is a Final Process Change Notice informing ON Semiconductor customers that Logic Devices under the VHC1G, VHC1GT and SZ families in SC88A package are now qualified to be manufactured in the TS18 wafer technology line of Tower Semiconductor Ltd and qualified to be				

This is a Final Process Change Notice informing ON Semiconductor customers that Logic Devices under the VHC1G, VHC1GT and SZ families in SC88A package are now qualified to be manufactured in the TS18 wafer technology line of Tower Semiconductor Ltd and qualified to be assembled with Pd coated Cu wire and Henkel mold compound at ON Leshan, China. These device families are currently being fabricated in the TS60 wafer technology line of Tower Semiconductor Ltd and assembled with either Au or bare Cu wire and Nitto mold compound at ON Leshan, China.

This FPCN will take precedence over other PCNs for the affected parts.

Tower Semiconductor Ltd, Israel fab and ON Leshan, China assembly site are certified according to ISO/TS16949 standard; and have been the production site for majority of the Logic Devices of On Semiconductor.

Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed ON Semiconductor standards. ON Semiconductor recommends that customers evaluate sample units in each associated application circuit to ensure there are no unexpected electrical incompatibilities.

Customers, that require to be sourced by automotive graded devices, have to change the ordering code to automotive part number version prior the expiration of this PCN, which assures automotive PPAP coverage. No qualification is needed for automotive versions of the devices. In case customer will stay with standard device, general PCN rules are applied (90 days for PCN implementation), no PPAP coverage, and no site and change control. ON Semiconductor Customer service will provide assistance in the backlog transfer process.

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#### **Reliability Data Summary:**

Test:	Conditions:	Interval:	Results:
UHAST-PC	Ta=130C, RH 85; 18.8psig	96 hrs	0/240
HAST+PC	Ta=130C RH=85%;18.8psig, bias=5.5V	96 hrs	0/240
HTSL	Ta=150C	1008 hrs	0/240
HTOL	Ta=150C	1008 hrs	0/240
TC+PC	Ta= -65 C to 150 C	500 cyc	0/240
SAT	Ta=260		0/30
RSH	Ta=260	10 sec	0/90
DPA	post TC	500 cyc	0/6
DPA	post HAST	96 hrs	0/6
DPA	post HTSL	1008 hrs	0/6

#### **Electrical Characteristic Summary:**

The integrated circuits electrical specifications will remain identical. ESD rating will be standardized for all the affected parts.

#### **List of Affected Standard Parts:**

Part Number	Qualification Vehicle
M74VHC1G125DFT1G	NL17SZ08DFT2G
M74VHC1G125DFT2G	NL17SZ08DFT2G
M74VHC1G126DFT1G	NL17SZ08DFT2G
M74VHC1G126DFT2G	NL17SZ08DFT2G
M74VHC1GT00DFT1G	NL17SZ08DFT2G
M74VHC1GT00DFT2G	NL17SZ08DFT2G
M74VHC1GT02DFT1G	NL17SZ08DFT2G
M74VHC1GT02DFT2G	NL17SZ08DFT2G
M74VHC1GT04DFT1G	NL17SZ08DFT2G
M74VHC1GT04DFT2G	NL17SZ08DFT2G
M74VHC1GT04DFT3G	NL17SZ08DFT2G
M74VHC1GT08DFT1G	NL17SZ08DFT2G
M74VHC1GT08DFT2G	NL17SZ08DFT2G
M74VHC1GT125DF1G	NL17SZ08DFT2G
M74VHC1GT125DF2G	NL17SZ08DFT2G
M74VHC1GT126DF1G	NL17SZ08DFT2G
M74VHC1GT126DF2G	NL17SZ08DFT2G
M74VHC1GT14DFT1G	NL17SZ08DFT2G
M74VHC1GT14DFT2G	NL17SZ08DFT2G
M74VHC1GT32DFT1G	NL17SZ08DFT2G
M74VHC1GT32DFT2G	NL17SZ08DFT2G
M74VHC1GT50DFT1G	NL17SZ08DFT2G
M74VHC1GT50DFT2G	NL17SZ08DFT2G
M74VHC1GT86DFT1G	NL17SZ08DFT2G
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M74VHC1GT86DFT2G	NL17SZ08DFT2G
M74VHC1GU04DFT1G	NL17SZ08DFT2G
M74VHC1GU04DFT2G	NL17SZ08DFT2G
MC74VHC1G00DFT1G	NL17SZ08DFT2G
MC74VHC1G00DFT2G	NL17SZ08DFT2G
MC74VHC1G01DFT1G	NL17SZ08DFT2G
MC74VHC1G01DFT2G	NL17SZ08DFT2G
MC74VHC1G02DFT1G	NL17SZ08DFT2G
MC74VHC1G02DFT2G	NL17SZ08DFT2G
MC74VHC1G04DFT1G	NL17SZ08DFT2G
MC74VHC1G04DFT2G	NL17SZ08DFT2G
MC74VHC1G05DFT1G	NL17SZ08DFT2G
MC74VHC1G05DFT2G	NL17SZ08DFT2G
MC74VHC1G07DFT1G	NL17SZ08DFT2G
MC74VHC1G07DFT2G	NL17SZ08DFT2G
MC74VHC1G08DFT1G	NL17SZ08DFT2G
MC74VHC1G08DFT2G	NL17SZ08DFT2G
MC74VHC1G09DFT1G	NL17SZ08DFT2G
MC74VHC1G09DFT2G	NL17SZ08DFT2G
MC74VHC1G14DFT1G	NL17SZ08DFT2G
MC74VHC1G14DFT2G	NL17SZ08DFT2G
MC74VHC1G32DFT1G	NL17SZ08DFT2G
MC74VHC1G32DFT2G	NL17SZ08DFT2G
MC74VHC1G50DFT1G	NL17SZ08DFT2G
MC74VHC1G50DFT2G	NL17SZ08DFT2G
MC74VHC1G86DFT1G	NL17SZ08DFT2G
MC74VHC1G86DFT2G	NL17SZ08DFT2G
MC74VHC1GU04DF1G	NL17SZ08DFT2G
NL17SZ07DFT2G	NL17SZ08DFT2G
NL17SZ125DFT2G	NL17SZ08DFT2G
NL17SZ08DFT2G	NL17SZ08DFT2G
NL17SZ32DFT2G	NL17SZ08DFT2G
NL17SZ00DFT2G	NL17SZ08DFT2G
NL17SZ04DFT2G	NL17SZ08DFT2G
NL17SZ126DFT2G	NL17SZ08DFT2G
NL17SZ06DFT2G	NL17SZ08DFT2G
NL17SZ02DFT2G	NL17SZ08DFT2G
NL17SZ86DFT2G	NL17SZ08DFT2G
NL17SZ16DFT2G	NL17SZ08DFT2G
MC74VHC1G125DFT1G	NL17SZ08DFT2G
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