



PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

11-OCT-2001

SUBJECT: ON Semiconductor Product/Process Change Notification #11942

TITLE: Qualification of Alternate Assembly/Test Sites for ON Semiconductor SC-88 Logic Devices

EFFECTIVE DATE: 14-Dec-2001

AFFECTED CHANGE CATEGORY:
On Semiconductor Assembly/Test Site
Subcontractor Assembly/Test Site

AFFECTED PRODUCT DIVISION: Logic Products Div

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or Ken Fergus <RRST50@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or
Dianne Von Borstel <RPDR20@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or Dianne Von Borstel <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 qualify an additional assembly/test site for SC-88 Logic devices. The additional site to be qualified is ON Semiconductor's Seremban, Malaysia facility. Currently, Logic SC-88 devices are produced in a subcontracted manufacturer in Hana. ON Semiconductor Seremban, Malaysia is ISO/QS9000 and TS16949 certified. ON Semiconductor Seremban already manufactures SC-88 Discrete devices and SC-88A Logic 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 alternate site qualification will allow ON Semiconductor to continue to meet the high demand for our SC-88 device families.

QUALIFICATION PLAN:

Qualification Vehicle Justification:

NL27WZU04DFT2 (Logic 2 gate), most complex die available.



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RELIABILITY DATA SUMMARY:

Reliability Test Results: Package = SC88, Device = NL27WZU04DF

Test	Conditions	Interval	SS	Rejs
A/clave	Ta= 121 deg C,P=15 psig,RH=100%	96 hrs	3x77	0
Temp Cycle	Ta= -65/+150 deg C	1000 cyc	3x77	0
HTS	Ta= 150 deg C	1000 hrs	3x77	0
Solder Heat	Ta= 260 deg C	1x	3x45	0

Reliability Test Results: Package = SC88A, device = MC74HC1G00DF

Test	Conditions	Interval	SS	Rejs
HTOL	Ta= 145 deg C, Vcc= 5V	1008 hrs	3x80	0
HAST	Ta= 130 deg C,P=18.8psig, RH=85%, Vcc=5V	96 hrs	3x80	0
A/clave	Ta= 121 deg C,P=15 psig,RH=100%	96 hrs	3x80	0
Temp Cycle	Ta= -65/+150 deg C	1000 cyc	3x80	0
MSL1	Pre-cond + Autoclave	96 hrs	3x80	0
MSL1	Pre-cond + Temp Cycle	1000 cyc	3x80	0

ELECTRICAL CHARACTERISTIC SUMMARY:

No change in electrical performance.

CHANGED PART IDENTIFICATION:

Hana product contains a line under the single digit date code letter.

Sbn product does not contain a line under the date code letter.

AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART

- NL27WZ04DFT2
- NL27WZ06DFT2
- NL27WZ07DFT2
- NL27WZ14DFT2
- NL27WZ16DFT2
- NL27WZU04DFT2
- NLAS4599DFT2
- NLAS4599DFT4
- NLAST4599DFT2
- NLAST4599DFT4