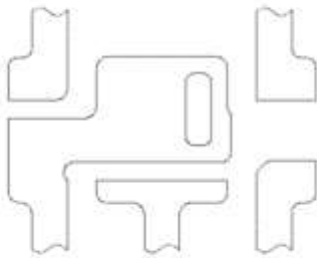
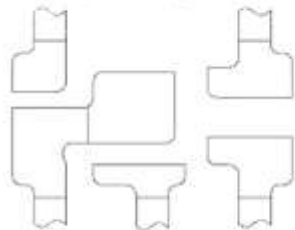


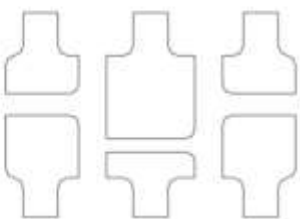
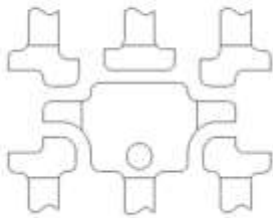
Title of Change:	Qualification of Vanguard Minigates in SC74A and SC74 Package
Proposed First Ship date:	31 Mar 2023 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or logic.fpcn@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact < PCN.Support@onsemi.com >
Marking of Parts/ Traceability of Change:	Custom source on label will show TW instead of JP (TPSCo) to indicate new die source from Vanguard.
Change Category:	Assembly Change, Wafer Fab Change
Change Sub-Category(s):	Material Change, Manufacturing Site Transfer
Sites Affected:	
onsemi Sites	External Foundry/Subcon Sites
onsemi Leshan, China	Vanguard International Semiconductor, Taiwan

Description and Purpose:

This Initial Notification announces that onsemi is qualifying Vanguard wafer fabrication for SC74 and SC74A package. Besides Vanguard wafers, do take note that new lead frame and additional mold compound are also being qualified as part of this change.

SC74A and SC74 package:

	From	To
Lead frame for SC74A	SC74A A42 Cu LF 	SC74A A42 Cu LF (new design, smaller flag size) 

Lead frame for SC74	SC74 A42 Cu LF 	SC74 A42 Cu LF (new design) 
Mold Compound for SC74	Showa Denko GE200F HWG-S	Hysol GR640 HV L1 or Showa Denko GE200F HWG-S
Die Source	TPSCo	Vanguard

There is no product marking change as a result of this change.

Qualification Plan:

QV DEVICE NAME: NL27WZ14DBVT1G

RMS: S82713 / L85044

PACKAGE: SC74

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
ELFR	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC+TC	JESD22-A104	Ta= -65°C to + 150°C	500 cyc
PC+HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias Vcc	96 hrs
PC+uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 / JESD-A113	MSL 1 @260 °C	-
RSH	JESD22- B106	Ta = 265C, 10 sec	-

QV DEVICE NAME: MC74VHC1G14DBVT1G

RMS: S82725

PACKAGE: SC74A

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC+TC	JESD22-A104	Ta= -65°C to + 150°C	500 cyc
PC+HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias Vcc	96 hrs
PC+uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 / JESD-A113	MSL 1 @260 °C	-
RSH	JESD22- B106	Ta = 265C, 10 sec	-



Initial Product/Process Change Notification

Document #: IPCN24889X

Issue Date: 29 Sep 2022

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

To view attached Parts List:

1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file/s.