

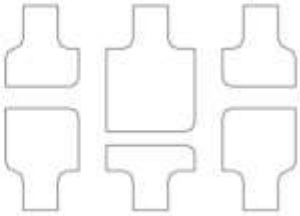
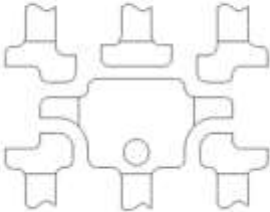
<b>Title of Change:</b>	Qualification of Vanguard Minigates in SC74A and SC74 Package
<b>Proposed First Ship date:</b>	31 Mar 2023 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:logic.fpcn@onsemi.com">logic.fpcn@onsemi.com</a>
<b>PCN Samples Contact:</b>	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.
<b>Type of Notification:</b>	This is an Initial Product/Process Change Notification (IPC24889X) sent to customers. An IPC24889X 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 (FPC24889X). This IPC24889X notification will be followed by a Final Product/Process Change Notification (FPC24889X) at least 90 days prior to implementation of the change. In case of questions, contact < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> >
<b>Marking of Parts/ Traceability of Change:</b>	Custom source on label will show TW instead of JP (TPSCo) to indicate new die source from Vanguard.
<b>Change Category:</b>	Assembly Change, Wafer Fab Change
<b>Change Sub-Category(s):</b>	Material Change, Manufacturing Site Transfer
<b>Sites Affected:</b>	
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>
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	<p>SC74A A42 Cu LF</p>	<p>SC74A A42 Cu LF (new design, smaller flag size)</p>

Lead frame for SC74	<p>SC74 A42 Cu LF</p> 	<p>SC74 A42 Cu LF (new design)</p> 
Mold Compound for SC74	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 #:IPC�24889X

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.

Appendix A: Changed Products

Issue Date: Sep 29, 2022

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NL7SZ19DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ175DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ373DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ374DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ386DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL27WZU04DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74HC1G04DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74HC1G08DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74HC1G32DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74VHC1G14DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74VHC1G32DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74VHC1G125DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74VHC1GT08DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74VHC1GT50DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74VHC1GT125DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
MC74VHC1GT126DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7S00M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7S04M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7S08M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7S14M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7S32M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7S86M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7ST00M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7ST02M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7ST04M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL7SZ98DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7ST08M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ10DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7ST32M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ00M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SU04M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ02M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ04M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ05M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
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NC7SZ08M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ38M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ32M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ125M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ86M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZ126M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ02DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ14DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ08DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7SZU04M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7ST86M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NC7S02M5X		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	
NL17SZ125DBVT1G		NL27WZ14DBVT1G,MC74VHC1G14D	BN1G	