

<b>PDN Number:</b>	20201012000.3	<b>PDN Date:</b>	Oct 14, 2020
<b>Title:</b>	Discontinuance of the SN74AVC4T234ZSUR MicroStar BGA and Replacement with nFBGA package device		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Last date to order:</b>	April 14, 2021	<b>Last date to ship:</b>	April 14, 2022
<b>Change Type:</b>	Product Discontinuance - End Of Life		
<b>Product Discontinuance Notification Details</b>			
<b>Description of Discontinuance:</b>			
<p>Texas Instruments, Incorporated (TI) is announcing the discontinuance of the SN74AVC4T234ZSUR MicroStar BGA and the replacement with an nFBGA package device. A non-cancelable, non-refundable last time buy is being offered per the date shown above. Part numbers are shown in the Product Affected section below.</p> <p>The devices in the MicroStar BGA package were redesigned using a laminate BGA package (nFBGA). nFBGA provides the same X and Y dimensions as MicroStar BGA, and provides pin-to-pin and footprint compatibility. However the nFBGA PCB land pattern and stencil recommendations have been updated to achieve better soldering results after extensive testing and evaluation. For more details, please refer to this <a href="#">nFBGA application note</a>.</p>			
<b>BOM for new nFBGA Package:</b>			
	<b>Assembly Site nFBGA</b>		
Assembly Site	<b>TI Philippines</b>		
Mount Compound	<b>film</b>		
Mold compound	<b>4205283</b>		
Wire Type	<b>Cu</b>		
Substrate	<b>Laminate</b>		
<p>NOTE: There are no samples offered for withdrawn/obsolete products. For samples of any replacement products, please contact your local sales representative or visit the TI store at <a href="https://www.ti.com/store">https://www.ti.com/store</a>.</p>			
<b>Reason for Withdrawal/Discontinuance:</b>			
Due to an equipment End-Of-Life notice from our substrate supplier, we are phasing out certain MicroStar BGA package devices and offering a last time buy.			
<b>Product Affected:</b>			
	<b>RECOMMENDED REPLACEMENT PRODUCTS (nFBGA Package)</b>	<b>REPLACEMENT CODES</b>	
<b>Devices Being Discontinued</b>			
SN74AVC4T234ZSUR	SN74AVC4T234ZWAR	Q	
<b>Replacement Notes:</b>			
F = Similar functionality but not equivalent.			
P = Same functionality but not pin-for-pin equivalent and may not be parametrically equivalent.			
Q = Same functionality and PIN-OUT as the compared device but is NOT an exact equivalent.			
S = EXACT equivalent in functionality and parametrically to the compared device.			

## Qualification Report (nFBGA) Approve Date 8-Jan-2020

### Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: <u>SN74AVC4T234ZWAR</u>	QBS Process Reference: <u>SN74AVCT234ZSU</u>
PC	Preconditioning	(Level 2-260C)	3/1230/0	-
HTOL	Life Test, 150C	300 hrs	-	3/231/0
HAST	Biased HAST, 110C/85%RH	264 Hours	3/231/0	-
HTSL	High Temp Storage Bake 150C	1000 Hours	3/231/0	-
TC	Temperature Cycle, -55/125C	700 Cycles	3/231/0	-
UHAST	Unbiased HAST 110C/85%RH	264 Hours	3/231/0	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-
CDM	ESD - CDM	750V	2/6/0	-
HBM	ESD - HBM	3000V	2/6/0	-
LU	Latch-up	(per JESD78)	3/18/0	-

- QBS: Qual By Similarity

- Qual Device SN74AVC4T234ZWAR is qualified at LEVEL2-260C

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

**Green/Pb-free Status:**

Qualified Pb-Free(SMT) and Green

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

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