

Manual Update Sheet

# **TMS320VC5409A MicroStar BGA Discontinued and Redesigned**



## **ABSTRACT**

This document should be used in conjunction with the device data sheet and describes the updated package designator for the indicated devices.

---

## **Table of Contents**

**1 Package Redesign Details**..... 2

### **Trademarks**

MicroStar BGA™ and MicroStar Junior™ are trademarks of Texas Instruments.  
All other trademarks are the property of their respective owners.

## 1 Package Redesign Details

### Explanation

The devices in the MicroStar BGA™ packaging were redesigned using a laminate nfBGA package. This nfBGA package offers datasheet-equivalent electrical performance. It is also footprint equivalent to the MicroStar BGA. For more details, please refer to this [nfBGA Packaging Application Report](#).

When referencing the device data sheet, use the new package designator in place of the discontinued package designator throughout the document.

The orderable addendum at the end of the device data sheet will reflect the new package designator.

See the following page or the end of the device data sheet for the updated nfBGA package drawing.

**Table 1-1. Package Designator**

Old Package Designator	New Package Designator
GGU	<b>GWS</b>
ZGU	<b>ZWS</b>

### Reason for Discontinuance

Due to an equipment End-Of-Life notice from our substrate supplier, we are phasing out certain MicroStar BGA and MicroStar Junior™ BGA packaging devices and offering a Last Time Buy.

These devices have now been converted to an nfBGA package.

### Devices Affected

The following table describes the devices affected, the old and new package designators, and references to the device data sheet.

**Table 1-2. Devices and Nomenclature**

Device	Discontinued MicroStar BGA Device	Redesigned Laminate nfBGA Device	Device Data Sheet
TMS320VC5409A	TMS320VC5409AGGU12	TMS320VC5409AGWS12	SPRS140
TMS320VC5409A	TMS320VC5409AGGU16	TMS320VC5409AGWS16	SPRS140
TMS320VC5409A	TMS320VC5409AZGU12	TMS320VC5409AZWS12	SPRS140
TMS320VC5409A	TMS320VC5409AZGU16	TMS320VC5409AZWS16	SPRS140

## IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#) or other applicable terms available either on [ti.com](http://ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265  
Copyright © 2022, Texas Instruments Incorporated