

<b>PCN Number:</b>	20160328001	<b>PCN Date:</b>	03/30/2016
<b>Title:</b>	ADS42JBx Die Revision Change		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	06/30/2016	<b>Estimated Sample Availability:</b>	Date provided at sample request.
<b>Change Type:</b>			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>		<input type="checkbox"/>	Part number change

### PCN Details

#### Description of Change:

This notification is to inform of a die revision change to select devices. This design enhancement is being done to increase product manufacturability robustness. Specifically, this enhancement increases serdes timing margin to reduce sensitivity to process variation and more reliably assure product supply. There are no specification or other limits changes associated with this design enhancement. The design changes do not affect the device's guaranteed datasheet specifications or electrical performance.

Affected devices are listed in the product affected section of this document.

#### Reason for Change:

Improved product performance

#### Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

#### Changes to product identification resulting from this PCN:

Die Rev designator will change as shown in the table and sample label below:

Current	New
Die Rev [2P]	<b>Die Rev [2P]</b>
B	<b>C</b>

Sample product shipping label (not actual product label)

**TEXAS INSTRUMENTS**  
 MADE IN: Malaysia  
 2DC: 2Q:  
 MSL 2 / 260C / 1 YEAR SEAL DT  
 MSL 1 / 235C / UNLIM 03/29/04  
 OPT: 39  
 ITEM: LBL: 5A (L) TO: 1750

(1P) SN74LS07NSR  
 (Q) 2000 (D) 0336  
 (31T) LOT: 3959047MLA  
 (4W) TKY (1T) 7523483SI2  
 (2P) REV: (V) 0033317  
 (20L) CSO: SHE (21L) CCO: USA  
 (22L) ASO: MLA (23L) ACO: MYS

#### Product Affected:

ADS42JB46IRGC25	ADS42JB49IRGCR	ADS42JB69IRGCT	ADS42LB69IRGC25
ADS42JB46IRGCR	ADS42JB49IRGCT	ADS42LB49IRGC25	ADS42LB69IRGCR
ADS42JB46IRGCT	ADS42JB69IRGC25	ADS42LB49IRGCR	ADS42LB69IRGCT
ADS42JB49IRGC25	ADS42JB69IRGCR	ADS42LB49IRGCT	

## Qualification Report

### ADS42JBXX Design Revision Approve Date 24-Mar-2016

#### Product Attributes

Attributes	Qual Device: ADS42JB69	QBS Product Reference: ADS42JB69IRGC-RFAB	QBS Process Reference: VSP6825BZRC	QBS Package Reference: SN75DP130DSRGZ	QBS Package Reference: VSP8133RSKR
Assembly Site	UTAC	UTAC	PHI	UTAC	UTAC
Package Family	QFN	QFN	JRBGA	QFN	QFN
Wafer Fab Supplier	RFAB	RFAB	HIJI, RFAB	UMC12A	DFAB, RFAB
Wafer Process	C05	C05	C05	C027	C05

-QBS: Qual By Similarity  
-Qual Device ADS42JB69 is qualified at LEVEL3-260C

#### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ADS42JB69	QBS Product Reference: ADS42JB69IRGC-RFAB	QBS Process Reference: VSP6825BZRC	QBS Package Reference: SN75DP130DSRGZ	QBS Package Reference: VSP8133RSKR
AC	Autoclave 121C	96 Hours	-	4/233/0	-	3/231/0	1/77/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	-	Pass	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/230/0	3/231/0	-
HBM	ESD - HBM	3000 V	1/3/0	-	-	-	-
CDM	ESD - CDM	1500 V	1/3/0	-	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	3/231/0	-
HTOL	Life Test, 140C	480 Hours	-	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	3/230/0	3/231/0	-	-
LU	Latch-up (per JESD78)		1/6/0	-	2/12/0	3/18/0	1/6/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/230/0	3/231/0	3/231/0	1/77/0
WBP	Bond Pull	Wires	-	-	-	1/76/0	1/76/0
WBS	Ball Bond Shear	Wires	-	-	-	1/76/0	-

-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 you can contact your local Field Sales Representative.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>