**PCN Number:** 20150714000 PCN Date: 07/17/2015 Title: UCC28600 Die Revision Change **Customer Contact:** PCN Manager **Quality Services** Dept: **Estimated Sample** Date provided at **Proposed 1st Ship Date:** 10/17/2015 **Availability:** sample request. **Change Type: Assembly Process Assembly Materials** Assembly Site Design **Electrical Specification** Mechanical Specification **Test Site** Packing/Shipping/Labeling **Test Process** Wafer Bump Site Wafer Bump Material Wafer Bump Process Wafer Fab Site Wafer Fab Materials Wafer Fab Process Part number change

## **PCN Details**

# **Description of Change:**

This notification is to inform of a die revision change to select devices. The design change does not affect the device's guaranteed datasheet specifications or electrical performance. The Design changes were made to:

- 1. Improve high temperature operation.
- 2. Improve noise immunity on VDD.

Affected devices are listed in "Product Affected" section.

## **Reason for Change:**

Improved product performance

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

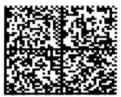
### Changes to product identification resulting from this PCN:

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

Current New Die Rev [2P] Die Rev [2P] Α C

Sample product shipping label to indicate die rev location (not actual product label)







### **Product Affected:**

TPS92010D	UCC28600D	UCC28600DR	UCL64010D
TPS92010DR	UCC28600DG4	UCC28600DRG4	UCL64010DR

#### **Qualification Report**

## UCC28600 PG3 Qual

Approved June 29, 2015

#### Product Attributes

Attributes	Qual Device: UCC28600	QBS Product Reference: TPS92010	QBS Product Reference: UCC28600	QBS Product Reference: UCC28600	QBS Process Reference: TPS40211DGQR	QBS Package Reference: TPS2042BD	QBS Package Reference: TPS2419DR
Assembly Site	FMX	MEX	FMX	FMX	ASESH	FMX	FMX
Package Family	SOIC	-	SOIC	SOIC	VSSOP	-	-
Wafer Fab Supplier	DFAB	DLN	DLN	DLN	DFAB	HIJI	MIHO
Wafer Process	LBC4	LBC4/200 BOAC	LBC4/200 BOAC	LBC4/200 BOAC	LBC4	LBC4X	LBC7

#### Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: UCC28600	QBS Product Reference: TPS92010	QBS Product Reference: UCC28600	QBS Product Reference: UCC28600	QBS Process Reference: TPS40211DGQR	QBS Package Reference: TPS2042BD	QBS Package Reference: TPS2419DR
AC	Autoclave 121C	96 Hours	-	-	-	-	-	3/231/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0	1/30/0	-	1/30/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	-	3/231/0
HBM	ESD - HBM	2000 V	1/3/0	1/3/0	1/3/0	1/3/0	-	-	-
CDM	ESD - CDM	1000 V	1/3/0	1/3/0	1/3/0	1/3/0	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	1/77/0	2/154/0	2/154/0	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	3/231/0	3/231/0
LI	Lead Pull to Destruction	Leads	-	-	-	-	-	3/66/0	-
LU	Latch-up	(per JESD78)	1/6/0	1/5/0	1/6/0	1/6/0	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	1/77/0	1/77/0	1/77/0	3/231/0	3/231/0	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-	3/231/0	-	-

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

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	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com

<sup>-</sup> Qual Devices qualified at LEVEL1-260CG; UCC28600, UCC28600, UCC28600

<sup>-</sup> The following are equivalent HTOL options based on an activation energy of 0.7 eV: 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 0.7 eV: 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/