

### 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

# PCN#20150209000 Qualification of TI Taiwan for Alternate Assembly site with new BOM for the DP83848 family of devices Change Notification / Sample Request

**Date:** 2/11/2015

To: Newark/Farnell PCN

#### Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN\_ww\_admin\_team@list.ti.com).

Sincerely,

PCN Team SC Business Services

# 20150209000 Attachment: 1

# **Products Affected:**

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	<b>CUSTOMER PART NUMBER</b>
DP83848CVV/NOPB	null
DP83848CVVX/NOPB	null
DP83848IVV/NOPB	null
DP83848IVVX/NOPB	null

Technical details of this Product Change follow on the next page(s).

PCN	<b>PCN Number:</b> 20150209000 <b>PCN Date:</b> 2/10/201						2/10/2015							
Titl	Title: Qualification of TI Taiwan for Alternate Assembly site with new BOM for the DP83848 family of devices													
Cus	stome	er Contact:	PCN	l Ma	<u>nager</u>	D	ept:	Q	uality Se	rvice	es			
Pro	<b>Proposed 1<sup>st</sup> Ship Date:</b> 05/10/2015 <b>Estimated Sample Availability:</b> 02/28/2015						28/2015							
Cha	Change Type:													
$\boxtimes$	Asse	mbly Site	Site Assembly			Pro	Process X Ass			Ass	ssembly Materials			
	Design Electrical:			Spe	Specification Mecha			chanical	Specif	ication				
☐ 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			5										
•					Part numb	er	chang	е						
PCN Details														

### **Description of Change:**

Texas Instruments is pleased to announce the qualification of TI Taiwan as an alternate Assembly location for the family of DP83848 devices. BOM differences are noted below:

	TI Melaka	ASEK	TAI
<b>Mount Compound</b>	8001746	SID#1400013111	4211470
Mold Compound	8095183	SID#1800008161	4209640
Bond Wire	Au, 1.0 mils	Au, 1.0 mils	Cu, 0.8 mils
<b>Composition/Diameter</b>			
Lead Finish	Matte Sn	Matte Sn	NiPdAu

Upon expiry of this PCN TI will combine lead free solutions in a single standard part number, for example; <u>DP83848CVV/NOPB</u> - can ship with both Matte Sn and NiPdAu/Ag.

# Example:

- Customer order for 7500units of **DP83848CVV/NOPB** with 2500 units SPQ (Standard Pack Quantity per Reel).
- TI can satisfy the above order in one of the following ways.
  - 3 Reels of NiPdAu finish. I.
  - II. 3 Reels of Matte Sn finish
  - III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish.
  - IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish.

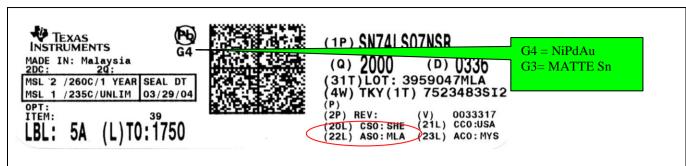
#### **Reason for Change:**

Continuity of Supply

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

None

Changes to product identification resulting from this PCN:				
Assembly Site				
TIEM-AT		Assembly Site Origin (22L)	ASO: CU6	
ASEK		Assembly Site Origin (22L)	ASO: ASF	
TI Taiwan		Assembly Site Origin (22L)	ASO: TAI	
Sample product shipping label (not actual product label)				



# **Topside Device marking:**

Assembly site code for CU6= U Assembly site code for ASF= 7

**Assembly site code for TAI= T** 

# **Product Affected**

DP83848CVV/NOPB	DP83848IVV/NOPB	DP83848IVVX/S7002477	DP83848PVVX/NOPB	
DP83848CVVX/NOPB	DP83848IVVX/NOPB	DP83848PVV/NOPB		



#### **Qualification Report**

# DP83848 Product. LQFP package assembled at TITL Approved 12/16/2014

#### **Product Attributes**

Attributes	Qual Device: DP83848CVV/NOPB
Assembly Site	TAI/TITL
Package Family	LQFP
Flammability Rating	UL 94 V-0
Wafer Fab Site	MFAB
Wafer Fab Process	CMOS9T

- QBS: Qual By Similarity
- Qual Device DP83848CVV/NOPB is qualified at LEVEL3-260C

### **Qualification Results**

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

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

Туре	Test Name / Condition	Duration	Qual Device: DP83848CVV/NOPB
PC	PreCon Level 3	Elec. Test at 25C	1/245/0
HAST	Biased HAST, 130C/85%RH	96 hrs.	1/77/0
AC	Autoclave 121C	196 hrs.	1/77/0
TC	Temperature Cycle, -65/150C	1000 Cyc.	1/77/0
TC	Post Temp Cycle Bond Pull	bond pull/shear	pass
HTSL	High Temp Storage Bake 170C	420hrs	1/45/0
MQ	Manufacturability (Assembly)	(Approved by A-T site)	1/Pass

- 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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com