

PCN Number:	20150209000	PCN Date:	2/10/2015
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Title:	Qualification of TI Taiwan for Alternate Assembly site with new BOM for the DP83848 family of devices		
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Customer Contact:	PCN Manager	Dept:	Quality Services
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Proposed 1st Ship Date:	05/10/2015	Estimated Sample Availability:	02/28/2015
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Change Type:			
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Design	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Bump Site
<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Wafer Bump Process	<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
<input type="checkbox"/>	Part number change		

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
Mount Compound	8001746	SID#1400013111	4211470
Mold Compound	8095183	SID#1800008161	4209640
Bond Wire Composition/Diameter	Au, 1.0 mils	Au, 1.0 mils	Cu, 0.8 mils
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; [DP83848CVV/NOPB](#) – 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.
 - I. 3 Reels of NiPdAu finish.
 - 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)

TEXAS
INSTRUMENTS

MADE IN: Malaysia
2DC: 2Q:

MSL 2 /260C/1 YEAR	SEAL DT
MSL 1 /235C/UNLIM	03/29/04

OPT:
ITEM:

39
LBL: 5A (L)T0:1750

(Pb)
G4



(1P) SN741 S07NSR

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

G4 = NiPdAu
G3 = MATTE Sn

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

Type	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