PCN Number:	20220208000.1	PCN Date:	February 16, 2022
Title:	Qualification of TIPI as an alternate Assembly site for select devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	May 16, 2022	Estimated Sample Availability:	Date provided at sample request

Change Type:					
☒	Assembly Site	☐	Design	☐	Wafer Bump Site
☒	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials
				☐	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments Incorporated is announcing the qualification of TIPI as an additional Assembly site for the select devices listed below. Construction differences are noted below:

What	ASEK	TIEM	TITL	TIPI
Mold Compound	SID#1800008161	8095183	4209640	**4222198**
Mount Compound	SID#1400013111	8001746	4211470	**4211470**
Lead Finish	Matte Sn	Matte Sn	NiPdAu	**NiPdAu**
Bond wire/diameter	Au/1.0 mil	Au/1.0 mil	Cu/0.8 mil	**Cu/0.8 mil**
ECAT	G3	G3	G4	**G4**

Upon expiration 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.

Reason for Change:

Supply continuity

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

None

Impact on Environmental Ratings

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

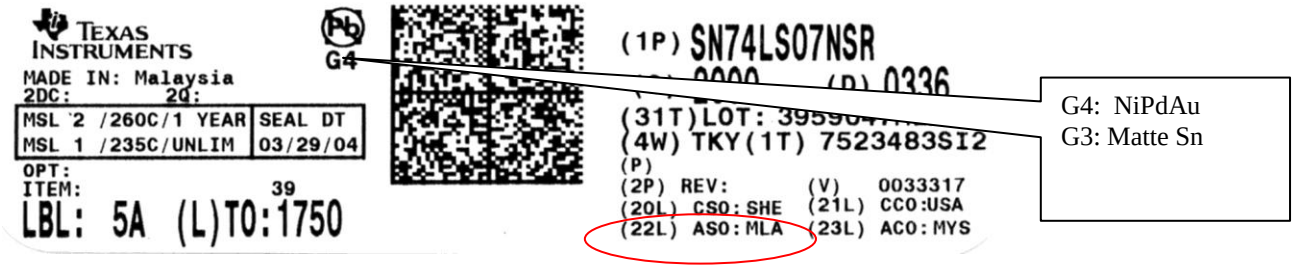
RoHS	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
ASEK	ASF	TWN	Kaohsiung
TIEM	CU6	MYS	Melaka
TI Taiwan	TAI	TWN	Chung Ho, New Taipei City

TIPI	PHI	PHL	Baguio City

Sample product shipping label (not actual product label)



Product Affected:

DP83848CVV/NOPB	DP83848EVVX/NOPB	DP83848IEVVX/NOPB	DP83848IVVX/NOPB
DP83848CVVX/NOPB	DP83848IEVV/NOPB	DP83848IVV/NOPB	DP83848IVVX/S7002477
DP83848EVV/NOPB			

TEXAS INSTRUMENTS

TI Information
Selective disclosure

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

Type	Test Name / Condition	Duration
PC	Preconditioning	(MSL3 @ 260C peak +5/-0C)
CDM	ESD CDM	+/- 1000V
ED	Electrical Characterization	Per Datasheet Parameters
HAST	**Biased HAST	130C/85%RH/33.3 psia (96 Hrs.), Vddmax
HBM	ESD HBM	+/-4000V
LU	Latch-up	(per JESD78)-125C
MISC	Bond Pad Cratering Check	During MQ
MISC	Bond Pad Cratering Check	Post 500 Cycles
MQ	Manufacturability (Assembly)	(per mfg. Site specification)
MSL	Thermal Path Integrity	(level 3 @ 260C +5/-0C)
PD	Physical Dimensions	(per mechanical drawing)
TC	**T/C -65C/150C	-65C/+150C (500, Cycles)
UHAST	**Unbiased HAST	130C/85%RH/33.3 psia (96 Hours)
WBP	Bond Pull	76 Wire, 3 units min
WBS	Ball Bond Shear	76 balls, 3 units min
XRAY	X-ray	(top side only)

Type	Test Name / Condition	Duration
BP	Post 500 TC Bond Pull	30 ball bonds, min. 5 units

- QBS: Qual By Similarity
- Qual Device DP83848EVV/NOPB is qualified at LEVEL3-260CG
- 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

TI Qualification ID: 20210316-139150

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

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USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN_ww_admin_team@list.ti.com