



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20220208000.1

**Qualification of TIPI as an alternate Assembly site for select devices
Change Notification / Sample Request**

Date: February 16, 2022

To: TOKYO ELECTRON DEVICE (DSTR) 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.

Texas Instruments requires acknowledgement of 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 samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

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 or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team
SC Business Services

20220208000.1
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	CUSTOMER PART NUMBER
DP83848CVVX/NOPB	null
DP83848IVV/NOPB	null
DP83848IVVX/NOPB	null
DP83848CVV/NOPB	null

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

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:																																			
<input checked="" type="checkbox"/> Assembly Site	<input type="checkbox"/> Design	<input type="checkbox"/> Wafer Bump Site																																	
<input checked="" type="checkbox"/> Assembly Process	<input type="checkbox"/> Data Sheet	<input type="checkbox"/> Wafer Bump Material																																	
<input checked="" type="checkbox"/> Assembly Materials	<input type="checkbox"/> Part number change	<input type="checkbox"/> Wafer Bump Process																																	
<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Site	<input type="checkbox"/> Wafer Fab Site																																	
<input type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input type="checkbox"/> Wafer Fab Materials																																	
		<input type="checkbox"/> Wafer Fab Process																																	
PCN Details																																			
Description of Change:																																			
<p>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:</p> <table border="1" style="margin: 10px auto; width: 80%;"> <thead> <tr> <th>What</th> <th>ASEK</th> <th>TIEM</th> <th>TITL</th> <th>TIPI</th> </tr> </thead> <tbody> <tr> <td>Mold Compound</td> <td>SID#1800008161</td> <td>8095183</td> <td>4209640</td> <td>4222198</td> </tr> <tr> <td>Mount Compound</td> <td>SID#1400013111</td> <td>8001746</td> <td>4211470</td> <td>4211470</td> </tr> <tr> <td>Lead Finish</td> <td>Matte Sn</td> <td>Matte Sn</td> <td>NiPdAu</td> <td>NiPdAu</td> </tr> <tr> <td>Bond wire/diameter</td> <td>Au/1.0 mil</td> <td>Au/1.0 mil</td> <td>Cu/0.8 mil</td> <td>Cu/0.8 mil</td> </tr> <tr> <td>ECAT</td> <td>G3</td> <td>G3</td> <td>G4</td> <td>G4</td> </tr> </tbody> </table> <p>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.</p>						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
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																															
Reason for Change:																																			
Supply continuity																																			
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																																			
None																																			
Impact on Environmental Ratings																																			
<p>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.</p> <table border="1" style="margin: 10px auto; width: 80%;"> <thead> <tr> <th>RoHS</th> <th>REACH</th> <th>Green Status</th> <th>IEC 62474</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> </tr> </tbody> </table>						RoHS	REACH	Green Status	IEC 62474	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change																						
RoHS	REACH	Green Status	IEC 62474																																
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> 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)			
   <p> (1P) SN74LS07NSR (31T) LOT: 3959047 (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CC0: USA (22L) AS0: MLA (23L) ACO: MYS </p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> G4: NiPdAu G3: Matte Sn </div> <p> MADE IN: Malaysia 2DC: 20: MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750 </p>			
Product Affected:			
DP83848CVV/NOPB	DP83848EVVX/NOPB	DP83848IEVVX/NOPB	DP83848IVVX/NOPB
DP83848CVVX/NOPB	DP83848IEVV/NOPB	DP83848IVV/NOPB	DP83848IVVX/S7002477
DP83848EVV/NOPB			



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 DF83848EVV/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.

Location	E-Mail
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

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale (www.ti.com/legal/termsofsale.html) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.