



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

**PCN#20220804000.1**

**Qualification of TI Malaysia as an additional assembly site for select Devices  
Change Notification / Sample Request**

**Date:** August 04, 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 additional data is 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](mailto: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

**20220804000.1**  
**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 twenty-four (24) months. The corresponding customer part number is also listed, if available.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
OPA551PA	null
OPA177GP	null
OPA445AP	null

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

<b>PCN Number:</b>	20220804000.1		<b>PCN Date:</b>	August 04, 2022													
<b>Title:</b>	Qualification of TI Malaysia as an additional assembly site for select Devices																
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services														
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Nov 4, 2022		<b>Sample requests accepted until:</b>	Sept 4, 2022*													
<b>*Sample requests received after Sept 4, 2022 will not be supported.</b>																	
<b>Change Type:</b>																	
<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												
<b>PCN Details</b>																	
<b>Description of Change:</b>																	
<p>Texas Instruments Incorporated is announcing the qualification of TI Malaysia as an alternate Assembly site for devices listed below in the product affected section. Construction differences are as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>UTL2</th> <th>TI Malaysia</th> </tr> </thead> <tbody> <tr> <td>Mount Compound</td> <td>SID#PZ0013</td> <td>4147858</td> </tr> <tr> <td>Bond wire composition/diameter</td> <td>Au, 1.3mil</td> <td>Cu, 1.3 mil or 1.0 mil</td> </tr> <tr> <td>Mold Compound</td> <td>SID#CZ0239</td> <td>4211880</td> </tr> </tbody> </table>							UTL2	TI Malaysia	Mount Compound	SID#PZ0013	4147858	Bond wire composition/diameter	Au, 1.3mil	Cu, 1.3 mil or 1.0 mil	Mold Compound	SID#CZ0239	4211880
	UTL2	TI Malaysia															
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Mold Compound	SID#CZ0239	4211880															
<b>Reason for Change:</b>																	
Supply continuity																	
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>																	
None																	
<b>Impact on Environmental Ratings</b>																	
<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-left: auto; margin-right: auto;"> <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				
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<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change														
<b>Changes to product identification resulting from this PCN:</b>																	
<b>Assembly Site</b>	<b>Assembly Site Origin (22L)</b>	<b>Assembly Country Code (23L)</b>	<b>Assembly City</b>														
UTL2	NS2	THA	Bangpakong														
<b>MLA</b>	<b>MLA</b>	<b>MYS</b>	<b>Kuala Lumpur</b>														
Sample product shipping label (not actual product label)																	

TEXAS INSTRUMENTS  
MADE IN: Malaysia  
2DC: 20:

G4

(1P) SN74LS07NSR  
(Q) 2000 (D) 0336  
(31T) LOT: 3959047MLA  
(4W) TKY (1T) 7523483SI2  
(P)  
(2P) REV: (V) 0033317  
(20L) CS0: SHE (21L) CC0: USA  
(22L) AS0: MLA (23L) AC0: MYS

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

OPT:  
ITEM: 39  
LBL: 5A (L)T0:1750

**Product Affected:**

DRV134PA	OPA177GP	SN65HVD1780P	SN65HVD1785P
INA134PA	OPA445AP	SN65HVD1781P	SN65HVD1786P
OPA134PA	OPA551PA	SN65HVD1782P	UCC3804N
OPA177FP			

TI Information  
Selective Disclosure

**Qualification Report**  
Approve Date 01-August-2022

**Qualification Results**

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

Type	#	Test Name	Condition	Duration	QBS Reference: ADC0832CCN/NOPB	QBS Reference: LM231AN/NOPB	QBS Reference: LM2594HVN- ADJ/NOPB	QBS Reference: LMC6482IN/NOPB
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0	3/231/0	3/231/0	3/231/0
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	3/228/0	3/228/0	3/228/0	3/228/0
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	3/228/0	3/228/0	3/228/0	3/228/0
PD	C4	Physical Dimensions	(per mechanical drawing)	-	3/15/0	3/15/0	3/15/0	3/15/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	1/30/0

- QBS: Qual By Similarity
- 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: R-CHG-2204-078

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

Location	E-Mail
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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