

**PCN# 20180423001**  
**Qualification of GTBF as Additional Assembly/Test Site**  
**for Select Devices**  
**Change Notification / Sample Request**

**Date:** April 25, 2018

**To:** TOKYO ELECTRON DEVICE (DSTR) PCN

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 proposed first ship date is indicated 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, contact your local Field Sales Representative or the PCN Manager ([PCN\\_ww\\_admin\\_team@list.ti.com](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

PCN Team  
SC Business Services

**20180423001**  
**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.

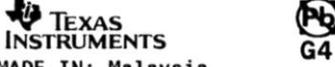
<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
TLV1117LV33DCYT	null
TLV1117LV12DCYT	null
TLV1117LV33DCYR	null
TLV1117LV12DCYR	null
TLV1117LV25DCYR	null
TLV1117LV15DCYT	null
TLV1117LV18DCYR	null
TLV1117LV30DCYR	null

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

<b>PCN Number:</b>	20180423001	<b>PCN Date:</b>	Apr 25, 2018												
<b>Title:</b>	Qualification of GTBF as Additional Assembly/Test 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>	Jul 25, 2018	<b>Estimated Sample Availability:</b>	Date Provided at Sample request												
<b>Change Type:</b>															
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design												
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet												
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change												
<input type="checkbox"/>	Mechanical Specification	<input checked="" 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 Fab Site												
		<input type="checkbox"/>	Wafer Fab Materials												
		<input type="checkbox"/>	Wafer Fab Process												
<b>PCN Details</b>															
<b>Description of Change:</b>															
Texas Instruments Incorporated is announcing the qualification GTBF as an Additional Assembly and Test Site for select devices listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.															
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>NFME</td> <td>NFM</td> <td>CHN</td> <td>Chongchuan</td> </tr> <tr> <td><b>GTBF</b></td> <td><b>GTF</b></td> <td><b>CHN</b></td> <td><b>Dong Guan</b></td> </tr> </tbody> </table>				Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	NFME	NFM	CHN	Chongchuan	<b>GTBF</b>	<b>GTF</b>	<b>CHN</b>	<b>Dong Guan</b>
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City												
NFME	NFM	CHN	Chongchuan												
<b>GTBF</b>	<b>GTF</b>	<b>CHN</b>	<b>Dong Guan</b>												
<b>Material Differences:</b>															
	<b>NFME</b>	<b>GTBF</b>													
Mount Compound	SID# A-09	SID# EY0000011													
Mold Compound	SID# R-17	SID# EN0000054													
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.															
<b>Reason for Change:</b>															
Continuity of Supply															
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>															
None															
<b>Anticipated impact on Material Declaration</b>															
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the <a href="#">TI Eco-Info website</a> . There is no impact to the material meeting current regulatory compliance requirements with this PCN change.												
<b>Changes to product identification resulting from this PCN:</b>															

Assembly Site		
NFME	Assembly Site Origin (22L)	ASO: NFM
GTBF (Great Team Backend Foundry)	Assembly Site Origin (22L)	ASO: GTF

Sample product shipping label (not actual product label)




MADE IN: Malaysia  
2DC: 2d:

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

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

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

**Product Affected:**

TLV1117LV12DCYR	TLV1117LV15DCYT	TLV1117LV25DCYR	TLV1117LV30DCYT
TLV1117LV12DCYT	TLV1117LV18DCYR	TLV1117LV25DCYT	TLV1117LV33DCYR
TLV1117LV15DCYR	TLV1117LV18DCYT	TLV1117LV30DCYR	TLV1117LV33DCYT

## Qualification Report

### Qualify GTBF as Subcon A/T Site for PWR Packages: Phase 3 APP-LP-LDO Devices (4 pin SOT 223)

Approve Date 17-Apr-2018

#### Product Attributes

Attributes	Qual Device: TLV1117LV33DCYR
Assembly Site	GTBF
Package Family	SOT223
Flammability Rating	UL 94 V-0
Wafer Fab Supplier	MIHO8
Wafer Process	LBC7

- Qual Device TLV1117LV33DCYR is qualified at LEVEL1-260CG

#### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TLV1117LV33DCYR
AC	Autoclave 121C	96 Hours	3/231/0
CDM	ESD - CDM	500 V	3/9/0
ED	Electrical Characterization	Per Datasheet Parameters	3/30/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
HTOL	Life Test, 125C	336 Hours	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0
MSL	Moisture Sensitivity	Level 1-260C	3/36/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0
VM	Post Autoclave, Visual Quality Reliability Inspection	96 Hours	Pass
VM	Post Biased HAST, Visual Quality Reliability	96 Hours	Pass

	Inspection		
VM	Post Temp. Cycle, Visual Quality Reliability Inspection	500 Cycles	Pass
YLD	FTY and Bin Summary	--	Pass

- 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/1000 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/1000 Hours, and 170C/420 Hours
- The following are equivalent Temperature Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

THIS INFORMATION RELATING TO QUALITY AND RELIABILITY IS PROVIDED "AS IS." Product information detailed in this report may not accurately reflect TI's current product materials, processes and testing used in the construction of the TI products. Customers are solely responsible to conduct sufficient engineering and additional qualification testing to determine whether a device is suitable for use in their applications. Using TI products outside limits stated in TI's datasheet may void TI's warranty. See TI's Terms of Sale at "<http://www.ti.com/lscds/ti/legal/termsofsale.page>".

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

<b>Location</b>	<b>E-Mail</b>
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>