



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

**PCN# 20140709002**  
**Qualification of TI Chengdu as Additional Assembly and Test Site**  
**for Select X2QFN/X2SON Package Devices**  
**Change Notification / Sample Request**

**Date:** 7/16/2014  
**To:** MOUSER 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.

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 changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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  
Phone: +1(214) 480-6037  
Fax: +1(214) 480-6659

**20140709002**  
**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>
SN74AUP1G02DSFR	null
SN74AUP1G126DSFR	null
SN74AUP1G14DSFR	null
SN74AUP1G32DSFR	null
SN74AUP2G07DSFR	null
SN74LVC1G07DSFR	null
SN74LVC1G08DSFR	null
SN74LVC1G11DSFR	null
SN74LVC2G07DSFR	null
TLV70718PDQNR	null
TLV707285PDQNR	null
TLV70736PDQNR	null
TLV71320DQNR	null
TLV71718PDQNR	null
TLV71727PDQNR	null
TLV71729PDQNR	null
TLV71733PDQNR	null
TPL0102-100RUCR	null
TPS3839G33DQNR	null
TPS3839K50DQNR	null

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

<b>PCN Number:</b>	20140709002			<b>PCN Date:</b>	07/16/2014
<b>Title:</b>	Qualification of TI Chengdu (CDAT) as Additional Assembly and Test Site for Select X2QFN/X2SON Package Devices				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Phone:</b>	+1(214)480-6037		<b>Dept:</b> Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	10/16/2014	<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"/>	Wafer Bump Site	
<input type="checkbox"/> Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material	
<input type="checkbox"/> Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process	
<input type="checkbox"/> Mechanical Specification	<input checked="" 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:

Texas Instruments Incorporated is announcing the qualification of TI Chengdu (CDAT) as Additional Assembly and Test Site for select devices listed in the "Product Affected" Section. Current assembly sites are as follows and material differences as follows.

	<b>From</b>	<b>To</b>
<b>Assembly/Test Sites</b>	JCETCZ, HNT, NSE	<a href="#">CDAT</a>

Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.

#### Reason for Change:

Continuity of supply.

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

None

#### Changes to product identification resulting from this PCN:

Assembly Site		
JCETCZ	Assembly Site Origin (22L)	ASO: GP6
HNT	Assembly Site Origin (22L)	ASO: HNT
NSE	Assembly Site Origin (22L)	ASO: NSE
<a href="#">TI Chengdu (CDAT)</a>	Assembly Site Origin (22L)	ASO: CDA

ASSEMBLY SITE CODES: JCETCZ = F, HNT = H, NSE = J, [CDAT](#) = 8

Sample product shipping label (not actual product label)



**(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**

<b>Product Affected:</b>			
SN1205066PDQNR	SN74LVC1G08DSFR	TLV707285PDQNR	TPL0102-100RUCR
SN1206013PDQNR	SN74LVC1G11DSFR	TLV70732DQNR	TPS3839G18DQNR
SN74AUP1G02DSFR	SN74LVC1G66DSFR	TLV70736PDQNR	TPS3839G33DQNR
SN74AUP1G126DSFR	SN74LVC2G07DSFR	TLV71320DQNR	TPS3839K33DQNR
SN74AUP1G14DSFR	TLV70712PDQNR	TLV717185PDQNR	TPS3839K50DQNR
SN74AUP1G32DSFR	TLV70718PDQNR	TLV71718PDQNR	TPS3839L30DQNR
SN74AUP2G07DSFR	TLV70719PDQNR	TLV71727PDQNR	
SN74LVC1G02DSFR	TLV70725PDQNR	TLV71729PDQNR	
SN74LVC1G07DSFR	TLV707285DQNR	TLV71733PDQNR	

## **Qualification Status Report**

### Chengdu A/T startup X2QFN/X2SON

#### Product Attributes

	<b>Qual Device: SN74LVC1G04DSFR</b>	<b>Qual Device: TLV70728PDQNR</b>	<b>Qual Device: TPL0102-100RUCR</b>
<b>Die Attributes</b>			
<b>Die Revision</b>	G	B	A
<b>Wafer Fab Supplier</b>	CFAB	FFAB	MH8
<b>Wafer Fab Process</b>	ASLC10	LBC7	LBC7T
<b>Package Attributes</b>			
<b>Assembly Site</b>	CHENGDU	CHENGDU	CHENGDU
<b>Package Family</b>	X2SON	X2SON	X2QFN
<b>Package Designator</b>	DSF	DQN	RUC
<b>Package Size (mils)</b>	39.37 X 39.37	39.37 X 39.37	78.74 X 78.74
<b>Body Thickness (mils)</b>	15.75	15.75	15.75
<b>Pin Count</b>	6	4	14
<b>Lead Frame Type</b>	Cu	Cu	Cu
<b>Lead Finish</b>	NiPdAu	NiPdAu	NiPdAu
<b>Lead Pitch (mils)</b>	13.78	25.59	15.75
<b>Mount Compound</b>	4221460	4221460	4221460
<b>Mold Compound</b>	4210087	4210087	4210087
<b>Bond Wire Composition</b>	Au	Au	Au
<b>Bond Wire Diameter (mils)</b>	0.8	0.8	0.8
<b>Flammability Rating</b>	UL 94 V-0	UL 94 V-0	UL 94 V-0

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260C: SN74LVC1G04DSFR, TLV70728PDQNR, TPL0102-100RUCR

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

Type	Test Name / Condition	Duration	Qual Device: SN74LVC1G04DSFR	Qual Device: TLV70728PDQNR	Qual Device: TPL0102-100RUCR
HAST	Biased HAST	130C/85% RH	July 30, 2014	Aug 2, 2014	July 30, 2014
HTOL	High Temperature Operating Life Test 150C	300 Hours	3/231/0	N/A	July 30, 2014
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	July 28, 2014
TC	Temperature Cycle, -65/+150C	500 Cycles	3/231/0	3/255/0	July 30, 2014
HTSL	High Temp Storage Bake 170C	420 Hours	July 19, 2014	July 21, 2014	Aug 10, 2014
ED	Electrical Characterization	Per Datasheet Parameters	Aug 29, 2014	July 18, 2014	July 31, 2014
PD	Physical Dimensions	Per specification	3/15/0	3/15/0	3/15/0
WBS	Ball Bond Shear	76 wires	3/228/0	3/228/0	3/228/0
WBP	Wire Pull	76 wires	3/228/0	3/228/0	3/228/0
XRAY	X Ray	(top side only)	3/15/0	3/15/0	3/15/0
DS	Die Shear	30 Die	3/90/0	3/90/0	3/90/0
SD	Solderability	8 Hours Steam Age	3/22/0	3/22/0	July 22, 2014
SA	Salt Atmosphere	24 Hours	N/A	3/22/0	July 22, 2014
FLAMM	Flammability	UL 94 V-0	N/A	N/A	July 22, 2014
HBM	ESD-HBM	1000V	N/A	3/12/0	N/A
CDM	ESD-CDM	250V	N/A	3/9/0	N/A
TIS	Thermal Integrity Sequence	Level 1 @260C	N/A	July 24, 2014	N/A
MSL	Moisture Sensitivity Level	Level 1 @260C	N/A	N/A	July 31, 2014

- 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: 20131112-97501

N/A = Not Applicable

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>