



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20140915000A

**Qualification of TI Chengdu as Additional Assembly and Test Site
for Select Devices on X2SON and WQFN Package
Change Notification / Sample Request**

Date: 5/8/2015
To: MOUSER PCN

Dear Customer:

Revision A is to announce the retraction of select devices.

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).

Sincerely,

PCN Team
SC Business Services

20140915000A

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 |
|---------------|-----------------------------|
| TPS62080DSGT | null |
| TPS62082DSGT | null |

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

| | | | | |
|---|---|--------------------|--------------------------|---------------------|
| PCN Number: | 20140915000A | | PCN Date: | 05/08/2015 |
| Title: | Qualification of TI Chengdu as Additional Assembly and Test Site for Select Devices on X2SON and WQFN Package | | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services | |
| Change Type: | | | | |
| <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 checked="" 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:

Revision A is to announce the retraction of select devices in Group 1 of the Product Affected section. These devices will continue to be manufactured as prior and will not be subjected to the change described in this notification. Affected devices are identified with a **strike-through** and are highlighted in yellow in the Product Affected Section.

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.

| | Existing Sites | Additional Site |
|---------------------|---------------------|-----------------|
| Assembly/Test Sites | TI-CLARK, CARZ, NSE | CDAT |

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 | | |
|-------------------|----------------------------|----------|
| TI-CLARK | Assembly Site Origin (22L) | ASO: QAB |
| CARZ | Assembly Site Origin (22L) | ASO: CSZ |
| NSE | Assembly Site Origin (22L) | ASO: NSE |
| TI Chengdu (CDAT) | Assembly Site Origin (22L) | ASO: CDA |

ASSEMBLY SITE CODES: TI-CLARK = I , CARZ = F , NSE = J , CDAT = 8

Sample product shipping label (not actual product label)



Product Affected: Group 1 Devices

| | | | |
|-------------|---------------|---------------|--------------|
| BQ294502DRV | BQ294592DRV | TPS51225RUKR | TPS61158DRV |
| BQ294502DRV | BQ294602DRV | TPS51225RUKT | TPS62061DSGR |
| BQ294504DRV | BQ294602DRV | TPS51275RUKR | TPS62061DSGT |
| BQ294504DRV | BQ294604DRV | TPS51275RUKT | TPS62063DSGR |
| BQ294515DRV | BQ294604DRV | TPS51275CRUKR | TPS62063DSGT |
| BQ294524DRV | SN51285ARUKR | TPS51275CRUKT | TPS62065DSGR |
| BQ294524DRV | TPS22967DSGR | TPS51275RUKR | TPS62065DSGT |
| BQ294532DRV | TPS22967DSGT | TPS51275RUKT | TPS62080DSGR |
| BQ294532DRV | TPS51225RUKR | TPS51285ARUKR | TPS62080DSGT |
| BQ294582DRV | TPS51225RUKT | TPS51285ARUKT | TPS62082DSGR |
| BQ294582DRV | TPS51225CRUKR | TPS51285RUKR | TPS62082DSGT |
| BQ294592DRV | TPS51225CRUKT | TPS51285RUKT | |

Product Affected: Group 2 Devices

| | | | |
|---------------|----------------|----------------|----------------|
| TLV70712PDQNT | TLV707285PDQNT | TLV71718PDQNT | TPS3839G33DQNT |
| TLV70718PDQNT | TLV70732DQNT | TLV71727PDQNT | TPS3839K33DQNT |
| TLV70719PDQNT | TLV70736PDQNT | TLV71729PDQNT | TPS3839K50DQNT |
| TLV70725PDQNT | TLV71320DQNT | TLV71733PDQNT | TPS3839L30DQNT |
| TLV707285DQNT | TLV717185PDQNT | TPS3839G18DQNT | |

Qualification Plan – Group 1 Device

This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

Qualification Schedule: **Start:** Sept 2014 **End:** Dec 2014

Qual Vehicle # 1: BQ294504DRV (MSL2-260C)

Package Construction Details

| | | | |
|----------------------------|-------------|-----------------|-------------------|
| Assembly Site: | TI CHENGDU | Mold Compound: | 4208625 |
| # Pins-Designator, Family: | 6-DRV, WQFN | Mount Compound: | 4207768 |
| Lead frame (Finish, Base): | NiPdAu, Cu | Bond Wire: | 0.96 Mil Dia., Cu |

Qualification: **Plan** **Test Results**

| Reliability Test | Conditions | Sample Size/Fail | | |
|-----------------------------|-------------------------------|------------------|-------|-------|
| | | Lot#1 | Lot#2 | Lot#3 |
| Electrical Characterization | - | 30/0 | 30/0 | 30/0 |
| **High Temp. Storage Bake | 170C (420hrs) | 77/0 | 77/0 | 77/0 |
| **Autoclave 121C | 121C, 2 atm (96 Hrs) | 77/0 | 77/0 | 77/0 |
| **T/C -65C/150C | -65C/+150C (500 Cyc) | 77/0 | 77/0 | 77/0 |
| Manufacturability | (per mfg. Site specification) | 1/0 | 1/0 | 1/0 |
| Moisture Sensitivity | (level 2 @ 260C peak +5/-0C) | 12/0 | 12/0 | 12/0 |

Notes **- Preconditioning sequence: Level 2-260C.

| Qual Vehicle # 2: TPS51285BRUKR (MSL2-260C) | | | | | | | | | | |
|--|---|---------------------------------------|-------------------------|-------|-------|--|--|--|--|--|
| Package Construction Details | | | | | | | | | | |
| Assembly Site: | TI CHENGDU | Mold Compound: | 4208625 | | | | | | | |
| # Pins-Designator, Family: | 20-RUK, WQFN | Mount Compound: | 4207768 | | | | | | | |
| Lead frame (Finish, Base): | NiPdAu, Cu | Bond Wire: | 0.96 Mil Dia., Cu | | | | | | | |
| Qualification: | <input checked="" type="checkbox"/> Plan | <input type="checkbox"/> Test Results | | | | | | | | |
| Reliability Test | Conditions | | Sample Size/Fail | | | | | | | |
| | | | Lot#1 | Lot#2 | Lot#3 | | | | | |
| Electrical Characterization | - | | 30/0 | 30/0 | 30/0 | | | | | |
| **High Temp. Storage Bake | 170C (420hrs) | | 77/0 | 77/0 | 77/0 | | | | | |
| **Autoclave 121C | 121C, 2 atm (96 Hrs) | | 77/0 | 77/0 | 77/0 | | | | | |
| **T/C -65C/150C | -65C/+150C (500 Cyc) | | 77/0 | 77/0 | 77/0 | | | | | |
| Solderability | Pb-free | | 22/0 | 22/0 | 22/0 | | | | | |
| Manufacturability | (per mfg. Site specification) | | 1/0 | 1/0 | 1/0 | | | | | |
| Moisture Sensitivity | (level 2 @ 260C peak +5/-0C) | | 12/0 | 12/0 | 12/0 | | | | | |
| Notes | **- Preconditioning sequence: Level 2-260C. | | | | | | | | | |
| Qual Vehicle # 3: TPS61158DRV (MSL2-260C) | | | | | | | | | | |
| Package Construction Details | | | | | | | | | | |
| Assembly Site: | TI CHENGDU | Mold Compound: | 4208625 | | | | | | | |
| # Pins-Designator, Family: | 6-DRV, WQFN | Mount Compound: | 4207768 | | | | | | | |
| Lead frame (Finish, Base): | NiPdAu, Cu | Bond Wire: | 0.96 Mil Dia., Au | | | | | | | |
| Qualification: | <input checked="" type="checkbox"/> Plan | <input type="checkbox"/> Test Results | | | | | | | | |
| Reliability Test | Conditions | | Sample Size/Fail | | | | | | | |
| | | | Lot#1 | Lot#2 | Lot#3 | | | | | |
| Electrical Characterization | - | | 30/0 | 30/0 | 30/0 | | | | | |
| **High Temp. Storage Bake | 170C (420hrs) | | 77/0 | 77/0 | 77/0 | | | | | |
| **Autoclave 121C | 121C, 2 atm (96 Hrs) | | 77/0 | 77/0 | 77/0 | | | | | |
| **T/C -65C/150C | -65C/+150C (500 Cyc) | | 77/0 | 77/0 | 77/0 | | | | | |
| Manufacturability | (per mfg. Site specification) | | 1/0 | 1/0 | 1/0 | | | | | |
| Notes | **- Preconditioning sequence: Level 2-260C. | | | | | | | | | |
| Qual Vehicle # 4: TPS62065DSGR (MSL2-260C) | | | | | | | | | | |
| Package Construction Details | | | | | | | | | | |
| Assembly Site: | TI CHENGDU | Mold Compound: | 4208625 | | | | | | | |
| # Pins-Designator, Family: | 8-DSG, WQFN | Mount Compound: | 4207768 | | | | | | | |
| Lead frame (Finish, Base): | NiPdAu, Cu | Bond Wire: | 1.30 Mil Dia., Cu | | | | | | | |
| Qualification: | <input checked="" type="checkbox"/> Plan | <input type="checkbox"/> Test Results | | | | | | | | |
| Reliability Test | Conditions | | Sample Size/Fail | | | | | | | |
| | | | Lot#1 | Lot#2 | Lot#3 | | | | | |
| Electrical Characterization | - | | 30/0 | 30/0 | 30/0 | | | | | |
| **High Temp. Storage Bake | 170C (420hrs) | | 77/0 | 77/0 | 77/0 | | | | | |
| **Autoclave 121C | 121C, 2 atm (96 Hrs) | | 77/0 | 77/0 | 77/0 | | | | | |
| **T/C -65C/150C | -65C/+150C (500 Cyc) | | 77/0 | 77/0 | 77/0 | | | | | |
| Manufacturability | (per mfg. Site specification) | | 1/0 | 1/0 | 1/0 | | | | | |
| Notes | **- Preconditioning sequence: Level 2-260C. | | | | | | | | | |

Qualification Data – Group 2 Device

This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

Qual Vehicle : TLV70728PDQNR (MSL1-260C)

Package Construction Details

| | | | |
|----------------------------|---------------------|-----------------|-------------------|
| Assembly Site: | TI CHENGDU | Mold Compound: | 4210087 |
| # Pins-Designator, Family: | 4-DQN, X2SON | Mount Compound: | 4221460 |
| Lead frame (Finish, Base): | NiPdAu/NiPdAuAg, Cu | Bond Wire: | 0.80 Mil Dia., Au |

Qualification: **Plan** **Test Results**

| Reliability Test | Conditions | Sample Size/Fail | | |
|-----------------------------|-------------------------------|------------------|-------|-------|
| | | Lot#1 | Lot#2 | Lot#3 |
| Electrical Characterization | - | Pass | Pass | Pass |
| **Biased HAST | 130C/85%RH (96Hrs) | 77/0 | 77/0 | 77/0 |
| **High Temp. Storage Bake | 170C (420hrs) | 77/0 | 77/0 | 77/0 |
| **Autoclave 121C | 121C, 2 atm (96 Hrs) | 75/0 | 77/0 | 77/0 |
| **T/C -65C/150C | -65C/+150C (500 Cyc) | 77/0 | 77/0 | 77/0 |
| ESD-HBM | 1000V | 3/0 | 3/0 | 3/0 |
| ESD-CDM | 250V | 3/0 | 3/0 | 3/0 |
| Solderability | Pb-free | 22/0 | 22/0 | 22/0 |
| Salt Atmosphere | 24 Hrs | 22/0 | 22/0 | 22/0 |
| Manufacturability | (per mfg. Site specification) | Pass | Pass | Pass |
| Moisture Sensitivity | (level 1 @ 260C peak +5/-0C) | 11/0 | 12/0 | 12/0 |

Notes **- Preconditioning sequence: Level 1-260C.

For questions regarding this notice, e-mails can be sent to the regional 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 |
| Japan | PCNJapanContact@list.ti.com |