

**PCN# 20180925002.1A**  
**Qualification of TI Malaysia as an additional**  
**Assembly Site for select devices**  
**Change Notification / Sample Request**

**Date:** October 16, 2018  
**To:** MOUSER PCN

Dear Customer:

Revision A is to add the affected customer device list under Page 2 of this PCN letter. We apologize for any inconvenience this may have caused.

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

**20180925002A**  
**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> |
|---------------|-----------------------------|
| UC2638N       | null                        |
| UC2855BN      | null                        |
| UC2875N       | null                        |
| UC2879N       | null                        |
| UC3638N       | null                        |
| UC3855BN      | null                        |
| UC3875N       | null                        |
| UC3876N       | null                        |
| UC3879N       | null                        |
| UCC28500N     | null                        |
| UCC2895N      | null                        |
| UCC38500N     | null                        |
| UCC38501N     | null                        |
| UCC38502N     | null                        |
| UCC3895N      | null                        |

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

| <b>PCN Number:</b>  | 20180925002.1A   |                                       | <b>PCN Date:</b>  | Oct 16, 2018             |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
|---|--|---------------------------------------|---|--------------------------|---------------------|----------------------|-----------------------|--------------------|----------------------|-----|-----|--------------|-----------------------------|---------------------|---------------------|------------------------------|
| <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>   | Jan 05, 2019   | <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 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 checked="" 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>   |  |                                       |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| Texas Instruments Incorporated is announcing the qualification TI Malaysia as Additional Assembly 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>Microchip Technology</td> <td>ALP</td> <td>THA</td> <td>Chachoengsao</td> </tr> <tr> <td><a href="#">TI Malaysia</a></td> <td><a href="#">MLA</a></td> <td><a href="#">MYS</a></td> <td><a href="#">Kuala Lumpur</a></td> </tr> </tbody> </table> |  |                                       |   |                          | Assembly Site       | Assembly Site Origin | Assembly Country Code | Assembly Site City | Microchip Technology | ALP | THA | Chachoengsao | <a href="#">TI Malaysia</a> | <a href="#">MLA</a> | <a href="#">MYS</a> | <a href="#">Kuala Lumpur</a> |
| Assembly Site   | Assembly Site Origin   | Assembly Country Code                 | Assembly Site City  |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| Microchip Technology  | ALP  | THA                                   | Chachoengsao  |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| <a href="#">TI Malaysia</a>   | <a href="#">MLA</a>  | <a href="#">MYS</a>                   | <a href="#">Kuala Lumpur</a>  |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| <b>Material Differences:</b>  |  |                                       |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| <b>Group 1 Device:</b>  |  |                                       |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
|   | <b>Microchip Technology</b>  | <b>TI Malaysia</b>                    |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| Mount Compound  | 142010008  | 4147858                               |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| Mold compound   | 141002081  | 4211880                               |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| Lead finish   | Matte Sn   | NiPdAu                                |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| <b>Group 2 Device:</b>  |  |                                       |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
|   | <b>Microchip Technology</b>  | <b>TI Malaysia</b>                    |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| Mount Compound  | 142010008  | 4147858                               |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| Mold compound   | 141002081  | 4211880                               |   |                          |                     |                      |                       |                    |                      |     |     |              |                             |                     |                     |                              |
| <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        |                            |          |
| Microchip Technology | Assembly Site Origin (22L) | ASO: ALP |
| TI Malaysia          | Assembly Site Origin (22L) | ASO: MLA |

Sample product shipping label (not actual product label)

**TEXAS INSTRUMENTS**  
 MADE IN: Malaysia  
 2DC: 2Q:  
 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) CS0: SHE (21L) CCO:USA  
 (22L) ASO: MLA (23L) ACO: MYS

**Group 1 Product Affected:**

|         |         |         |
|---------|---------|---------|
| UC2875N | UC3875N | UC3876N |
|---------|---------|---------|

**Group 2 Product Affected:**

|           |            |           |             |
|-----------|------------|-----------|-------------|
| UC2638N   | UC3638N    | UC3879N   | UCC38502N   |
| UC2855BN  | UC3638NG4  | UCC28500N | UCC38502NG4 |
| UC2875NG4 | UC3855BN   | UCC2895N  | UCC3895N    |
| UC2879N   | UC3855BNG4 | UCC38500N | UCC3895NG4  |
| UC2879NG4 | UC3875NG4  | UCC38501N |             |

## Qualification Report

### MMT Offload Qualification for PDIP 20N devices

Approve Date 25-May-2018

### Product Attributes

| Attributes          | Qual Device:<br><u>UC3875N</u> | Qual Device:<br><u>UCC38501N</u> | QBS Package Reference:<br><u>SN74HCT540N</u> | QBS Package Reference:<br><u>TPA3122D2N</u> |
|---------------------|--------------------------------|----------------------------------|--|---|
| Assembly Site       | MLA                            | MLA                              | MLA  | MLA   |
| Package Family      | PDIP                           | PDIP                             | PDIP   | PDIP  |
| Flammability Rating | UL 94 V-0                      | UL 94 V-0                        | UL 94 V-0                                    | UL 94 V-0                                   |
| Wafer Fab Supplier  | SFAB                           | SFAB                             | SFAB   | UMC FAB8AB                                  |
| Wafer Fab Process   | J1_PWR2                        | IMP-PWR2                         | 74HC-NONEPI                                  | LBC5X                                       |

- QBS: Qual By Similarity
- Qual Devices UC3875N and UCC38501N are qualified at Not Classified

### Qualification Results

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

| Type | Test Name / Condition   | Duration | Qual Device:<br><u>UC3875N</u> | Qual Device:<br><u>UCC38501N</u> | QBS Package Reference:<br><u>SN74HCT540N</u> | QBS Package Reference:<br><u>TPA3122D2N</u> |
|------|-------------------------|----------|--------------------------------|----------------------------------|--|---|
| AC   | Autoclave 121C          | 96 Hours | 3/231/0                        | 3/231/0                          | 3/231/0                                      | 3/231/0                                     |
| FLAM | Flammability (UL 94V-0) | -        | -                              | -                                | 3/15/0                                       | -   |

| Type | Test Name / Condition        | Duration                      | Qual Device:<br><u>UC3875N</u> | Qual Device:<br><u>UCC38501N</u> | QBS Package Reference:<br><u>SN74HCT540N</u> | QBS Package Reference:<br><u>TPA3122D2N</u> |
|------|------------------------------|-------------------------------|--------------------------------|----------------------------------|--|---|
| HTSL | High Temp Storage Bake 170C  | 420 Hours                     | 3/231/0                        | 3/231/0                          | 3/231/0                                      | 3/231/0                                     |
| LI   | Lead Fatigue                 | Leads                         | -                              | -                                | 3/45/0                                       | 3/45/0                                      |
| LI   | Lead Pull to Destruction     | Leads                         | -                              | -                                | 3/180/0                                      | 3/180/0                                     |
| MQ   | Manufacturability (Assembly) | (per mfg. Site specification) | Pass                           | Pass                             | Pass   | Pass  |
| PKG  | Lead Finish Adhesion         | Leads                         | -                              | -                                | 2/30/0                                       | 3/45/0                                      |
| SD   | Solderability                | 8 Hours Steam Age             | 3/30/0                         | 3/30/0                           | 3/66/0                                       | 3/66/0                                      |
| TC   | Temperature Cycle, -65/150C  | 500 Cycles                    | 3/231/0                        | 3/231/0                          | 3/231/0                                      | 3/231/0                                     |

- 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

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/lscs/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.

| Location     | E-Mail   |
|--------------|--|
| 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>       |