# PRODUCT/PROCESS CHANGE NOTICE (PCN)

<table>
<thead>
<tr>
<th>PCN #:</th>
<th>A1510-01</th>
<th>DATE: 6-Nov-2015</th>
<th>MEANS OF DISTINGUISHING CHANGED DEVICES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Affected:</td>
<td>PDIP-28, 48 (Green package)</td>
<td></td>
<td>Lot # will have:</td>
</tr>
<tr>
<td>Refer to Attachment II for the affected part numbers</td>
<td></td>
<td>Back Mark</td>
<td>“GR” prefix for Greatek Electronics, Taiwan</td>
</tr>
</tbody>
</table>

### Date Effective:

6-Feb-2016

### Contact:

IDT PCN DESK

### E-mail:

pcndesk@idt.com

### Attachment:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Samples:

Please contact your local sales representative for sample request.

## DESCRIPTION AND PURPOSE OF CHANGE:

- **Die Technology**
- **Wafer Fabrication Process**
- **Assembly Process**
- **Equipment**
- **Material**
- **Testing**
- **Manufacturing Site**
- **Data Sheet**
- **Other**

This notification is to advise our customers that IDT is adding Greatek Electronics, Taiwan (GEI) as the alternate Assembly facility.

There is no change to the moisture performance.

Attachment I details the qualification data for this change and Attachment II shows the affected list of part numbers.

## RELIABILITY/QUALIFICATION SUMMARY:

Refer to qualification data shown in Attachment I.

## CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.

IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

### Customer:

______________________________

### Name/Date:

______________________________

### E-Mail Address:

______________________________

### Title:

______________________________

### Phone# /Fax# :

______________________________

### CUSTOMER COMMENTS:

______________________________

______________________________

______________________________

______________________________

______________________________

### Approval for shipments prior to effective date.

## IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: ___________________________ DATE: ___________________________
ATTACHMENT I - PCN # : A1510-01

PCN Type: Manufacturing Site - Alternate Assembly Location

Data Sheet Change: None
No change in moisture sensitivity level (MSL)

Detail Of Change:

This notification is to advise our customers that IDT is adding Greatek Electronics, Taiwan (GEI) as the alternate Assembly facility.

The material set details of the current and alternate assembly location is as shown in Table 1. The die attach and mold compound used at the alternate assembly are qualified IDT materials. There is no change from the existing qualified lead frame material, lead finish, and wire for the alternate assembly location.

There is no change to the moisture performance.

Table 1: Assembly Material Sets for The Existing and Alternate Assembly Location

<table>
<thead>
<tr>
<th></th>
<th>Existing Assembly (Amkor, Philippines)</th>
<th>Alternate Assembly (Greatek, Taiwan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Attach</td>
<td>8390A</td>
<td>CRM1076DJ-G</td>
</tr>
<tr>
<td>Wire</td>
<td>Au wire</td>
<td>Au wire</td>
</tr>
<tr>
<td>Mold Compound</td>
<td>CK5000A</td>
<td>G631M</td>
</tr>
</tbody>
</table>
ATTACHMENT I - PCN # : A1510-01

Qualification Information and Qualification Data:

Affected Packages: PDIP-28 & 48

Assembly Material: The affected package type is using Greatek standard materials shown on page 2 of this attachment.

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests.

Qualification Vehicle: PDIP-48

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Test Method</th>
<th>Lot 1</th>
<th>Lot 2</th>
<th>Lot 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>* HAST - Biased (130 °C/85% RH, 96 Hrs)</td>
<td>JESD22-A110</td>
<td>25/0</td>
<td>25/0</td>
<td>25/0</td>
</tr>
<tr>
<td>* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)</td>
<td>JESD22-A104</td>
<td>25/0</td>
<td>25/0</td>
<td>25/0</td>
</tr>
<tr>
<td>High Temp. Storage Test (150 °C, 1000 Hrs)</td>
<td>JESD22-A103</td>
<td>25/0</td>
<td>25/0</td>
<td>25/0</td>
</tr>
</tbody>
</table>

Note:
* Test requires moisture pre-conditioning sequence per JESD22-A113 prior to stress test
## Affected Part Numbers

<table>
<thead>
<tr>
<th>Part Number</th>
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<th>Part Number</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>7130LA35PDG</td>
<td>7204L15PDGI</td>
<td>7130LA55PDGI</td>
<td>7134LA25PDG</td>
</tr>
<tr>
<td>7201LA50PDG</td>
<td>7205L12PDG</td>
<td>7132LA35PDG</td>
<td>7134LA25PDGI</td>
</tr>
<tr>
<td>7202LA12PDG</td>
<td>7206L15PDG</td>
<td>7132LA35PDGI</td>
<td>7207L15PDG</td>
</tr>
<tr>
<td>7202LA15PDGI</td>
<td>7201LA35PDG</td>
<td>7132LA55PDGI</td>
<td></td>
</tr>
<tr>
<td>7203L12PDG</td>
<td>7201LA12PDG</td>
<td>7132SA55PDG</td>
<td></td>
</tr>
<tr>
<td>7204L12PDG</td>
<td>7140LA35PDG</td>
<td>7134LA20PDG</td>
<td></td>
</tr>
</tbody>
</table>