## PRODUCT/PROCESS CHANGE NOTICE (PCN)

**PCN #:** A1911-01  
**DATE:** 26-Nov-2019  
**MEANS OF DISTINGUISHING CHANGED DEVICES:**
- Product Mark
- 2D barcode on product marking
- Back Mark
- Date Code
- Other

**Product Affected:** FCBGA53 and FCBGA253  
(Refer to attachment II for affected part#)

**Date Effective:** 26-Dec-2019  
**Contact:** IDT PCN DESK  
**E-mail:** idt-pcn@lm.renesas.com

**Attachment:** Yes  
**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 2D barcode on product marking to improve the traceability. The 2D barcode contains the wafer and substrate information.

There is no change to the moisture performance.

### RELIABILITY/QUALIFICATION SUMMARY:

Not applicable

### 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.

<table>
<thead>
<tr>
<th>Customer: __________________________</th>
<th>Approval for shipments prior to effective date.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name/Date: ________________________</td>
<td>E-Mail Address: ____________________________</td>
</tr>
<tr>
<td>Title: ____________________________</td>
<td>Phone#/Fax#: ________________________________</td>
</tr>
</tbody>
</table>

### CUSTOMER COMMENTS:

____________________________________

### IDT ACKNOWLEDGMENT OF RECEIPT:

<table>
<thead>
<tr>
<th>RECD. BY: __________________________</th>
<th>DATE: __________________________</th>
</tr>
</thead>
</table>
ATTACHMENT I - PCN #: A1911-01

PCN Type: Assembly Process
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 2D barcode on the product marking to improve traceability. The 2D barcode contains wafer and substrate information.

There is no change to the moisture performance.

2D Barcode Information
ATTACHMENT I - PCN #: A1911-01

DDR4 RCD Marking Format and Dimension

- **Fixed Substrate level 2D ID Content**
  - 17 digit max
  - Lot no (12) + PP + SS

- **Combine Sublot + Substrate 2D ID info + Unit code + wafer and die ID and mark into IDT Unit**
  - Total 31 digits
  - Assembly Sublot (3)
  - Substrate Lot no (12)
  - Panel No PP(2)
  - Strip No SS(2)
  - Unit Location, XXYY(4)
  - Wafer ID WW(2)
  - Die Location XXYYYY (6)

Device Info – Line 2

- Device step, 4th line “$”
- Subcon location 4th line “$”
- Date code is YYWW – 4th line

Assembly lot no. – last line beside pin 1
PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN #: A1911-01

DDR4 DB Marking Format and Dimension

CURRENT MARKING

NEW MARKING

2D

- Fixed Substrate level 2D ID Content
  - 17 digit max
  - Lot no (12) + PP + SS
- Combine Sublot + Substrate 2D ID info + Unit code + wafer and die ID and mark into IDT Unit
  - Total 31 digits
- Assembly Sublot (3)
- substrate Lot no (12)
- Panel No PP(2)
- Strip No SS(2)
- Unit Location , XXXY(4)
- Wafer ID WW(2)
- Die Location XXXYYY (6)

Device info is on line 1 & 2
Device Step is on line 2 "Z"

$ Last character of line 2, "$", subcon location

3rd line, YWW, Date code
Assembly lot no 3rd line "***" – Lot Sequential code.
**PRODUCT/PROCESS CHANGE NOTICE (PCN)**

**ATTACHMENT II - PCN #: A1911-01**

**Affected Part Numbers**

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<td>4RCD0232EMKC1ATGI</td>
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