

## Product Change Notice (PCN)

**Subject:** Addition of back-end production for general-purpose linear IC products (MSOP package products)

**Publication Date:** 6/30/2023

**Effective Date:** 1/26/2024

**Revision Description:**

Initial Release

**Description of Change:**

This notice is to propose the addition of a Back-End Factory.

< Products >

Operational amplifier ICs, Comparator ICs, Reset ICs (MSOP package products)

< Production site >

|   | Production site                               |
|---|---|
| Back-end production<br>Additional plant | HCA : HIGH COMPONENTS AOMORI CO.,LTD. (Japan) |

< Material >

Some materials are different, but this material has been mass-produced.

| Material   | Current products | HCA products               |
|------------|------------------|----------------------------|
| Lead frame | Cu-based         | Cu-based                   |
| Resin      | Epoxy Resin      | Epoxy Resin (Halogen Free) |
| Plating    | Sn-Bi            | Sn-Bi                      |
| Wire       | Au(23um)         | Au(20um)                   |

**Affected Product List:**

| No | Part number             |
|----|-------------------------|
| 1  | UPC1251AMP(30)-KAA-E1-A |
| 2  | UPC1251AMP(30)-KAA-E2-A |
| 3  | UPC1251EMP(30)-KAA-E2-A |
| 4  | UPC1251EMP(38)-KAA-E2-A |
| 5  | UPC1251EMP(92)-KAA-E2-A |
| 6  | UPC1251EMP(93)-KAA-E2-A |
| 7  | UPC1251MP(30)-KAA-E1-A  |
| 8  | UPC1251MP(30)-KAA-E2-A  |
| 9  | UPC1251MP(31)-KAA-E1-A  |
| 10 | UPC1251MP(38)-KAA-E1-A  |
| 11 | UPC1251MP(38)-KAA-E2-A  |
| 12 | UPC1251MP(92)-KAA-E2-A  |
| 13 | UPC1251MP(93)-KAA-E2-A  |
| 14 | UPC1251MP-KAA-E1-A      |
| 15 | UPC1251MP-KAA-E2-A      |
| 16 | UPC277MP(20)-KAA-E1-A   |
| 17 | UPC277MP(30)-KAA-E1-A   |
| 18 | UPC277MP(30)-KAA-E2-A   |
| 19 | UPC277MP(31)-KAA-E1-A   |
| 20 | UPC277MP(38)-KAA-E2-A   |
| 21 | UPC277MP(92)-KAA-E2-A   |
| 22 | UPC277MP-KAA-E1-A       |
| 23 | UPC277MP-KAA-E2-A       |
| 24 | UPC842AMP(20)-KAA-E1-A  |
| 25 | UPC842AMP(20)-KAA-E2-A  |
| 26 | UPC842AMP(21)-KAA-E1-A  |
| 27 | UPC842AMP(21)-KAA-E2-A  |
| 28 | UPC842AMP(91)-KAA-E1-A  |
| 29 | UPC842AMP(91)-KAA-E2-A  |
| 30 | REAC1251GSN#GC0         |
| 31 | REAC1251JSN#GC0         |
| 32 | REAC1251JSN#GC1         |
| 33 | REAC1251JSN#GC2         |
| 34 | REAC1251JSN#HC0         |
| 35 | REAC1251JSN#HC1         |
| 36 | REAC1251JSN#HC2         |
| 37 | REAC1251JSN#HC3         |
| 38 | REAC1251JSN#HC4         |
| 39 | REAC1251JSN#HC5         |
| 40 | READ2303GSN#GC0         |
| 41 | READ2304GSN#GC0         |
| 42 | REAR56953AJSN#HC1       |
| 43 | REAR56953BJSN#HC1       |
| 44 | REAR56957AJSN#HC1       |
| 45 | REAR56957BJSN#HC1       |
| 46 | REAR56958BJSN#HC1       |

**Reason for Change:**

For stable supply.

**Impact on Fit, Form, Function, Quality & Reliability:**

< Form >

There are some dimensional differences in the outline drawing, but the recommended foot pattern remains the same.

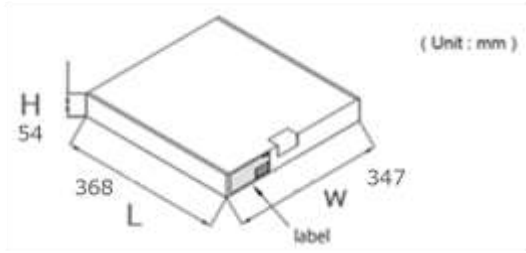
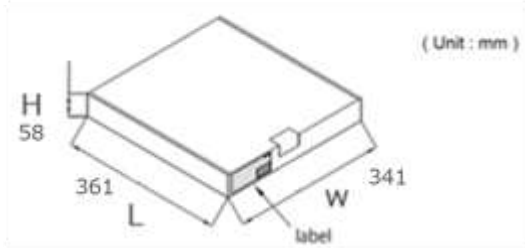
| Current products |   | (UNIT:mm) |   | HCA products |  | (UNIT:mm) |  |
|------------------|---|-----------|---|--------------|--|-----------|--|
| ITEM             | DIMENSION                               | ITEM      | DIMENSION                               | ITEM         | DIMENSION                              | ITEM      | DIMENSION                              |
| D                | 2.90                                    | D         | 2.75                                    | D            | 2.95±0.20                              | D         | 2.75                                   |
| D1               | 3.00±0.20                               | D1        | 3.00±0.20                               | D1           | 2.95±0.20                              | D1        | 2.95±0.20                              |
| E                | 2.80                                    | E         | 2.80                                    | E            | 2.80                                   | E         | 2.80                                   |
| HE               | 4.00±0.20                               | HE        | 4.00±0.20                               | HE           | 4.00±0.30                              | HE        | 4.00±0.30                              |
| e                | 0.65                                    | e         | 0.65                                    | e            | 0.65                                   | e         | 0.65                                   |
| b                | 0.22±0.05                               | b         | 0.22±0.05                               | b            | 0.20 <sup>+0.10</sup> <sub>-0.05</sub> | b         | 0.20 <sup>+0.10</sup> <sub>-0.05</sub> |
| A                | 1.03 MAX                                | A         | 1.03 MAX                                | A            | 1.00 MAX                               | A         | 1.00 MAX                               |
| A1               | 0.08±0.05                               | A1        | 0.08±0.05                               | A1           | 0.05±0.05                              | A1        | 0.05±0.05                              |
| A2               | 0.85±0.05                               | A2        | 0.85±0.05                               | A2           | 0.85±0.10                              | A2        | 0.85±0.10                              |
| A3               | 0.25                                    | A3        | 0.25                                    | A3           | 0.25                                   | A3        | 0.25                                   |
| L1               | 0.60±0.20                               | L1        | 0.60±0.20                               | L1           | 0.60±0.20                              | L1        | 0.60±0.20                              |
| c                | 0.145 <sup>+0.05</sup> <sub>-0.03</sub> | c         | 0.145 <sup>+0.05</sup> <sub>-0.03</sub> | c            | 0.13 <sup>+0.10</sup> <sub>-0.05</sub> | c         | 0.13 <sup>+0.10</sup> <sub>-0.05</sub> |
| Lp               | 0.37±0.10                               | Lp        | 0.37±0.10                               | Lp           | 0.37±0.12                              | Lp        | 0.37±0.12                              |
| x                | 0.10                                    | x         | 0.10                                    | x            | 0.10                                   | x         | 0.10                                   |
| y                | 0.10                                    | y         | 0.10                                    | y            | 0.10                                   | y         | 0.10                                   |
| θ                | 3° <sup>+5°</sup> <sub>-3°</sub>        | θ         | 3° <sup>+5°</sup> <sub>-3°</sub>        | θ            | 7±7°                                   | θ         | 7±7°                                   |
| ZD               | 0.525                                   | ZD        | 0.525                                   | ZD           | 0.50                                   | ZD        | 0.50                                   |

< Packaging >

The size of the tape packaging box is different as follows.

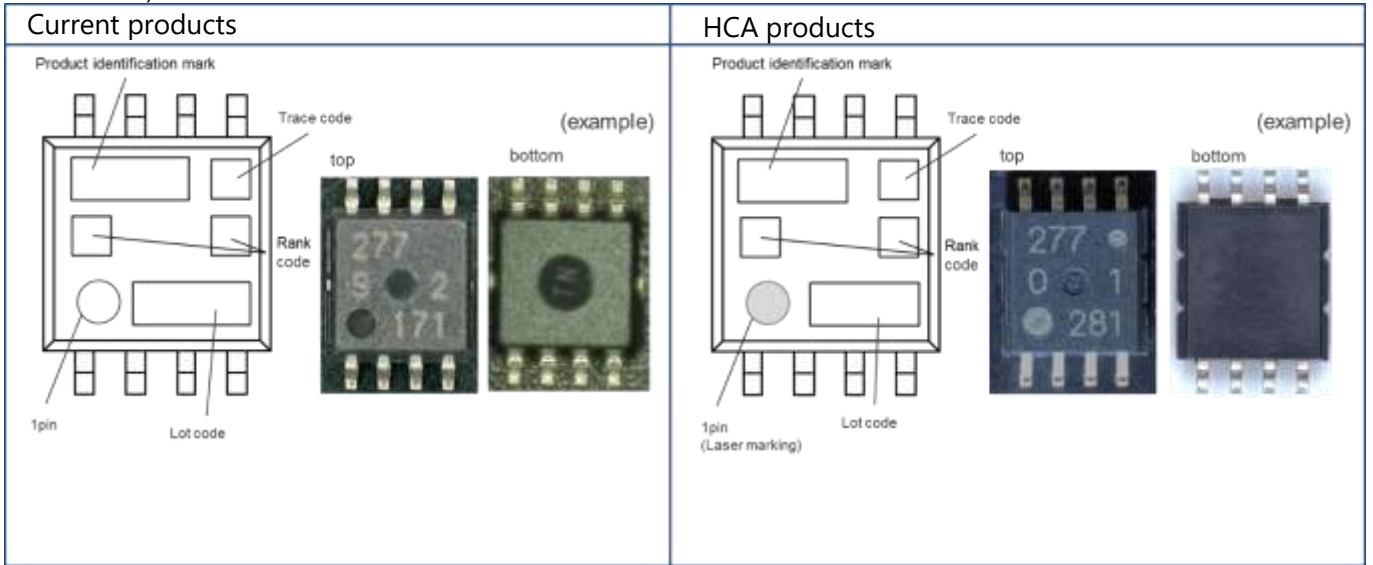
This is standard specifications that have been mass-produced.

| Current products (L×W×H) | HCA products (L×W×H) |
|--------------------------|----------------------|
| 368×347×54 (mm)          | 361×341×58 (mm)      |

| Current products   | HCA products  |
|--|---|
| <p>The label position is an image</p>  <p>Box Dimensions<br/>368×347×54 MAX 2 reels/box</p> | <p>The label position is an image</p>  <p>Box Dimensions<br/>361×341×58 MAX 2 reels/box</p> |

**Product Identification:**

The appearance of the marking/outline (typeface, 1-pin mark, surface finish, etc.) is different, but the marking/outline information is the same. (There is no change in the marking drawing of the delivery specification.)



Production sites can be identified by labels (reels, packaging boxes).

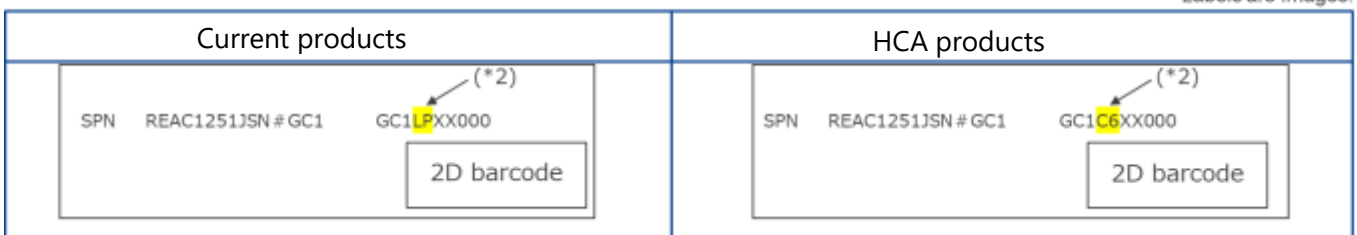
Examples of products beginning with UPC  
 (\*1) characters: 04 → RG

Labels are images.



Examples of products beginning with REAx  
 (\*2) characters: LP → C6

Labels are images.



**Qualification Status:** Available from 7/15/2023.

**Sample Availability Date:** 6/30/2023

**Device Material Declaration:** Please contact your sales representative.

Note:

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.
2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.
3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

**For additional information regarding this notice, please contact your Renesas sales representative.**