## Standardized Information for Process/Product Change Notification (PCN)

|                                     |                      | 1 PCN                                          | basic data      |  |
|-------------------------------------|----------------------|------------------------------------------------|-----------------|--|
| 1.1<br>Company                      | TAIWAN SEMICONDUCTOR | TAIWAN SEMICONDUCTOR CO. LTD                   |                 |  |
| 1.2 PCN No.                         |                      | QPCN15008                                      |                 |  |
| 1.3 Title of PCN                    |                      | Packing specification change in 13 inch reel   |                 |  |
| 1.4 Product Category                |                      | Semiconductor components                       |                 |  |
| 1.5 Issue date                      |                      | 2015/06/24                                     |                 |  |
| 1.6 PCN revision history (optional) |                      | 1.7 Issue date of previous revision (optional) | evious revision |  |
|                                     |                      |                                                |                 |  |
|                                     |                      |                                                |                 |  |
|                                     |                      |                                                |                 |  |

| 2. PCN Team                  |                            |                        |  |  |  |
|------------------------------|----------------------------|------------------------|--|--|--|
| 2.1 Contact supplier         |                            |                        |  |  |  |
| 2.1.1 Name                   | Owen Wang                  |                        |  |  |  |
| 2.1.2 Phone                  | +886 2 8913 1588 ext. 2201 |                        |  |  |  |
| 2.1.3 Email                  | owen@mail.ts.com.tw        |                        |  |  |  |
| 2.2 Team supplier (optional) |                            |                        |  |  |  |
| 2.2.1 Name (optional)        | 2.2.2 Phone (optional)     | 2.2.3 Email (optional) |  |  |  |
| Ken Kan                      | +886 2 8913 1588 ext. 2103 | ken kan@mail.ts.com.tw |  |  |  |
|                              |                            |                        |  |  |  |
|                              |                            |                        |  |  |  |
|                              |                            |                        |  |  |  |

| 3. Changes |                  |                                         |  |  |  |
|------------|------------------|-----------------------------------------|--|--|--|
|            | 3.1 Category     | 3.2 Type of change                      |  |  |  |
| Change #1  | Packing/Shipping | Packing / shipping specification change |  |  |  |
| Change #2  |                  |                                         |  |  |  |
| Change #3  |                  |                                         |  |  |  |
| Change #4  |                  |                                         |  |  |  |
| Change #5  |                  |                                         |  |  |  |

| 4. Description of change                                                                             |                                                               |                                                                   |  |  |  |  |
|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--|--|--|--|
|                                                                                                      | Old                                                           | New                                                               |  |  |  |  |
| Change #1                                                                                            | Carton size:                                                  | Carton size:                                                      |  |  |  |  |
| · ·                                                                                                  | 35.8cm x 35.8cm x 29cm for                                    | 36.5cm x 36.5cm x 18cm for SOD-323F                               |  |  |  |  |
|                                                                                                      | SOD-323F                                                      | 00 5 00 5 40 for MEL 5                                            |  |  |  |  |
| Change #2                                                                                            | 36cm x 36cm x 29cn for MELF Shipments quantity at one carton: | 36.5cm x 36.5cm x 18cm for MELF Shipments quantity at one carton: |  |  |  |  |
| change #2                                                                                            | MELF (Glass Seal) = 50,000pcs                                 | MELF (Glass Seal) = 30,000pcs                                     |  |  |  |  |
|                                                                                                      | SOD-323F = 100.000pcs                                         | SOD-323F = 60.000pcs                                              |  |  |  |  |
| Change #3                                                                                            | Gross weight:<br>MELF (Glass Seal) = 13kg                     | Gross weight:<br>MELF (Glass Seal) = 7.2kg                        |  |  |  |  |
|                                                                                                      | SOD-323F = 7.27kg                                             | SOD-323F = 3.75kg                                                 |  |  |  |  |
| Change #4                                                                                            |                                                               |                                                                   |  |  |  |  |
| 01 "5                                                                                                |                                                               |                                                                   |  |  |  |  |
| Change #5                                                                                            |                                                               |                                                                   |  |  |  |  |
| 4.6 Anticipated impact on form, fit,                                                                 | No                                                            |                                                                   |  |  |  |  |
| function, reliability or processability?                                                             |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
| 4.7 Deference ports with sustance                                                                    |                                                               |                                                                   |  |  |  |  |
| 4.7 Reference parts with customer number (optional)                                                  |                                                               |                                                                   |  |  |  |  |
| (opposition)                                                                                         | L                                                             |                                                                   |  |  |  |  |
|                                                                                                      | 5. Reason / motivation for c                                  |                                                                   |  |  |  |  |
| 5.1 Motivation 5.2 Additional explanation (optional)                                                 | Optimize own operation time, improve                          | e work efficiency.                                                |  |  |  |  |
| 5.2 Additional explanation (optional)                                                                |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
|                                                                                                      | l .                                                           |                                                                   |  |  |  |  |
|                                                                                                      | 6. Marking of parts / traceability                            | of change                                                         |  |  |  |  |
| 6.1 Description                                                                                      |                                                               | o. ogo                                                            |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
|                                                                                                      | 7. Timing / schedule                                          |                                                                   |  |  |  |  |
| 7.1 Date of qualification results                                                                    |                                                               |                                                                   |  |  |  |  |
| 7.2 Last order date (optional)                                                                       | 2015/09/24                                                    |                                                                   |  |  |  |  |
| 7.3 Last delivery date (optional)                                                                    | 2016/09/24                                                    |                                                                   |  |  |  |  |
| 7.4 Intended start of delivery                                                                       | 2015/09/24                                                    |                                                                   |  |  |  |  |
|                                                                                                      | 2010/00/21                                                    |                                                                   |  |  |  |  |
| 7.5 Qualification samples available?                                                                 | N/A                                                           |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
| 7.6 Customer feedback required until                                                                 | 2015/07/24                                                    |                                                                   |  |  |  |  |
| 7.0 Gustomer leedback required until                                                                 | 2010/01/24                                                    |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
|                                                                                                      | 8. Qualification / validati                                   | on                                                                |  |  |  |  |
| 8.1 Description                                                                                      |                                                               |                                                                   |  |  |  |  |
| (e.g. qual. plan/report, AEC-Q) 8.2 Qualification report and                                         |                                                               | issue date                                                        |  |  |  |  |
| qualification results available (see attachement)                                                    |                                                               | 13310 4410                                                        |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
| 9. Input to customer for risk assessment process                                                     |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
| 10. Attachments (e.g. new datasheet, additional documentation, pictures, process flow, sample plan,) |                                                               |                                                                   |  |  |  |  |
| see attached involved part number list.                                                              |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |
| QPCN15008_Invol                                                                                      |                                                               |                                                                   |  |  |  |  |
| ved P-N<br>list 20150514                                                                             |                                                               |                                                                   |  |  |  |  |
|                                                                                                      |                                                               |                                                                   |  |  |  |  |

| 11. Affected parts             |                                 |                                              |                           |                                             |                                                           |                                 |                                                  |                           |                                                           |
|--------------------------------|---------------------------------|----------------------------------------------|---------------------------|---------------------------------------------|-----------------------------------------------------------|---------------------------------|--------------------------------------------------|---------------------------|-----------------------------------------------------------|
| 11.1 Current                   |                                 |                                              |                           |                                             | 11.2 New (i                                               | f applicable)                   |                                                  |                           |                                                           |
| 11.1.1<br>Customer<br>Part No. | 11.1.2<br>Supplier Part<br>Name | 11.1.3<br>Supplier<br>Part No.<br>(optional) | 11.1.4<br>Package<br>Name | 11.1.5<br>Part<br>Description<br>(optional) | 11.1.6<br>Additional<br>Part<br>Information<br>(optional) | 11.2.2<br>Supplier<br>Part Name | 11.2.3<br>Supplier<br>Part No.<br>(optional)     | 11.2.4<br>Package<br>Name | 11.2.6<br>Additional<br>Part<br>Information<br>(optional) |
|                                |                                 |                                              |                           |                                             |                                                           |                                 |                                                  |                           |                                                           |
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