


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

| 1. PCN basic data                   |   |  |
|-------------------------------------|---|--|
| 1.1 Company                         |  |  |
| 1.2 PCN No.                         | PCN17007-1  |  |
| 1.3 Title of PCN                    | A new fully-automated SMA backend assembly line increase                          |  |
| 1.4 Product Category                | Active Components - Discrete Components   |  |
| 1.5 Issue date                      | 2019/01/10  |  |
| 1.6 PCN revision history (optional) | 1.7 Issue date of previous revision (optional)                                    | 1.8 Delta to previous revision (optional)                |
| PCN17007                            | 2017/02/07  | A new fully-automated SMA backend assembly line increase |

Form provided by ZVEI - Revision 3.0.0

| 2. PCN Team                  |                           |                          |
|------------------------------|---------------------------|--------------------------|
| 2.1 Contact supplier         |                           |                          |
| 2.1.1 Name                   | Sunnie Lin                |                          |
| 2.1.2 Phone                  | +886-2-8913-1588 Ext:2205 |                          |
| 2.1.3 Email                  | sunnie.lin@mail.ts.com.tw |                          |
| 2.2 Team supplier (optional) |                           |                          |
| 2.2.1 Name (optional)        | 2.2.2 Phone (optional)    | 2.2.3 Email (optional)   |
| Danny Lin                    | +886-2-8913-1588 Ext:2133 | danny_lin@mail.ts.com.tw |
| Vince Lee                    | +86-543-869-1091 Ext:3101 | vince@mail.tsyew.com.cn  |
| May Zhang                    | +86-543-869-1091 Ext:3108 | may@mail.tsyew.com.cn    |

| 3. Changes |           |                    |  |
|------------|-----------|--------------------|--|
| No.        | 3.0 Ident | 3.1 Category       | 3.2 Type of change   |
| #1         | SEM-PA-03 | PROCESS - ASSEMBLY | Change in leadframe dimensions   |
| #2         | SEM-PA-11 | PROCESS - ASSEMBLY | Change of mold compound / encapsulation material   |
| #3         | SEM-PA-13 | PROCESS - ASSEMBLY | Change of product marking  |
| #4         | SEM-PA-14 | PROCESS - ASSEMBLY | Change in process technology (e.g. sawing, die attach, bonding, moulding, plating, trim and form, lead frame preparation, ...) |
| #5         | SEM-PS-03 | PACKING/SHIPPING   | Change of carrier (tray, reel)   |

| 4. Description of change  |  |   |
|---|--|---|
|   | Old  | New   |
| Change #1   | manual SMA production line   | Increase fully-automated SMA production line  |
| Change #2   | Lead Frame<br>Supplier : A<br>Material : Copper  | Lead Frame<br>Supplier : B<br>Material : Copper   |
| Change #3   | Molding Compound<br>Consumer (Non-HF)<br>Type: EME-1100<br>Supplier : A<br>Material : Epoxy<br><br>Consumer (HF)<br>Type: EME-E110<br>Supplier : A<br>Material : Epoxy | Molding Compound<br><br>Consumer (HF)<br>Type: EME-E500<br>Supplier : A<br>Material : Epoxy |
| Change #4   | Marking<br>no square around datecode   | Marking<br>add special square around datecode   |
| Change #5   | Packing<br>13" Paper Reel & 13" Plastic Reel   | Packing<br>13" Plastic Reel   |
| 4.6 Anticipated impact on form, fit, function, reliability or processability? | No impact in form, fit, function and reliability but better processability for less human handling   |   |
| 4.7 Reference parts with customer number (optional)                           |  |   |

| 5. Reason / motivation for change     |   |
|---------------------------------------|---|
| 5.1 Motivation                        | To increase SMA capacity in assembly line for green and non-green |
| 5.2 Additional explanation (optional) |   |

