No. PCN-26001-01
Issue Date : 2026 / 10 / 1
**TDK Corporation**
Magnetics Business Group
μPOL BU, BU Head
Parviz Parto

**To : TTI, INC.**

**Process Change Notice**

FS160xA/FS160x/FS100x series, Assembly Site Addition – Shunsin Technology

First of all, we would like to thank you very much for your continuous patronage toward TDK products. This letter informs your company that TDK/Faraday Semi will bring ShunSin Technology(SST) for assembly as second source suppliers in addition to ASE to increase capacity for FS160xA/FS160x/FS100x series.
SST Zhongshan is certified to ISO90001, ISO140001, and IATF16949.
Below is the manufacturing flow before and after SST qualification.

| Manufacturing Flow | Current Flow | New Flow |
|---|---|---|
| Wafer Fab | TSMC BCD 0.18μm | TSMC BCD 0.18μm |
| Wafer Redistribution | ASE-KH | ASE-KH |
| Die Embedding Substrate | ASE-KH | ASE-KH |
| Assembly | ASE-Kaohsiung | ASE-KH / SST |
| Final Test | Greatek Electronics | Greatek Electronics |

**1. Planned implementation date**

1st January 2027

**2. Samples Availability:**

* When you request samples, please inform PCN number : PCN-26001-01
* Samples are only provided in tray
* Samples are available upon request for the following P/N:

| | | |
|---|---|---|
| FS1606A-0600 | FS1606-0600 | FS1006-3300-AL |
| FS1604A-2500 | FS1604-2500 | FS1006-5000-AL |
| FS1604A-3300 | FS1604-3300 | FS1003-0600-AL |
| FS1603A-3300 | FS1603-3300 | |
| FS1603A-5000 | FS1603-5000 | |

## 3. Qualification Plan and Results

Temperature and Humidity Biased (THB) and High Temperature Operating Life (HTOL) test are not performed in this qualification since the package is an Open Top Embedded-Die LGA-SiP. The substrate surface only consists of passive components (i.e., inductor and capacitors) without active silicon die.

The embedded-die substrate manufacturer, substrate materials, and substrate manufacturing process remain the same. Therefore, HTOL (silicon early life failure prediction) and THB (package corrosion failure) are deemed not necessary in this assembly site qualification.

| Test Name | Reference | Condition | Sample Size | Results (Pass/Total) |
|---|---|---|---|---|
| Preconditioning | JESD22-A113 | 260°C, MLS-3 | 154 units, 3 lots | PASS |
| Temperature Cycling (TC)[1] | JESD22-104A | -55°C to +125°C for 1000 cycles | 77 units, 3 lots | PASS |
| Unbiased Highly Accelerated Temperature and Humidity Test (uHAST)[1] | JESD22-A118 | 130°C/85% RH/96 hours | 77 units, 3 lots | PASS |
| ESD-CDM | JS-002 | Class C2B<br>750V ≤ Voltage (V) < 1000V | 3 units | PASS |
| [1]The samples used in these tests are subjected to preconditioning per J-STD-020 prior to the start of stress test. | | | | |

## 4. Customer Acknowledgement/Responses/Approval

* When contacting us, please include PCN number: PCN-26001-01 in the subject line.
* This PCN procedure follows JEDEC-J-STD-046 standard.

**Notification of Acknowledgement from Customers:**

Please notify “Acknowledgement” within 30 days of receipt by email to TDK sales representative.

Lack of Acknowledgement of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

**PCN Customer Approval:**

After acknowledgement, when you need Approval, questions, sample request or further information, please contact your TDK sales representative.

Please notify “Approval” in written form or by email to TDK sales representative.

The period of official customer approval of the PCN is up to 90 days from the PCN issue date. Once customer approve the PCN, the change becomes effective.

If there are not any contacts by the end of December 2026, we would like to start shipping out our changed products from January 2027.

| Planned Date : January 1st ,2027 | Response Date By : December 31st ,2026 | Last Order date for current spec : Not Applicable |
|---|---|---|

Attachment :

ANSWER SHEET

| To TDK Corporation<br>Magnetics Business Group | Company<br>Department<br>Name |
|---|---|
| Approval<br>Date:_____ | Directions |

**List of the Applicable Part No.**

| Customer part No. | TDK part name | TDK Item name after changes |
|---|---|---|
| TDKFS1606-0600-AL | FS1606-0600-AL | FS1606-0600-AL |