

Customer Notification of Product/Process Changes

*PCN No.:0234*Issued Date: Nov/18/2020

*Subject: G5E100B polyimide wafer for improving the stress distribution of the product

*Effective date:Feb/18/2021

*Affected category: SMD

*Affected Family: see attached file

| Change Item | <input type="checkbox"/> Material <input type="checkbox"/> Design <input type="checkbox"/> Process <input checked="" type="checkbox"/> Others | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--------------|------------|--|--|------------|-----|----|-----|---------------------------------------|------|----|------|---------------------------------------|------|----|------|-------------------|--------|----|------|-------------------|--------|----|------|----------------|--------|----|------|----------------|--------|----|------|---------------|--------|----|------|-----------|------------|--|--|------------|------------|--|--|----------------|----|----|-----|-----------|------|--|----|--|------|------------|--|--|------------|-----|----|-----|---------------------------------------|------|----|------|---------------------------------------|------|----|------|-------------------|--------|----|------|-------------------|--------|----|------|----------------|--------|----|------|----------------|--------|----|------|---------------|--------|----|------|-----------|------------|--|--|------------|------------|--|--|----------------|----|----|-----|-----------|------|--|
| Impact Item | 1. Product P/N : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 3. Label : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 2. Marking : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 4. Other items : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Related Item | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Change Purpose | .To improves the stress distribution of the product, as well as the temperature electric field distribution of the device during operation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Description of Change | Before Change | After Change | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Name</th> <th colspan="3">Dimensions</th> </tr> </thead> <tbody> <tr> <td>Wafer Size</td> <td>150</td> <td>mm</td> <td>6.0</td> </tr> <tr> <td>Die Size X (G) include Cutting Street</td> <td>1778</td> <td>um</td> <td>70.0</td> </tr> <tr> <td>Die Size Y (G) include Cutting Street</td> <td>1778</td> <td>um</td> <td>70.0</td> </tr> <tr> <td>Active Area X (G)</td> <td>1582.3</td> <td>um</td> <td>62.3</td> </tr> <tr> <td>Active Area Y (G)</td> <td>1582.3</td> <td>um</td> <td>62.3</td> </tr> <tr> <td>Pad Size X (G)</td> <td>1643.0</td> <td>um</td> <td>64.7</td> </tr> <tr> <td>Pad Size Y (G)</td> <td>1643.0</td> <td>um</td> <td>64.7</td> </tr> <tr> <td>Thickness (G)</td> <td>305.25</td> <td>um</td> <td>12.0</td> </tr> <tr> <td>Top Metal</td> <td colspan="3">TIN/Ag 2um</td> </tr> <tr> <td>Back Metal</td> <td colspan="3">TIN/Ag 2um</td> </tr> <tr> <td>Cutting Street</td> <td>60</td> <td>um</td> <td>2.4</td> </tr> <tr> <td>Gross Die</td> <td>4948</td> <td></td> <td>EA</td> </tr> </tbody> </table> | Name | Dimensions | | | Wafer Size | 150 | mm | 6.0 | Die Size X (G) include Cutting Street | 1778 | um | 70.0 | Die Size Y (G) include Cutting Street | 1778 | um | 70.0 | Active Area X (G) | 1582.3 | um | 62.3 | Active Area Y (G) | 1582.3 | um | 62.3 | Pad Size X (G) | 1643.0 | um | 64.7 | Pad Size Y (G) | 1643.0 | um | 64.7 | Thickness (G) | 305.25 | um | 12.0 | Top Metal | TIN/Ag 2um | | | Back Metal | TIN/Ag 2um | | | Cutting Street | 60 | um | 2.4 | Gross Die | 4948 | | EA | <p>Wafer passivation optimization (add polyimide)</p> <table border="1"> <thead> <tr> <th>Name</th> <th colspan="3">Dimensions</th> </tr> </thead> <tbody> <tr> <td>Wafer Size</td> <td>150</td> <td>mm</td> <td>6.0</td> </tr> <tr> <td>Die Size X (G) include Cutting Street</td> <td>1778</td> <td>um</td> <td>70.0</td> </tr> <tr> <td>Die Size Y (G) include Cutting Street</td> <td>1778</td> <td>um</td> <td>70.0</td> </tr> <tr> <td>Active Area X (G)</td> <td>1582.3</td> <td>um</td> <td>62.3</td> </tr> <tr> <td>Active Area Y (G)</td> <td>1582.3</td> <td>um</td> <td>62.3</td> </tr> <tr> <td>Pad Size X (G)</td> <td>1643.0</td> <td>um</td> <td>64.7</td> </tr> <tr> <td>Pad Size Y (G)</td> <td>1643.0</td> <td>um</td> <td>64.7</td> </tr> <tr> <td>Thickness (G)</td> <td>305.25</td> <td>um</td> <td>12.0</td> </tr> <tr> <td>Top Metal</td> <td colspan="3">TIN/Ag 2um</td> </tr> <tr> <td>Back Metal</td> <td colspan="3">TIN/Ag 2um</td> </tr> <tr> <td>Cutting Street</td> <td>60</td> <td>um</td> <td>2.4</td> </tr> <tr> <td>Gross Die</td> <td>4948</td> <td></td> <td>EA</td> </tr> </tbody> </table> | Name | Dimensions | | | Wafer Size | 150 | mm | 6.0 | Die Size X (G) include Cutting Street | 1778 | um | 70.0 | Die Size Y (G) include Cutting Street | 1778 | um | 70.0 | Active Area X (G) | 1582.3 | um | 62.3 | Active Area Y (G) | 1582.3 | um | 62.3 | Pad Size X (G) | 1643.0 | um | 64.7 | Pad Size Y (G) | 1643.0 | um | 64.7 | Thickness (G) | 305.25 | um | 12.0 | Top Metal | TIN/Ag 2um | | | Back Metal | TIN/Ag 2um | | | Cutting Street | 60 | um | 2.4 | Gross Die | 4948 | |
| Name | Dimensions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wafer Size | 150 | mm | 6.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Die Size X (G) include Cutting Street | 1778 | um | 70.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Die Size Y (G) include Cutting Street | 1778 | um | 70.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Active Area X (G) | 1582.3 | um | 62.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Active Area Y (G) | 1582.3 | um | 62.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pad Size X (G) | 1643.0 | um | 64.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pad Size Y (G) | 1643.0 | um | 64.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thickness (G) | 305.25 | um | 12.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top Metal | TIN/Ag 2um | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Back Metal | TIN/Ag 2um | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cutting Street | 60 | um | 2.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross Die | 4948 | | EA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name | Dimensions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wafer Size | 150 | mm | 6.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Die Size X (G) include Cutting Street | 1778 | um | 70.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Die Size Y (G) include Cutting Street | 1778 | um | 70.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Active Area X (G) | 1582.3 | um | 62.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Active Area Y (G) | 1582.3 | um | 62.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pad Size X (G) | 1643.0 | um | 64.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pad Size Y (G) | 1643.0 | um | 64.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thickness (G) | 305.25 | um | 12.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top Metal | TIN/Ag 2um | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Back Metal | TIN/Ag 2um | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cutting Street | 60 | um | 2.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross Die | 4948 | | EA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Related Report | <input checked="" type="checkbox"/> Electrical Test Report <input type="checkbox"/> SGS / MCD_MDS Report <input type="checkbox"/> ESD Report <input type="checkbox"/> Mechanical Test Report <input checked="" type="checkbox"/> Others | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample availability | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer Approval | <input type="checkbox"/> Approve <input type="checkbox"/> Disapprove | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer Requirement (ex. Last Buy requirement) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(Note):

- If you need sample(s) or any question, please contact with our Salesperson within 30day
- LSC will follow WW industry standard spec (JEDEC46D) criteria define as below.
 - Customers should acknowledge receipt of the PCN within 30 day period constitutes
 - Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.
 - After acknowledgement, lack of additional response within the 90 day period constitutes acceptance of the change.
 - If customer requires additional time to perform samples testing, beyond the 90 day review period an extension must be negotiate

Quality Assurance

CSK
FIV-QA101-2