Premstaetten, March 15, 2018

Product Change Notification PCN09-2018
Filter Equipment Change for TSL2584TSV

Dear Customer,

ams would like to inform you about an improvement in the supply chain security of the product TSL2584TSV.

The optical filters for TSL2584TSV are currently processed on a single equipment. This equipment is a single tool equipment and therefore we are going to switch this product to our standard filter tools from Q2/2018 onwards.

ams has currently 39 equipments of this standard tool installed and is running production in high volume on these machines. The single equipment will enter EOL by end of Q2/2018. We are convinced that this change will significantly increase the supply security.

The Filter material and product performance / data-sheet parameters will stay unchanged.

Affected Products:

TSL2584TSV

Applied change:

<table>
<thead>
<tr>
<th></th>
<th>Current Filter Equipment</th>
<th>New Filter Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter material</td>
<td>no change</td>
<td>no change</td>
</tr>
<tr>
<td>Filter deposition method</td>
<td>no change</td>
<td>no change</td>
</tr>
<tr>
<td>Filter layout</td>
<td>Full Die</td>
<td>TSV+PD only</td>
</tr>
</tbody>
</table>
Reason for change

+ Eliminate single equipment for filter processing.
+ Increase supply security.

Change Date

The change is effective by end of Q2/2018

Sample Availability

Samples are available on request.

Qualification

• Stress measurement on bare wafers after filter disposition and comparison between Current and New Filter Equipment
• 10 Lots Safe Launch
  o 100 % MRB
  o Full data analysis & comparison of optical and electrical parameters
  o FA Analysis of all open short fails
• FMEA

Risk Assessment:

The risk is classified as very low based on following facts:
• Only change to new equipment with better uniformity and stability.
• No change of filter material.
• Identical optical performance.

If you do have further questions, please do not hesitate to contact me.

Best Regards,

Reinhard Rogy
ams AG
Senior Manager Operations