PCN07-2020  
NanEye2D Supply Chain update for 2x2 version

Dear Customer,

Please be informed about the upcoming NanEye supply chain improvement for 2x2 version.

Change Description
To ensure the continuous improvement and to reinforce the NanEye2D supply chain, ams AG has qualified Xintec for the TSV (Through Silicon Via) process. It is ams intention to use Xintec as the primary source of the TSV process.

With the introduction of Xintec for the TSV process, a change in the product form is foreseen in the solder bumps which have a rounded shape and will increase the chip stack height. This change also implies an update on the product data-sheet which will reflect the new qualified condition MSL3.

This is a revision of the PCN05-2018 that was sent on February 26th, 2018. The update includes the following:

- The statement on the changes of material in the product.
- Update of the part number list (2x2 chip versions)

Impact on Stability
As TSV process will move from a research institute to an ams AG qualified supplier production site, an improvement is expected.

Impact on product performance
Sample cameras have been built and tested without showing degradation of product performance.

Implementation date and schedule
ams AG expects to release this change in May 2020.
Impact on Supply Chain
A lead-time reduction for TSV process will lead to a total production cycle time reduction. New production part numbers for TSV process at Xintec were generated and integrated in the chain.

Impact on design
With this introduction of Xintec for TSV process, a change in solder balls shape and composition is expected. This change will contribute to a higher stack height. The TSV material composition will change from copper to aluminium.

Traceability
Selling part number will not change. Its Traceability is assured by batch management in ams AG ERP system.

The following products will be affected.

<table>
<thead>
<tr>
<th>Material No</th>
<th>Material Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>301190004</td>
<td>NE2D_RGB_F2.8_FOV120_SGA FT SE</td>
</tr>
<tr>
<td>301190011</td>
<td>NE2D_RGB_F2.7_FOV90_SGA FT SE</td>
</tr>
<tr>
<td>301190021</td>
<td>NE2D_CHIP_RGB_SGA CON FT SE</td>
</tr>
<tr>
<td>301200033</td>
<td>NE2D_CHIP_B&amp;W_SGA CON FT SE</td>
</tr>
</tbody>
</table>

Please be advised that unless we receive your written refusal concerning this change notification within 30 days, the change notification shall be deemed accepted.

If you do have further questions, please do not hesitate to contact our customer support team at any time.

Best regards,

Peter Crabbe
ams AG
Director Operations CIS