The participants got an impressive introduction on electrostatics basics, ESD damage mechanisms and ESD textures in microstructures, including their failure analysis and diagnostics. Examples and hints for ESD risk evaluation rounded up the seminar content.

The positive feedback we received encourages us to offer this seminar again in 2013.

RoodMicrotec offers worldwide ESD evaluation services for production lines, as well as training and failure analysis.

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Number 1, February 2013 • RoodMicrotec

**eXtended SCM**

In 2012 we have expanded our supply chain management further by adding ASIC design in collaboration with Fabless Companies. This means we can offer an even more comprehensive one-stop-shop service. This initiative was set up at the express request of our customers and introduced in the market as eXtended SCM.

In this context we have extended our professional team with a sales & marketing manager with extensive experience in this area, Mr Malkit Jhitta. Mr Hanoun has been appointed to liaise between our team and the design partners.

The service has been received enthusiastically and we have already welcomed a number of promising customers.

**ESD-Evaluations in Automated Processes**

On 16 September, 30 engineers attended RoodMicrotec’s seminar on ‘ESD-Evaluation in Automated Processes.’ The concept of ESD protection is shifting more and more from workplaces towards automated process facilities. Both the use of modern plastic materials and accelerated process throughputs generate high electrostatic potentials. At the same time, ESD-sensitivity of state-of-the-art electronic components has increased significantly. The existing standards for production line ESD risk assessment do not cover the electrostatic effects within process tools, thus requiring an engineering evaluation approach.

The participants got an impressive introduction on electrostatics basics, ESD damage mechanisms and ESD textures in microstructures, including their failure analysis and diagnostics. Examples and hints for ESD risk evaluation rounded up the seminar content.

RoodMicrotec offers worldwide ESD evaluation services for production lines, as well as training and failure analysis.
eXtended Supply Chain Management

For many years now, semiconductor supply chain services have been a growing contributor to RoodMicrotec’s sales. As RoodMicrotec recognized that customers, market partners and competitors are all looking for a one-stop-shop approach, RoodMicrotec has taken SCM one step further by teaming up with ASIC/ASSP, foundry and assembly partners.

But in contrast to other offers in the market, RoodMicrotec’s eXtended SCM is based on the insight that each application and each project are unique with respect to their technology, design expertise and test requirements. These can only be met with a flexible approach: for each project a specific team of experts in each field is put together, coordinated by a dedicated project manager - from design specification, prototype evaluation, test development, and industrialization to production release. Then RoodMicrotec’s ‘normal’ supply chain management takes over to deal with order processing, production control and shipment logistics.

eXtended SCM already begins in the chip specification phase - thus RoodMicrotec’s experienced test engineers can work with ASIC design engineers on a test concept targeting the selected test environment. If required, even appropriate measurement blocks can be designed into the ASIC at this stage. This DfT (Design for Testability) method can contribute significantly to higher yields and shorter test times once the device is in mass production; these are key factors for bringing the overall unit costs down.

eXtended SCM by no means replaces any of the individual services RoodMicrotec has provided to its customers for many years, but is rather an additional service that combines multiple disciplines.

To summarize, RoodMicrotec’s eXtended SCM combines full turnkey service and full flexibility - the best of both worlds!

Illustration: Scope of eXtended SCM

<table>
<thead>
<tr>
<th>ASIC DESIGN PARTNER</th>
<th>standard: selection by customer</th>
<th>eXtended: RoodMicrotec suggests ASIC partner matching your application</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUNDRY PARTNER</td>
<td>standard: selection by ASIC partner or customer</td>
<td>eXtended: RoodMicrotec suggests optimal ASIC design house/foundry combination for your project</td>
</tr>
<tr>
<td>TESTABILITY</td>
<td>standard: ASIC designers provide access to internal nodes</td>
<td>eXtended: RoodMicrotec test engineers discuss DfT with ASIC designers targeting specific testers - before chip spec is frozen</td>
</tr>
<tr>
<td>ASSEMBLY PARTNER</td>
<td>standard: chosen by customer or ASIC design house</td>
<td>eXtended: RoodMicrotec selects and/or proposes optimal partner for specific project</td>
</tr>
<tr>
<td>project / volume</td>
<td>----------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>PROTOTYPES</td>
<td>standard: debug by ASIC design house or by customer</td>
<td>eXtended: RoodMicrotec offers failure analysis methods plus TCB for rapid modification</td>
</tr>
<tr>
<td>INDUSTRIALIZATION</td>
<td>standard: customers’ test department organizes flow</td>
<td>eXtended: RoodMicrotec offers fast optimization and customized qualification</td>
</tr>
<tr>
<td>TEST &amp; SHIPMENT</td>
<td>standard: customer organizes test, logistics, shipments</td>
<td>eXtended: RoodMicrotec provides full supply chain services</td>
</tr>
</tbody>
</table>

Agenda 2013

26 – 28 February 2013  embedded world 2013  Nuremberg

Visit RoodMicrotec during embedded world 2013 in Nuremberg. You will find us at booth 4-A40 in hall 4. Jürgen Gruber from RoodMicrotec gives a lecture in hall 2 on Tuesday 26 at 2:00 p.m about the theme Chipmodification with focused ION Beam.

23 April 2013  Elektronik Lighting Congress  Munich

Colophon

Investor relations: Philip Nijenhuis, investor-relations@roodmicrotec.com
Irmgard Bayerle, irmgard.bayerle@roodmicrotec.com
Sales and marketing: Reinhard Pusch, reinhard.pusch@roodmicrotec.com
Editor in chief: Marlies Kort, kort Investor Relations
Design and Layout: SjeWorks, V. Vogelaar
Images: S. Jellema, SjeWorks; RoodMicrotec

RoodMicrotec N.V.
“Rembrandt”
Dokter van Deenweg 58
NL-8025 BC Zwolle
The Netherlands
Telephone +31 (0) 38 4215 216

RoodMicrotec GmbH
Motorstraße 49
D-70499 Stuttgart
Telephone: +49 (0) 711 86709-0

RoodMicrotec GmbH
Oettinger Strasse 6
D-86720 Nördlingen
Telephone +49 (0) 9081 804-0

RoodMicrotec GmbH
Motorstraße 49
D-70499 Stuttgart
Telephone: +49 (0) 711 86709-0

www.roodmicrotec.com