



**RoodMicrotec**  
powerful solutions

# RoodMicrotec Newsletter

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## 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.

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.

# 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!

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

Illustration: Scope of **eXtended** SCM

## Agenda 2013

26 – 28 February 2013

embedded world 2013

Nuremberg

Visit RoodMicrotec during embedded world 2013 in Nuremberg  
You will find us at booth 4-640 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

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