



## RoodMicrotec Newsletter

Number 1, May 2015 • RoodMicrotec

# Demand for chips from the automotive sector is booming;

it is the fastest growing market in the entire semiconductor industry.

For RoodMicrotec, this translates into a growing number of requests for support on new products in the automotive market.

This concerns new products in the supply chain, but we also observe that in both Europe and Asia quality requirements are rising steeply. That is an interesting development in which RoodMicrotec can play a big role. We will keep you informed of further developments in our newsletter.

## Martin Sallenhag appointed as CTO RoodMicrotec

On the 1st of March Martin Sallenhag joined RoodMicrotec as CTO and Business Unit Manager for the Qualification & Reliability, Burn-In operation.

Martin has more than 23 years of experience in the electronics industry.

After his Master of Science degree from Lund University in Sweden he joined Ericsson Mobile Phone in 1992. There he started as RF Engineer and then moved on to work as project leader and technical manager for the Mixed Signal ASIC group.

In the early 2000s he spent one year at Axis Communications working in the newly formed Mobile Internet group until in 2001 he joined Dialog Semiconductor as Director of Applied Technology. Martin also worked a few years with product marketing before he joined the newly formed company, Digital Imaging Systems, as VP of Engineering. This company focused on high performance camera modules for the mobile market.

In 2011 he joined Samsung in Stockholm as head of the WiFi Internet of Things operations. This company designed and manufactured highly integrated wireless solutions for the new connectivity market.

Martin Sallenhag

Martin will overlook all technical aspects within the company including Qualification & Reliability, Test Engineering, Failure Analysis and Optomechanical Qualification.

He will also directly be responsible for the business unit Qualification & Reliability, Burn-In.

'I am very excited to join RoodMicrotec in this role and work with this highly skilled team to shape the new company that will not only be a test house but a full service house for components and systems. The new strategy is going to position the company in a completely new market and I believe it to be the absolute right direction for RoodMicrotec', says Martin Sallenhag.

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### The Automotive Competence Centre (ACC)

- a step change in the development of the eXtended Supply Chain Management system (SCM)

Electronic components for vehicle applications have become the global driver of the semiconductor industry.

The use of electronics in conventional vehicles is growing rapidly. And new electric vehicles have even more electronic systems.

In order to maintain the quality and reliability of a vehicle or increase it, the requirements across the whole of the supply chain (car manufacturers/ primary suppliers/subcontractors/component manufacturers) must also be raised simultaneously.

At the same time, major manufacturers are starting to contract out the development of components for customer-specific ICs to subcontractors, together with the downstream process steps.

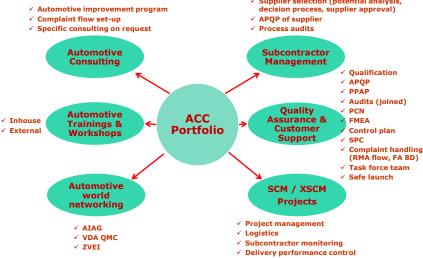
As a consequence, semiconductor design houses now must find partners that are capable of undertaking all the stages following the development of a component.

In view of this new trend, RoodMicrotec decided in Q4/2014 to intensify its own competencies in the automotive field and attract employees who are highly experienced in the automotive sector.

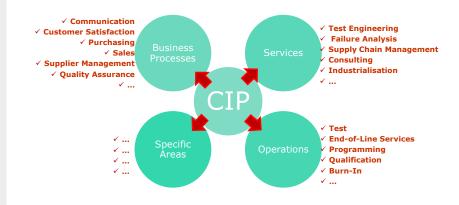
The objective of the ACC is to concentrate the available know-how and to expand RoodMicrotec's existing service portfolio with high-level automotive competencies.

These will enable RoodMicrotec to offer new services that are required and expected for automotive projects.

## Automotive Competence Centre (ACC) Supplier selection (potential analysis,



#### Continuous Improvement Process (CIP)



#### **Projects and prospects**

The establishment of the ACC comes on the back of several years' experience handing SCM projects for the automotive industry and other industrial sectors.

This is how we gained extensive experience of certain specialised areas in the automotive sector such as qualification, assembly, test, burn-in, delivery, failure analysis, etc.

We have already reached the final stage of the tendering process for complete projects following the design of a component (backend), for which RoodMicrotec will function as a fully accountable supplier of bulk component quantities, and prospects are looking good.

# Direct Docking provides significant benefits in testing

ICs are becoming ever smaller, functionality is getting more complex, higher frequency requires shorter distance, performance is increasing and yield has to be maximised.

Direct docking (DD) is a technical solution that allows us to maximise OEE (Overall Equipment Effectiveness), realise shorter time-to-market and improve capital cost.

Using this DD contacting method, the ATE test head is directly connected to the handling system.

#### It provides several benefits:

- shorter and more precise test cell setup;
- no wiring defects, so less maintenance;
- quicker and more reliable loadboard changes.

This shows that the method supports improved effective tester uptime and ultimately contributes to a cost-optimised test solutions for our customers.

#### The technical reasons for this are:

- no cables, so better system performance;
- higher test frequency can be realised, esp. necessary for RF devices;
- less technical risk compared to soft docking (no cables, connectors, etc.);
- accurately fixed connections allow for easier alignment of test / testhead.

RoodMicrotec's operational team has excellent experiences with this docking method and will continuously use it.



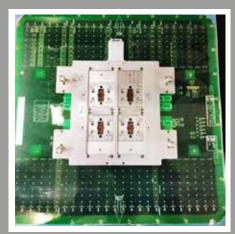
Old setup: Cable docking



New Setup: Direct Docking



Docking System



Load Board for Direct Docking

### Agenda 2015

smthybridpackaging  Internationals Fachinesses und Kongress 165 Systeministegration in der Mikroelektronsk Nürnbern, 95. – 97.65.2015	5 - 7 May 2015	SMT Hybrid Packaging N	Nuremberg, Germany	Trade fair "Optics meet Electronics" booth 109F hall 6
SMT Hybrid Packaging	5 May 2015 10.30 hour *Jürgen Gruber	Failure Analysis Going Toward a Holistic Approach for Succes Cause Detection		hall 7A, booth 7A-335
SMT Hybrid Packaging	5 May 2015 13.00 hour *Gerhard Bayer	Failure Characteristics on PCB (Printed Circuit Board) and PBA (Printed Board Asser		hall 6, booth 6-217J
SMT Hybrid Packaging	6 May 2015 10.30 hour *Uwe Thiemann	Rootcause and risks on LED a	nd LED-Systems	hall 7A, booth 7A-335
	*Lecture is in German language - for questions the speakers are available the whole day at our booth 109F, hall 6.			
25. Firmenkontaktmesse Pyramid 2015	13 May 2015	Recruitment Fair Pyramid	Augsburg, Germany	
RoodNicrotec	13 May 2015	Information meeting for investors, bondholders, analysts, journalists and other interested parties	Amsterdam, The Netherlands	Euronext, Beursplein 5 Meeting starts 16.00 pm.
RoodNicrotec powerful solutions	11 June 2015	Annual general meeting of shareholders	Amsterdam, The Netherlands	Euronext, Beursplein 5 Meeting starts 14.00 pm.

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