

5th International Symposium on Emerging and Industrial DLP® Applications

Frankfurt/Main, Germany
Conference Center IHK Frankfurt
November 16th, 2010

www.dlp-symposium.com

Conference Program – Technical Session

Key Note – DLP® in Industrial Applications
Arun Chhabra, Texas Instruments Inc.

Laser vs. Plasma, an Energetic Evaluation
Dr.-Ing. Stefan Pieke, OpSyTec

High Power VCSEL Arrays for Tailored Illumination with High Brightness
Dr. Holger Mönch, Philips Technologie GmbH

PhlatLight: UV and RGB LEDs engineered for DLP Applications
Michael Lim, Luminus Devices Inc.

**Advanced LED Drivers for DLP® and Small Footprint Optical Modules
for Industrial DLP Applications**
Endre Kirkhorn, Visitech AS

Transfer Problems of Illumination-Uniformity in DMD-Projection Devices
Günter Zöchling, In-Vision Digital Imaging Optics GmbH

Foyer Exhibition

Exhibitors are Befort Wetzlar OD GmbH, BTE Beschichtungstechnik
Elsoff GmbH, Design!Struktur, GFMesstechnik GmbH, In-Vision
Digital Imaging GmbH, OpSys Project Consulting, Optence e.V.,
Texas Instruments Inc., ViaLUX GmbH, Visitech AS

Conference Program – Applications Session

A medical breakthrough: Phototherapy using DLP Technology
Friedrich Lüllau, Lüllau Engineering GmbH

Confocal Microscopy using a Digital Micromirror Device
Prof. Dr. Walter Neu, Univ. of Applied Sciences Emden/Leer

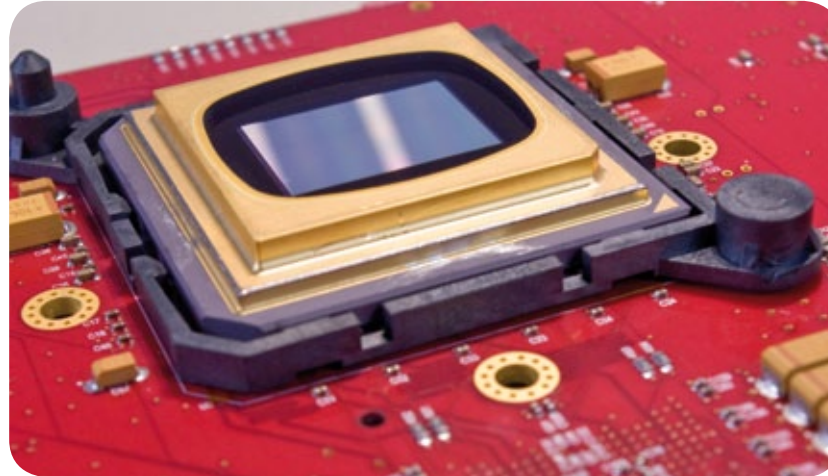
3D Imaging in LifeScience using DLP Technology
Christian Benderoth, GFMesstechnik GmbH

Paving the Way to All Solid State Direct Imaging UV Lithography
Dr. Roland Höfling, ViALUX GmbH
Robert de Jonge, Luminus Devices Inc.

**Next generation 3D Systems:
Exploiting the Switching Speed of DLP® Technology**
Lawrence Bogaert, Vrije Universiteit Brussel, B-Phot

Practical Printing: All done by Mirrors
Robin Pagan, MIVA Technologies GmbH

Register at
www.dlp-symposium.com



During the past years a **wide variety of industrial and scientific applications** have been developed, such as spectroscopy and hyperspectral imaging in medicine, chemistry and geology applications, medical and life-science applications, UV applications in lithography, materials processing and rapid prototyping, optical metrology systems for quality inspection, processing inspection and manufacturing, or applications in optical networking.

Other **new fields are coming** into view such as augmented reality, head-up displays, holographic data storage, NIR projection systems, neuroscience imaging, volumetric displays, etc.

The **technical session** of the conference program covers the many challenging aspects of DLP product development, including

- New DLP and DLP Discovery product platforms
- Product roadmaps and DLP community aspects
- Light source selection and their technical challenges
- Optical system concepts
- Electronics hardware, firmware and software
- System integration aspects

As a trigger for new product developments the **applications section** of the conference highlights innovative product concepts that have been successfully invented and introduced into the markets.

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Registration Fees:

Members of Competence Networks (KNOT)

120,00 Euro (until Oct. 22, 2010) 160,00 Euro (after Oct. 22, 2010)

Others

140,00 Euro (until Oct. 22, 2010) 180,00 Euro (after Oct. 22, 2010)

Cancellations prior to Nov. 3, 2010 free of charge; full fee applies after Nov. 3, 2010. Prices incl. VAT.

For general questions please contact:

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Location

Chamber of Industry and Commerce (IHK Frankfurt am Main)
Ludwig-Erhard-Saal · Börsenplatz 4 · 60313 Frankfurt/Main · Germany

Parking Options during DLP®-Symposium

Parking Garage „Börse“ · Meisengasse, Frankfurt/M
Parking Garage „Schiller-Passage“ · Taubenstraße 11, Frankfurt/M



with



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Sponsored by:

VISITECH

Visitech AS
Drammen, Norway

in-VISION®
a *Digital Imaging*® Company

In-Vision Digital Imaging GmbH
Guntramsdorf, Austria

DLP®
TEXAS INSTRUMENTS

Texas Instruments Inc.
Plano, TX, USA

Date: November 16, 2010

Time: 09:30 h – 17:10 h

Location: Chamber of Industry and Commerce (IHK Frankfurt am Main)
Ludwig-Erhard-Saal
Börsenplatz 4, 60313 Frankfurt/Main, Germany

with



Program and Schedule

- 09:30 h Welcome by Organizers
- 09:35 h Key Note – DLP in Industrial Applications
Arun Chhabra, Texas Instruments Inc.
- 10:10 h Laser vs. Plasma, an Energetic Evaluation
Dr.-Ing. Stefan Pieke, OpSyTec GmbH
- 10:40 h Coffee Break
- 11:20 h Advanced LED Drivers for DLP and Small Footprint Optical Modules for
Industrial DLP Applications
Endre Kirkhorn, Visitech AS
- 11:50 h PhlatLight: UV and RGB LEDs engineered for DLP Applications
Michael Lim, Luminus Devices Inc.
- 12:20 h Lunch break
- 13:45 h High Power VCSEL Arrays for Tailored Illumination with High Brightness
Dr. Holger Mönch, Philips Technologie GmbH
- 14:10 h Transfer Problems of Illumination-Uniformity in DMD-Projection Devices
Günter Zöchling, In-Vision Digital Imaging Optics GmbH
- 14:35 h Paving the Way to All Solid State Direct Imaging UV Lithography
Dr. Roland Höfling, ViALUX GmbH, Germany
Robert de Jonge, Luminus Devices Inc., The Netherlands
- 15:00 h Coffee Break

with



- 15:30 h Next generation 3D Systems: Exploiting the Switching Speed of DLP Technology
Lawrence Bogaert, Vrije Universiteit Brussel, B-Phot, Belgium
- 15:50 h Practical Printing: All done by Mirrors
Robin Pagan, MIVA Technologies GmbH
- 16:10 h A Medical Breakthrough: Phototherapy using DLP Technology
Friedrich Lüllau, Lüllau Engineering GmbH
- 16:30 h Confocal Microscopy using a Digital Micromirror Device
Prof. Dr. Walter Neu, Univ. of Applied Sciences Emden/Leer
- 16:50 h 3D Imaging in LifeScience using DLP Technology
Christian Benderoth, GFMesstechnik GmbH

Closing words and end of event
Alfred Jacobsen, OpSys Project Consulting

Moderation: Alfred Jacobsen, OpSys Project Consulting

Foyer Exhibition

Befort Wetzlar OD GmbH, Germany
BTE Beschichtungstechnik Elsoff GmbH, Germany
Design!Struktur U. Bernatzki, Germany
GFMesstechnik GmbH, Germany
In-Vision Digital Imaging GmbH, Austria
OpSys Project Consulting, Germany
Optence e.V., Germany
Texas Instruments Inc., USA
ViALUX GmbH, Germany
Visitech AS, Norway