We prototype your idea
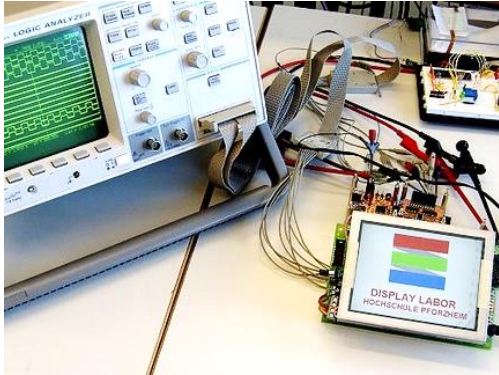
From ideas & concepts to R&D, prototypes incl. hardware, software, measurement, evaluation …

… functional prototyping …

… towards implementation, presentations …

How to cooperate?

Use our Know-How. We offer both industrial and academic cooperation on topics related to display technologies and LEDs together with our partners.

We are also happy to advise you on the possibilities of public funded programs such as BMBF and ZIM.

STEINBEIS TRANSFERZENTRUM SIGNALVERARBEITUNGSSYSTEME

Contact

We offer tailored to your needs:

• Research and development
• Prototyping
• Measurements incl. new methods
• Evaluation and assessments
• Consultancy and strategy
• Presentations
• Workshops, seminars, training
• …

for electronic displays, display systems, LEDs, hard- and software development

DISPLAY LAB
PFORZHEIM UNIVERSITY

Contact:

Prof. Dr. Karlheinz Blankenbach
Phone +49 151 167 400 68
Fax +49 7231 28 - 6060
kb@displaylabor.de
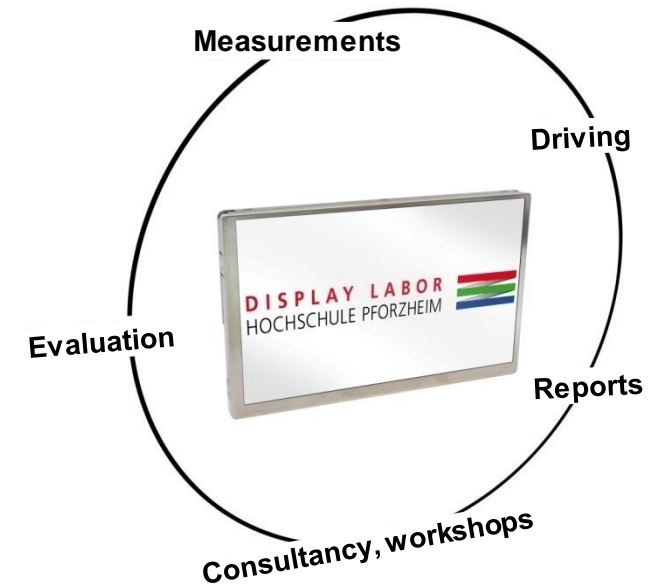www.displaylab.org

Secretary: +49 7231 - 28 - 6135

Pforzheim University
School of Engineering
Information Technology
Tiefenbronner Straße 65
D-75175 Pforzheim

We make your

ideas sparkling …

www.displaylab.org

Display Lab

www.displaylab.org

Measurements

Driving

Evaluation

Reports

Consultancy, workshops

+ LEDs

DISPLAY LAB
PFORZHEIM UNIVERSITY

Display Technologies

Our competence in display technologies and applications base on technical expertise and practical know how with long-time experience and networking.

Our focus:
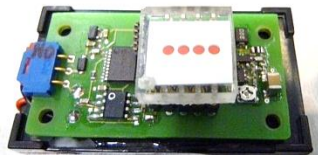- Automotive
- Industry
- White goods
- E-Signage ...

Energy-efficient displays

LCD
- Passive Matrix
- Active Matrix
- Backlight
- Segmented …

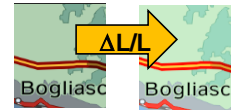### E-Paper
- Technologies
- System design

OLED
- Displays
- Signs, lighting

Display Driving + Software

We develop customized display systems in terms of hardware and software incl. interface and graphics controller. HMI/GUI prototyping etc. enable systems.

- 8 - 32-bit
- FPGA
- Industrial PC
- Graphics controller
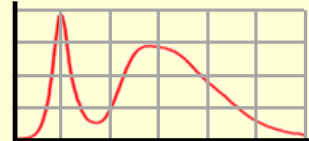- Image enhancement software
- ASIL

µC

ΔL/L

Bogliasco   Bogliasco

Display evaluation is performed with dedicated software and test patterns for optical evaluation and visual inspection (assessment).

LEDs

- RGB automotive interior lighting (ISELED)
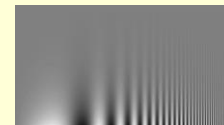- LED street lighting
- Visible light communication (VLC)

Rel. L

λ /nm

LED optical measurements:
- Spectra …
- Color (management)
- Uniformity (CSF) …
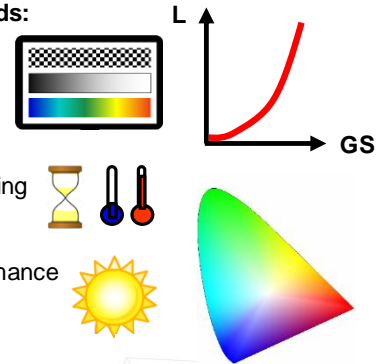
RGB matrix

LED systems

Display - Metrology

Our well equipped optical measurement lab supports you to evaluate and assess your displays in terms of all major parameters.
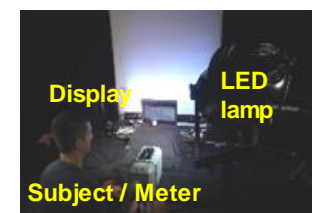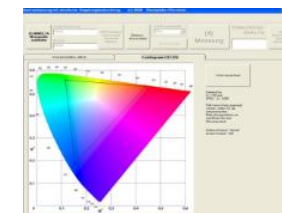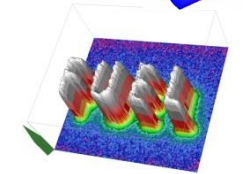
Measurement methods:
- Luminance
- Contrast ratio
- Gray level, gamma
- Color
- Lifetime
- Burn-In, Image Sticking
- Uniformity
- Response time
- Ambient light performance

L

GS

Equipment:
- Luminance meter
- Spectrometer
- Luminance/color imager
- Dark room
- Lamps for ambient light
- Response time device
- …

AUTO

Display   LED lamp

Subject / Meter

We support you as well regarding planning, design and evaluation of your optical test benches and recommend either measurement devices and evaluation strategies. This includes HW & SW as well.