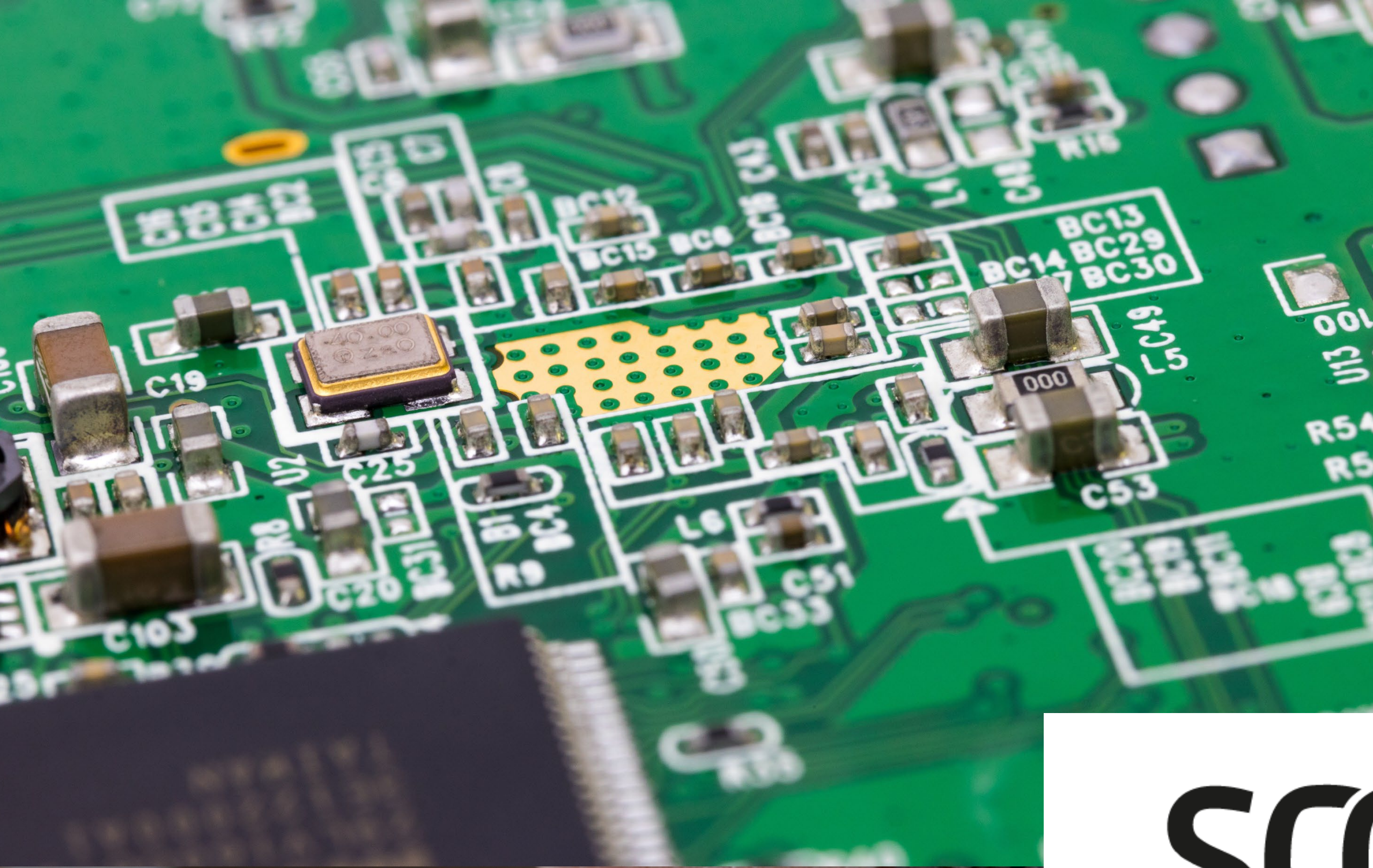




A Relaxed View into a Microscopic World

sina **SCOPE**



SCOPE
sina

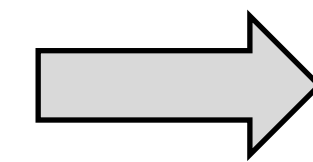


OVERVIEW

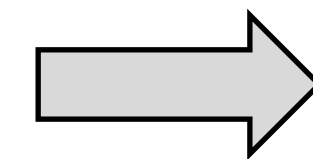
- + [sinaSCOPE – Focus on ergonomics](#)
- + [sinaSCOPE – Digital 3D microscopy system](#)
- + [Overview of sinaSCOPE variants](#)
- + [3D technology](#)
- + [sinaSCOPE OEM – Tailor-made solutions](#)
- + [sinaSCOPE web shop](#)
- + [Solectrix GmbH – the manufacturer](#)



Since the 16th century, microscopes have served as essential tools for inspection and working.



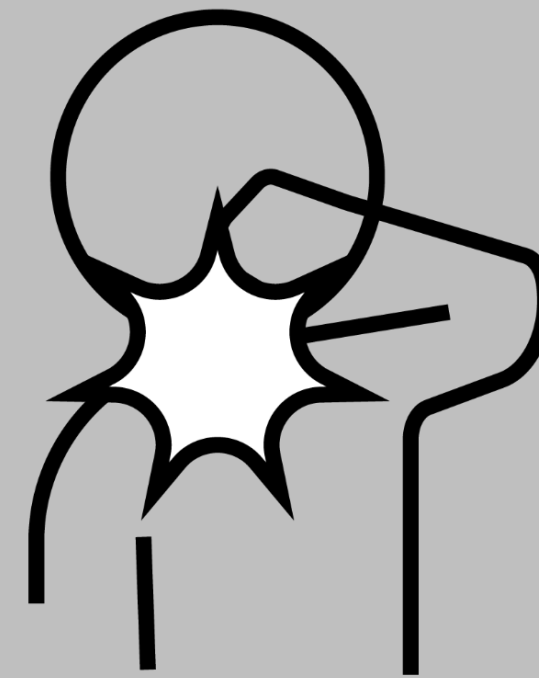
However, traditional microscopes are not tailored to the users' needs.



And yet, approximately 250,000 microscopes are in use in German laboratories!



Prolonged, unhealthy
posture
(leaning forward
towards the eyepiece)



Pain
in the back and neck
→ Loss of concentration,
rapid fatigue



Long recovery
→ up to
and including
incapacity for work

sinaSCOPE – Ergonomic, flexible and comfortable



- + Fatigue-free working on a large 3D screen
- + Prevents loss of concentration
- + Optimal choice of working position
- + Unrestricted working and viewing area
for ergonomic working – head remains free to move.
- + Time-consuming tasks become significantly easier



➡ Invest in your employees' health and benefit
from improved work performance!



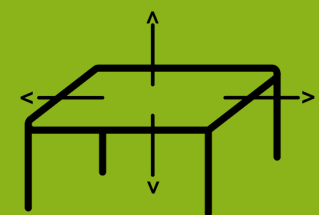
- + Comfortable viewing of objects on a large 3D monitor in 4K cinema quality
- + Improved concentration through ergonomically optimized working
- + Brilliant 3D live image without 3D glasses
- + Easy digital use/archiving of image data

3D

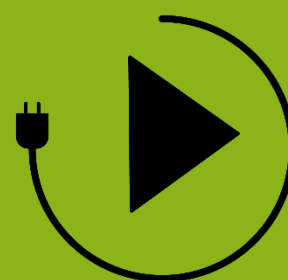
- + **Spatial image:** depth information as with an analogue stereomicroscope



- + **Workplace microscope:** Seamless hand-eye interaction for precise work



- + **Large work space:** More room for precise and comfortable working



- + **Plug-and-Play:** No prior knowledge required – set it up and start right away



- + **Made in Germany:** High-quality technology with German engineering expertise

- + **sinaSCOPE Basic** – the smart entry point
- + **sinaSCOPE Complete** – the comfortable complete system
- + **sinaSCOPE Upgrade** – the digital upgrade for your existing microscope
- + **sinaSCOPE Pro Series** – teamwork on the next level
- + **sinaSCOPE OEM** – tailor-made solutions

sinaSCOPE Basic – the smart entry point



- + **Digital 3D microscope** that uses two 4K cameras to capture objects and display them on a 3D monitor.
- + Ideal for assembly, repair and testing in microelectronics, precision engineering, laboratory work and quality assurance – for use in research and education.
- + **Optimization of quality control and fault analysis**
- + **Easy documentation**
- + **High depth of field and spatial visualization**
- + **More precision for inspection and production** (assembly, soldering, etc.)

- + **Image processing electronics**

sinaSCOPE Control Compact – space-saving mini PC

- + **Camera heads**

Solectrix SXC5 twin camera heads with 50 mm lenses

- + **Display**

Solectrix SXD2 autostereoscopic 15.6-inch 4K display

- + **Software**

SX Camera ISP, SX 3D Analyzer, SX Monitor License

- + **Includes accessories** (basic microscope mount with stand, clip-on ring light, etc.)



sinaSCOPE Complete – the comfortable complete system



- + **Digital 3D microscope** that uses two 4K cameras to capture objects and display them on a 3D monitor.
- + Ideal for assembly, repair, and testing in microelectronics, precision engineering, laboratory work, and quality assurance—use in research and education.
- + **Optimization of quality control and error analysis**
- + **Easy documentation**
- + **High depth of field and spatial visualization**
- + **More precision for inspection and production** (assembly, soldering, etc.)

- + **Image processing electronics**

sinaSCOPE Control Compact – space-saving mini PC

- + **Camera heads**

Solectrix SXC5 twin camera heads with 50 mm lenses

- + **Display**

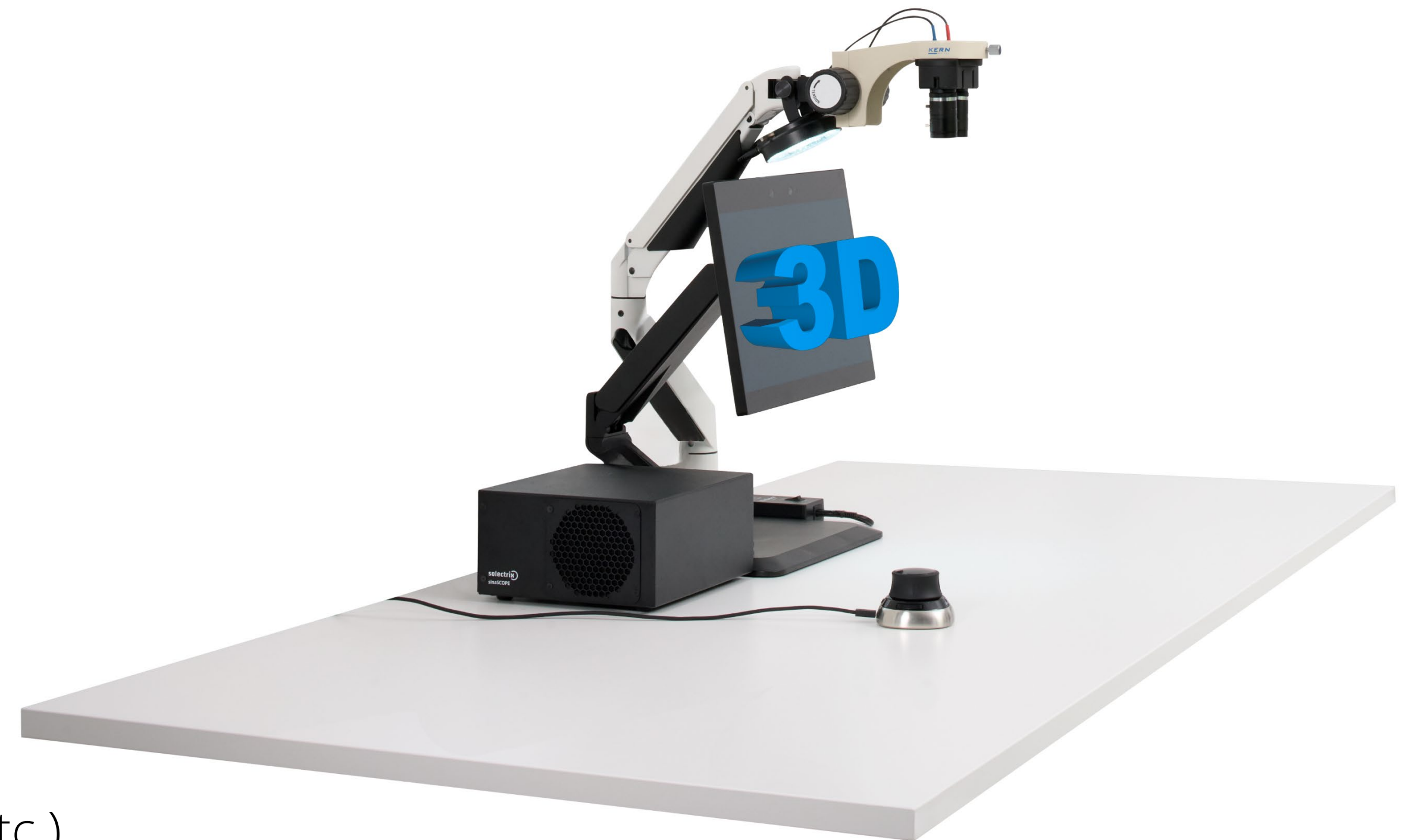
Solectrix SXD2 autostereoscopic 15.6-inch 4K display

- + **Software**

SX Camera ISP, SX 3D Analyzer, SX Monitor License

- + **Includes accessories**

Microscope stand with spring arm for ergonomic positioning, 3Dconnexion SpaceMouse, LED ring light, etc.)



- + **Illuminates and magnifies the object by 7× to 36×**

The high magnification and image quality precise quality control.

- + **Ergonomic and space-saving design**

Large working area thanks to camera heads positioned 43 cm above the object – ensuring an unobstructed view and maximum freedom of movement. Easy operation via wireless mouse and keyboard.

- + **Comfortable working environment**

An upright head posture and ergonomically optimized working position help reduce fatigue and improve focus.

- + **Digital processing**

Digital imaging enables direct documentation of inspection results for further analysis and reporting.

- + **Real-time 3D imaging without 3D glasses**

4K UHD resolution with minimal latency for seamless live 3D viewing.

sinaSCOPE Upgrade – the digital upgrade for your microscope



- + Easily upgrade your existing analog stereo microscope to a 3D digital system.
- + Replace the eyepieces with two 4K miniature cameras.
- + Adjust and calibrate via Solectrix image processing software.
- + Compatible with all optical, eyepiece-based stereo microscopes.

- + **Image processing electronics**

sinaSCOPE Control Compact – space-saving mini PC

- + **Camera heads**

2× Solectrix SXC4 miniature camera head

- + **Display**

Solectrix SXD2 autostereoscopic 15.6-inch 4K display

- + **Software**

SX Camera ISP, SX 3D Analyzer, SX-Monitor License

- + **Includes accessories** (flexible monitor mount, 3Dconnexion SpaceMouse, etc.)



- + **Cost-efficient**

Utilizing existing hardware reduces investment costs.

- + **Modular**

Flexible expansion of existing microscope systems.

- + **Fast integration**

Minimal conversion time and easy installation.

- + **Future-proof**

Compatible with future software and hardware updates.

- + **Individually customizable**

Adaptable to specific applications and requirements via configurable SX image processing software.

- + **Low maintenance**

Industrial-grade components ensure no calibration is required during operation.



sinaSCOPE Pro series – perfect for teams



- + With a **powerful desktop PC**, the Pro series supports a second monitor output for **multi-user applications** (3D images for multiple people wearing 3D glasses) with lower latency (65 ms).
- + Ideal for **training, education, and continuing education**, as well as presentations
- + Ideal for use in **universities, training centers, and in-company training**.

Available as sinaSCOPE Upgrade Pro
and sinaSCOPE Complete Pro

sinaSCOPE Technology – Hardware I

Camera systems

- + 4K high-quality Sony image sensor / 60 frames per second
- + As a single camera with C-mount lens connection or dual-head camera for use with all 76 mm lens carriers

Image processing unit

- + Solectrix Windows-based mini PC or optionally powerful desktop PC with graphics card
- + Solectrix proFRAME grabber card integrated for latency-free transmission of image data from camera systems

sinaSCOPE Technology – Hardware II

Image output / available monitors

+ Autostereoscopic monitor

- + Single-user system with EyeTracker for user localization
- + 3D image displayed directly on the monitor via micro lens film

+ Glasses-based monitor

- + Multi-user system: second monitor output (3D image for multiple

+ Control units

- + 3Dconnexion SpaceMouse
- + Wireless keyboard with mouse



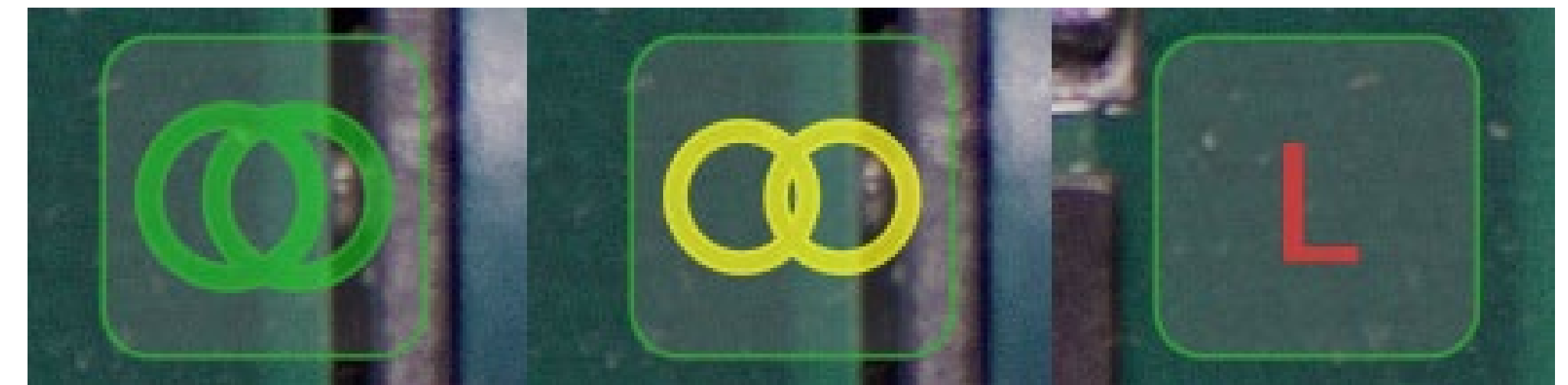
sinaSCOPE Software I

+ High Quality Image Signal Processing

- + Cinema-quality color grading with Solectrix Image Pipeline for the highest possible image quality

+ Stereo Analyzer and Correction

- + Automatic adjustment of the two camera sensor signals
- + for optimal stereo viewing



+ Image Control

- + Digital zoom – brightness control, contrast adjustment, color saturation adjustment
- + Switch between 2D and 3D viewing possible

sinaSCOPE Software II

Monitor Support

- + Interface to autostereoscopic or glasses-based 3D monitors

+ Image Capture / Playback

- + sinaSCOPE supports the recording, playback, and display of 3D image data
- + Screenshots and display in image gallery, archive location can be selected individually
- + JPEG stereo format (.jps), stored in cross-eyed side-by-side format

+ User Interface

- + On-screen menu navigation for sharpness, exposure, contrast, saturation, brightness via 3D and wireless mouse
- + Extended menu for sinaSCOPE setup and configuration, access-protected, operation via keyboard

- + Are you interested in the sinaSCOPE concept?
- + Are you a microscope system manufacturer or a device producer working with optical inspection systems?
- + Or do you have ideas on how sinaSCOPE could enhance your current setup?

We offer a complete integration kit that allows you to implement sinaSCOPE technology in your own microscope setup.

- + 4K camera heads to upgrade your analog stereo microscope
- + Capturing module (Solectrix proFRAME PCIe® board) for integration into your image processing system
- + Autostereoscopic 4K UHD screens in 15.6 or 31 inches
- + Software
- + Accessories



For all customer-specific adaptations → Contact Solectrix customer support

sales@solectrix.de



We customize the sinaSCOPE system
to your specific requirements and wishes!

Please contact the Solectrix customer support – sales@solectrix.de

Visit our sinaSCOPE-Webshop:

<https://solectrix.de/en/products/sinascope/>

Reliable expertise in camera and image processing technologies for over 20 years



ARRISCAN

Feature film
scanners & lasers



ARRI ALEXA-Series

Professional digital
film camera



proFRAME

Video grabber
and playback systems



Automotive

mirror replacement
system

Rapid Imaging
Prototyping System



sinaCAM 3D

Broadcast-3D-HD
camera system



sinaSCOPE 3D

3D 4K microscopy
systems

2005

2025

- + Solectrix GmbH is an independent full-service provider specializing in the **development** and **manufacture** of sophisticated embedded electronics systems and devices.



+ Markets:

- + Imaging and camera technology
- + Medical
- + Automotive
- + Industrial



Solectrix locations: Fürth (HQ), Mannheim, and Leipzig

- + **Development and production in Germany**

Thank you very much
for your attention!





solectrix GmbH
Dieter-Streng-Str. 4
90766 Fürth
Germany



Geschäftsführer:
Dipl.-Ing. (FH) Stefan **Schütz**
Dipl.-Ing. (FH) Jürgen **Steinert**



Tel.: +49 (0) 911 - 30 91 61 - 0



info@solectrix.de

www.solectrix.de