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Assembly and Automation

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VOLUME 40 - NUMBER 1

THE GLOBAL ELECTRONICS PUBLICATION

Jan/Feb 2025

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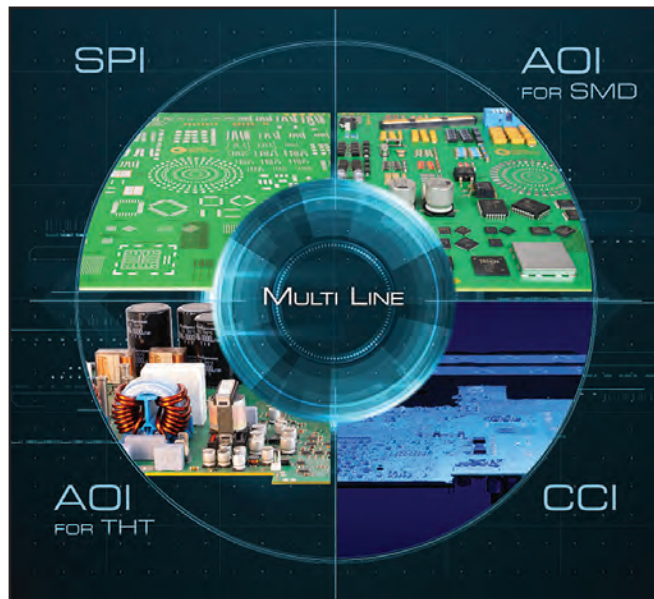


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GÖPEL Launches All-Around Inspection in a Single Platform

AUSTIN, TX — The new Multi Line from GÖPEL electronic is a flexible platform that combines dif-



Multi Line offers combined inspection tasks in a single platform.

ferent inspection tasks such as SMD and THT inspection, Solder Paste Inspection (SPI) and Conformal Coating Inspection (CCI).

The centerpiece of this solution is a modular base system with standardized, easy-to-use operating software. The flexible all-around system can be configured with modules for AOI, SPI, and CCI, supporting all optical inspection tasks throughout the entire manufacturing process. Multi Line also offers additional, customer-specific configuration options, such as double-sided 3D inspection without turning the assembly. Standardized, award-winning software makes the systems easy to use, reducing effort and maximizing efficiency.

Flexible Transport

For THT printed circuit board assemblies (PCBAs), Multi Line provides flexible transport options, with or without carriers, and all the necessary camera modules for this application. It also allows THT solder inspection, even during return on the optional lower transport conveyor. Due to 3D technology, solder joints can be inspected not only

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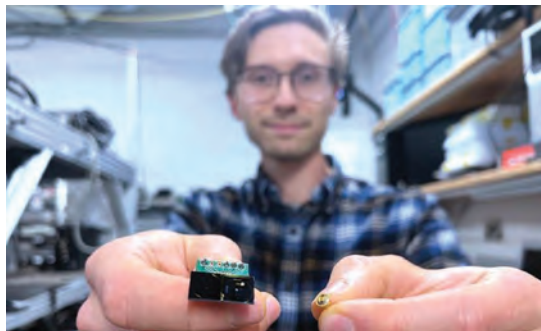
Precision Lasers at the Chip Scale

SANTA BARBARA, CA — For experiments that require ultra-precise measurements and control over atoms — think two-photon atomic clocks, cold-atom interferometer sensors and quantum gates — lasers are the technology of choice, the more spectrally pure (emitting a single color/frequency), the better. Conventional lab-scale laser technology currently achieves this ultra low-noise, stable light via bulky, costly tabletop systems designed to generate, harness and emit photons within a narrow spectral range.

But what if these atomic applications could be lifted from their current confines in labs and on benchtops? This advancement is at the heart of the effort at UC Santa Barbara engineering professor Daniel Blumenthal's lab, where his team seeks to recreate

the performance of these lasers on lightweight devices that can fit in the palm of the hand.

"These smaller lasers will enable scalable laser solutions for actual quantum systems, as well as lasers for portable, field-deployable and space-based



Andrei Isichenko holds the ring resonator (left).

quantum sensors," says Andrei Isichenko, a graduate student researcher in Blumenthal's lab. "This will impact technology spaces such as quantum comput-

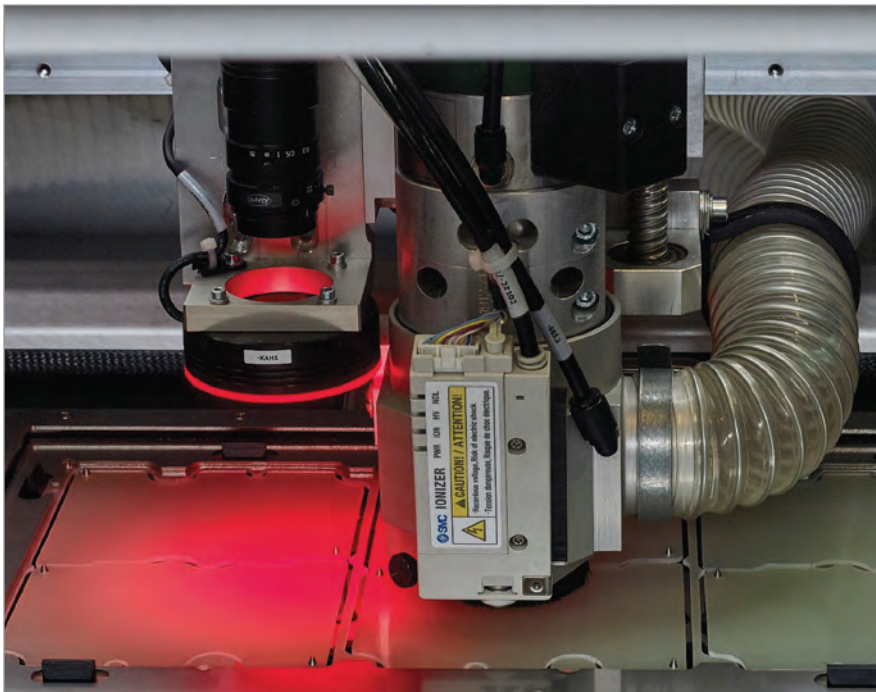
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Self-Assembling Electronics

RALEIGH, NC — Researchers have demonstrated a new technique for self-assembling electronic devices. The proof-of-concept work was used to create diodes and transistors, and paves the way for self-assembling more complex electronic devices without relying on existing computer chip manufacturing techniques.

"Existing chip manufacturing techniques involve many steps and rely on extremely complex technologies, making the process costly and time consuming," says Martin Thuo, corresponding author of a paper on the work and a professor of materials science and engineering at North Carolina State University. "Our self-assembling approach is significantly faster and less expensive. We've also demonstrated that we can use the process to tune the

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Milestone Anniversaries in 2025

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mands of the electronics industry. "Celebrating 15 years of innovation, PARMi USA has solidified its reputation for delivering exceptional 3D inspection systems that combine unparalleled precision with user-friendly operation," says Juan Arango, head of sales and business development, PARMi USA. "Our strong growth in the U.S. market reflects the trust our customers place in the quality and reliability of our automated optical and solder paste inspection solutions. We are committed to empowering manufacturers across industries with the cutting-edge technology they need to achieve maximum efficiency and uncompromising product quality."

Web: www.parmi.com

Nihon Superior Co. Ltd. — 60 Years

Nihon Superior is celebrating its 60th anniversary, marking its legacy of leadership in the metal-joining and soldering materials industry. The company began its journey under the vision of Toshiro Nishimura, who initially supplied brazing alloys to Japanese metal-joining businesses. Over the years, with three generations of the Nishimura family leading the way, Nihon Superior has expanded globally, continuously developing breakthrough solutions and entering new markets. A key turning point came when Tetsuro Nishimura, the current president, invented the SN100C alloy, a development that trans-

formed the industry and cemented Nihon Superior's global influence.

Tetsuro Nishimura shares, "This 60th anniversary is a chance to express our deepest gratitude to our customers who have supported us on our journey to becoming a global leader in soldering materials. We are committed to earning their trust by



Tetsuro Nishimura, president (center).

continuously developing new technologies and products and supporting the Sustainable Development Goals (SDGs)."

Web: www.nihonsuperior.co.jp/english

Murray Percival Company — 65 Years

As the Murray Percival Company celebrates its 65th anniversary, the company reflects on the legacy of its founder, Murray A. Percival Sr., who built the company on principles of honesty, integrity, and loyalty. Since its founding on January 4, 1960, the company has grown to become the leading supplier to the midwest's electronics industry, offering thousands of consum-

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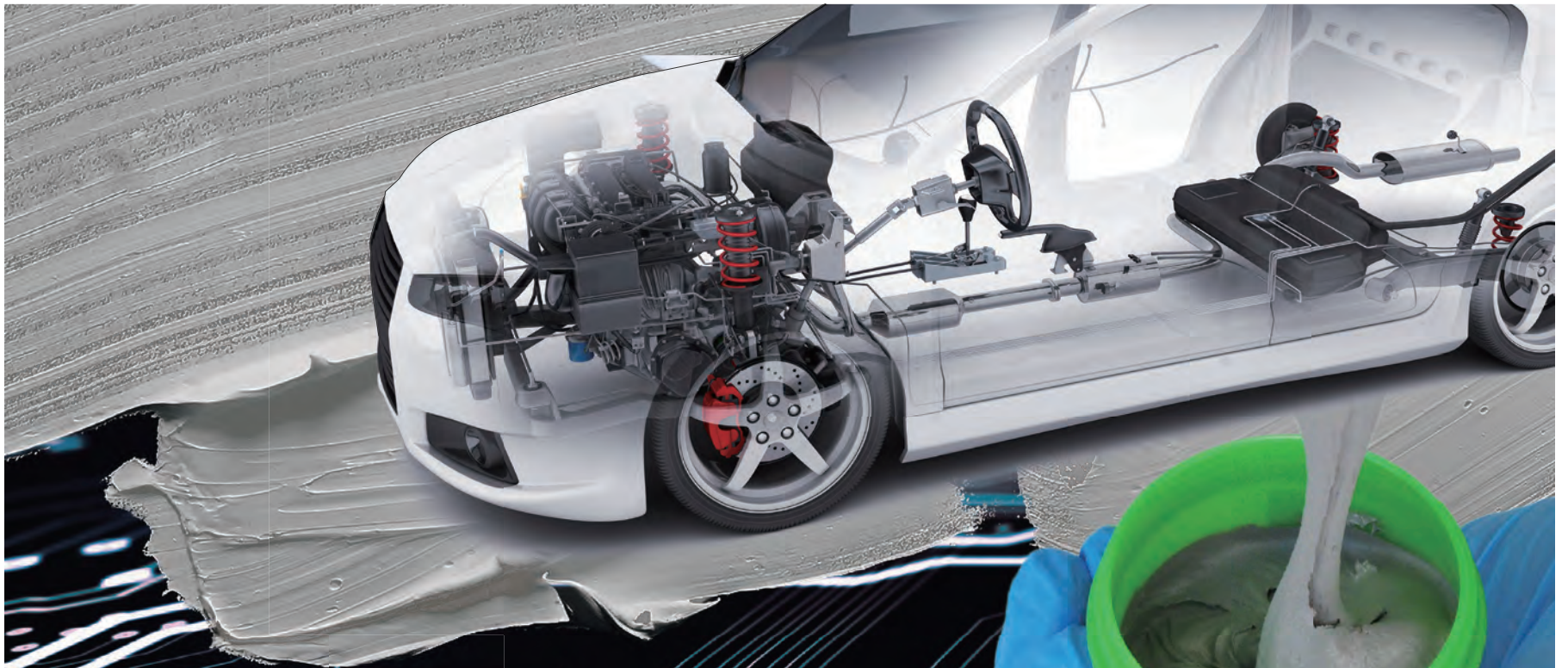
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