Spring 2026

PPI Newsletter

www.ppisystems.com

Resistor Trimming Solutions

Resistor Trimming on Temperature Sensors

The Future of Resistor Trimming

The sensors discussed in this article are Resistance Temperature Detectors (RTDs), based on the principle that the electrical resistance of a conductor increases with increasing temperature. Due to the large available temperature range and chemical inertness of platinum (Pt), it has long been the conductor of choice. The standard devices have a resistance of 100Ω at 0°C, with 1000Ω also used for lower power consumption and therefore less influence of self-heating by the current flow.

These devices have a wide variety of uses including automotive (temperature monitoring of the engine, air intake, coolant, transmission fluid, etc.) consumer electronics, power circuits, food processing equipment, industrial and medical electronics as well as military and aerospace applications.

Read more...

Events

Sensors Converge

Santa Clara, CA

May 5-7, 2026

Sensor and Test

Nuremberg, Germany

June 9-11, 2026

PPI Systems Announces Agreement to Provide Wafer Trimming Systems to Major North American Semiconductor Wafer Manufacturer

PPI Systems is pleased to announce that it has begun providing RapiTrim-S semiconductor wafer trimming systems to a major North American semiconductor chip manufacturer, replacing older systems as they reach end of life. The RapiTrim-S is a high performance, turnkey laser trimming system for the optimization of linear and mixed-signal IC devices on semiconductor wafers.

“As older wafer trimming systems end their service life, PPI stands poised to offer the next generation of wafer trimmers as their replacements for companies upgrading, reshoring and re-tooling.” states Robert Parker, Vice President of PPI Systems. “Modern systems provide many features that have not been available on previous generations, allowing easier use along with faster, more accurate results.”

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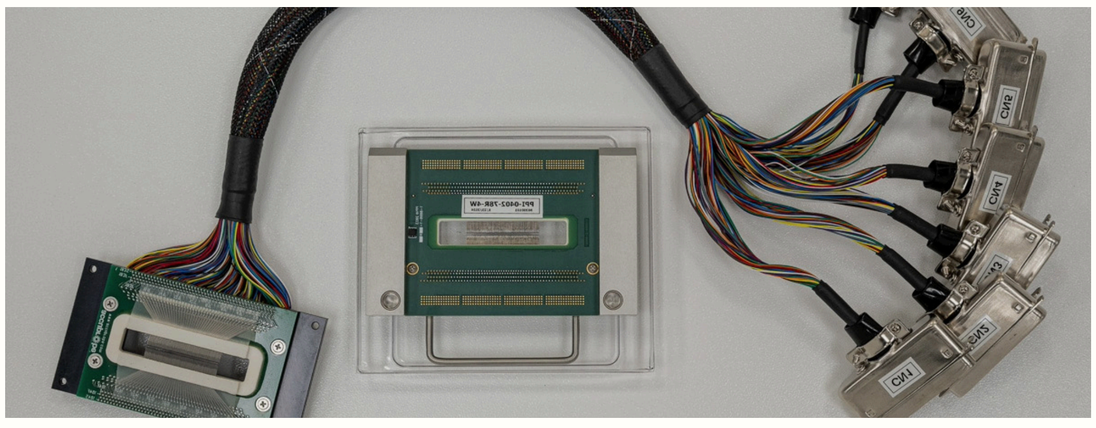
Product Insights

Next Generation Probe Card Resistor Trimming Systems



PPI Systems designs and manufactures the most advanced turnkey laser resistor trimming solution for modern chip resistors, taking advantage of the developments found in next generation probe card trimming. Modern electronics, mechanics and software design advances produce trimmers that are faster, more accurate with greater flexibility than older systems designed over 40 years ago. Features include:

- Designed for extremely complex and demanding chip resistor trimming applications.
- PPI’s new cable free chipR probe cards:
  Eliminate the large cable bundles that accompany traditional chipR probe cards, removing damage risk to the cables for easier handling and storage as well as easier repair
  Allows faster probe card exchange
  Lower cost than the old style cabled cards with shorter lead times

Read more...

- Accuracy and performance to meet 0201 design and beyond
- Handles up to 60 mm wide substrates
- RapiTrim chipR trimming system customers benefit from:
  - Automatic alignment and planarization
  - High performance 4-axis prober with profiled motion trajectory control
  - Fast job changeover
  - Automatic probe card cleaning
  - Real-time measurements that enable output of trim profiles for process optimization
  - Four independent high-speed source-measure units, each capable of full Kelvin measurements
- Optional temperature-controlled chuck.

PPI Systems offers a full selection of automation choices. For a complete guide to stack loader, magazine loader and custom options please see our optional features page.

RapiTrim Short Pulse (1.03 µm) Laser Trimmers

PPI Systems is pleased to introduce the RapiTrim IR (1.03 µm) short pulse laser resistor trimming system. These long-life, low maintenance fiber lasers produce ultra short pulses with extremely high peak power for superior process quality in a variety of materials. Systems are suitable for thick and thin film resistor trimming with a range of spot sizes.

Able to handle both high-mix, low volume and high-volume applications with ease, RapiTrim systems are easy to install with intuitive software and over 100 years of combined application experience shared by our engineering and R&D groups. No matter what your job specification, there is a RapiTrim laser resistor system to meet your needs.

Articles and Case Studies

PPI Systems Announces Major European Resistor Trimming Win with One of the World's Largest Passive Device Manufacturers

RapiTrim Solutions: Trimming Flying Probes Myths and Misconceptions

Designed to meet todays applications, our laser processing systems are complete turnkey systems.

As a leading producer of laser material processing solutions since 2003, PPI Systems is passionate about providing world-class equipment and support to its customers. Based in Ottawa, Canada, PPI designs and manufactures turn-key laser drilling and trimming systems for the electronic interconnect and component markets from its 23,000 square foot production facility

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