

Fall 2023

PPI

Newsletter

www.ppisystems.com

Resistor Trimming Solutions

RapiTrim-P Probe Card System

Next generation resistor trimming system.

Since the early days of laser resistor trimming, probe cards have been the primary method of connecting resistors to be trimmed to the measurement system. Despite some inherent limitations, probe cards have benefits in the manufacture of today's components and circuits.

Typical situations might be simple circuit production (low resistor density), that can be trimmed in a single probe card pass, high volume repetitive component trim or simply a desire to continue with a known process and existing library of probe cards.

Read more...

<https://www.ppisystems.com/wp-content/uploads/2023/08/Solution-RapiTrim-P.pdf>

Events



EuMW 2023
San Diego, CA
Sept. 17-22, 2023



productronica 2023
Munich, Germany
Nov. 14-17, 2023

Report from the productronica trade exhibition

PPI Systems was pleased to attend the productronica trade fair in Munich Germany from Nov. 14 to 17th. PPI presented our RapiTrim resistor trimming system with our European distributor, GS Electronic GmbH. We spent four busy days demonstrating the advantages of modern resistor trimming systems for wafer, chip resistor, component and circuit trim manufacturers. Our customers came prepared with questions and input about their applications and were impressed with the systems robust construction and the ease of use of the ProSys software interface.

With more than 1400 exhibitors, the show attracted over 42,000 visitors from 45 countries, bringing attendance levels back to pre-covid levels.



Exhibitors: >1400 | Trade Visitors: 42,000 | Exhibition Space: 90,000 m²

Product Insights

Wafer Trimming

The RapiTrim-S wafer resistor trimmer is a full turnkey system with IR laser, producing spot sizes of 6 to 12 μm . It is designed for high throughput optimization of linear and mixed-signal IC devices. ProSys trimming software allows rapid job setup and new process development.

Designed for Next-Generation Semiconductor Trim and Test when your high-volume production needs are best served by a probe card system, RapiTrim is the system of choice. Incorporating the industry's highest performance probe card handler, ultra-rigid and high resolution XY motion stages, and a modern user interface with automated run-time calibration. RapiTrim delivers the reliable 24x7 production solution you need. Trimming your next-generation products shouldn't be trusted to equipment designed decades ago.

IR laser trimming and wafer probe system

Simplified integration of industry standard automated testing equipment (ATE)

Industry standard wafer loader/unloader options



Features include:

- Designed for trimming on semiconductor wafers up to 300 mm.
- Compatible with industry standard probe cards and integration with modern automatic testing equipment.
- Advanced beam positioning and pulse control for improved process quality, accuracy and trim speed.
- Automatic run-time calibration for optimum process integrity.
- Turnkey customized solutions for both full wafer and singulated die, with and without automated part handling.



Chip Resistor Trimming

PPI high-density probe card-based resistor trimming systems are designed specifically to work with extremely complex and demanding chip resistor trim applications. This type of high-volume production requires the high speeds and accuracies found in the modern software and hardware design advances.

- Designed for extremely complex and demanding chip resistor trimming applications.
- Setting a new standard with wireless probe cards.
- Resistance is measured in real time using high speed PPI proprietary measurement systems.
- Advanced probe card solutions with high performance 4-axis prober, fast job changeover, automatic alignment and planarization along with simplified job setup, profiled motion trajectory control and automatic probe card cleaning.
- Optional temperature-controlled chuck.
- PPI real-time measure and trim control system with cut profile measurement data available as part of normal operation, speeding process optimization and making systems extremely R&D friendly.
- Four independent source-measure units, each capable of full Kelvin measurement.
- PPI Systems offers a full selection of automation choices.

Articles and Case Studies

RapiTrim Solution: The RapiTrim-P Probe Card System

<https://www.ppisystems.com/wp-content/uploads/2023/08/Solution-RapiTrim-P.pdf>

RapiTrim Solution: RF and Microwave Components

<https://www.ppisystems.com/wp-content/uploads/2023/08/Solution-RF-and-Microwave-Components.pdf>

Net Generation Probe Card Based Resistor Trimming

<https://www.ppisystems.com/next-generation-probe-card-based-resistor-trimming-systems/>

Designed to meet todays applications, our laser processing systems provide both turn-key and customized 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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