

# Component, Circuit, Chip and Wafer Resistor Trimming Systems



## RapiTrim™ Laser Resistor Trimming Systems

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**PPI**  
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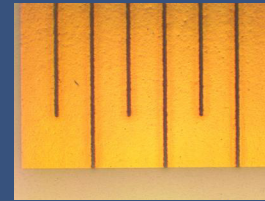
# RapiTrim Component and Circuit Trimming Systems



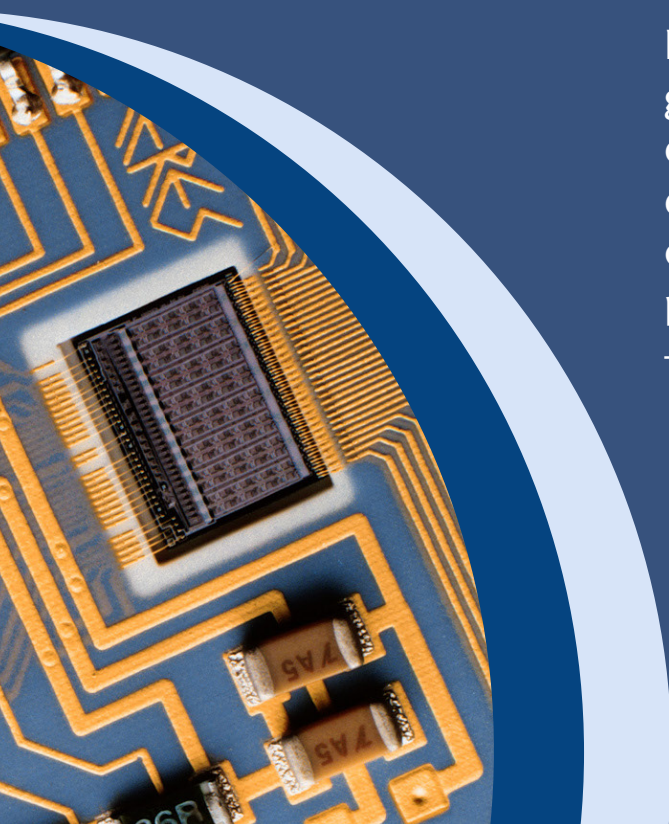
RapiTrim circuit trimming systems offer the microelectronic industries most versatile laser resistor trimmers, able to handle both high-mix and high volume applications with ease. System designs allow users to choose laser, probing and automation solutions which meet their specific application.

As older resistor trimming systems with older designs reach end of life, RapiTrim systems offer a huge step forward with modern software and hardware designed to meet both today's and future resistor trimming applications.

- IR (1064nm) and Green (532 nm) lasers
- Flying probe, probe card or custom measurement
- Stack loader, magazine loader or custom automation
- Active and passive trimming
- Full PCB trimming capability
- Complete turnkey resistor trimming solution



Serpentine Cut with Green Laser



ProSys resistor trimming software's intuitive graphical user interface offers unmatched ease of use for both operators and process engineers. All machine setup and calibration controls, job and process settings, vision and process map, status and diagnostic information – accessible with a single click or tap.

# PPI

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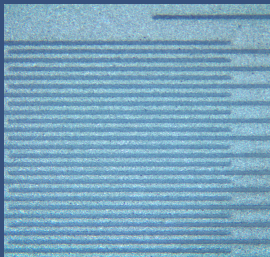
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# RapiTrim Chip Resistor Trimming System



PPI probe card-based resistor trimming systems are designed specifically to work with extremely complex and demanding chip resistor trim applications.

RapiTrim chip resistor trimming systems have been used in major production facilities for years, with models available for both thick and thin-film resistors.



Serpentine and plunge cut in precision thin film chip resistor.

High volume production of chip resistors  
IR and Green laser models  
Setting the new standard with wireless probe cards  
in chip resistor trimming systems  
Automatic planarization (roll/pitch) and Z  
calibration  
Automation including stack loaders, magazine  
loaders, in-line and custom options

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

# PPI

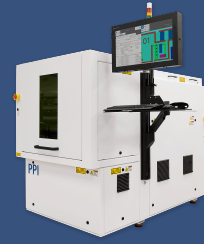
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# RapiTrim Semiconductor Wafer Trimming System



The RapiTrim wafer resistor trimmer is a full turnkey system with IR laser, producing spot sizes of 6 to 12  $\mu\text{m}$ . 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.

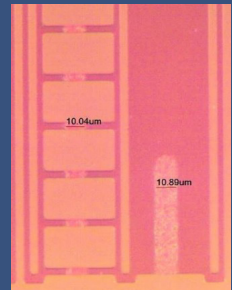
Features include:

- Designed for trimming on semiconductor wafers up to 300 mm

- Compatible with industry standard probe cards and integration with modern automatic test equipment

- Advanced beam positioning and pulse control for improved process quality, accuracy and trim speed

- Turnkey customized solutions for both full wafer and singulated die, with and without automated part handling



Example of 100  $\mu\text{m}$  kerf on Si

Many existing probe card-based wafer trimming systems have undergone minimal design updates since their original development. With continuous design updates, PPI Systems is able to integrate modern hardware and software features into its RapiTrim next generation semiconductor resistor trimming systems.

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