

## Better Performance thanks to LPKF CircuitPro RP CAM Software for the LPKF ProtoLaser Family

- Process data preview
- Extensive material and process libraries
- SkyWriting – improved geometry precision
- Heat Stitching optimizes scan field borders
- Premium version extends area of applications



**LPKF**



## Stretching Technical Capabilities ...

LPKF is a pioneer in laser micromaterial processing. LPKF processes set the standard – both for performance as well as for quality – in various areas of medical technology, electronics, and the automotive industry. With CircuitPro system software, LPKF customers benefit from the experience gleaned from system development and applications.

### **Continuous Precision**

The capability of a laser system stands and falls with the software. Since 2012, LPKF has been working on comprehensive system software for all of its product lines: A common core software is supplemented by product-specific modules. Thanks to LPKF CircuitPro RP, all ProtoLasers now have a common software basis, and other systems will follow. The advantage lies in uniform material libraries, optimized processes, and additional modules for fine-tuning.

### **Intuitive Operation**

LPKF CircuitPro RP software offers easy and intuitive operation. New users quickly learn their way around the software, while professionals can use tried-and-tested procedures to reach their goals faster thanks to new features. Yet the most important benefit is not even noticeable at first: New software algorithms generate optimal laser paths in order to transfer demanding layouts to the substrates in a geometrically accurate fashion.

## Good Reasons for LPKF CircuitPro RP

The task of modern CAM software? To convert the ideas formulated in the layout into production data as easily as possible. LPKF's standardized machine software yields high performance with uniform operation. Process and material libraries containing the knowledge of LPKF's physicists, technicians, and engineers from countless application tests help with the entering of sophisticated layouts.

The second important aspect concerns machine control. To ensure that users can create their PCB prototypes economically, quickly, and with great precision, LPKF prepares special modules for the individual system families where it factors in the individual capabilities of the controlled systems.

## Process Data Preview

A new module visually shows the user the effects of changes in the laser parameters, such as pulse frequency, beam diameter, etc. The visual display allows experienced applicators to quickly derive suitable process parameters.

## Material Libraries

An applications team at LPKF tests new materials and calculates optimal processing parameters. LPKF CircuitPro RP reads in these parameter files, thereby conserving valuable development capacity during functional and material tests.

## SkyWriting

With SkyWriting, the laser always moves over the material at a constant speed. This ensures the constancy of the energy input at each processing point for reliable, homogeneous structuring processes and minimal substrate stress.

## Faster Results with the Computer and Laser System

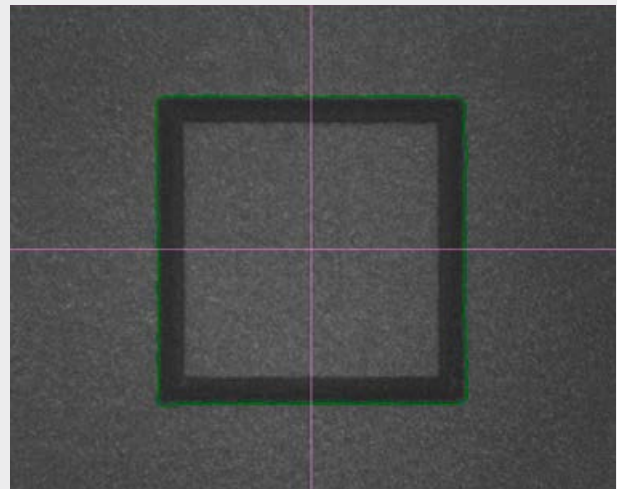
The system programmers at LPKF have done a good job. With LPKF Circuit-Pro RP, all previous procedures have been optimized or newly implemented. The software promises uniform, intuitive operation for all LPKF ProtoLaser systems, automation of routine tasks, improved path routines, and much faster calculations. Some routines cut the calculation time in half or more compared to the previous versions. Thanks to LPKF CircuitPro RP, users achieve even better results in less time.

## LPKF CircuitPro RP Premium

The newly introduced Premium version opens up further areas of application in circuit board post-processing and in merging different data sources.

### Free Form Fiducials

This function allows you to read in any registration marks – and thus easily rework existing PCBs. This allows the ProtoLaser to, for example, separate circuit tracks or create additional contact holes on existing PCBs.



Free Form Fiducial recognition

### Heat Stitching

Heat stitching introduces a completely new approach for processing and calculating scan field borders. This ensures more precise contours and less impact on the substrate.

### Save Production Data in Several CAD Formats

Use data from different production steps, for example from test layouts or ramp-up production, and transfer changes from CircuitPro back into the original CAD format.

LPKF CircuitPro RP is delivered with the latest ProtoLaser systems and is available as an upgrade for owners of previous laser systems.

Prio	Features	CircuitPro RP Basic	CircuitPro RP Advanced	CircuitPro RP Premium
1	Fast and flexible processing of PCB prototypes	yes	yes	yes
2	User-friendly data preparation for ProtoLasers	yes	yes	yes
3	New materials being added constantly	yes	yes	yes
4	Parameter of existing materials being optimized	yes	yes	yes
5	Regular performance updates	yes	yes	yes
6	Laser tool preview UI	yes	yes	yes
7	Non-laminated processing method	no	yes	yes
8	Flexible scanfield calculation	no	yes	yes
9	Improved scanfield sorting (non laminated)	no	yes	yes
10	Creating instances	no	yes	yes
11	“Step and repeat” function	no	yes	yes
12	DXF import capability	no	yes	yes
13	Dynamic SN generator	no	yes	yes
14	Free-form fiducial recognition	no	no	yes
15	Data export ability (GerberX, DXF, Excellon, Sieb&Meyer)	no	no	yes
16	Heat stitching	no	no	yes

## Hardware Requirements

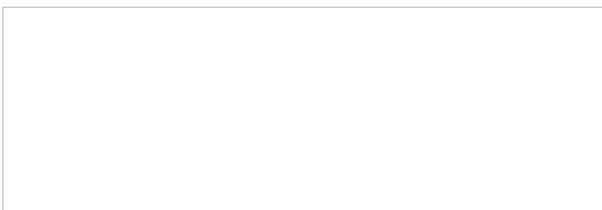
### Minimum requirement:

- Intel Core i5 4x3.0 GHz
- 8 GB RAM
- 2 GB of free hard disk space
- Intel HD 530 integrated graphics or graphics card with 2 GB DDR3 V-RAM
- Screen Resolution: 1680 x 1050 Pixels

### Recommended:

- Intel Core i5 6x3.0 GHz
- 16 GB RAM
- 2 GB of free hard disk space
- Intel HD 770
- Screen Resolution: 1920 x 1080 Pixels

Presented by:



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