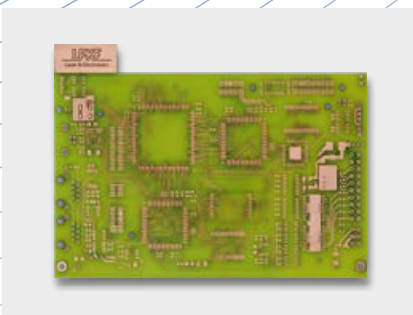
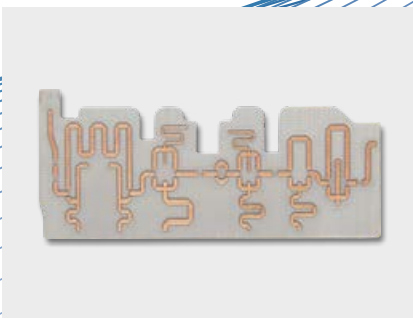


Tabletop System for Laser Structuring of PCBs

LPKF ProtoLaser ST

- Quick surface processing on all common circuit board materials
- Exact geometries by means of a contactless, scanner-based process
- Compact as a tabletop system and safe: lab-ready, laser class 1
- Intelligent, intuitive system software LPKF CircuitPro Basic



Tabletop System for Laser Structuring of PCBs

The upgrade for your lab: Surfaces can be processed safely, precisely and suitably for the material with the compact LPKF ProtoLaser ST meaning that laser-structured circuit boards with exact geometries can be manufactured in only a few minutes. This is possible due to the combination of a better cutting capacity and a higher cutting speed. The safe lab system for the processing of FR4 and sensible RF materials will convince you with its amazing performance. Due to its compact tabletop format it can be used in any lab.

LPKF ProtoLaser ST allows for efficient prototyping of complex digital and analogue circuits, RF and microwave circuit boards. Without any tool wear, the laser system also processes demanding materials, and is ideally suited for the structuring of single- or double-sided laminated materials. Even flexible materials and foils can be freely positioned and exactly fixed.

The latest generation of the CAM and machine software CircuitPro Basic has been adapted to the further processing of drilled and cut-out circuit boards. The software and the integrated camera system allow for exact positioning. For operation, the compact table laser system requires only a power plug and compressed air.

LPKF ProtoLaser ST	
Max. layout area and material size (X/Y/Z)	229 mm x 305 mm x 7 mm (9" x 12" x 0.28")
Laser wavelength	1064 nm
Max. laser power	16 W
Laser pulse frequency	25 – 400 kHz
Diameter of focused laser beam	20 ± 2 µm (0.78 ± 0.08 Mil)
Structuring speed	8.5 cm ² /min (1.3 in ² /min) ^a on laminated substrates 18 µm (0.5 oz) Cu
Minimum line/space	100 µm / 50 µm (3.9 mil / 2 mil) ^a on FR4 18 µm (0.5 oz) Cu
Positioning accuracy in the scan field	± 10 µm (± 0.39 mil)
Repeatability in the scan field	± 1.8 µm (± 0.07 mil)
Dimensions (W x H x D)	725 mm x 665 mm x 840 mm (28.6" x 26.2" x 33.1")
Weight	115 kg (254 lbs)
Power supply	115 – 230 V, 50 – 60 Hz, 500 W
Compressed air supply	Min. 6 bar; 20 l/min (min. 87 PSI; 20 l/min)
Cooling	Air-cooled
Ambient temperature; humidity	22 °C ± 2 °C (71.6 °F ± 4 °F); < 60 %
Software	LPKF CircuitPro Basic
Options and accessories	Dust extraction unit, compressor, starter set

^a Depending on material and laser beam parameters

