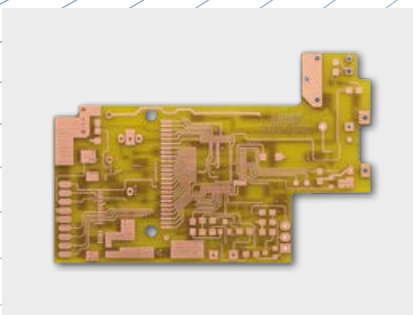


An All-rounder for Rapid PCB Prototyping

LPKF ProtoMat S64

- Fully automatic operation incl. automatic tool change
- Low-maintenance high-speed milling spindle
- Intuitive, integrated system software
- Camera controlled fiducial recognition and milling depth/width control
- Granite base for highest accuracy results



An All-rounder for Rapid PCB Prototyping

LPKF ProtoMat S64: fast and reliable basic system for almost any application – even for multilayer production. The milling spindle with a high rotation speed that requires almost no maintenance produces fine structures as small as 100 µm. Housing parts can be processed in up to 2.5 dimensions. The comprehensive features (including a vacuum table) can be expanded with an optional dispenser as well as five additional tool positions making ProtoMat S64 a perfect addition to any development environment.

Fast and Automatic

The milling spindle with a speed of up to 60 000 RPM offers quick processing and high geometric accuracy. The spindle and milling depth sensor require almost no maintenance due to their self-cleaning functionality. Quick setup and operator-free work are possible thanks to automatic tool change and automatic milling width adjustment. Sensor ensure correct milling depth; the integrated camera monitors the tool change.

Integrated, Intuitive Operating Software

The LPKF CircuitPro Basic system software is extremely flexible, easy to operate and features, among others, a parameter library for various materials. If necessary, the integrated Process Guide leads the user step by step through the processing.

LPKF ProtoMat S64	
Max. layout area (X/Y/Z)	229 mm x 305 mm x 8 mm (9" x 12" x 0.3")
Max. material size (X/Y/Z)	250 mm x 330 mm x 26 mm (9.8" x 13" x 1")
Mechanical resolution (X/Y)	0.5 µm (0.02 mil)
Repeatability	± 5 µm (± 0.2 Mil)
Milling spindle	Max. 60 000 RPM, software-controlled
Tool change	Automatic, 15 positions + 5 optional
Camera accuracy	1.8 µm/Pixel
Milling width adjustment	Automatic, micro switch ± 1 µm (0.04 mil)
Tool holder	3.175 mm (1/8")
Drilling speed	100 strokes/min
Travel speed (X/Y)	150 mm/s (6"/s)
Dimensions (W x H x D), weight	680 mm x 560 mm x 800 mm (26.8" x 22.0" x 31.5"), 95 kg (210 lbs)
Power supply	100 – 240 V, 50 – 60 Hz, 250 W
Compressed air supply	Min. 6 bar; 75l/min @ 6 bar (min. 90 PSI; 75l/min @ 90 PSI)
Environmental conditions	20 °C – 25 °C; max. 90% air humidity
Solder paste dispense rate (optional)	≥ 0.3 mm (≥ 0.011") (solder point), ≥ 0.4 mm (≥ 0.015") (pad)
Software	LPKF CircuitPro Basic
Options and accessories	Dust extraction unit, compressor, status light, measuring microscope, dispenser

