



- Advanced functionality
- Quality components
- High-quality construction
- Perfectly matched

Options & Accessories for LPKF Circuit Board Plotters

The capabilities of LPKF circuit board plotters and other LPKF systems can be upgraded with accessories and options. High-quality materials and precise machining ensure high reliability and a long life for all upgrades. The accessories can quickly and easily be installed on-site. The ProtoMat S series circuit board plotters can be upgraded to turn an entry-level system into a high-end model.

i Ordering info: See front sleeve.

Options

Upgrade kits

The LPKF ProtoMat S43 and S63 circuit board plotters can be upgraded to a S103 high-end system at any time. All that's needed is the corresponding upgrade kit.

Upgrade	Part no.	ProtoMat S43/S63
Upgrade ProtoMat S43 to S63	127700	Milling head S63 with tool change bar (automatic tool change and milling width adjustment), camera, dispenser with pneumatic components and software upgrade LPKF CircuitPro Full
Upgrade ProtoMat S43 to S103	127701	Milling head S103 with pneumatic non-contact working depth limiter, tool change bar (automatic tool change and milling width adjustment), camera, dispenser with pneumatic components, vacuum table and software LPKF CircuitPro Full
Upgrade ProtoMat S63 to S103	127702	Milling head S103 with pneumatic non-contact working depth limiter (milling head S103 without camera, already installed on S63) and vacuum table.



Optical fiducial recognition

Referencing a PCB with optical fiducial recognition is more precise and significantly faster than front-to-back alignment – making it virtually indispensable for structuring multilayer boards. The LPKF software-supported camera automatically locates fiducials, then determines the material position. The camera system further provides a direct measuring function. The camera of the S series merely requires a computer with a USB 2.0 port, the ProtoMat X60 requires a Windows computer with an empty PCI slot.

Optical fiducial recognition	ProtoMat S43	ProtoMat X60
Part no.	127689	114487



Vacuum table

The vacuum table secures the work piece tightly across the entire work surface and prevents the substrate from buckling. The use of a vacuum table allows flexible and rigid-flex PCBs to be machined.

Vacuum table	ProtoMat S43/S63
Part no.	127688



Accessories

Dust extraction

The LPKF dust extraction with absolute filter ensures a clean workspace – no fibers, no shavings, no fine dust. The built-in AutoSwitch automatically turns the vacuum on and off. This ensures safety and an extended vacuum life while eliminating unnecessary noise when the machine is not in operation.

Dust extraction	ProtoMat S + E, X60	ProtoL. S + U3, ProtoM. D 104
Part no.	10033243	124391
Vacuum pressure	Max. 22 500 Pa	Max. 21 000 Pa
Air flow rate	241 m ³ /hour (142 cfm)	320 m ³ /hour (188 cfm)
Power consumption	800 W (230 V) or 960 W (120 V)	1.6 kW (230 V, 50/60 Hz)
Dimensions (W x H x D)	250 mm x 300 mm x 350 mm (10" x 12" x 14")	365 mm x 1 245 mm x 501 mm (14.4" x 49" x 19.7")
Acoustic pressure	50 dB(A)	Approx. 65 dB(A)
Absolute filter	HEPA filter	HEPA filter
Remote control	Software controlled	Software controlled

All specifications are subject to technical modifications.



Measuring microscope

The LPKF measuring microscope with its 100x magnification and metric scale facilitates setting the isolation widths and quality control.

Measuring microscope	
Part no.	10035579



Precision ring setter

The LPKF precision ring setter, consisting of an adjustment unit with measuring microscope, accurately places distance rings on the tool. The tools can then be used with ease without the need for readjustments.

Precision ring setter	ProtoMat S43/E33
Part no.	116698



Brush head (for ProtoMat X60 only)

The brush head, used primarily for reworking populated PCBs, maintains low-pressure for dust extraction. The workspace is kept dust-free without damaging the placed components.

Brush head	ProtoMat X60
Part no.	113815 (plus 109688 [micrometer screw])



Accessories (continued)

Compressor

The LPKF compressors ensure a constant, reliable supply of compressed air for LPKF systems using compressed air supply.

Compressor	Compressor 24 l	Compressor 50 l	Compressor 60 l *
Part no.	10032687	104863	122805
Tank size	24 liter	50 liter	60 liter
Max. pressure	8 bar (116 psi)	10 bar (145 psi)	10 bar (145 psi)
Output	50 l/min (1.8 cfm)	165 l/min (5.8 cfm)	240 l/min (8.5 cfm)
Outside dims. (W x H x D)	400 x 540 x 400 mm (15.7" x 21.3" x 15.7")	1000 x 770 x 390 mm (39.4" x 30.3" x 15.4")	970 x 770 x 480 mm (38" x 30" x 19")
Weight	29 kg (64 lbs)	56 kg (123.2 lbs)	90 kg (198.4 lbs)
Acoustic noise at a distance of 4 m (157.5")	40 dB(A)	68 dB(A)	83 dB(A)
Recommended for	LPKF ProtoPlace S	LPKF ProtoMat S103 LPKF ProtoMat X60	LPKF ProtoLaser S & U3 LPKF ProtoMat D104

All specifications are subject to technical modifications.

* incl. refrigerant-type dryer



StatusLight

The LPKF StatusLight indicates the LPKF ProtoMat operating status. This allows a constant monitoring of the ProtoMat in large production halls without the need for operating personnel to be in close proximity.

StatusLight	ProtoMat S-Series
Part no.	10023555



Adjustment tool (ProtoLaser S & U3)

This precision tool set is helpful for adjusting the work bench and laser.

Adjustment tool	ProtoLaser S & U3
Part no.	118005

