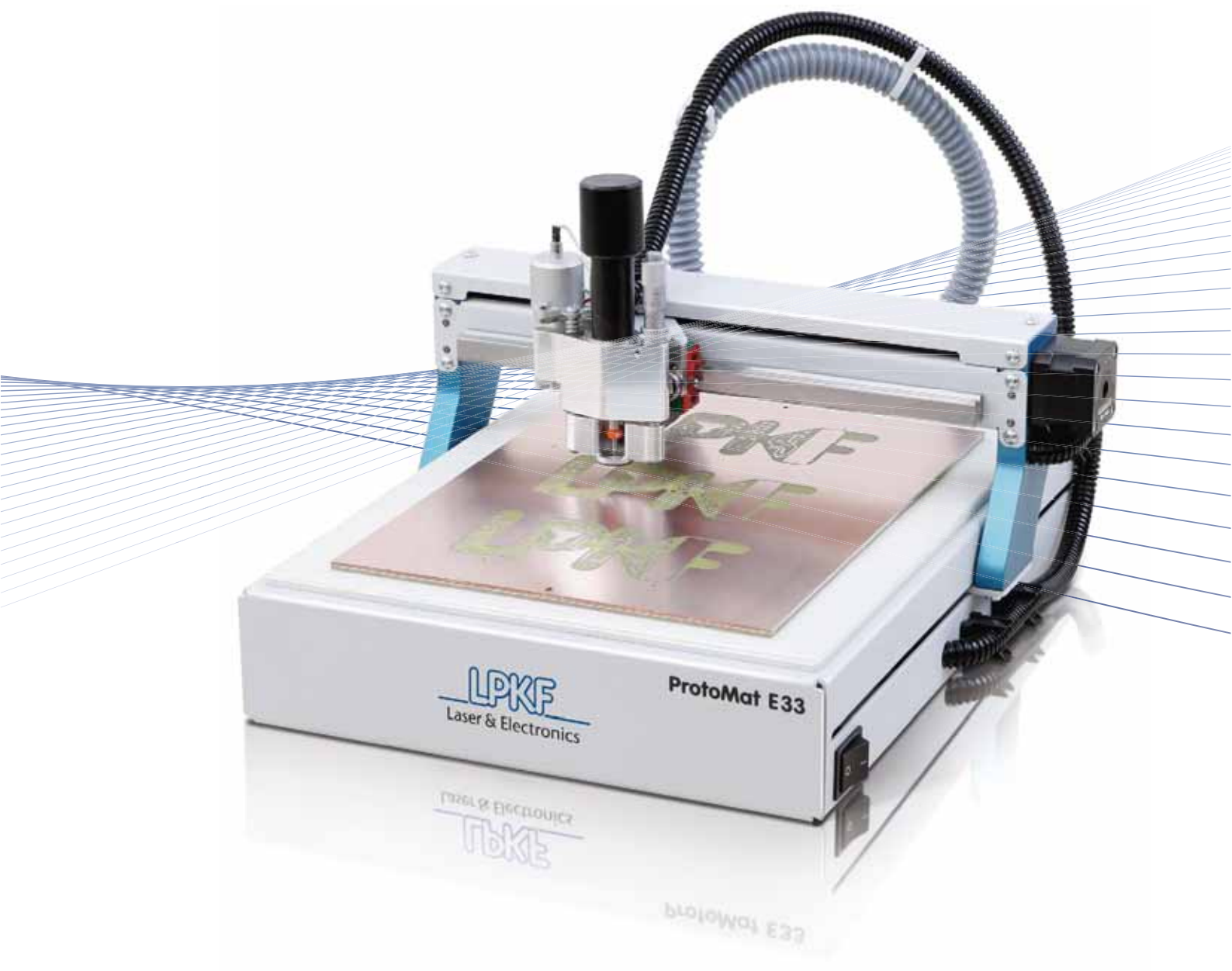
In-House Rapid PCB Prototyping

Easy-to-Use, Accurate, Affordable:
LPKF ProtoMat E33



LPKF
Laser & Electronics

The Perfect Partner for Your Electronics Lab

Hardly larger than a DIN-A3 sheet (11.7” x 16.5”), the LPKF ProtoMat E33 is an especially affordable and easy-to-use solution for entry into the world of professional PCB prototyping.

The ProtoMat E33 showcases its advantages even with smaller batches or with occasional use. For example, the equipment features a level of accuracy similar to the ProtoMat S-series high-speed systems while also sticking to the basics of PCB prototyping.

The equipment masters milling tasks on copper-coated PCB material, and also drills through-holes or separates units from larger panels. Its cutter mills through copper on substrate materials at 33,000 rpm. The ProtoMat E33 is specifically designed for processing laminated PCB materials such as FR4 or CEM 1.

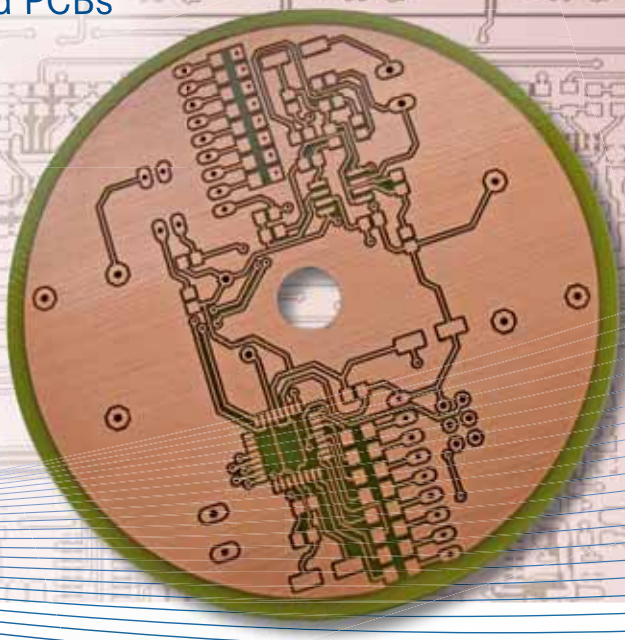
The primary benefit of the ProtoMat E33 is its ease-of-use from setup to application. The innovative milling plotter is a valuable addition to any electronics lab, especially for the creation of prototypes and for training purposes.

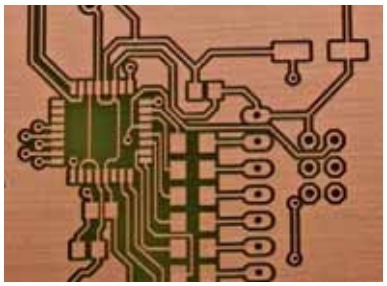
LPKF
Reliable efficiency
Engineered for safety
User-friendly
Eco-friendly

easy handling CONCEPT

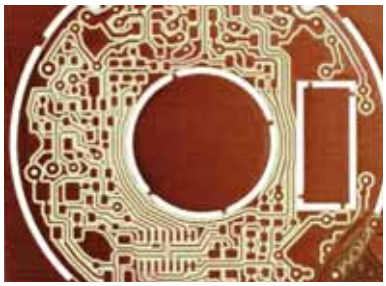
LPKF ProtoMat E33

- Simple operation
- Small footprint
- Produces single and double-sided PCBs
- 33,000 rpm high-speed spindle

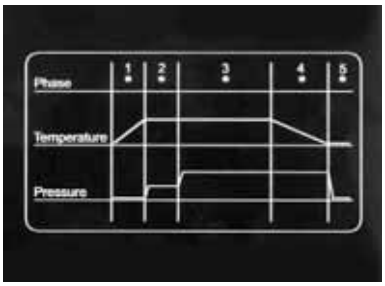




Milling and drilling



Cutting breakout tabs + contours



Engraving front panels

For Training, Design and Production

A sturdy, reliable system with a small footprint, the LPKF ProtoMat E33 is perfectly suited for PCB processing.

Built-in Precision

At a resolution of less than 1 µm, a repeat accuracy of ± 5 µm and a front-to-back-alignment precision of ± 20 µm, the small milling plotter surpasses the typical requirements for single or double-sided PCBs.

Ease-of-Use

The LPKF ProtoMat E33 is extremely easy-to-use, requiring only an electrical outlet, a dust extraction and a PC to operate. LPKF CircuitPro Lite software intuitively handles data preparation and editing for PCB structuring and system control with full user support. By using the software, jobs can be saved as files and retrieved with just a few clicks.

Integrates LPKF's latest processing Software

CircuitPro

Get Professional PCB Prototypes Faster

Technical Specifications: LPKF ProtoMat E33	
Part no.	127687
Max. material size and layout area (X/Y/Z)	229 mm x 305 mm x 10 mm (9” x 12” x 0.4”)
Resolution (X/Y)	0.8 µm (0.04 mil)
Repeatability	± 0.005 mm (± 0.02 mil)
Precision of front-to-back alignment	± 0.02 mm (± 0.8 mil)
Milling spindle	Max. 33,000 rpm, software controlled
Tool change	Manual
Milling width adjustment	Manual
Tool holder	3.175 mm (1/8”)
Drilling speed	100 holes/min
Travel speed (X/Y)	Max. 50 mm/s (2”/s)
X/Y-drive	2-phase stepper motor
Z-drive	2-phase stepper motor
Dimensions (W x H x D)	370 mm x 300 mm x 450 mm (14.6” x 11.8” x 17.7”)
Weight	15 kg (33 lbs)
Operating conditions	
Power supply	90 – 240 V, 50/60 Hz, 150 W
Required accessories	Dust extraction

Technical specifications subject to change.

Quality at an Affordable Price

The LPKF E-series provides additional options for efficient prototyping and small batch production. For example, the stencil printer LPKF ProtoPrint E can be used for solder printing, LPKF ProtoPlace E for manual PCB assembly, and the LPKF ProtoFlow E as the convection oven for soldering the PCB.

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Photos may also show optional accessories.

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