



# Meet the Quick Laser™

## An all-in-one circuit board printer.

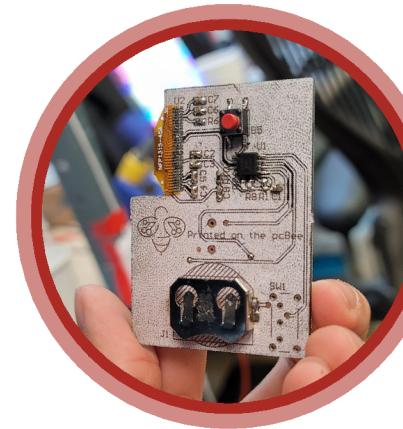
Create professional in-house PCBs in 1 hour or less - no chemical etchants required.

Made in the USA!



### Print PCBs FAST

The Quick Laser™ **eliminates PCB manufacturing lead times**, allowing users to produce boards in **under 1 hour** instead of waiting weeks for third-party fabrication houses. Just as 3D printers streamline the creation of plastic parts, the Quick Laser™ offers a fast, easy solution for circuit board production, enhancing development and speed of design iterations.



### A plethora of substrates to use

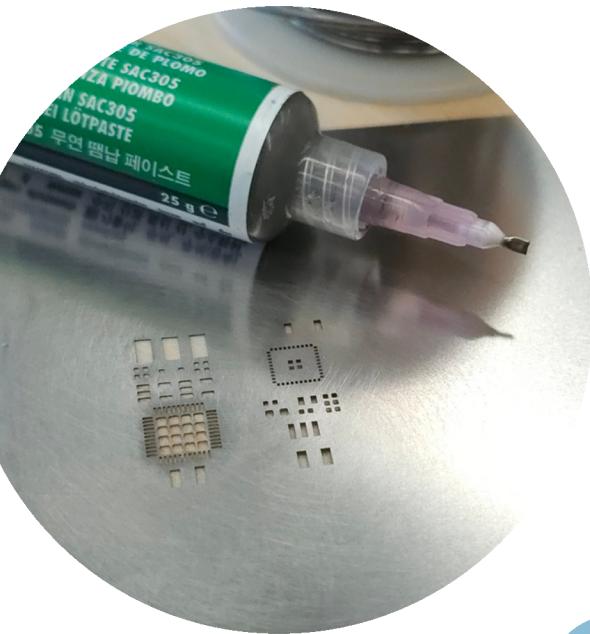
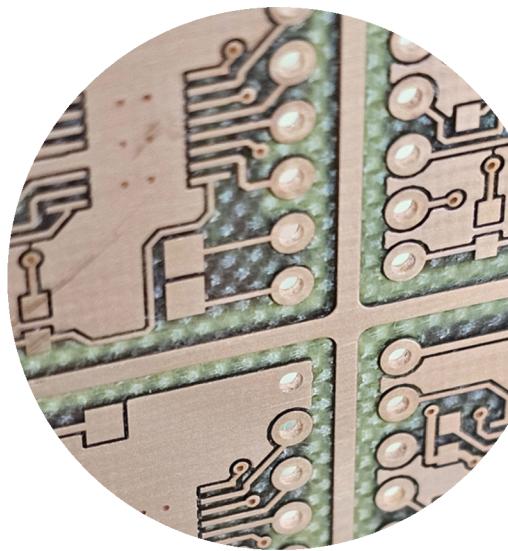
Hardware development often demands materials that go beyond traditional rigid FR4 circuit boards. The Quick Laser™ can print on a wide array of substrates for every use case:

- **Flex**
  - Often used in **medical devices** and **wearables**
- **Ceramics and RF** (Rogers Ro4000, TMM6, others)
  - Applications in **RF**, **telecommunications**, **Physics research**, **Quantum Computing**, and other high speed technologies
- **Aluminum**
  - Used for high-power, high-heat electronics in **automotive**, **aerospace**, and other industrial sectors
- **+More**
  - Contact us to learn more!

For these specialty materials, **traditional fabrication house lead times often stretch from weeks to months**, hindering project timelines significantly. In addition, these materials often command exorbitantly high prices that can quickly drain budgets. **The Quick Laser™ allows engineers to focus on their projects** and not worry about high materials costs or long lead times slowing their progress.

## Rapid Plate Technology

With patent-pending Rapid Plate technology, you can plate your PCB's vias quickly and easily with pure copper. Thanks to our proprietary setup, boards just need to be drilled then plated; **no micro-etch solution, graphite compounds, or electroless copper needed!** Simply place the boards in our small desktop plating bath and have your boards ready to go in **2 hours or less**.



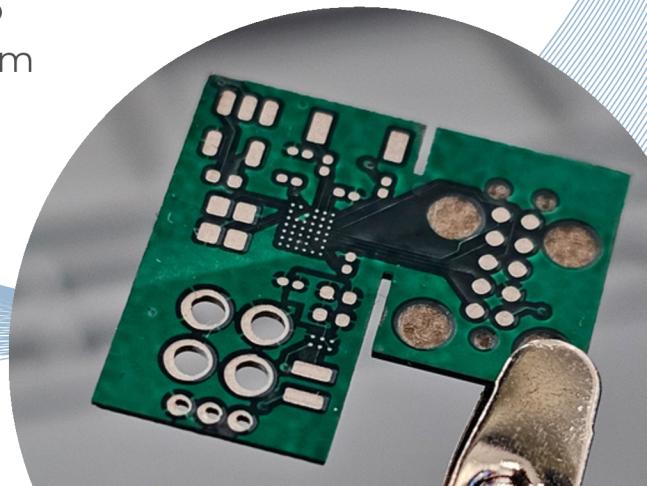
## Print high resolution stencils

Our highly accurate laser allows you to print solder stencils with the same ultra-small feature sizes. Print on stainless steel, brass, polyimide, and more, at any thickness you need. Perfect for everything from prototype soldering to batch production to rework, simply upload a stencil file and print in minutes.

## Manufacturing specs to do anything

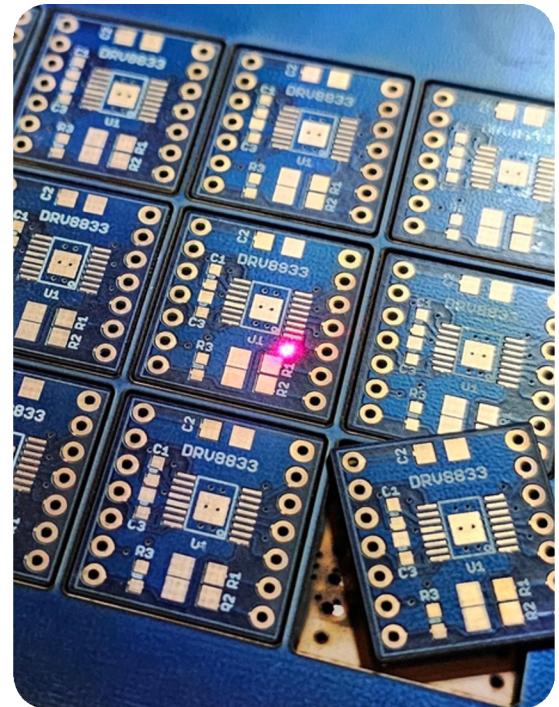
Min. Trace Width	2 mil (50 $\mu$ m)
Min. Drill Hole	7 mils (175 $\mu$ m)
Copper Thickness	All Standard Thicknesses
Surface Finish	ENIG / IT / Cu
Copper Vias?	Yes
Slot support?	Yes
Countour Routing?	Yes

**Design without compromise.** The Quick Laser™ is built to make sure you're printing boards that can go straight to a production line, no design changes required. Choose any copper weight your design requires and etch down to 2 mil (50  $\mu$ m) feature sizes for BGAs and 0201 parts. Drill clean 7 mil vias for dense interconnects with no minimum or maximum slot limitations.



## The Green way to make PCBs

Our machines remove copper via direct laser ablation rather than the traditional “coat, expose, etch, and strip” sequence. Because no photo-resist, developers, acids, or rinses are involved, the workflow **generates zero liquid or hazardous solid waste**. On top of that, producing boards on-site avoids the air-freight legs and courier van miles needed to deliver boards. The **Quick Laser™** is eliminating the two biggest ecological impacts from PCB production: CO<sub>2</sub> emissions and industrial waste release.



## Easy to use software built for your users

We have focused intensely on making our machine **as easy to use as possible**. Rather than have a difficult learning curve and obtuse software, we work hand-in-hand with our customers to create the perfect software experience. Our software breaks down manufacturing into **easy to understand steps** with accompanying video and text tutorials.

## Great for more than just circuit boards!

Thanks to the **20 micron spot size** on our laser, the Quick Laser™ is more than just a circuit board printer. Users can utilize the its unique material ablation abilities to create ultra-detailed lithographic masks, micro-etched surfaces, micro-fluidic structures, and other **unique applications in everything from biology to silicon manufacturing**. This makes the Quick Laser™ an incredible tool for materials processing that can broadly expand anyone's production capabilities. Contact us to learn more!



# Beating the competition.

The Quick Laser™ delivers where others can't

	Quick Laser™	OtherMill	LPKF	Voltera
Min. Trace Width	2 mils	10 mils	2-6 mils	8 mils
No Extensive Chemical Processing	✓	✓		✓
Full Domestic Support	✓	✓		✓
High Speed of Manufacturing	✓			
Silkscreen & Soldermask	✓			
Full Copper	✓	✓	✓	
Exotic Substrates	✓		✓	
Hardware and Software Consistency	✓			

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