

UV Laser Drilling Machine

LU-2QS252

High-Speed, High-Precision UV Laser Drilling Machine for FPC/Package PCBs

UV laser drilling machine realizing micro hole drilling for various materials with high-speed and high-precision

Via Mechanics, Ltd.

LU-2QS252 UV Laser Drilling Machine for FPC/Package PCBs

Providing high-quality micro hole drilling for various materials with our unique technology

High-quality picosecond laser drilling

Picosecond or nanosecond laser oscillator can be selected according to various materials and required quality.

Example of high-quality drilling using a picosecond laser oscillator Achieved enhanced Cu processing sharpness and high-taper.





Cu drilled surface

Cross section

Micro hole drilling, High-productivity

Capable of Cu-Direct drilling of ϕ 20µm or less. A new high-speed trepanning system can be selected for further high-productivity.

Drilling example of picosecond laser ocillator +new high-speed trepanning system (Cu thickness: t1.5µm)



¢15µm



φ20µm

Primary specifications

Model	LU-2QS252
Max. drilling area	635×813mm
XY positioning speed	50m/min
Number of beams	2
Laser power	ns laser:30W (OP:25W, 20W, 15W) ps laser:21W
Galvano scan area	□ 30mm (0P : □50mm)
Drilling accuracy	Ave. $\pm 3\sigma \leq 6\mu m$ (glass master)
CNC	MARK-55L+

High-precision

Adopted the same platform as LC-2QS252. Capable of same drilling precision as CO2 micro hole drilling by adjusting the glass master.

Example of drilling to glass master 1.9 million holes drilled (Number of samples: 60 holes)



High-efficiency cutting achieved by routing

Capable to support routing, which is highly demanded in FPC drilling. Also contributes to cost reduction such as reducing the mold cost with high-precision and high-efficiency cutting.

Routing (Material: Polyimide t25µm / Line width: 25µm)



Floor Plan



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