

LU-2QS252

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

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



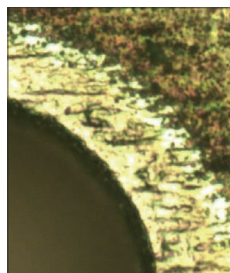
Providing high-quality micro hole drilling for various materials with our unique technology

High-quality picosecond laser drilling

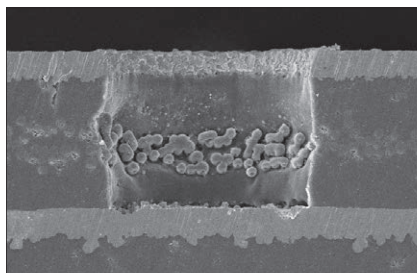
Picosecond or nanosecond laser oscillator can be selected according to various materials and required quality.

Example of high-quality drilling using a picosecond laser oscillator

Achieved enhanced Cu processing sharpness and high-taper.



Cu drilled surface



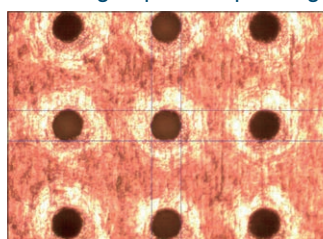
Cross section

Micro hole drilling, High-productivity

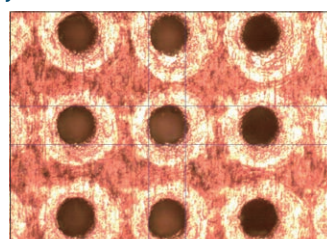
Capable of Cu-Direct drilling of $\phi 20\mu\text{m}$ or less. A new high-speed trepanning system can be selected for further high-productivity.

Drilling example of picosecond laser oscillator

+new high-speed trepanning system (Cu thickness: $t1.5\mu\text{m}$)



$\phi 15\mu\text{m}$



$\phi 20\mu\text{m}$

Primary specifications

Model	LU-2QS252
Max. drilling area	635×813mm
XY positioning speed	50m/min
Number of beams	2
Laser power	ns laser : 27W (OPTION : 20W) ps laser : 28W
Galvano scan area	□ 30mm (OPTION : □50mm)
Drilling accuracy	$\pm 0.008\text{mm}$ (Via pattern) Ave. $\pm 3\sigma \leq 6\mu\text{m}$ (glass master) * 1
CNC	MARK-55L+

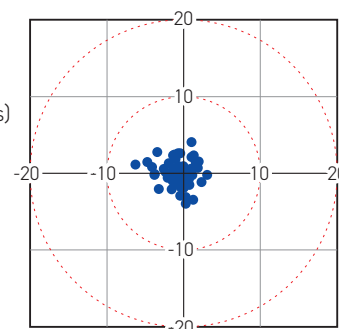
* 1 OPTION

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)

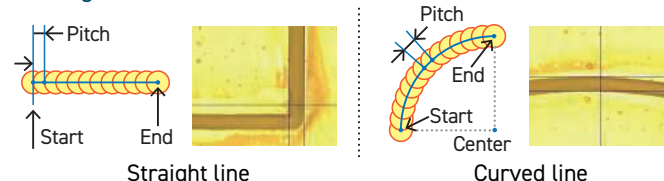


Ave. $\pm 3\sigma \leq 6\mu\text{m}$ * 1

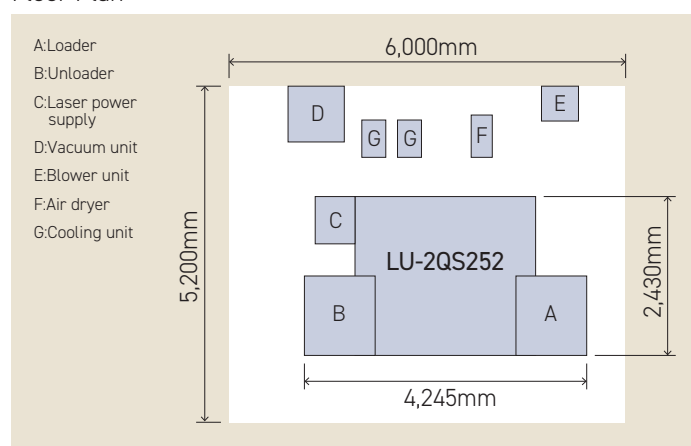
High-efficiency cutting achieved by routing

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 $t25\mu\text{m}$ / Line width: $25\mu\text{m}$)



Floor Plan



*Please note that the contents of this catalog are subject to change without notice.



Via Mechanics, Ltd.

Headquarters: 9-32 Tamura-cho, Atsugi-shi, Kanagawa Prefecture, 243-0016 Japan

Tel. +81-46-203-9687 Fax. +81-46-203-9690

<https://www.viamechanics.com>

