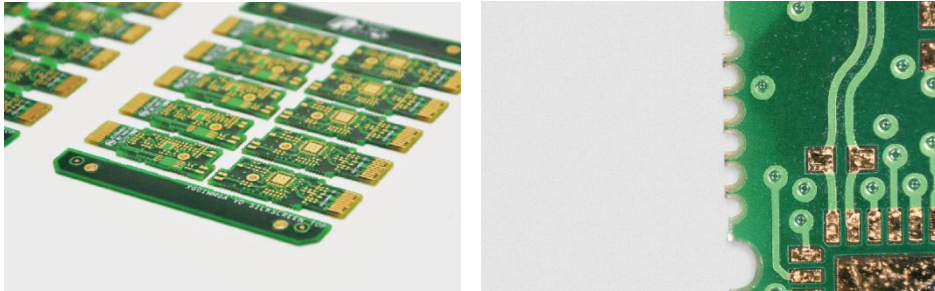


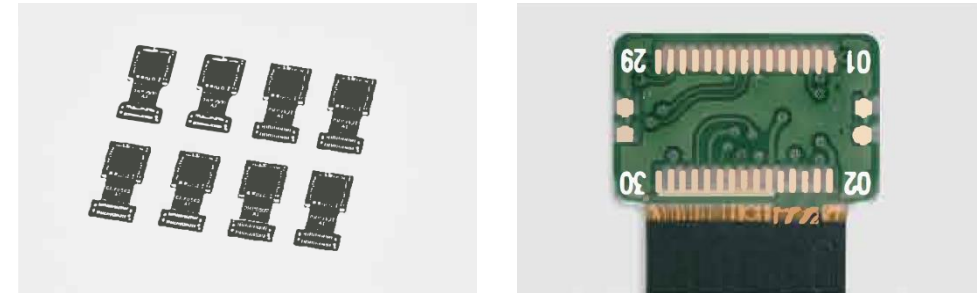
# ***FPC/PCB LASER MICRO MACHINING SYSTEM***

## PCB connection points and profile cutting



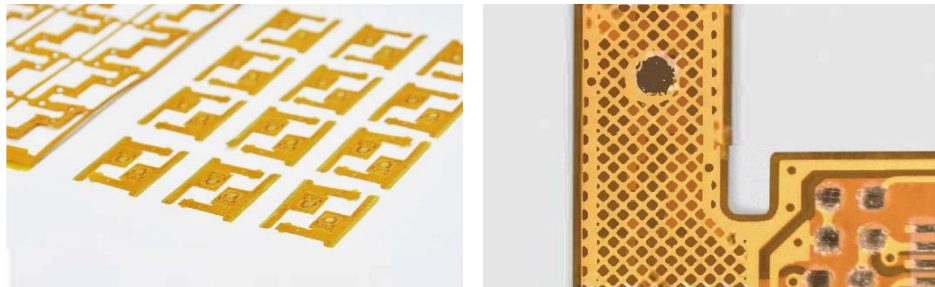
The laser cutting process does not cause any stress on the PCB board, the cutting edges are smooth with no burrs nor dust during processing.

## RF PCB/Camera PCB Cutting



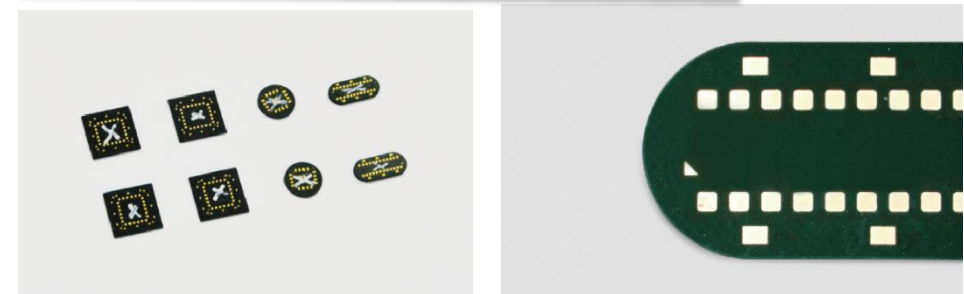
Rigid-flex board has better characteristics than PCB and FPC, laser can process different materials layer by layer simultaneously for ensuring cutting quality.

## FPC/CVL/PI/COP/LCP Profile Cutting



The laser cutting FPC can eliminate the cost of die, short the processing cycle time and improve the yield. It also avoids the damage and deformation of the material, which makes the edges smoother.

## SIP Package Chip Cutting/Grooving



With the wide application of SIP packaged structure, such as fingerprint module, smart watch, and mobile phone motherboard, laser can satisfy the complex profiles and grooves processing of products.

## RETINA 3030D

Dual Station Laser Cutting Machine



## RETINA 6565

Large Width PCB/FPC Laser Cutting Machine



## RETINA 3030

PCB/FPC Laser Cutting Machine



## RETINA 4030

PCB/FPC Laser Cutting Machine

- High performance UV gives a small heat affected zone. It has capability to process high density and highly-integrated PCB board .
- Control Laser self developed software has functions of multiple jointed board cutting, automatic focus finding and distortion compensation, to achieve high accuracy processing.
- The system equipped high accuracy motion system and high accuracy galvohead to ensure a high cutting accuracy.
- CCD positioning and error correction system
- The machine can be integrated into customer's production line with auto loading and unloading system.

| Machine Model           | RETINA 3030      | RETINA 6565   | RETINA 4030      | RETINA 3033D        |
|-------------------------|------------------|---------------|------------------|---------------------|
| Control System          | Windows 7        |               |                  |                     |
| Laser Wavelength        | 355nm            | 355nm         | 355nm            | 355nm               |
| Laser Power             | 15W/20W          | 15W/20W       | 15W/20W          | 15W/20W             |
| Minimum Line Width      | 0.03mm           | 0.03mm        | 0.03mm           | 0.03mm              |
| Laser Processing Area   | 50mm x 50mm      | 50mm x 50mm   | 50mm x 50mm      | 50mm x 50mm         |
| Accuracy                | ±0.02mm/±0.05mm  | ±0.03mm       | ±0.025mm/±0.05mm | ±0.03mm/±0.06mm     |
| Repeatability           | ±0.002mm/±0.01mm | ±0.003mm      | ±0.002mm/±0.01mm | ±0.003mm/±0.01mm    |
| Maximum Processing Area | 300mm x300mm     | 600mm x550mm  | 300mm x300mm     | 300mm x300mm (Dual) |
| Camera                  | 5MP              | 5MP           | 5MP              | 5MP                 |
| File Format             | DXF,PLT etc.     | DXF,PLT etc.  | DXF,PLT etc.     | DXF,PLT etc.        |
| Cooling                 | Water Cooling    | Water Cooling | Water Cooling    | Water Cooling       |

### Information Code Reading



### Height Measurement Sensor



### Laser Power Meter



### Automatic loading and unloading system







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