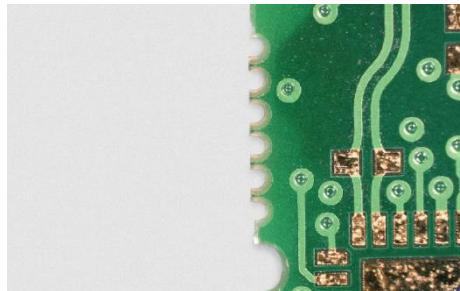
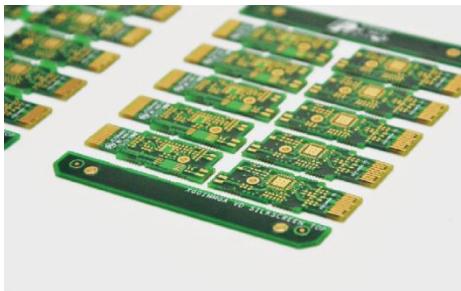




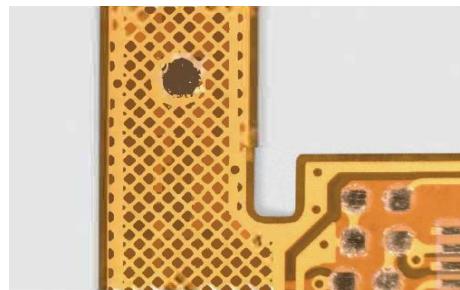
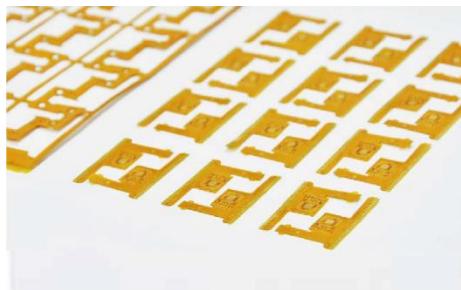
# *FPC/PCB LASER MICRO MACHINING SYSTEM*

## PCB connection points and profile cutting



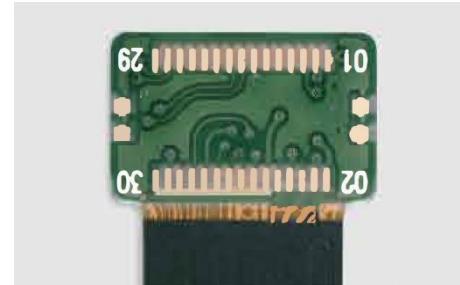
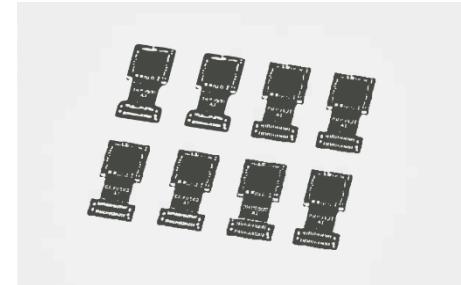
The laser cutting process does not cause any stress on the PCB board, the cutting edges are smooth with no burrs nor dust during processing.

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



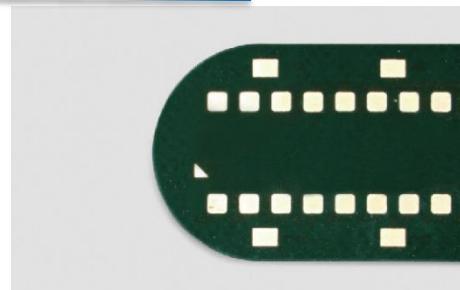
The laser cutting FPC can eliminate the cost of die, short the processing cycle time and improve the yield. It also avoids the damage and deformation of the material, which makes the edges smoother.

## 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.

## 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 3030

PCB/FPC Laser Cutting Machine



## RETINA 6565

Large Width PCB/FPC Laser Cutting Machine



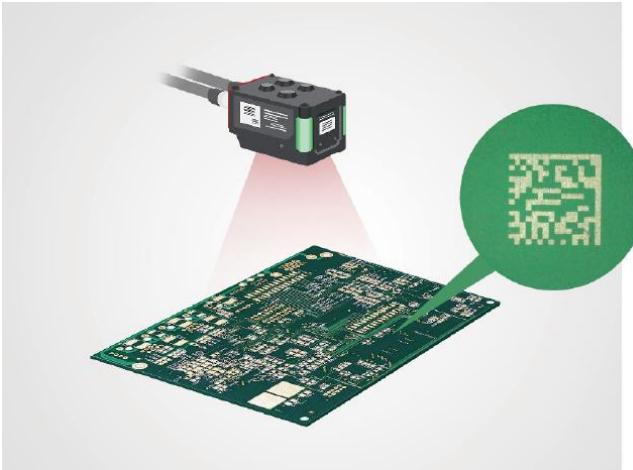
## RETINA 4030

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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**[www.controllaser.com](http://www.controllaser.com)**

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