

## FOUR-AXIS LINKAGE SYSTEM

### 四轴联动系统

#### □ 工作原理

##### WORKING PRINCIPLE



四轴联动系统主要由XY振镜、XY运动平台、平台驱动器、GMC控制卡以及通用打标软件组成，拥有无限视野范围功能，可同步线性伺服轴与激光扫描振镜。当扫描振镜的高动态性能与伺服平台的大行程范围结合后，可连续处理比传统振镜更大的工作范围，无需进行工作区域的拼接。四轴联动系统不仅扩大了扫描振镜系统的工作范围及单个光学器件的应用范围，还避免了激光束范围与可用工作范围之间的相互影响，而且提高了加工质量和大型零件的生产。

The four-axis linkage system is mainly composed of XY galvanometers, XY motion platform, platform driver, GMC control card and general marking software. It has the function of infinite field of vision, synchronize the linear servo and laser scanning galvanometer. When the high dynamic performance of the scanning galvanometer is combined with the large stroke range of the servo platform, a larger working range can be continuously processed than that of the traditional galvanometer, without the need for stitching the working area. The four-axis linkage system not only expands the working range of the scanning galvanometer system and the application range of a single optical device, but also avoids the interaction between the laser beam range and the available working range, and improves the processing quality and the production of large parts.

#### □ 产品特点

##### FEATURES



使用自主研发的GMC控制卡，系统可实现高速度、高精度、大幅面的激光加工。  
Using GMC control card independently developed by Han's Scanner, the system can achieve high speed, high precision laser processing.



可导入标准格式的矢量图，也可进行二次开发，开发语言支持C++,C#。  
Import standard of vector format, can support secondary development based on C++, C#.



适用于大族思特系列扫描振镜，兼容XY2-100驱动的第三方振镜。  
Suitable for Han's Scanner series scanning galvanometers, compatible with the other galvanometers with XY2-100 Communication protocol.



只需要一张控制卡就可实现振镜与平台的实时同步联动控制。  
Only one control card is enough to realize real-time synchronous linkage control between the galvanometer and the platform.

## 应用场景

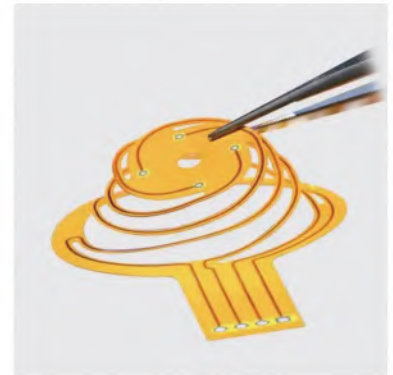
APPLICATION SCENARIOS



UV钻孔  
UV drilling



OLED屏加工  
OLED processing

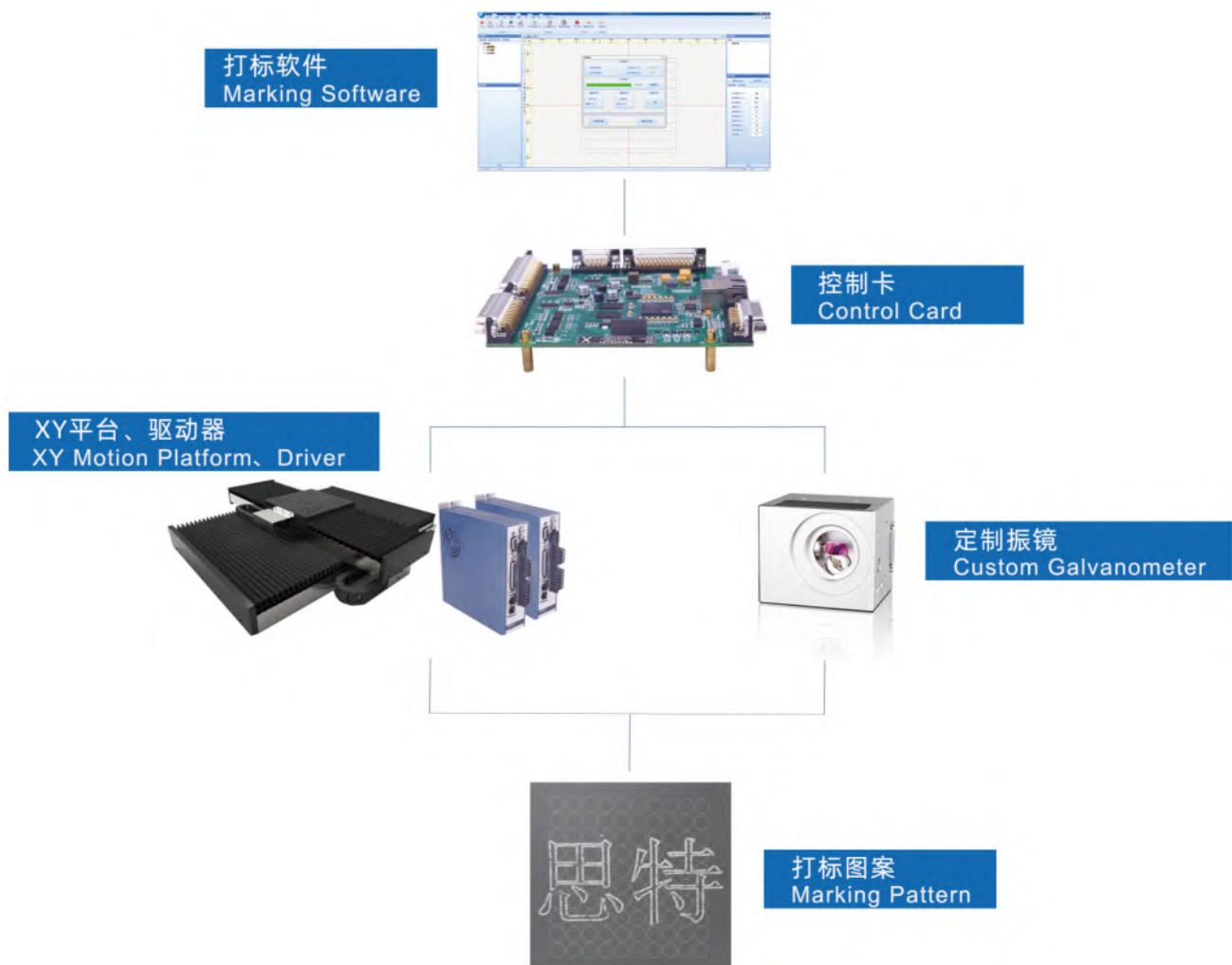


FPC切割  
FPC cutting

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The above pictures are from the Internet

## 四轴联动方案组成

FOUR AXIS LINKAGE SYSTEM SCHEME



加工精度为5um@130mm行程  
The machining accuracy is 5um@130mm stroke