

SWPCI PCI总线Camera Link图像卡

SWPCI PCI Camera Link Base Frame Grabber



产品简介 (Overview)

低成本、高性能、50MB/S实时采集 Low Cost, High Performance, 50MB/S Throughput

SWPCI图像卡采用SOC解决方案实现了高集成度和低成本的机器视觉图像采集应用，可与SWIFT系列线扫描相机产品完全兼容；图像卡采用双DMA缓冲交替存储应用技术，在保证传输速度的同时，传输过程中的CPU负载率接近0%，可满足实时在线机器视觉应用的需求。

SWPCI图像卡采用半高卡尺寸设计，可符合当今嵌入式和小型化主机的内部空间，通过选配的I/O扩展板，可将外部输入信号（如编码器、控制信号等）传递至相机并实现相机的外触发和外同步功能。

The SWPCI frame grabber is a dedicated data capture equipment for our SWIFT series line scan cameras. The grabber incorporates dual DMA buffer to accomplish real-time data capture with nearly zero CPU loads. With optional I/O daughter board, trigger or sync of camera with external shaft encoders or other sources is available.

The frame grabber is a ideal high-speed data capture equipment for PC based line scan vision applications such as surface inspection, high-speed industry metrology, and large range of other vision applications.

[1] 需选配相应的I/O扩展板 (With optional I/O daughter card);

产品特性 (Features)

- 采用短型半高尺寸设计，可适应小型机箱 (Low profile design);
- 32bit 33MHz PCI总线接口 (32bit, 33MHz PCI bus specification v2.2 compatible);
- 不低于 50 M 字节 / 秒的平均突发数据传输率 ($\geq 50\text{MByte/s}$ average burst data transfer rate);
- 双DMA缓冲实时数据采集 (Dual DMA buffer real-time data capture);
- 零CPU负载 (Zero CPU load transfer);
- Camera Link Base 1T8模式线阵相机接口 (Camera Link Base 1T8 line scan camera interface);
- 与SWIFT系列相机兼容 (Compatible with SWIFT series cameras);
- 可编程标准通用异步串行接口 (9600 bps programmable UART interface);
- 可选的输入输出扩展板 (Optional I/O interface daughter card);
- 相机外同步及外触发 (Camera trig or sync via frame grabber); [1]
- 提供Windows DLL二次开发接口 (Widows DLL based SDK included);
- 提供含源代码的图像采集、相机配置VC++演示例程 (Demo with VC++ source codes);
- 图像采集开发接口兼容CLPCI系列图像卡 (Data capture compatible with CLPCI series frame grabber);