

PCI-X bus imaging board

[X400/X800]

(1) Introduction

X400/X800 is a frame grabber based on PCI-X bus. The speed of data transmission of PCI-X bus reaches 528MByte/s. It supports 4 or 8 CVBS real-time video acquisition and display. It supports 4 or 8 stereo real-time acquisition. It can receive the standard video signals (PAL, NTSC and SECAM) from various video sources. Hardware completes image scaling and cutting. The brightness, hue, contrast, saturation and the proportion and size of image can be adjusted by software.

It supports multiple boards to be used in one computer simultaneously. It can complete 16 video data acquisition with $768 \times 576 \times 24$ Bit.

(2) Performance:

- 8 Bit A/D converter
- Standard PCI-X bus: 64 Bit, 66MHz PCI bus, 528MByte/s
- 4 or 8 channels video and 4 or 8 channels audio real-time acquisition
- Video format: PAL, NTSC, SECAM, resolution up to 768×576 (PAL, SECAM) and 640×480 (NTSC)
- Capture 8 bit (monochrome), RGB16、RGB24、RGB32、YUV422 (color)
- Up to 44.1K, 16 Bit stereophonic acquisition.
- Real-time monitoring one channel audio (selectable)
- Record audio stream
- Up to 16 channels real-time acquisition $768 \times 288 \times 24$ Bit
- Pixel rate: 25fps (PAL), 30fps (NTSC)
- Video detection: ① no video input ② video inputted is black field ③ fixed frame video
- Audio detection: ① right/left sound channel inputs audio or not ② the volume of right/left sound channel
- Hardware supports image scaling and cutting
- Image real-time vertical and horizontal inversion
- Software can adjust brightness, contrast, hue and saturation
- 4 channels TTL input control and 4 channels TTL output control
- Definition: 450lines (vertical)
350lines (horizon)
- Power consumption: 6.3W (X400)
7.3W (X800)

(3) Software:

It supplies development tools and demonstration procedure under the environment of Dos, Win9X, WinNT, Win2000, WinXP and Linux. It supports the development environment such as VC, VB, /Delphi/VFW/Dshow, C++Builder and so on.

(4) Application:

Traffic, capturing the license plate, big screen displaying, television monitoring