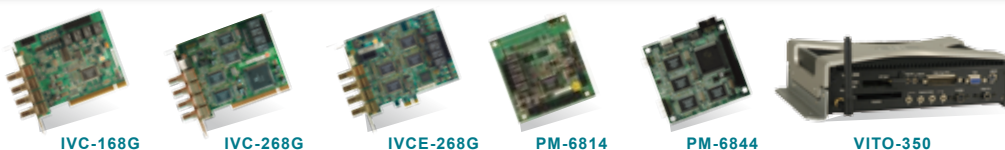


Video Capture Solutions



Introduction

An emerging worldwide demand for security application is increasing after the 911 terrorism, and video surveillance is one of the most popular tool for guarding a safe environment. When people walk into a private space, security camera enables them to monitor any potential risk. Nowadays, banks and retail stores have come to depend on the protection provided by video surveillance. Digital technology have made video surveillance more flexible and easy to use than ever, and allow you to create the security system that conforms exactly to your needs.



Video Engine				Software Compression				MPEG4 Hardware Compression	
				Techwell TW6805		Conxiant Fusion BT878A		Pentamicro AT2041	Softlogic Solo6010
				1 x	4 x	1 x	4 x	Hardware Encode/Decode	Hardware Encode
Video Processing	Resolution	NTSC	Max	720 x 480	720 x 480		720 x 480	720 x 480	
			Min	160 x 120	80 x 60		320 x 240	176 x 112	
		Resolution Degrees		6	16		6	4	
		PAL/SECAM	Max	720 x 576	720 x 576		720 x 576	720 x 480	
	Min		160 x 120	160 x 120		320 x 288	176 x 112		
	Resolution Degrees		12	18		6	4		
Frame Rate	NTSC (@D1 for 4 CH)		30fps	120fps	30fps	120fps	30fps	120fps	
	PAL/SECAM (@D1 for 4 CH)		25fps	100fps	25fps	100fps	25fps	100fps	
Audio Processing	Audio Compression			Software Compression		N	G.726 (ADPCM/PCM)	G.723 (ADPCM/PCM)	
	Audio Sampling Rate			8/32/44.1/48KHz		N	8/44.1/48KHz	8/16KHz	
	Audio Quantization			8/16/24-bit		N	8-bit data depth	8/16-bit	
Functionality	Video/Audio Synchronization			Y	PM-1056	IVCE-8784	Y	Y	
	Video loss detection			Y	Y	Y	Y	Y	
	on-screen display			Y	Y	Y	Y	Y	
	motion detection			Y	PM-1056	IVC-8784	Hardware Built-in	Y	
	Watermark			N	N	N	128bit adjustable secret key	Y	
Software Support	Device Driver	Windows		Y	Y	Y	Y	Y	
		Linux		Y	Y	IVC-200G-RS	N	Y	

1 Industrial Computing Solutions

2 Embedded Computing Solutions

3 RISC-Based Embedded Solutions

4 Industrial Data Collector/Server Solutions

5 Video Capture Solutions

6 I/O Communication Solutions

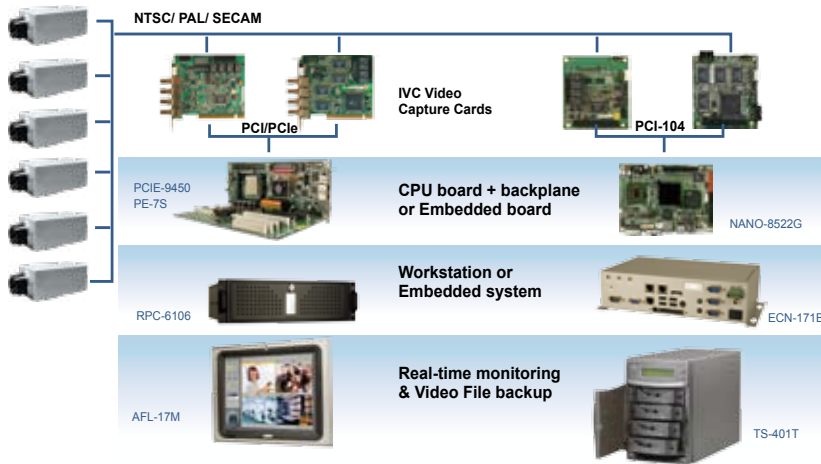
7 Panel Solutions

8 Power Supply/Network Communication/Peripherals

IEI Video Surveillance Solution

Multiple Card Support

The IEI IVC series are designed to support multiple IVC card in a system, its driver can recognize and support multiple IVC card plugged into a system. As to the limitation of how many IVC cards can be plugged into a system is depend on system resources such as CPU performance, interface bandwidth, and number of available IRQ. The following table shows some example configurations of a system :



Video/Audio processing capability

Model	Codec	Video/Audio Capture	Video Capture	Chipset
IVC-168G / IVC-268G / IVCE-268G / PM-6814 / PM-6844	N/A	Yes	TW	Techwell TW6805
IVC-100 / IVC-200 / IVCE-8784 / PM-1056	N/A	-	Yes	Conexant BT8784
IVC-8371 / PM-1059	Encoder Decoder	Yes	-	Pentamicro AT2401
IVC-368G-4CH	Encoder	Yes	TW	Softlogic Solo6010+ Techwell TW6805

Powerful Functions



Digit LED to show its ID (identification)



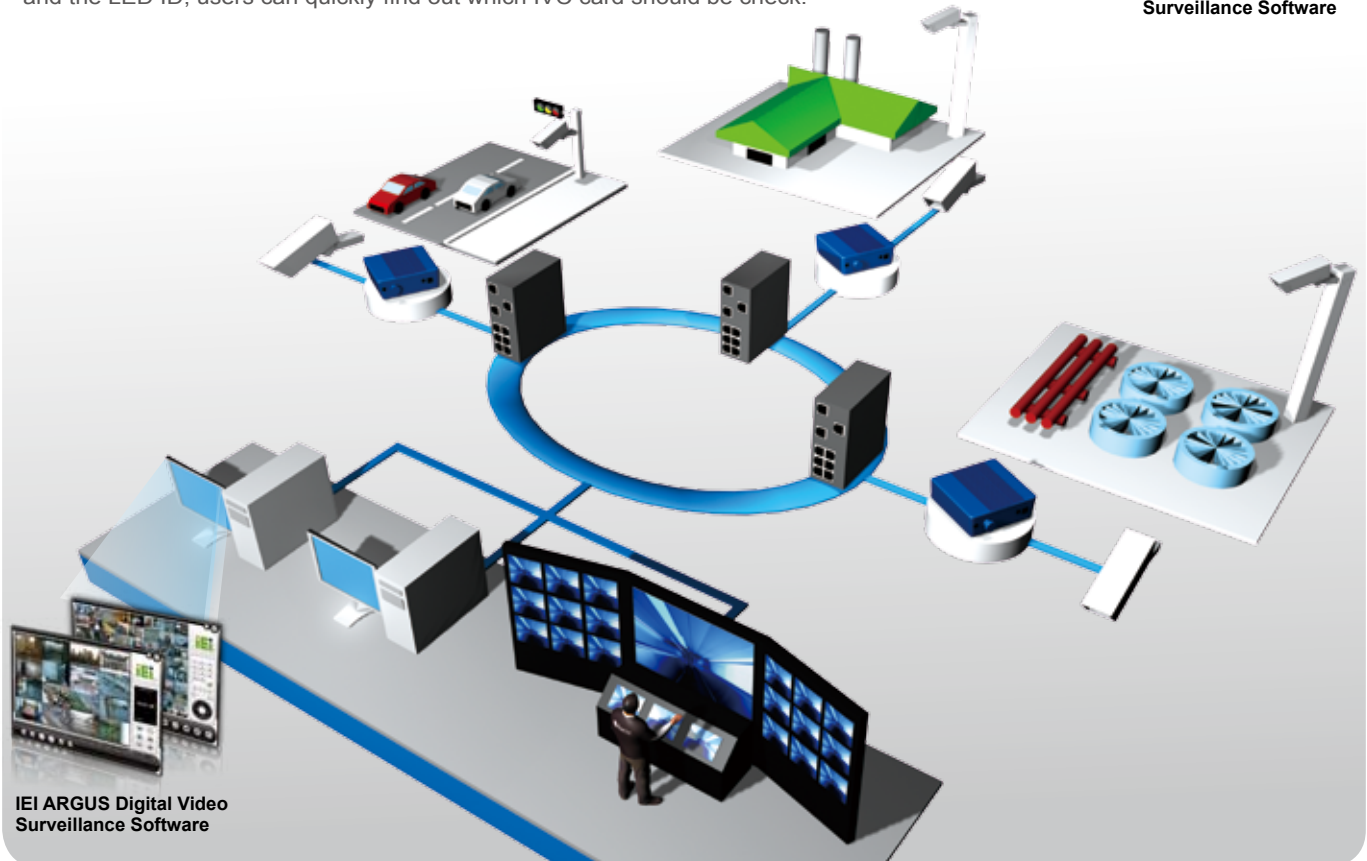
The ID is programmed by a 4-digit DIP switch

One Digit LED for Card Identification (ID)

Since The IEI IVC series support multiple IVC card to be plugged into a system, sometimes users need to know which card is related to which device name in the Device Manger of Windows XP. Each IVC card provide one digit LED to show its ID (identification), and the ID is programmed by a 4-digit DIP switch. The IEI IVC SDK also provides application programming interface (API) to get device name, and demo application software shows how to display device names in screen. The advantage is for ease of maintenance and debugging. While some display channels work abnormal, through the device names and the LED ID, users can quickly find out which IVC card should be check.



IEI ARGUS Digital Video Surveillance Software



IEI ARGUS Digital Video Surveillance Software

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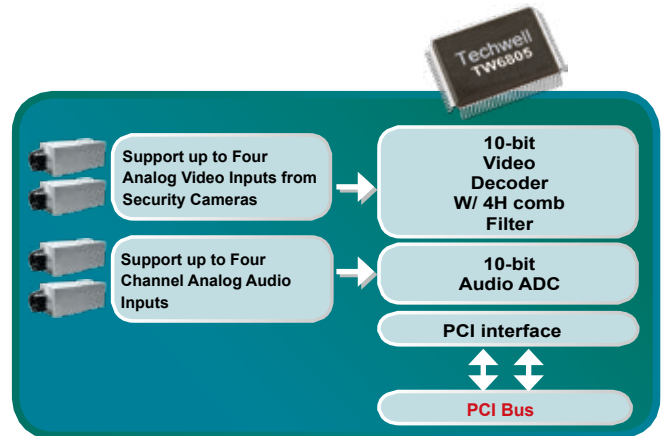
New Techwell TW6805 Video Capture Controller

Main Features

- Best Video quality with 10-bit ADC and 4H Comb for NTSC/SECAM/PAL
- Best weak and non-standard signal performance (for far away security cameras and non-ideal environments).
- Fastest non-real time channel switching speed due to fast video locking time (more frames per second).
- 10-bit Audio ADC for better audio quality
- Support up to 4CH non-real time video and 4CH non-real time audio
- Integrated Remote Control Receiver for remote control of PC DVR
- Significant cost advantage over Conexant
- Low Power Consumption : 10W(1-ch)~12W(4-ch)
- No Thermal
- Video quality increase +/- 55% compares to Conexant 25878
- 5-year longevity

Conexant v.s. Techwell

	Conexant BT878	Techwell TW6805
PCI 2.2-3.0	Compliant	Compliant
Video ADC	8-bit	10-bit
Comb Filter NTSC/PAL	4H/4H	4H/4H
Remote Control Receiver	External	Integrated
Digital ITU-R 656 Output	None	Supported
4 CH Mono Audio Support	Supported	Supported
DVR Non-real time Switching Speed Per channel	3 fps	7 fps
Audio Capture	No	Yes
Power Supply Analog/Digital	5V/5V	2.5V/2.5V
Application Software	Ready	Ready
Driver Software	Ready	Ready

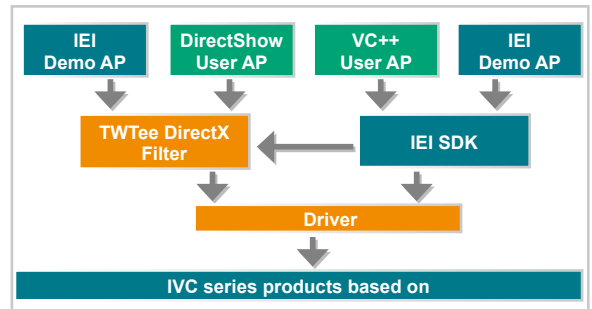


Better Performance

	Current model	Newer model
Model	IVC-100G/200G/8784 PM-1056	IVC-168G/268G PM-6814/6844
Chipset	Conexant BT878A	Techwell TW6805
Power Consumption	10.7W~15W	10W~12W
Heat sink	Yes	No
Capture	Video	Video/Audio
Interface	PCI/ PCIe/ PCI-104	PCI/ PCIe/ PCI-104
DVR Switching Speed	3 fps	7 fps

IEI SDK Software Support

- IEI provides complete software solutions such as device drivers and software development kits (SDK), the flexible open architecture allows easy integration of cameras, video signal processing, storage, and video management/security.
- IEI IVC-SDK68 is a new IEI SDK which supports Techwell /TW6805 based video capture cards, it containing rich software development supports including :
 - Techwell TW6805 drivers for Windows 2000/XP/XPe
 - TWTe, the DirectShow filter for DirectShow programming
 - DLL for Visual C++ programming
 - Demo application software with source code to show how to use IEI IVC-SDK68 to develop video capture system



IEI Demo Application

- Channel settings
- Video preview/capture
- Accessing GPIO ports
- Frame rate info
- Image attribute settings
- WDT settings
- Fast configuration and ready-to-run
- Completed source code provided



Free IEI Argus Digital Video Surveillance Software Bundle!

Argus is a PC-based digital video surveillance software system. It is designed for enterprise and industrial applications. Argus offers up to 16-channel display capability and provide optimized for processing high-resolution video /audio in real-time.

- Quick Search and Event List Search in Playback
- DI/DO/PTZ Control
- E-map, Showing Camera's Location and Background
- E-mail Alarm System once Triggered by Motion Detection
- Continuous and Event Triggered Recording
- Supports Different Speeds in Playback
- Professional surveillance software only support IVC-168G/268G, IVCE-268G, PM-6814/6844, VITO-100/350 series and includes free, so you quick and simple assembly DVR System

