Video Capture Solutions


IVC-168G


IVC-268G


IVCE-268G


PM-6814


PM-6844

Introduction

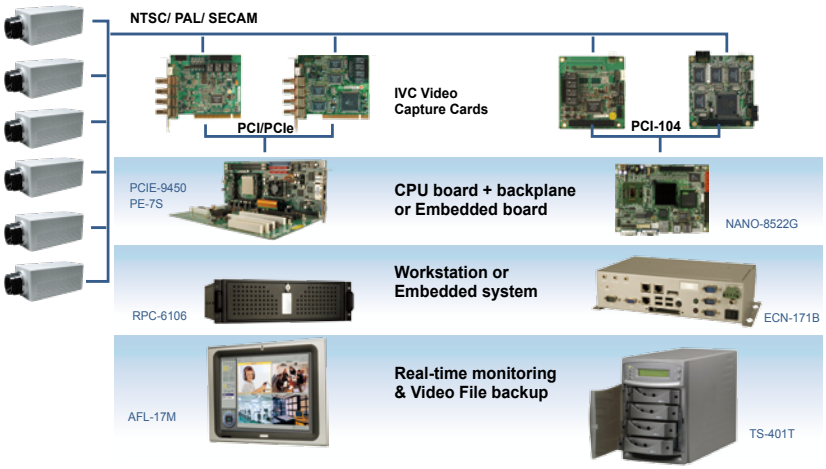
An emerging worldwide demand for security application is increasing after the 911 terrorism, and video surveillance is one of the most popular tool for guarding a safe environment. When people walk into a private space, security camera enables them to monitor any potential risk. Nowadays, banks and retail 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		Conexiant 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
	on-screen display			Y		Y		Y	Y
	motion detection			Y		PM-1056	IVC-8784	Hardware Built-in	Y
	Watermark			N		N		128bit adjustable secret key	Y
Software Support	Device Driver	Windows		Y		Y		Y	Y
		Linux		Y		Y	IVC-200G-RS	N	Y

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

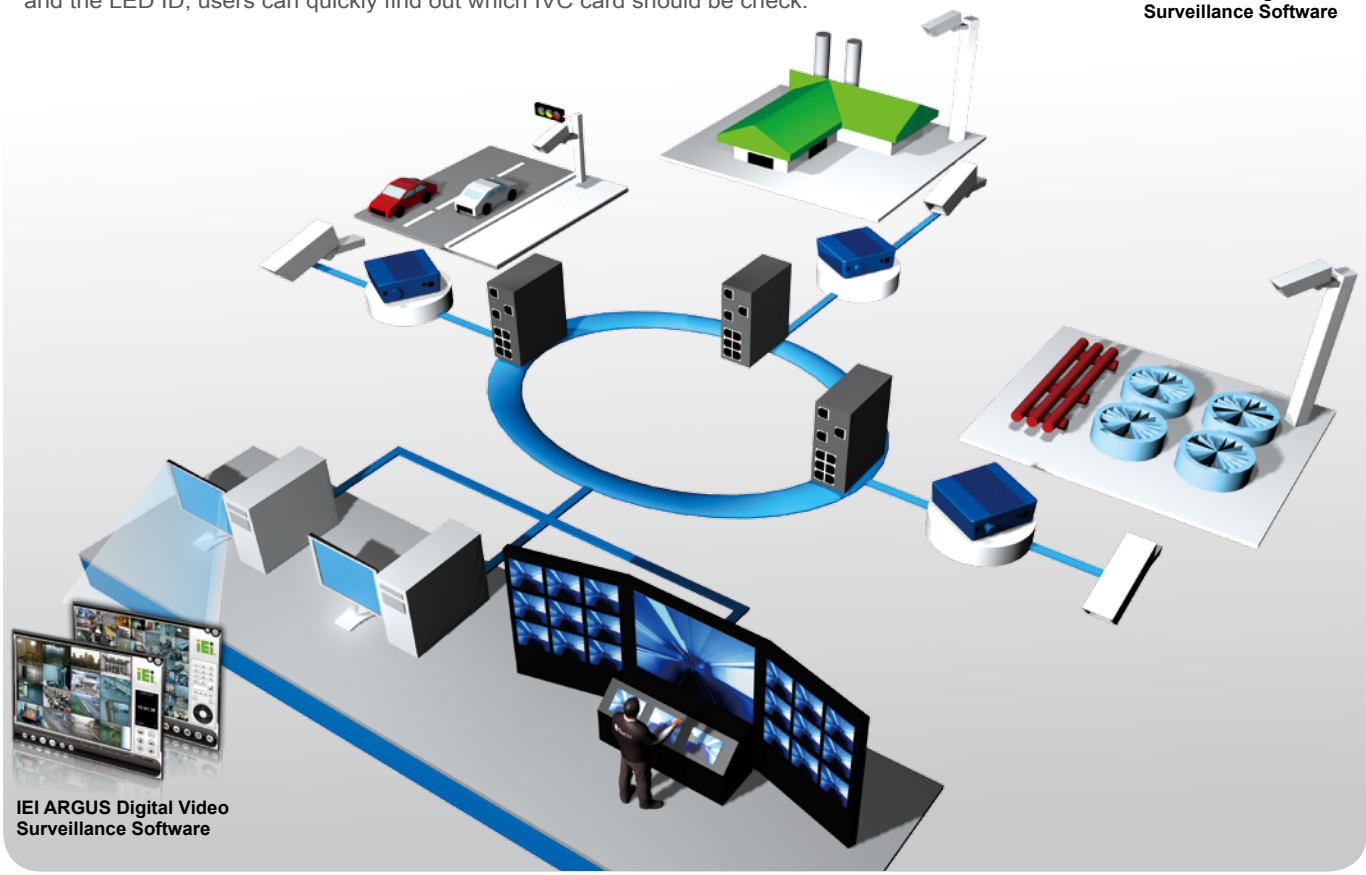
Digit LED to show its ID (identification)

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

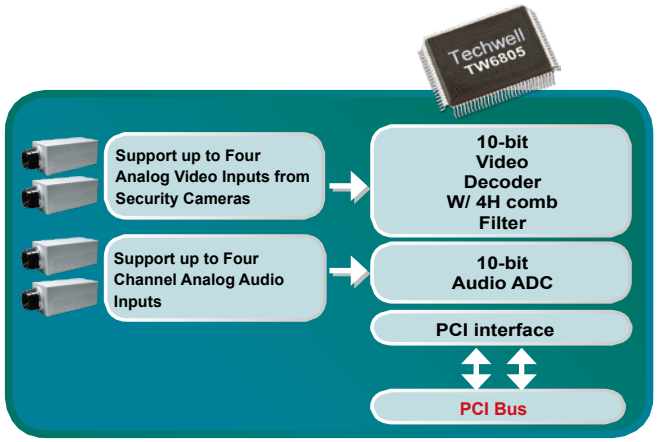


IEI ARGUS Digital Video Surveillance Software

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

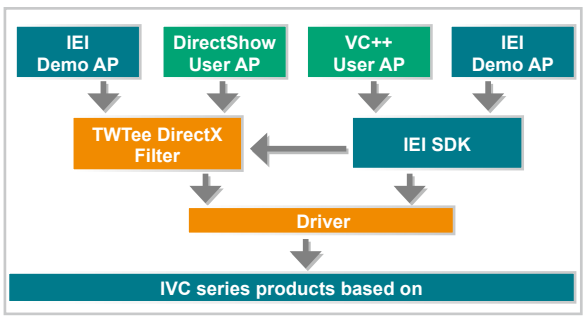
	Conexant BT878	Techwell TW6805
PCI 2.2-3.0	Compliant	Compliant
Video ADC	8-bit	10-bit
Comb Filter NTSC/PAL	4H/4H	4H/4H
Remote Control Receiver	External	Integrated
Digital ITU-R 656 Output	None	Supported
4 CH Mono Audio Support	Supported	Supported
DVR Non-real time Switching Speed Per channel	3 fps	7 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

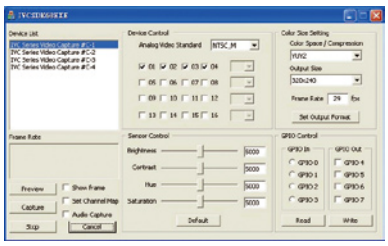
IEI SDK Software Support

- 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
  - TWTee, 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



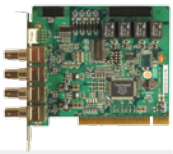
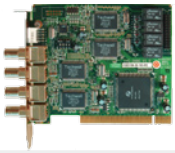
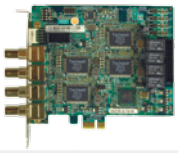
Free IEI Argus Digital Video Surveillance Software Bundle!

Argus is a PC-based digital video surveillance software system. It is designed for enterprise and industrial applications. Argus offers up to16-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

Video Capture Card Selection Guide

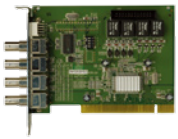
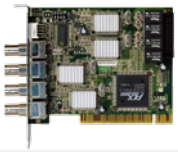
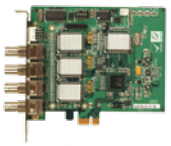
Low Power Consumption | **No Heatsink Required** | **RealTime Audio/Video Capture** | **Free Argus Surveillance Software Bundle**

Model Name	IVC-168G	IVC-268G	IVCE-268G	PM-6814	PM-6844
Formfactor	PCI	PCI	PCIe	PCI-104	PCI-104
◆ Interface					
Video input	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing
Video input type	BNC	BNC	BNC	BNC	BNC
Audio input	1 channel analog audio Active channel selectable by software	4 channel analog audio	4 channel analog audio	1 channel analog audio Active channel selectable by software	4 channel analog audio
Audio input type	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector
PCI / PCI-104 interface	PCI Rev 2.1 compliance	PCI Rev 2.1 compliance	PCIe x1	PCI Rev 2.1 compliance	PCI Rev 2.1 compliance
Alarm I/O	Yes	Yes	Yes	Yes	Yes
Card ID	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication
◆ Video processing					
Video compression	Software compression	Software compression	Software compression	Software compression	Software compression
Video engine	1 x Techwell TW6805	4 x Techwell TW6805	4 x Techwell TW6805	1 x Techwell TW6805	4 x Techwell TW6805
Resolution & frame rate	NTSC: 720 x 480, 720 x 240, 640 x 480, 640 x 240, 320 x 240, 160 x 120 PAL / SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 704 x 288, 640 x 480, 640 x 240, 352 x 288, 320 x 240, 176 x 144, 160 x 120 NTSC: Total 30fps@D1 for 4 channels PAL/SEACAM: 25fps@D1 for 4 channels	NTSC: 720 x 480, 720 x 240, 640 x 480, 640 x 240, 320 x 240, 160 x 120 PAL / SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 704 x 288, 640 x 480, 640 x 240, 352 x 288, 320 x 240, 176 x 144, 160 x 120 NTSC: Total 120fps@D1 for 4 channels PAL/SECAM: 100fps@D1 for 4 channels	NTSC: 720 x 480, 720 x 240, 640 x 480, 640 x 240, 320 x 240, 160 x 120 PAL / SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 704 x 288, 640 x 480, 640 x 240, 352 x 288, 320 x 240, 176 x 144, 160 x 120 NTSC: Total 120fps@D1 for 4 channels PAL/SECAM: 100fps@D1 for 4 channels	NTSC: 720 x 480, 720 x 240, 640 x 480, 640 x 240, 320 x 240, 160 x 120 PAL / SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 704 x 288, 640 x 480, 640 x 240, 352 x 288, 320 x 240, 176 x 144, 160 x 120 NTSC: Total 30fps@D1 for 4 channels PAL/SECAM: 25fps@D1 for 4 channels	NTSC: 720 x 480, 720 x 240, 640 x 480, 640 x 240, 320 x 240, 160 x 120 PAL / SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 704 x 288, 640 x 480, 640 x 240, 352 x 288, 320 x 240, 176 x 144, 160 x 120 NTSC: Total 120fps@D1 for 4 channels PAL/SECAM: 100fps@D1 for 4 channels
◆ Audio processing					
Audio compression	Software compression	Software compression	Software compression	Software compression	Software compression
Sampling rate	8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)	8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)	8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)	8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)	8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)
Quantization	8-bit, 16-bit and 24-bit (hardware spec.)	8-bit, 16-bit and 24-bit (hardware spec.)	8-bit, 16-bit and 24-bit (hardware spec.)	8-bit, 16-bit and 24-bit (hardware spec.)	8-bit, 16-bit and 24-bit (hardware spec.)
◆ Functionality					
Video /audio synchronization	Yes	Yes	Yes	Yes	Yes
Video loss detection	Yes	Yes	Yes	Yes	Yes
On-screen display	Yes	Yes	Yes	Yes	Yes
Motion detection	Yes	Yes	Yes	Yes	Yes
Watermarking	N/A	N/A	N/A	N/A	N/A
◆ System requirement					
System	x86 compatible computer	x86 compatible computer	x86 compatible computer	x86 compatible computer	x86 compatible computer
Memory	256 MB or above	256 MB or above	256 MB or above	256 MB or above	256 MB or above
Graphic	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode
◆ Software support					
Device driver	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux Kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program with sample source code in C++
Surveillance software support	Yes	Yes	Yes	Yes	Yes
◆ Others					
Dimensions	119.91 mm x 106.68 mm	119.91 mm x 106.68 mm	119.91 mm x 106.68 mm	95.89 mm x 90.17 mm	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing	0°C~60°C (32°F~140°F), non-condensing	0°C~60°C (32°F~140°F), non-condensing	0°C~60°C (32°F~140°F), non-condensing	0°C~60°C (32°F~140°F), non-condensing
Power consumption	10W, 2A@5V (with relay)	12W, 2.4A@5V (with relay)	12W, 1A@12V (with relay)	10W, 2A@5V (with relay)	4.5W, 0.9A@5V (without relay)

Video Capture Card Selection Guide

RealTime Video Capture

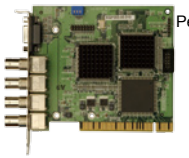

Model name	IVC-100G-RS	IVC-200G-RS	IVCE-8784	PM-1056
Formfactor	PCI	PCI	PCIe	PCI-104
◆ Interface				
Video input	4 channels composite video NTSC / PAL / SECAM auto sensing	4 channels composite video NTSC / PAL / SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/ SECAM auto sensing
Video input type	BNC	BNC	BNC	BNC
Audio Input	N/A	N/A	N/A	4 channels
Audio input type	N/A	N/A	N/A	DB9 to 3.5mm phone jack audio cable
PCI / PCI-104 interface	PCI rev 2.1 compliance	PCI rev 2.1 compliance	PCIe x1	PCI Rev 2.1 compliance
Alarm I/O	Yes	Yes	Yes	Yes
Card ID	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication
◆ Video processing				
Video compression	Software compression	Software compression	Software compression	Software Compression
Video engine	1 x Conexant Fusion BT878A	4 x Conexant Fusion BT878A	4 x Conexant Fusion BT878A	1 x Conexant FusionTM BT878A
Resolution & frame rate	NTSC: 720 x 480, 720 x 288, 720 x 240, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60 PAL/SECAM : 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60	NTSC: 720 x 480, 720 x 288, 720 x 240, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60 PAL/SECAM : 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60	NTSC: 720 x 480, 720 x 288, 720 x 240, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60 PAL/SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60	NTSC: 720 x 480, 720 x 288, 720 x 240, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60 PAL/SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 640 x 480, 640 x 288, 640 x 240, 352 x 288, 352 x 240, 320 x 240, 240 x 180, 240 x 176, 176 x 144, 160 x 120, 128 x 96, 88 x 72, 80 x 60
	NTSC: up to 30fps at all resolutions PAL/SECAM: up to 25fps at all resolutions	NTSC: up to 120fps at all resolutions PAL /SECAM: up to 100fps at all resolutions	NTSC: up to 120fps at all resolutions PAL/SECAM: up to 100fps at all resolutions	NTSC: Total 30fps @D1 for 4 channels PAL/SECAM: 25fps @D1 for 4 channels
◆ Audio processing				
Audio compression	N/A	N/A	N/A	N/A
Sampling rate	N/A	N/A	N/A	N/A
Quantization	N/A	N/A	N/A	N/A
◆ Functionality				
Video /audio synchronization	N/A	N/A	Yes	Yes
Video loss detection	Yes	Yes	Yes	Yes
On-screen display	Yes	Yes	Yes	Yes
Motion detection	N/A	N/A	Yes	Yes
Watermarking	N/A	N/A	N/A	N/A
◆ System requirement				
System	x86 compatible computer	x86 compatible computer	x86 compatible computer	x86 PC compatible computer
Memory	256 MB or above	256 MB or above	256 MB or above	256 MB or above
Graphic	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode
◆ Software support				
Device driver	Windows® 98 SE, ME, 2000, XP Linux kernel 2.4	Windows® 98 SE, ME, 2000, XP Linux kernel 2.4	Windows® 98, SE, ME, 2000, XP	Windows 98 SE, ME, 2000, XP, Linux kernel 2.4
SDK	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program with sample source code in C++
Surveillance software support	No	No	No	No
◆ Others				
Dimensions	119.91 mm x 106.68 mm	119.91 mm x 106.68 mm	11 9.91 mm x 106.68 mm	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing	0°C~60°C (32°F~140°F), non-condensing	0°C~60°C (32°F~140°F), non-condensing	0°C~60°C (32°F~140°F), non-condensing
Power consumption	10.7W, 2.14A@5V (with relay)	15W, 3A@5V (with relay)	7.8W, 0.65A@12V (without relay)	3.5W@5V (with relay)

Video Capture Card Selection Guide

MPEG 4 Hardware Compression | **RealTime Audio/Video Capture**

Softlogic Solo6010 + Techwell TW6805

Hardware Encode / Decode



PentaMicro AT2401

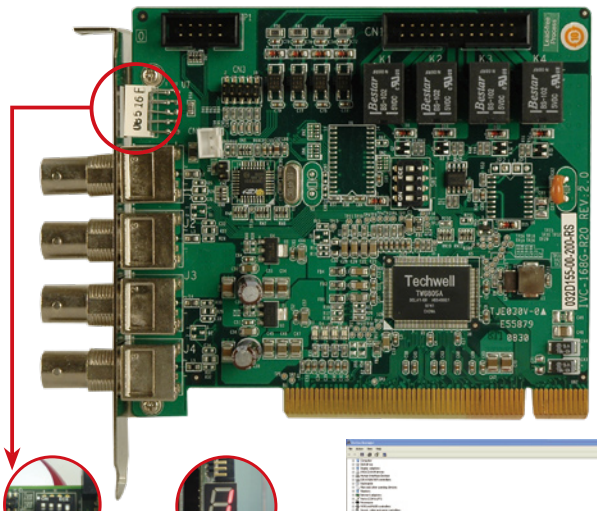
Hardware Encode / Decode

PentaMicro AT2401

Model name	IVC-368G-4CH	IVC-8371P	PM-1059
Formfactor	PCI	PCI	PCI-104
◆ Interface			
Video input	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels Composite video NTSC/PAL/SECAM	4 channels composite video NTSC/PAL/SECAM auto sensing
Video input type	DB-25 Connector	BNC	BNC
Audio input	4 channels analog audio	4 channels	4 channels
Audio input type	Audio kit with DB-25 connector together	DB9 to 3.5mm phone jack audio cable	DB9 to 3.5 mm phone jack audio cable
PCI / PCI-104 interface	PCI 2.2 compliance	PCI Rev 2.1 compliance	PCI Rev 2.1 compliance
Alarm I/O	External GPIO daughter board with 4 inputs and 4 outputs (optional)	Yes	Yes
Card ID	selectable with LED for ID indication	DIP switch selectable	DIP switch selectable
◆ Video processing			
Video compression	MPEG4 Video Encoder - ISO/IEC 1496-2 MPEG4 SOP@LEVEL 1,2,3 - Dual Speed Full Hardwired MPEG4 Core	MPEG 4 Advanced Simple Profile @ Level 5 (ISO/IEC 14496-2) MPEG-2 Main Profile @ Main Level (ISO/IEC 13818-2) MPEG-1 (ISO/IEC 11172-2) H.263 (ITU-T Recommendation H.263)	MPEG 4 Advanced Simple Profile @ Level 5 (ISO/IEC 14496-2) MPEG-2 Main Profile @ Main Level (ISO/IEC 13818-2) MPEG-1 (ISO/IEC 11172-2)
Video engine	MPEG4 Video Hardware Encoder	MPEG 4 Hardware Encode / Decode	MPEG 4 Hardware Encode / Decode
Resolution & frame rate	NTSC: 704 x 480 704 x 240 352 x 240 176 x 112 PAL / SECAM: 704 x 480 704 x 240 352 x 240 176 x 112	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 360 x 240 320 x 240 PAL/SECAM : 720 x 576 720 x 288 640 x 576 640 x 288 360 x 288 320 x 288	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 360 x 240 320 x 240 PAL / SECAM: 720 x 576 720 x 288 640 x 576 640 x 288 360 x 288 320 x 288
	NTSC: Total 120fps@D1 for 4 channels PAL/SEACAM: 100fps@D1 for 4 channels	NTSC: Total 30fps@D1 for 4 channels PAL/SEACAM: Total 25fps@D1 for 4 channels	NTSC: Total 30fps @D1 for 4 channels PAL/SECAM: 25fps @D1 for 4 channels
◆ Audio processing			
Audio compression	G.723 Voice CODEC (ADPCM/PCM)	Encoding StandardG.726 (ADPCM/PCM)	G.726(ADPCM/PCM)
Sampling rate	8K, 16KHz (Hardware Spec.)	8K, 44.1 KHz and 48 KHz	8K, 44.1 KHz and 48 KHz
Quantization	8K, 16K (Hardware Spec.)	8 bit data depth	8-bit data depth
◆ Functionality			
Video /audio synchronization	Yes	Yes	Yes
Video loss detection	Yes	Yes	Yes
On-screen display	Yes	Yes	Yes
Motion detection	Yes	Hardware built-in	Hardware build-in
Watermarking	Yes	128 bit secrete key, adjustable length	128-bit secrete key, adjustable length
◆ System requirement			
System	x86 PC compatible computer	x86 PC compatible computer	x86 compatible computer
Memory		256MB or above	256 MB or above
Graphic	DirectX compatible VGA card with YUV overlay mode supporting.	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode
◆ Software support			
Device driver	Windows XP, Linux Kernel 2.6	Windows 2000/ XP	Windows® 2000, XP
SDK	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program Complete source code of demo program in C++	Provide SDK and demo program with source code in C++
Surveillance software support		No	No
◆ Others			
Dimensions	119.91mm x 106.68mm	119.91mm x 106.68mm	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing		
Power consumption	1.8W, 0.36A@5V	7.5W, 1.5A@5V (without relay)	7.5W, 1.5A@5V (without relay)

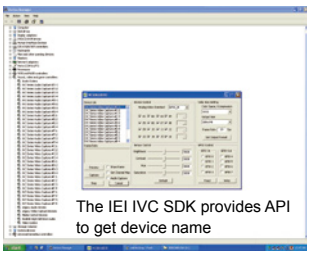
IVC-168G

PCI Video/Audio Capture Card with Four Video Input Channels, Total 30 fps@720x480(NTSC), and One Audio Input Channel



The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)



The IEI IVC SDK provides API to get device name

IEI ARGUS Digital Video Surveillance Software

Features

Low Power

- 10 W only ultra low power consumption
- No thermal issues, no heat sink required
- Best Video quality with 10-bit ADC and 4H composite for NTSC / PAL / SECAM auto sensing
- 10-bit ADC for Analog Sound digitizing for better audio quality
- 30 fps @ D1 per channel, for entry level surveillance market
- One channel audio capturing, channel selectable by software
- Eight GPIO relay channels (4 in / 4 out) on board, included I/O kit & cable
- Support Multiple Card (maximum 64 ports video input and 16 ports audio input)
- Windows® 2000, XP and Linux kernel 2.6 drivers available
- Bundle IEI Argus surveillance software supports 25/30fps@1 channel video/ audio monitoring and recording
- Applications: Video surveillance, security, public transportations, police and government

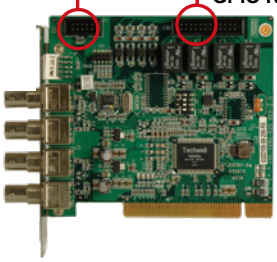
Input kit

2x5-pin 2.54 pitch connector

GPIO Kit & cable

Four 3.5 mm audio jacks

IVC-168G supports single channel audio capturing at a time, active channel can be selected by software.



Specifications

◆ Interface

Video input	4 channels composite video NTSC, PAL and SECAM auto sensing
Connector	BNC
Audio input	1 channel analog audio Active channel selectable by software
Connector	Audio kit with 3.5 mm audio jack connector
PCI interface	PCI 2.1 compliance
Card ID	Selectable with LED for ID indication
Alarm I/O	GPIO daughter board with 4 inputs and 4 outputs

◆ Software Support

Device driver	Windows® 2000, XP Linux kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++
Surveillance software support	Software supports 25/30fps@1 channel video/audio monitoring and recording

◆ Video Processing

Video engine	1 x Techwell TW6805		
Resolution	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 320 x 240 160 x 120	PAL / SECAM: 720 x 576 720 x 480 720 x 288 720 x 240 704 x 576 704 x 288	 640 x 480 640 x 240 352 x 288 320 x 240 176 x 144 160 x 120
Frame rate	NTSC: Four video channels with 30 fps @ D1 per channel PAL and SECAM: Four video channels with 25 fps @ D1 per channel		

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel / Resolution	Total Frame (NTSC/PAL)
1	4	1	4 channels, D1 (720 x 480)	30/25 fps
4	16	4	16 channels, D1 (720 x 480)	120/100 fps
8	32	8	32 channels, QVGA (320 x 240)	240/200 fps
16	64	16	64 channels, QVGA (320 x 240)	480/400 fps

Support Multiple Card (maximum 64 ports video input)

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	10W, 2A@5V (with relay)

Packing List

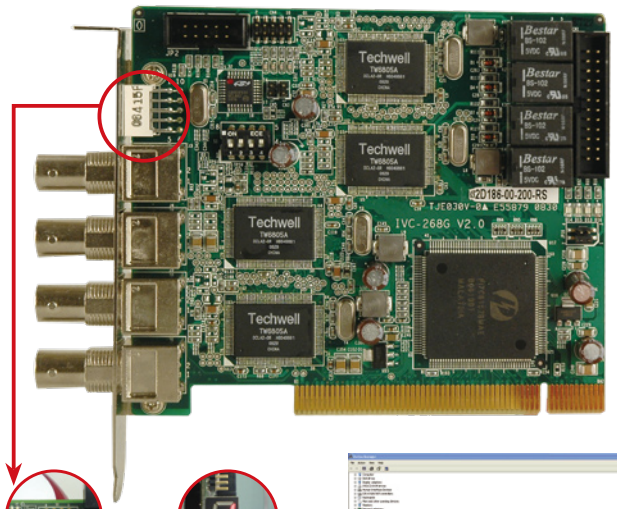
1 x IVC-168G	1 x GPIO kit
1 x GPIO cable	1 x audio input kit
1 x utility CD	1 x QIG
1 x IEI Argus Surveillance software CD	

Ordering Information

Part No.	Description
IVC-168G-R20	PCI video/audio capture card with four video input channels, total 30 fps@720x480(NTSC), and one audio input channel

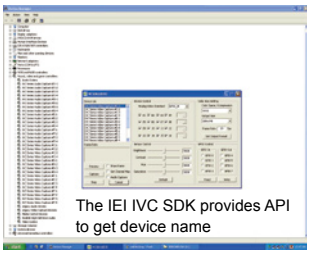
IVC-268G

PCI Video/Audio Capture Card with Four Video Input Channels, Total 120 fps@720x480(NTSC), and One Audio Input Channel



The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)



The IEI IVC SDK provides API to get device name

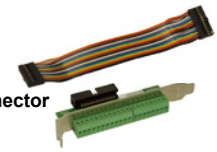
IEI ARGUS Digital Video Surveillance Software

Features

Low Power

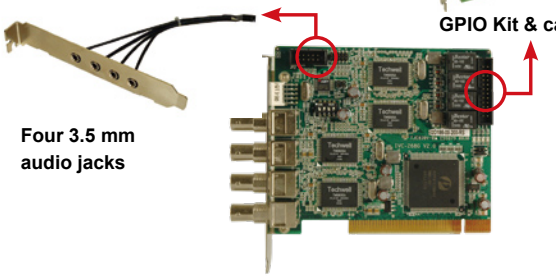
- Ultra low power consumption, only 12 W for 30 fps @ D1 per channel
- No thermal issues, no heat sink required
- Best Video quality with 10-bit ADC and 4H composite for NTSC / PAL / SECAM auto sensing
- 10-bit ADC for Analog Sound digitizing for better audio quality
- Four channels with 120 fps @ 720 x 480 (NTSC) per channel
- Eight GPIO relay channels (4 in / 4 out) on board, included I/O kit&cable
- Support Multiple Card (maximum 16 ports video input and 16 ports audio input)
- Windows® 2000, XP and Linux kernel 2.6 drivers available
- Bundle IEI Argus surveillance software supports 100/120fps@4 channel video/audio monitoring and recording
- Applications: Video surveillance, security, public transportations, police and government

Input kit



2x5-pin 2.54 pitch connector

GPIO Kit & cable



Four 3.5 mm audio jacks

Specifications

◆ Interface

Video input	4 channels composite video NTSC, PAL and SECAM auto sensing
Connector	BNC
Audio input	4 channels analog audio
Connector	Audio kit with 3.5 mm audio jack connector
PCI interface	PCI 2.1 compliance
Card ID	Selectable with LED for ID indication
Alarm I/O	GPIO daughter board with 4 inputs and 4 outputs

◆ Software support

Device driver	Windows® 2000, XP Linux kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++
Surveillance software support	Software supports 100/120fps@4 channel video/audio monitoring and recording

◆ Video Processing

Video engine	4 x Techwell TW6805		
Resolution	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 320 x 240 160 x 120	PAL / SECAM: 720 x 576 720 x 480 720 x 288 720 x 240 704 x 576 704 x 288	 640 x 480 640 x 240 352 x 288 320 x 240 176 x 144 160 x 120
Frame rate	NTSC: Four video channels with 120 fps @ D1 per channel PAL and SECAM: Four video channels with 100 fps @ D1 per channel		

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel / Resolution	Total Frame (NTSC/PAL)
1	4	4	4 channels, D1 (720 x 480)	120/100 fps
4	16	16	16 channels, QVGA (320 x 240)	480/400 fps

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	12W, 2.4A@5V (with relay)

Packing List

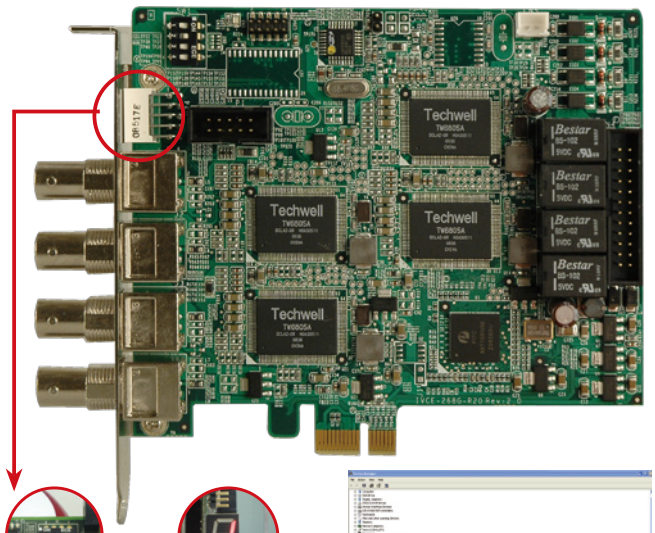
1 x IVC-268G	1 x GPIO kit
1 x GPIO cable	1 x audio input kit
1 x utility CD	1 x QIG
1 x IEI Argus Surveillance software CD	

Ordering Information

Part No.	Description
IVC-268G-R20	PCI video/audio capture card with four video input channels, total 120 fps@720x480(NTSC), and one audio input channel

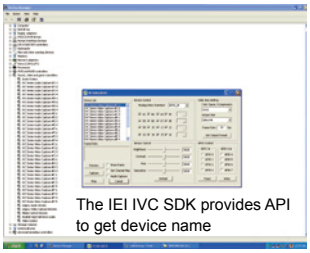
IVCE-268G

PCI Express Video/Audio Capture Card with Four Video Input Channels, Total 120 fps@720x480(NTSC), and One Audio Input Channel



The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)



The IEI IVC SDK provides API to get device name

IEI ARGUS Digital Video Surveillance Software

Features

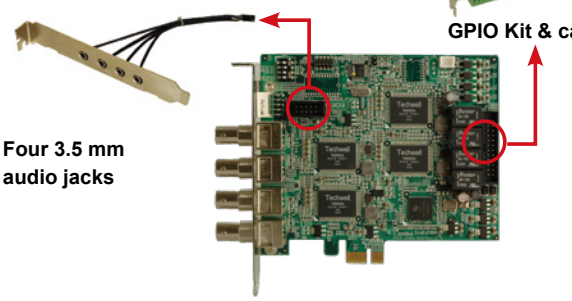
Low Power

- PCIe x1 high speed interface
- Ultra low power consumption, only 12 W for 30 fps @ D1 per channel
- No thermal issues, no heat sink required
- Best Video quality with 10-bit ADC and 4H composite for NTSC / PAL / SECAM auto sensing
- 10-bit ADC for Analog Sound digitizing for better audio quality
- Eight GPIO relay channels (4 in / 4 out) on board, included I/O kit & cable
- Support Multiple Card (maximum 32 ports video input and 32 ports audio input)
- Windows® 2000, XP and Linux kernel 2.6 drivers
- Bundle IEI Argus surveillance software supports 100/120fps@4 channel video/audio monitoring and recording
- Applications: Video surveillance, security, public transportations, police and government

Input kit

2x5-pin 2.54 pitch connector

GPIO Kit & cable



Four 3.5 mm audio jacks

Specifications

◆ Interface

Video Input	4 channels composite video NTSC, PAL and SECAM auto sensing
Connector	BNC
Audio Input	4 channels analog audio
Connector	Audio kit with 3.5 mm audio jack connector
PCI Interface	PCIe x1
Card ID	Selectable with LED for ID indication
Alarm I/O	GPIO daughter board with 4 inputs and 4 outputs

◆ Software support

Device Driver	Windows® 2000, XP Linux kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++
Surveillance software support	Software supports 100/120fps@4 channel video/audio monitoring and recording

◆ Video Processing

Video engine	4 x Techwell TW6805	
Resolution	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 320 x 240 160 x 120	PAL / SECAM: 720 x 576 640 x 480 720 x 480 640 x 240 720 x 288 352 x 288 720 x 240 320 x 240 704 x 576 176 x 144 704 x 288 160 x 120
Frame rate	NTSC: Four video channels with 120 fps @ D1 per channel PAL and SECAM: Four video channels with 100 fps @ D1 per channel	

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel / Resolution	Total Frame (NTSC/PAL)
1	4	4	4 channels, D1 (720 x 480)	120/100 fps
4	16	16	16 channels, D1 (720 x 480)	480/400 fps
8	32	32	32 channels, QVGA (320 x 240)	960/800 fps

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	12W, 1A@12V (with relay)

Packing List

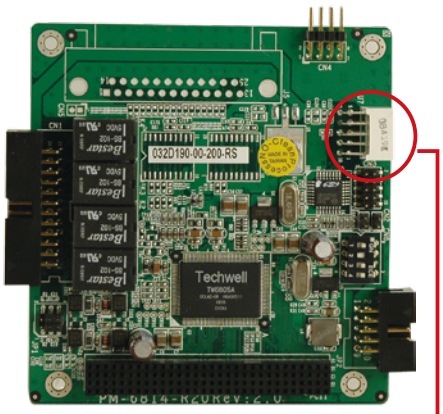
1 x IVCE-268G	1 x GPIO kit
1 x GPIO cable	1 x audio input kit
1 x utility CD	1 x QIG
1 x IEI Argus Surveillance software CD	

Ordering Information

Part No.	Description
IVCE-268G-R20	PCI Express video/audio capture card with four video input channels, total 120 fps@720x480(NTSC), and one audio input channel

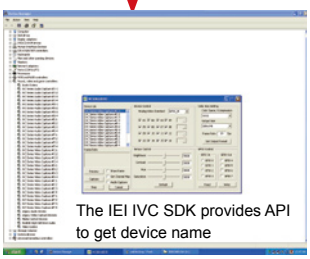
PM-6814

PCI-104 Video/Audio Capture Card with Four Video Input Channels, Total 30 fps@720x480(NTSC), and One Audio Input Channel



The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)



The IEI IVC SDK provides API to get device name

IEI ARGUS Digital Video Surveillance Software

Features

Low Power

- 10 W ultra low power consumption
- No thermal issues, no heat sink required
- Best Video quality with 10-bit ADC and 4H composite for NTSC / PAL / SECAM auto sensing
- 10-bit ADC for Analog Sound digitizing for better audio quality
- Four video channels with 30 fps @ D1 per channel for entry level surveillance market
- One channel audio capture, channel selectable by software
- Eight GPIO relay channels (4 in / 4 out) on board, included I/O kit & cable
- Support Multiple Card
  (maximum 16 ports video input and 4 ports audio input)
- Windows® 2000, XP and Linux kernel 2.6 drivers available
- Bundle IEI Argus surveillance software free supports 25/30fps@1 channel video/audio monitoring and recording
- Applications: Video surveillance, security, public transportations, police and government

Input kit

Video input daughter board for PM-6814

Four 3.5 mm audio jacks

2x5-pin 2.54 pitch connector

GPIO Kit & cable

Specifications

◆ Interface

Video Input	4 channels composite video NTSC, PAL and SECAM auto sensing
Connector	BNC
Audio Input	1 channel analog audio Active channel selectable by software
Connector	Audio kit with 3.5 mm audio jack connector
PCI Interface	PCI Rev 2.1 compliance
Card ID	Selectable with LED for ID indication
Alarm I/O	GPIO daughter board with 4 inputs and 4 outputs

◆ Software support

Device Driver	Windows® 2000, XP Linux kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++
Surveillance software support	Software supports 25/30fps@1 channel video/audio monitoring and recording

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel / Resolution	Total Frame (NTSC/PAL)
1	4	1	4 channels, D1(720 x 480)	30/25 fps
4	16	4	16 channels, D1(720 x 480)	120/100 fps

◆ Video Processing

Video engine	1 x Techwell TW6805	
Resolution	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 320 x 240 160 x 120	PAL / SECAM: 720 x 576 720 x 480 720 x 288 720 x 240 704 x 576 704 x 288
Frame rate	NTSC: Four video channels with 30 fps @ D1 per channel PAL and SECAM: Four video channels with 25 fps @ D1 per channel	

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Others

Dimensions	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	10W, 2A@5V (with relay)

Packing List

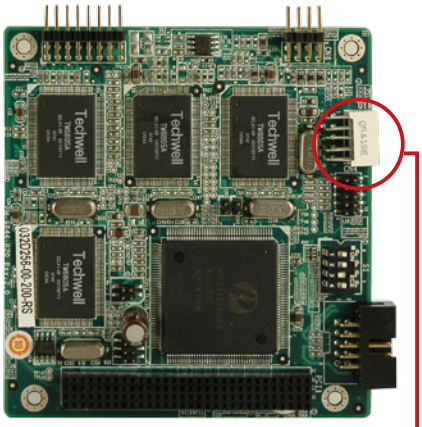
1 x PM-6814	1 x GPIO kit
1 x GPIO cable	1 x audio input kit
1 x utility CD	1 x QIG
1 x video input daughter board with cable	
1 x IEI Argus Surveillance software CD	

Ordering Information

Part No.	Description
PM-6814-R20	PCI-104 video/audio capture card with four video input channels, total 30 fps@720x480(NTSC), and one audio input channel

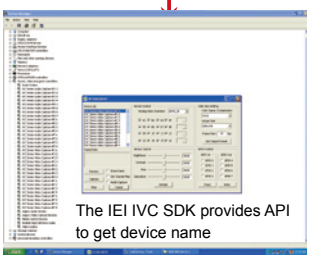
PM-6844

PCI-104 Video/Audio Capture Card with Four Video Input Channels, Total 120 fps@720x480(NTSC), and One Audio Input Channel



The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)



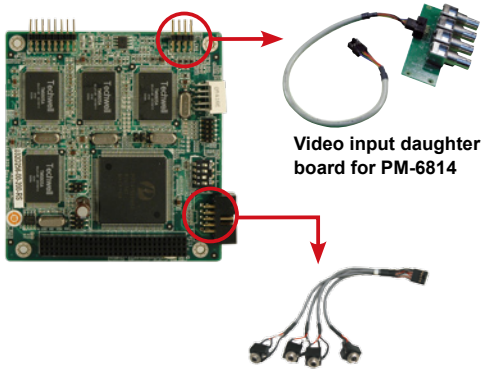
The IEI IVC SDK provides API to get device name

IEI ARGUS Digital Video Surveillance Software

Features

Low Power

- Ultra low power consumption, only 4.5 W for 30 fps @ D1 per channel
- No thermal issues, no heat sink required
- Best Video quality with 10-bit ADC and 4H composite for NTSC / PAL / SECAM auto sensing
- 10-bit ADC for Analog Sound digitizing for better audio quality
- 30 fps @ 720 x 480 (NTSC) per channel
- One channel audio capture, channel selectable by software
- Support Multiple Card (maximum 16 ports video input and 16 ports audio input)
- Windows® 2000, XP and Linux kernel 2.6 drivers available
- Bundle IEI Argus surveillance software free supports 25/30fps@1 channel video/audio monitoring and recording
- Applications: Video surveillance, security, public transportations, police and government



Video input daughter board for PM-6814

Four 3.5 mm audio jacks

Specifications

◆ Interface

Video Input	4 channels composite video NTSC, PAL and SECAM auto sensing
Connector	BNC
Audio Input	4 channels analog audio
Connector	Audio kit with 3.5 mm audio jack connector
PCI Interface	PCI 2.1 compliance
Card ID	Selectable with LED for ID indication

◆ Software support

Device Driver	Windows® 2000, XP Linux kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++
Surveillance software support	Software supports 100/120fps@4 channel video/audio monitoring and recording

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel / Resolution	Total Frame (NTSC/PAL)
1	4	4	4 channels, D1(720 x 480)	120/100 fps
4	16	16	16 channels, QVGA(320 x 240)	480/400 fps

◆ Video Processing

Video engine	4 x Techwell TW6805	
Resolution	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 320 x 240 160 x 120	PAL / SECAM: 720 x 576 640 x 480 720 x 480 640 x 240 720 x 288 352 x 288 720 x 240 320 x 240 704 x 576 176 x 144 704 x 288 160 x 120
Frame rate	NTSC: Four video channels with 30 fps @ D1 per channel PAL and SECAM: Four video channels with 100 fps @ D1 per channel	

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Others

Dimensions	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	4.5W, 0.9A@5V (without relay)

Packing List

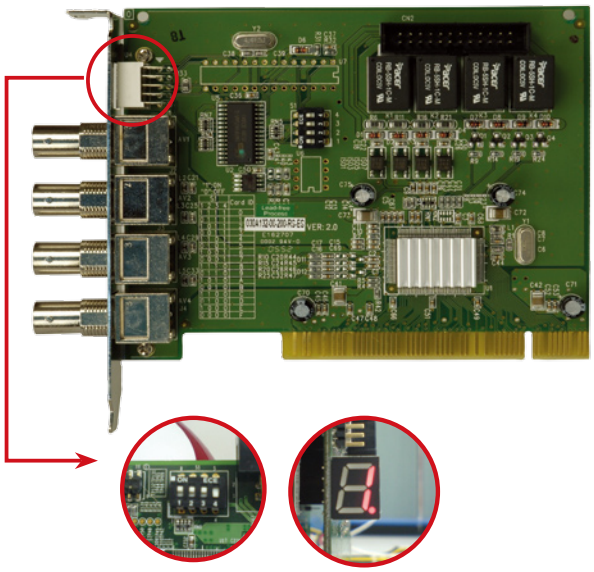
1 x PM-6844	1 x audio input kit
1 x utility CD	1 x QIG
1 x video input daughter board with cable	
1 x IEI Argus Surveillance software CD	

Ordering Information

Part No.	Description
PM-6844-R20	PCI-104 video/audio capture card with four video input channels, total 120 fps@720x480(NTSC), and one audio input channel

IVC-100G-RS

PCI Video Capture Card with Four Video Input Channels, Total 30 fps@720x480(NTSC)



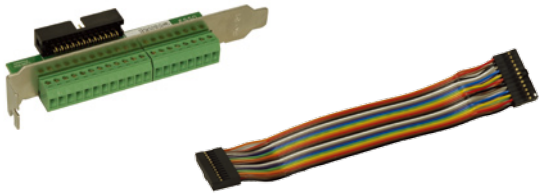
The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)

Notice: IVC-100-RS-R20 does not support GPIO function and has no relay components on board.

Features

- Eight GPIO relay channels (4 in / 4 out) on board, included I/O kit & cable
- Four video channels with 30 fps @ 720 x 480 (NTSC) per channel
- Support Multiple Card (maximum 64 ports video input)
- Drivers for Windows® and Linux available
- Applications: Video surveillance, security, public transportations, police and government



IVC-100G-RS-R20 GPIO-daughter board and cable

Specifications

◆ Interface

Video input	4 channels composite video NTSC, PAL and SECAM auto sensing
Video input Type	BNC
PCI interface	PCI Rev 2.1 compliance
CARD ID	DIP switch selectable with LED for ID indication
Alarm I/O	GPIO daughter board with 4 inputs and 4 outputs (IVC-100G-RS-R20 only)

◆ Software support

Device Driver	Windows® 2000, XP Linux kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++

◆ Video Processing

Video engine	1 x Conexant Fusion BT878A	
Resolution	NTSC: 720 x 480 320 x 240 720 x 288 240 x 180 720 x 240 240 x 176 640 x 480 176 x 144 640 x 288 160 x 120 640 x 240 128 x 96 352 x 288 88 x 72 352 x 240 80 x 60	PAL / SECAM: 720 x 576 352 x 240 720 x 480 320 x 240 720 x 288 240 x 180 720 x 240 240 x 176 704 x 576 176 x 144 640 x 480 160 x 120 640 x 288 128 x 96 640 x 240 88 x 72 352 x 288 80 x 60
Frame rate	NTSC: up to 30 fps per channel	
	PAL /SECAM: up to 25fps at all resolutions	

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel / Resolution	Total Frame (NTSC/PAL)
1	4	N/A	4 channels, D1(720 x 480)	30/25 fps
4	16	N/A	16 channels, D1(720 x 480)	120/100 fps
8	32	N/A	32 channels, QVGA(320 x 240)	240/200 fps
16	64	N/A	64 channels, QVGA(320 x 240)	480/400 fps

Support Multiple Card
(maximum 64 ports video input)

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	10.7W, 2.14A@5V (with relay)

Packing List

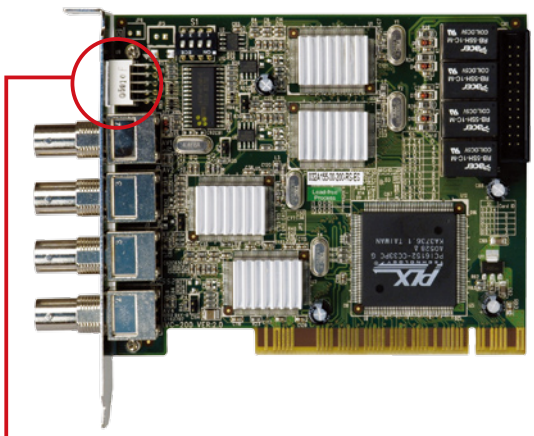
IVC-100G-RS-R20	1 x IVC-100G-RS-R20 1 x GPIO daughter board with cable 1 x utility CD 1 x QIG (quick installation guide)
IVC-100-RS-R20	1 x IVC-100-RS-R20 1 x utility CD 1 x QIG (quick installation guide)

Ordering Information

Part No.	Description
IVC-100G-RS-R20	PCI video capture card with four video input channels, total 30 fps@720x480(NTSC), and GPIO daughter board
IVC-100-RS-R20	PCI video capture card with four video input channels, total 30 fps@720x480(NTSC)

IVC-200G-RS

PCI Video Capture Card with Four Video Input Channels, Total 120 fps@720x480(NTSC)



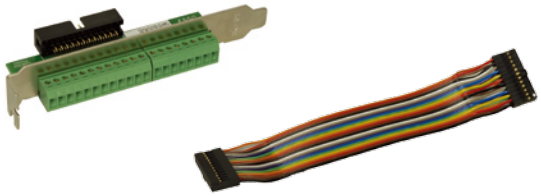
The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)

Notice: IVC-200-RS-R20 does not support GPIO function and has no relay components on board.

Features

- Eight GPIO relay channels (4 in / 4 out) on board, included I/O kit & cable
- Four video channels with 120 fps @ 720 x 480 (NTSC) per channel
- Support Multiple Card (maximum 16 ports video input)
- Drivers for Windows® and Linux available
- Applications: Video surveillance, security, public transportations, police and government



IVC-200G-RS-R20 GPIO-daughter board and cable

Specifications

◆ Interface

Video input	4 channels composite video NTSC, PAL and SECAM auto sensing
Video input type	BNC
PCI interface	PCI Rev 2.1 compliance
CARD ID	DIP switch selectable with LED for ID indication
Alarm I/O	GPIO daughter board with 4 inputs and 4outputs (IVC-200G-RS-R20 only)

◆ Software support

Device Driver	Windows® 98 SE, ME, 2000, XP Linux kernel 2.4
SDK	Provide SDK and demo program with sample source code in C++

◆ Video Processing

Video engine	4 x Conexant Fusion BT878A	
Resolution	NTSC: 720 x 480 320 x 240 720 x 288 240 x 180 720 x 240 240 x 176 640 x 480 176 x 144 640 x 288 160 x 120 640 x 240 128 x 96 352 x 288 88 x 72 352 x 240 80 x 60	PAL / SECAM: 720 x 576 352 x 240 720 x 480 320 x 240 720 x 288 240 x 180 720 x 240 240 x 176 704 x 576 176 x 144 640 x 480 160 x 120 640 x 288 128 x 96 640 x 240 88 x 72 352 x 288 80 x 60
Frame rate	NTSC: up to 120 fps per channel	
	PAL /SECAM: up to 100 fps per channel	

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel / Resolution	Total Frame (NTSC/PAL)
1	4	N/A	4 channels, D1(720 x 480)	120/100 fps
4	16	N/A	16 channels, QVGA(320 x 240)	480/400 fps

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Functionality

Video loss detection	Yes
Multi-screen support	Yes

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	15W, 3A@5V (with relay)

Packing List

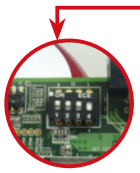
IVC-200G-RS-R20	1 x IVC-200G-RS-R20
	1 x GPIO daughter board with cable
	1 x utility CD
	1 x QIG (quick installation guide)
IVC-200-RS-R20	1 x IVC-200-RS-R20
	1 x utility CD
	1 x QIG (quick installation guide)

Ordering Information

Part No.	Description
IVC-200G-RS-R20	PCI video capture card with four video input channels, total 120 fps@720x480(NTSC), and GPIO daughter board
IVC-200-RS-R20	PCI video capture card with four video input channels, total 120 fps@720x480(NTSC)

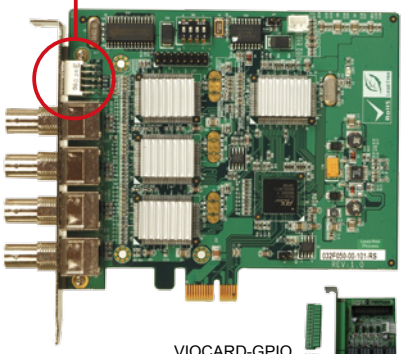
IVCE-8784

PCI Express Video Capture Card with Four Video Input Channels, Total 120 fps@720x480(NTSC)



The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)



VIOCARD-GPIO (optional)

Features

- External GPIO relay board with eight channels (4 in / 4 out), included I/O kit & cable
- PCI Express x1 interface with PCIe-to-PCI bridge onboard
- Four video channels with 120 fps @ D1 per channel
- NTSC/PAL/SECAM auto sensing
- Support Multiple Card (maximum 32 ports video input)
- SDK with Windows® drivers
- Applications: Video surveillance, security, public transportations, police and government

Specifications

◆ Interface

Video input	4 channels composite video NTSC, PAL and SECAM auto sensing
Connector	BNC
PCIe interface	PCIe x1
Card ID	DIP switch selectable with LED for ID indication
Alarm I/O	GPIO daughter board with 4 inputs and 4 outputs (optional)

◆ Software support

Device Driver	Windows® 98, SE, ME, 2000, XP
SDK	Provide SDK and demo program with sample source code in C++

◆ Video Processing

Video engine	4 x Conexant Fusion BT878A						
Resolution	NTSC:			PAL / SECAM:			
	720 x 480	352 x 288	176 x 144	720 x 576	640 x 288	240 x 176	
	720 x 288	352 x 240	160 x 120	720 x 480	640 x 240	176 x 144	
	720 x 240	320 x 240	128 x 96	720 x 288	352 x 288	160 x 120	
	640 x 480	240 x 180	88 x 72	720 x 240	352 x 240	128 x 96	
	640 x 288	240 x 176	80 x 60	704 x 576	320 x 240	88 x 72	
	640 x 240			640 x 480	240 x 180	80 x 60	
Frame rate	NTSC: up to 120 fps per channel						
	PAL /SECAM: up to 100 fps per channel						

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel/Resolution	Total Frame (NTSC/PAL)
1	4	N/A	4 channels, D1(720 x 480)	120/100 fps
4	16	N/A	16 channels, D1(720 x 480)	480/400 fps
8	32	N/A	32 channels, QVGA(320 x 240)	960/800 fps

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Functionality

Video loss detection	Yes
Multi-screen support	Yes

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	7.8W, 0.65A@12V (without relay)

Packing List

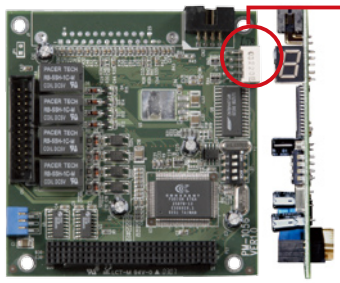
1 x IVCE-8784	1 x utility CD
1 x QIG (quick installation guide)	

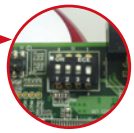
Ordering Information

Part No.	Description
IVCE-8784-R10	PCI Express video capture card with four video input channels, total 120 fps@720x480(NTSC)
Optios	
VIOCARD-GPIO-RS-R10	8 GPIO channels (4 digital inputs and 4 relay outputs)

PM-1056-RS

PCI-104 Video Capture Card with Four Video Input Channels, Total 30 fps@720x480(NTSC)





The ID is programmed by a 4-digit DIP switch

Digit LED to show its ID (identification)

VIN-KIT-01
4xBNC Connector Board

4 x RCA Connector Cable kit

◆ Applications: Video surveillance, security, public transportations, police and government

Specifications

◆ Interface

Video input	4 channels composite video NTSC, PAL and SECAM auto sensing
Connector	BNC
Audio Input	4 channel analog audio
Connector	DB9 to 3.5mm phone jack audio cable
PCIe interface	PCI 2.1 compliance
Card ID	Selectable with LED for ID indication
Alarm I/O	External GPIO daughter board with 4 inputs and 4 outputs (optional)

◆ Software support

Device Driver	Windows 2000, XP, Linux Kernel 2.4
SDK	Provide SDK and demo program with sample source code in C++

◆ Video Processing

Video engine	1 x Conexant Fusion™ BT878A						
Resolution	NTSC:			PAL / SECAM:			
	720 x 480	352 x 288	176 x 144	720 x 576	640 x 288	240 x 176	
	720 x 288	352 x 240	160 x 120	720 x 480	640 x 240	176 x 144	
	720 x 240	320 x 240	128 x 96	720 x 288	352 x 288	160 x 120	
	640 x 480	240 x 180	88 x 72	720 x 240	352 x 240	128 x 96	
	640 x 288	240 x 176	80 x 60	704 x 576	320 x 240	88 x 72	
	640 x 240			640 x 480	240 x 180	80 x 60	
Frame rate	NTSC: Total 30fps @D1 for 4 channels						
	PAL/SECAM: 25fps @D1 for 4 channels						

◆ Multiple Card Support

Card	Video Port	Audio Port	Support max. Channel /Resolution	Total Frame (NTSC/PAL)
1	4	N/A	4 channels, D1(720 x 480)	30/25 fps
4	16	N/A	16 channels, D1(720 x 480)	120/100 fps

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX Compatible VGA card with YUV overlay mode supporting

◆ Functionality

Video /audio synchronization	Yes
Video loss detection	Yes
Motion detection	Hardware Build-in
Watermarking	128-bit secrete key, adjustable length

◆ Others

Dimensions	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	3.5W@5V (with relay)

Packing List

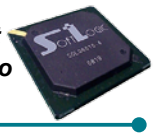
1 x PM-1056	1 x User manual
1 x Video cable (P/N: 32000-038100-RS)	1 x Utility CD
1 x Video flat cable (P/N: 32000-038100-RS)	

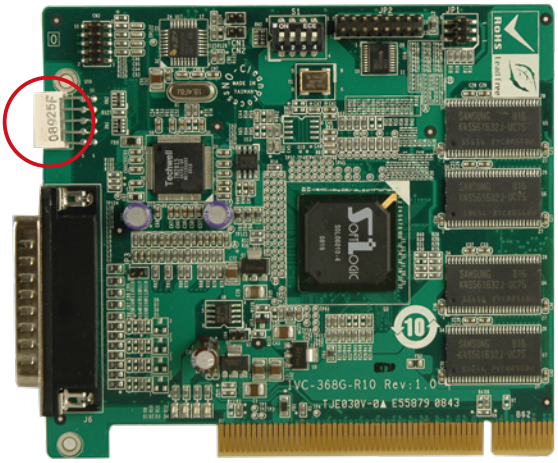
Ordering Information

Part No.	Description
PM-1056-4P-RS-R20	PCI-104 video capture card with four video input channels, total 30 fps@720x480(NTSC)
PM-1056-4PB-RS-R20	PCI-104 video capture card with four video input channels, total 30 fps@720x480(NTSC), and VIN-Kit-01
PM-1056-4PG-RS-R20	PCI-104 video capture card with four video input channels, total 30 fps@720x480(NTSC), and GPIO function
PM-1056-4PGB-RS-R20	PCI-104 Video capture card with four video input channels, total 30 fps@720x480(NTSC), GPIO function, and VIN-Kit-01

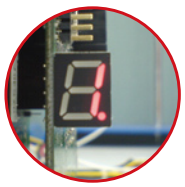
IVC-368G-4CH

PCI video/audio capture card with four video input channels, total 120 fps@704x480(NTSC), four audio input channels, and hardware MPEG 4





The ID is programmed by a 4-digit DIP switch



Digit LED to show its ID (identification)

Features

- ISO/IEC MPEG4 advanced simple profile @ LEVEL 3,2,1
- Quadruple D1 speed Full Hardwired MPEG4 video CODEC Engine
- Four video channels with 120 fps @ 704 x 480 (NTSC)
- Full search motion estimation with half-pixel resolution for optimal compression efficiency per channel
- 4-channel stereo audio input
- Programmable GOP (group of picture) /OSG (on-screen-Graphic)
- External GPIO daughter board with 4 inputs and 4 outputs (optional)
- Applications: Video conference, DVB-H/T, VOD,DVR

VIOCARD-GPIO (optional)

Specifications

◆ Interface

Video input	4 channels composite video NTSC/PAL/SECAM auto sensing
Connector	DB-25 Connector
Video input	4 channel analog audio
PCI interface	PCI Rev. 2.2 complaint
Card ID	selectable with LED for ID indication
Alarm I/O	External GPIO daughter board with 4 inputs and 4 outputs (optional)

◆ Software support

Device Driver	Windows 2000, XP Linux Kernel 2.6
SDK	Provide SDK and demo program with source code in C++

◆ Video Processing

Video engine	MPEG4 Video Hardware Encoder	
Resolution	NTSC: 704 x 480 704 x 240 352 x 240 176 x 112	PAL / SECAM: 704 x 480 704 x 240 352 x 240 176 x 112
Frame Rate	NTSC: Total 120fps@D1 for 4 channels PAL/SEACAM: 100fps@D1 for 4 channels	

◆ Audio Processing

Audio compression	G.723 Voice CODEC (ADPCM/PCM)
Sampling rate	8K,16K (Hardware Spec.)
Quantization	8K,16K (Hardware Spec.)

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX Compatible VGA card with YUV overlay mode supporting

◆ Functionality

Video /audio synchronization	Yes
Video Loss Detection	Yes
On-screen display	Yes
Camera loss detection	Yes
Motion detection	Yes
Watermarking	Yes

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	1.8W, 0.36A@5V(without relay)

Packing List

1 x IVC-368G-4CH
1 x DB-25 Connector
1 x utility CD
1 x QIG (quick installation guide)

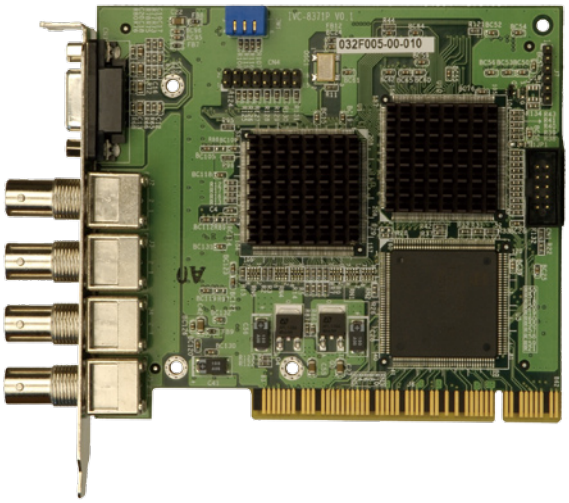
Ordering Information

Part No.	Description
IVC-368G-4CH-R10	PCI video/audio capture card with four video input channels, total 120 fps@704x480(NTSC), four audio input channels, and hardware MPEG 4
VIOCARD-GPIORS-R10	8 GPIO channels (4 digital inputs and 4 relay outputs)

IVC-8371P

PCI Video/Audio Capture Card with Four Video Input Channels, Total 30 fps@720x480(NTSC), Four Audio Input Channels, and Hardware MPEG 4 Codec

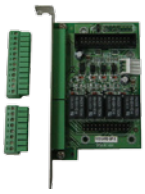
H.263 / MPEG 4 Hardware Codec



Features

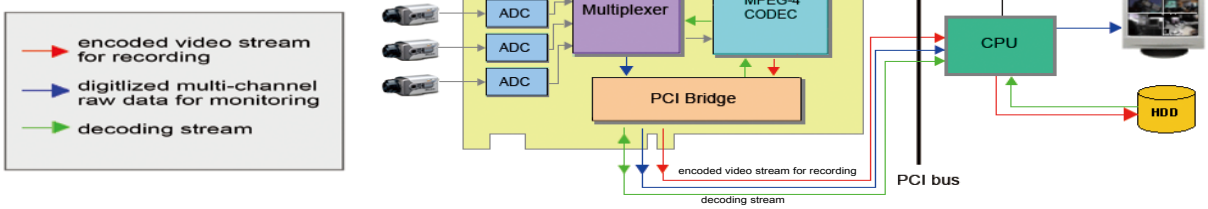
- External GPIO relay board with eight channels (4 in / 4 out), included I/O kit & cable
- Four video channels with 30 fps @ 720 x 480 per channel
- Multi-channel real time encoding/decoding
- Video and audio synchronizing
- Supports On-Screen-Display (OSD)
- Built-in camera lost detection
- Hardware motion detection
- Digital watermarking
- Applications: Video conference,DVB-H/T, VOD

Audio Cable



VIOCARD-GPIO (optional)

Encoding & Decoding Digram



Specifications

◆ Interface

Video input	4 channels composite video NTSC, PAL and SECAM
Video input type	BNC
Audio Input	4 channels
Audio input type	DB9 to 3.5 mm phone jack audio cable
PCI interface	PCI Rev 2.1 compliance
Card ID	Dip-switch selectable

◆ Software support

Device Driver	Driver for Windows® 2000/ XP
SDK	Provide SDK and demo program with source code in C++

◆ Video Processing

Video engine	MPEG 4 advanced simple profile @ level 5 (ISO/IEC 14496-2) MPEG 2 main profile @ main level (ISO/IEC 13818-2) MPEG 1 (ISO/IEC 11172-2) H.263 (ITU-T recommendation H.263)	
Resolution	NTSC: 720 x 480 640 x 240 720 x 240 360 x 240 640 x 480 320 x 240	PAL / SECAM: 720 x 576 640 x 288 720 x 288 360 x 288 640 x 576 320 x 288

◆ System Requirement

System	x86 compatible computer works perfectly with system using 400MHz CPU
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Functionality

Video /audio synchronization	Yes
On-screen display	Yes
Camera loss detection	Yes
Motion detection	Hardware built-in
Watermarking	128-bit secret key, adjustable length
Encoding bitrate control	VBR, CBR for each channel

◆ Others

Dimensions	119.91 mm x 106.68 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	7.5W, 1.5A@5V (without relay)

Packing List

1 x IVC-8371P
1 x DB-9 to 3.5 mm phone jet 4 channel audio cable
1 x utility CD
1 x QIG (quick installation guide)

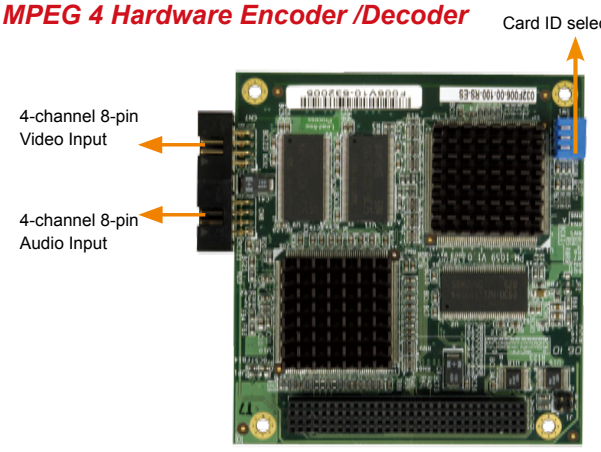
Ordering Information

Part No.	Description
IVC-8371P-R10	PCI video/audio capture card with four video input channels, total 30 fps@720x480(NTSC), four audio input channels, and hardware MPEG 4 Codec
VIOCARD-GPIO-RS-R10	8 GPIO channels (4 digital inputs and 4 relay outputs)

PM-1059

PCI-104 Video/Audio Capture Card with Four Video Input Channels, Total 30 fps@720x480(NTSC), Four Audio Input Channels, and Hardware MPEG 4 Codec

MPEG 4 Hardware Encoder /Decoder



Video input daughter board
With 4 x BNC connectors

2x4p 2.54 mm cable

2x4p 2.54 mm
to DB9 cable

DB9 to RCA jack
audio cable

Features

- 30 fps @ 720 x 480 for 4 channels
- Multi-channel real time encoding/decoding
- Video and audio synchronizing
- Supports on-screen-display(OSD)
- Built-in camera lost detection
- Hardware motion detection
- Digital watermarking
- Applications: Video conference, DVB-H/T, VOD

Specifications

◆ Interface

Video input	4 channels composite video
Video input interface	8-pin 2.54 mm connector onboard
Audio input	4 channels
Audio input interface	8-pin 2.54 mm connector onboard
PCI-104 interface	PCI Rev. 2.1 complaint
Card ID	DIP-switch selectable

◆ Software support

Device Driver	Driver for Windows® 2000 or XP
SDK	Provide SDK and demo program with source code in C++

◆ Video Processing

Video engine	MPEG 4 advanced simple profile@level 5 (ISO/IEC 14496-2) MPEG 2 main profile@main level (ISO/IEC 13818-2) MPEG 1 (ISO/IEC 11172-2) H.263(ITU-T recommendation H.263)	
Resolution	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 360 x 240 320 x 240	PAL / SECAM: 720 x 576 720 x 288 640 x 576 640 x 288 360 x 288 320 x 288

◆ Audio Processing

Audio compression	G.726 (ADPCM/PCM)
Sampling rate	8 K, 44.1 KHz and 48 KHz
Quantization	8-bit data depth

◆ System Requirement

System	x86 compatible computer
Graphic	DirectX compatible VGA card supporting YUV overlay mode

◆ Functionality

Video /audio synchronization	Yes
On-screen display	Yes
Camera loss detection	Yes
Motion detection	Hardware built-in
Watermarking	128-bit secret key, adjustable length
Encoding bitrate control	VBR, CBR for each channel

◆ Others

Dimensions	96 mm x 91 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing
Power consumption	7.5W, 1.5A@5V (without relay)

Packing List

- 1 x PM-1059
- 1 x QIG
- 1 x utility CD
- 1 x DB-9 to RCA jack audio cable
- 1 x 2x4p 2.54 mm cable
- 1 x video input daughter board
- 1 x 2x4p 2.54 mm to DB-9 cable

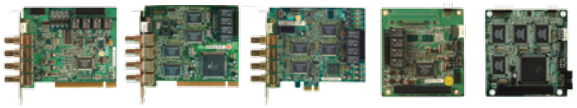
Ordering Information

Part No.	Description
PM-1059-R10	PCI-104 video/audio capture card with four video input channels, total 30 fps@720x480(NTSC), four audio input channels, and hardware MPEG 4 codec

IEI-ARGUS

Digital Video Surveillance Software

- Real-time Intelligent 16CH Video Surveillance Software
- 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 bundle in support IVC-168G/268G, IVCE-268G, PM-6814/6844 ,VITO-350/100 series cards and includes free, so you quick and simple assembly DVR System



IVC-168G / IVC-268G / IVCE-268G / PM-6814 / PM-6844

Introduction

It was said that, Argus was a giant with a hundred eyes in Greek Mythology thousands of years ago. Due to the fact that he has a hundred eyes, he could simply capture any movement or changes around him……

IEI Argus is a PC-based digital video surveillance software system. It is designed for enterprise and industrial applications. Argus offers up to16-channel display capability and provide optimized for processing high-resolution video /audio in real-time. Argus provides versatile features, such as, Real-time intelligent guard, multiple recording schemes, intelligent video analysis, auto alerts and other useful functions. Argus is the best-suited and versatile security solution for your business.

Features

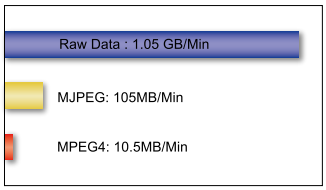
1. Up to 16 channels viewing and playback simultaneously
2. Selection of 1/4/6/9/10/13/16 divided screen
3. Real-time motion-detection Recording
4. Intelligent video analysis (Smart Search)
5. Recorded video/audio archiving with backup features
6. User management for secured viewing and administration
7. Real Time Status Display and Notification: System, Video, Event, Alarm, network connection and backup status can be seen immediately
8. Real Time Status Display and Notification: Four recording modes to schedule or trigger recordings based on camera and sensor input
9. Main program execution actions can be configured
10. Quick Search and Event List search in Playback
11. Customize search by tracking certain motion in a frame
12. Intelligent Guard Instant Response: On Screen Display, E-mail, Sound Alarm, Window Vibration, Digital Signal Output
13. System and Event can be recorded and browser
14. Supports E-map to showing camera location and background.

Functions

Supports Hardware Devices Compatible with IVC-168G, IVC-268G, IVCE-268G, PM-6814, PM-6844 capture card and VITO-350/100 video server..	**Smart Search** Customize search by tracking certain motion in a frame	**Window Vibration** Intelligent Guard instant response via window vibration.
16 CH Display Up to 16 channels viewing simultaneously.	**Logview** System and Event can be recorded and browser	**E-mail Alert** Intelligent Guard instant response via E-mail notification.
Scheduled Record There are four recording modes to schedule or trigger recordings based on camera and sensor input.	**Intelligent Guard** Including General Motion, Missing Object, Foreign Object, Single Lost, Lose Focus, Camera Occlusion.	**Backup** Up to 16 channels record data backup
Playback Up to 16-channel playback simultaneously	**Sound Alarm** Intelligent Guard instant response via digital audio output.	**E-map** Showing Camera's Location and Background

MPEG4 File Compression

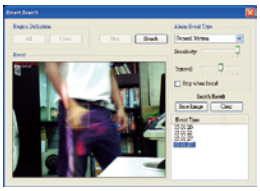
- Argus owns the software compression technique which could compress MPEG4 at real time.
- All recorded files can be played through Windows Media Player.
- The software compression technique would save a great amount of your hardware space, but Smart Search function can still working on the compressed video file.



Smart Search

Smart Search is the function which would allow users to investigate when certain event occurs. Traditional software often takes up user's time and energy to sit in front of the monitor to look for possible tracks; however, with Smart Search function, you can now shorten a bunch of time on investigation works..

Smart Search capability:
- Investigation and evidence collection afterwards.
- Intelligent search system to quickly find events.
- Records the time and image of a certain events



Intelligent Guard

Intelligent guard can be detected immediately in real time live video clips. Including General Motion, Missing Object, Lose Focus, Signal Lost, Foreign Object, Camera Occlusion.

General Motion
When a motion was detected at a selected area, an immediate alarm notification will be triggered.

Lose Focus
When camera lost its focus due to strong wind or vibration, an immediate alarm notification will be triggered.

Foreign Object
When a foreign object was detected at a selected area, an immediate alarm notification will be triggered.

Missing Object
When a selected object was shifted or stolen , an immediate alarm notification will be triggered.

Signal Lost
When camera lost its signal due to intended or unintended force, an immediate alarm notification will be triggered.

Camera Occlusion
When the lens of the camera was occluded, an immediate alarm notification will be triggered.

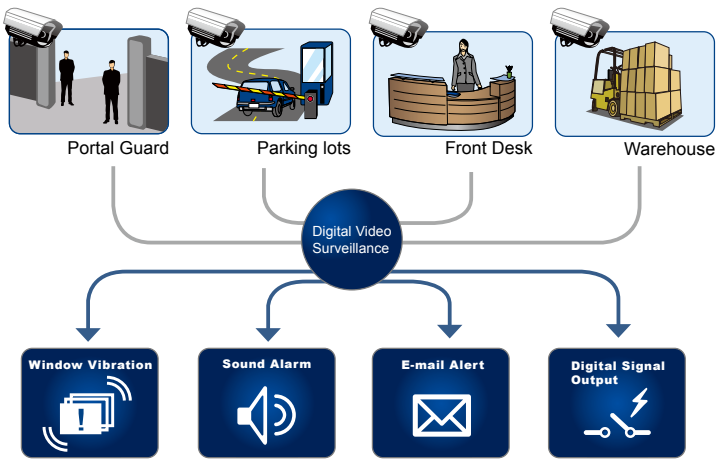
Application

The Best Choice of Security Surveillance

IEI Argus is a professional design of the Graphic User Interface make it easier to operate, and with its versatile functionality, Argus is the most professional digital surveillance solution in the security market.

Application filed, such as portal security, Retailing Store, Traffic station, Hospital, Nursing Home, Freeway, Forbidden Area, Building Lobby, Museum, Airport, Shopping Mall, School.

Argus provide Intelligent Guard and Instant Response, such as On Screen Display, E-mail, Sound Alarm, Window Vibration, Digital Signal Output.



Specifications

Function	Specification		Description
Monitoring	Status Display		Status prompts and event of system login/Lock, camera Connection status, data and time, sensors, and event alert status
	Logview		System and Event can be recorded, browser and export as file
	Screen Split		Selection of 1/4/6/9/10/13/16 devided screen
	Monitoring Channel		Up to 16 Channels
	Channel Switch		Supports Keypad, Navigation button, D&D on Channel Display
	Video Mode		NTSC/PAL/SECAM
	Resolutions		160x120, 176x144, 320x240, 352x288, 640x240, 640x480, 704x288, 704x576, 720x240, 720x288, 720x480, 720x576
	PTZ Control		Embedded pan, tilt and zoom control Supports Pelco D PTZ protocol
Recording	Compression Format		MPEG4
	Resolutions		160x120, 176x144, 320x240, 352x288, 640x240, 640x480, 704x288, 704x576, 720x240, 720x288, 720x480, 720x576
	Recording Modes		Event Triggered Recording (motion detection), and Scheduled Recording (Provides 4 recording modes for assigning private setup)
	Recording Quality		Adjustable recording quality for each recording mode
	Recording Frame Rate		25/30 FPS
	Audio Recording		Records up to 16 live audio channels
	Pre & Post Alarm Recording		Adjustable pre-alarm and post-alarm recording time (Pre-alarm recording: 10 seconds, post-alarm recording: 1 hour)
Playback	Playback Speed		1/4x, 1/2x, 1x, 2x, 4x, 6x fast forward and backward
	Multi-Channel Video Playback		Simultaneous playback of up to 16 channels
	Smart Search		Search archives for incidents with the smart search list
	Print		Printing Active Channel or All Channels
	Snapshot		Save Image as JPEG or BMP format
	Audio Control		Audio on/off, Voume control
Data Storage	Muti-Storage		Multiple storage path for recording with configurable safe capacity limit for each storage space
	Preserve Files		Choice of whether or not to automatically delete the recorded files after the date of preserve files
	Backup Data and time Search		Search recorded data with date and time for backup
	Backup Media		HDD or external USB HDD local storage devices
	Backup Data		Recorded video files, event logs, system logs
	Delete Recorded Data		Choice of whether or not to automatically delete the be recorded files data
Alarm Notification	Intelligent Guard		Including General Motion, Lose Focus, Missing Object, Foreign Object, Camera Occlusion
	E-mail		Address book can be registered multiple E-mail address, when event be triggered system will give a E-mail alarm notification to selection of contacts.
	On Screen Display		Shows warning message on display channel screen when event be triggered.
	Window Vibration		The Main Console will be vibrated when event be triggered.
	Sound Alarm		Plays a sound alarm when event be triggered.
	Sensor and DO		Supports 4 Digital In(DI) of sensors and 4 Digital Output (DO),Configurable DI/DO Module
Operation	User Account Management		Password protection and unlimited user accounts for login
	Authority Setting		Assign system access rights to each user (main console, system setting, accounting setting, smart guard setting, schedule setting, start/stop surveillance, playback, backup etc.)
	Multiple Task		Main Console, Playback, Backup simultaneously
	Hotkey Control		Supports 29 hotkey in Main Console, and 12 hotkey in Playback
	Language		English / Simplified Chinese
Supported Devices	IVC-168G-R20	Hardware	Hardware provided 25/30fps@4 channels composite video Supports 1 channel analog audio in
		Software	Software supports 25/30fps@1 channel video/audio monitoring and recording
	IVC-268G-R20	Hardware	Hardware provided 100/120fps@4 channels composite video Supports 4 channels analog audio in
		Software	Software supports 100/120fps@4 channels video/audio monitoring and recording
	IVCE-268G-R20	Hardware	Hardware provided 100/120fps@4 channels composite video Supports 4 channels analog audio in
		Software	Software supports 100/120fps@4 channels video/audio monitoring and recording
	PM-6814-R20	Hardware	Hardware provided 25/30fps@4 channels composite video Supports 1 channel analog audio in
		Software	Software supports 25/30fps@1 channel video/audio monitoring and recording
	PM-6844-R20	Hardware	Hardware provided 100/120fps@4 channels composite video Supports 4 channels analog audio in
		Software	Software supports 100/120fps@4 channels video/audio monitoring and recording

Minimum System Requirements

CPU	Intel® Pentium® 4 2.4GHz with Hyper-threading
RAM	1GB (2GB or above recommended)
Video RAM	32 MB or above recommended
Display Chip	ATI Radeon 9550 or above NVIDIA 6200 or above
Display Resolution	1024X768 24bits or above
Operating System	Windows2000 SP4 / Windows XP Pro SP2
DirectX	9.0c or above
Required space for installation	100MB
Recommended HD free space	250GB or above
Netware	Wire: Ethernet 100 baseT or above, Gigabit LAN recommended
	Wireless: IEEE802.11b, IEEE802.11g recommended