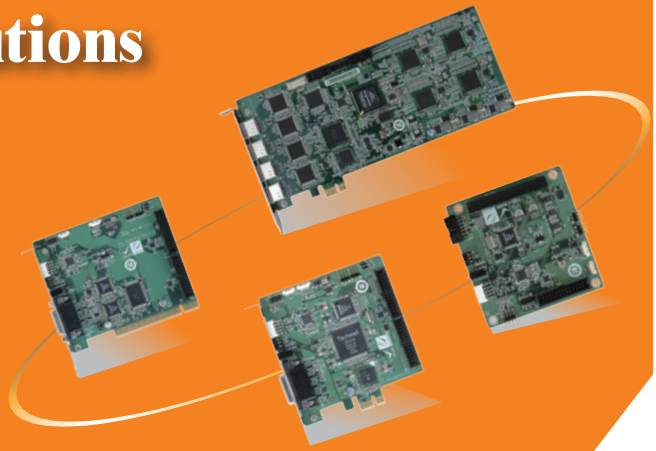


IEI Capture Card Solutions

IEI provides complete video/audio capture card solutions to fulfill the demands of various applications.

The latest HDC solutions are capable of compressing and decompressing full HD video (1920x1080) in real-time using the H.264 codec. The products enable recording, playing, and transmitting HD video with high-definition quality on devices such as digital video cameras, home network devices, industrial broadcasting devices, and surveillance cameras.

IEI IVC series provides standard-definition (SD) video resolution with standard or MP3 audio capture capability which provides better quality.



High Definition Solutions

H.264 Hardware Compression Capture Cards

Supports high definition video resolution up to 1920 x 1080

HDMI Interface DVI Interface SDI Interface

- | | | |
|----------|----------|----------|
| HDC-304E | HDC-401 | HDC-502E |
| HDC-302E | HDC-401E | |
| HDC-301E | HDC-402E | |
| HDC-301 | | |



Standard Definition Solutions

Software Compression Capture Cards

Supports standard definition video resolution up to 720 x 480 NTSC/ 720 x 576 PAL

PCIe Mini type PCI-104 type PCIe type PCI type PCIe type

- | | | | | |
|------------|---------|-----------|----------|-----------|
| IVCME-C604 | PM-1056 | IVCE-C604 | IVC-168G | IVCE-268G |
| | | IVCE-C608 | IVC-268G | |
| | | IVCE-8784 | IVC-100G | |
| | | | IVC-200G | |



Long Distance High Quality Extension Solution

SDI Interface

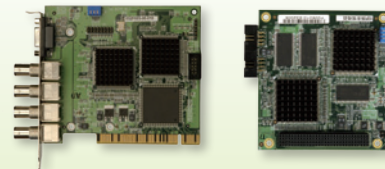
- HD-DSI-BOX-M
HD-DSI-BOX-S



H.263/MPEG-4 Hardware Compression Capture Cards

PCI type

- IVC-8371P
PM-1059



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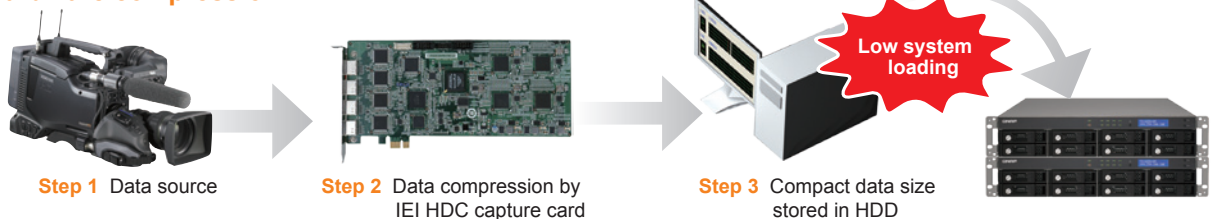
Panel Solutions Introduction

HD Video Capture Solutions

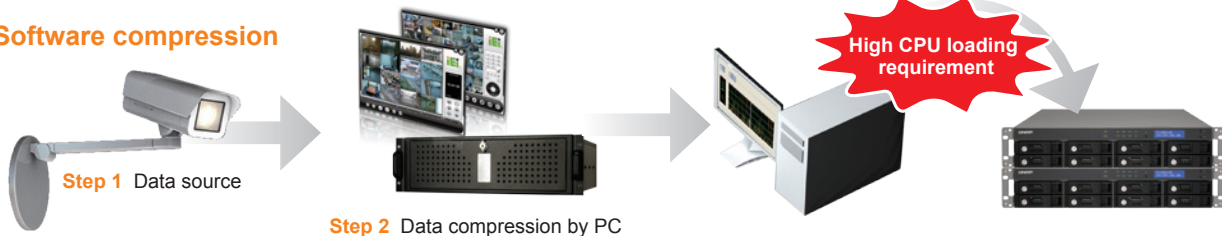
High Definition Compression Capture Card

Main difference between hardware compression and software compression capture cards:

• Hardware compression



• Software compression



H.264 Hardware Compression Solution

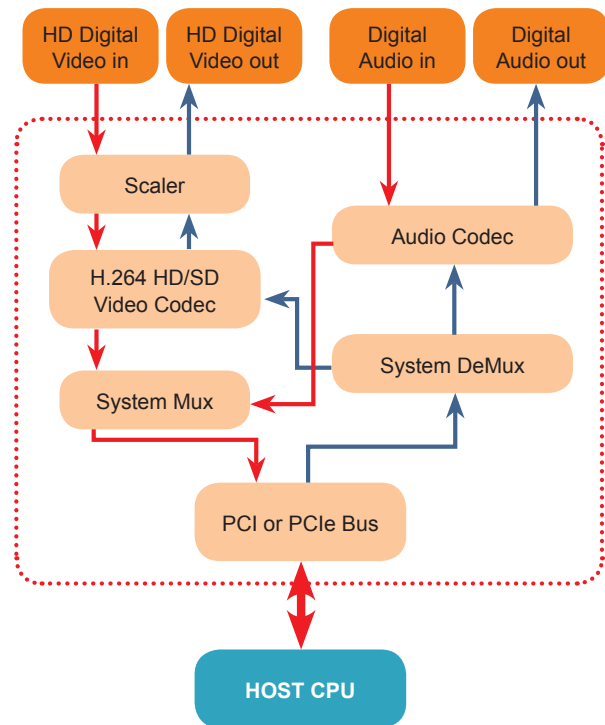
IEI HDC-series products are designed with FUJITSU Codec IC MB86H46 solution which is capable of compressing and decompressing full HD video (1920 x1080) in the H.264 format in real-time.



Main Features

- Supports high-definition 1080p, 1080i, 720p, 480p and 480i video inputs
- Supports video and audio capture from all kinds of HD devices
- Edit and playback captured files on computer
- H.264 codec supports better storage advantages
- 8-channel hardware capture with under 10% CPU loading
- HDMI output port with hardware decoding for external HDMI monitor
- PCI and PCIe interfaces for different system configurations

FUJITSU H.264 Codec IC Block Diagram



Benefits

Media data HD video/audio causes huge storage capacity. For example, an uncompressed full HD video will be about 373 MB/sec @60 fps. With IEI HDC series capture cards, the HD data could be compressed through hardware codec and then it is beneficial for storage usage, cost saving and transmission bandwidth in a variety of applications.

(1920 x 1080 x 3 (R.G.B.) x 60 frame/sec. = 373.248 MByte)

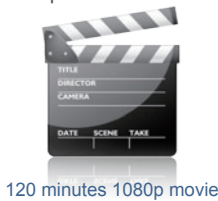
Compressed video encoding bit rate range from

30 Mbps = 3.75 MB to 2 Mbps = 0.25 MB

The compression ratio between compressed and uncompressed media data is up to **1492:1**.

Encoding Bit Rate	Un-compressed	Compressed			
		0.25 MB	1 MB	2 MB	3.75 MB
1 TB HDD Capacity	0.75 hr	1108 hrs	277 hrs	139 hrs	74 hrs
30-minute Full HD Video Recording	671 GB	450 MB	1.8 GB	3.6 GB	6.75 GB

Take 30-minute full HD video recording as an example. The uncompressed video is 671 GB, while the compressed video encoding with 0.25 MB (2 Mbps) bit rate is only 450 MB.

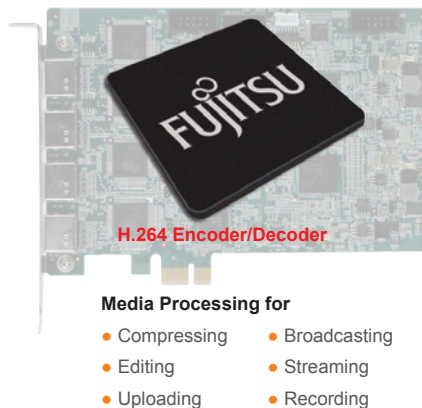


Marketing Applications

HD video and audio networking solution



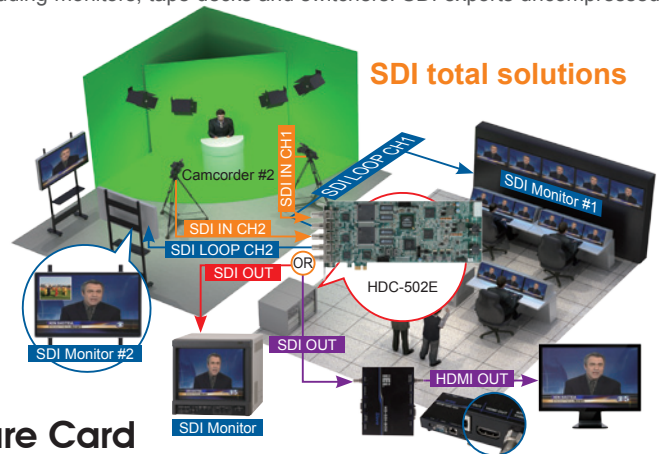
Compressed HD media content for fast transmission with best quality



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Long Distance High-Definition Compression Solution

Nowadays, more and more equipments are equipped with SDI output for television studios and other broadcasting applications. SDI is a high capacity interface used as a way of exporting uncompressed digital video in real time. That makes it ideal for live feed productions (such as a live TV show), as well as for editing and monitoring video at the highest possible quality. Since SDI is designed primarily for professional use, it is also compatible with a variety of video devices found in broadcast studios, including monitors, tape decks and switchers. SDI exports uncompressed SD and HD video over a coaxial cable.



Long Distance and High Quality Capture Card

SDI in studio editing field

SDI (Serial Digital Interface) is a family of video interfaces used for broadcast-grade video. A related standard known as high-definition serial digital interface (HD-SDI) provides a nominal data rate of 1.485 Gbit/s. IEI SDI product HDC-502E is designed with 2 channels SDI input, 2 channels SDI loop and 1 channel SDI output for high quality and long distance signal transmission. It achieves this through a 100 m (HD-SDI)/300 m (SD-SDI) coaxial cable without compression and with no data loss for professional studio, broadcast and transportation video applications.

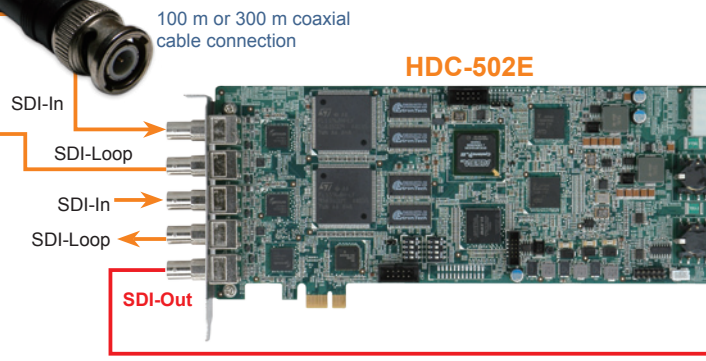


Name	Bit rates	Video
		Formats
SD-SDI (300 meters)	270 Mbit/s, 360 Mbit/s, 143 Mbit/s, 177 Mbit/s	480i, 576i
HD-SDI (100 meters)	1.5 Gbit/s, 1.5/1 Gbit/s	720p, 1080i

How high is 300 m?



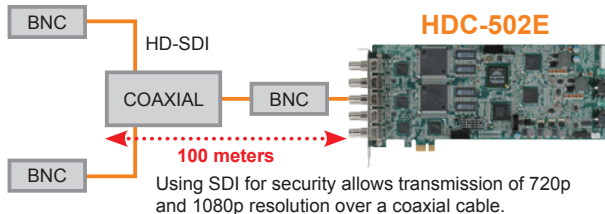
Uncompressed raw data for editing



High definition capturing has become a trend of the industrial surveillance. The HD-CCTV camera with SDI interface provides long distance transmission compared to analog camera and IP camera. The advantage is SDI interface can transmit high-definition 1080p video via coaxial cable instead of network cable. In other words, users can enjoy 1080p HD video over existing analog system without any changes.

SDI in high quality surveillance field

HD-CCTV1 camera V.S. IP camera



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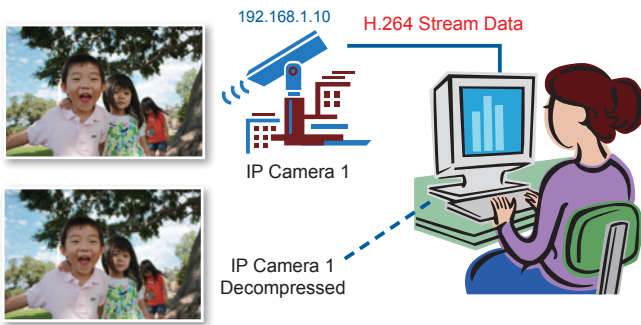
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Full HD 1080p Uncompressed Video



H.264 Full HD Decompressed Video

Long Distance and High Quality BOX

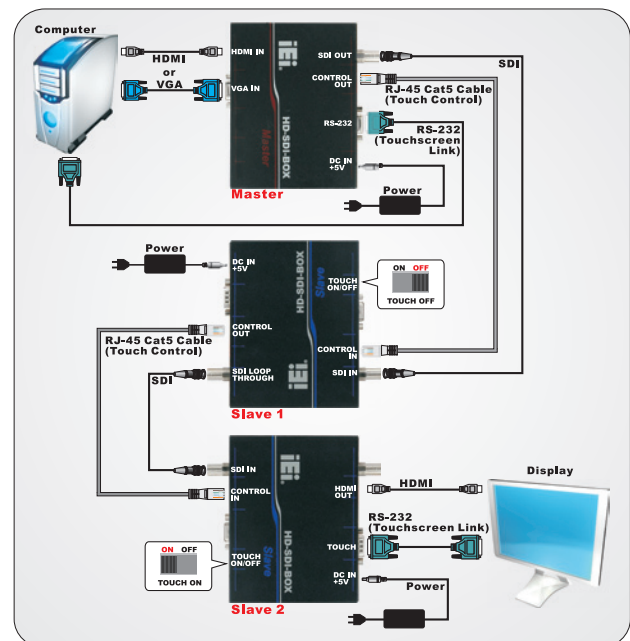
The HD-SDI-BOX kit, combining the HD-SDI-BOX-M (Master) and the HD-SDI-BOX-S (Slave), provides a high-definition serial digital interface (SDI) for long distance signal transmission. With the HD-SDI-BOX kit, the HDMI or VGA video signal can be transmitted directly through a 100 m coaxial cable without compression. The HD-SDI-BOX kit also supports touch-screen remote control. The touch-screen remote control is linked through the RJ-45 Cat5 cable and RS-232 cable.



Marketing Application

By using one HD-SDI-BOX Master and two HD-SDI-BOX Slave connected with PC or display devices, the integrated system could perform lossless signal transmission through up to 200 m long distance. The user can extend the connection distance by adding more HD-SDI-BOX Slave systems. Adding one HD-SDI-BOX Slave system can extend 100 m ~ 300 m for HD or SD video quality.

Applications



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■ Applications of Medical HD Image/Video Capture Equipment



Endoscopy Surgery

Endoscopy typically refers to looking inside the body for medical reasons using an endoscope. Unlike most other medical imaging devices, endoscopes are inserted directly into the organ or incision. Clear and detailed image is necessary for precise operations.

Ultrasound Scanner

A general-purpose ultrasound machine may be used for most imaging purposes. Usually specialty applications may be served only by use of a specialty transducer. Most ultrasound procedures are done using a transducer on the surface of the body, but improved diagnostic confidence is often possible if a transducer can be placed inside the body.

Microscope

Microscope is an instrument used to investigate objects that are too small for the naked eye. Recently, electron microscopic captures and displays the image through electric devices that allow people to see objects in detail.

Thermography

Thermal imaging/video are examples of infrared imaging science. The appearance and operation of a modern thermographic camera is often similar to a camcorder. The live thermography reveals temperature variations so clearly. Thus, it plays more and more important role for health analysis and management. For health reasons, a recording module is built-in for patient tracing.

■ Network Video Applications through HDC-series Capture Cards

Distance education/instruction

An educational model where the student and the teacher are in locations different from one another while the instruction is taking place. Ideal for this kind of education, the capture cards allow real-time capture or composition of two input sources, typically a live instruction with a Powerpoint presentation.

Sport/Game Broadcasting

The broadcasting of sport/game events is the coverage of sports/games as a television program. Spectators can engage in live conversations using broadcasting media. Through HD capture and broadcast, there is no virtually impact on the sport/game performance.

Traffic Broadcasting

The traffic systems now provide more informative and communicative broadcasting program that improve transport outcomes such as transport safety, transport productivity, travel reliability, and etc. Traffic media in vehicles or transportation is getting popular since wireless environment is getting mature.



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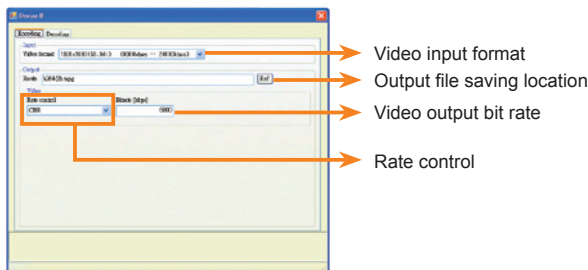
Video Capture Software

■ IEI SDK Software Support

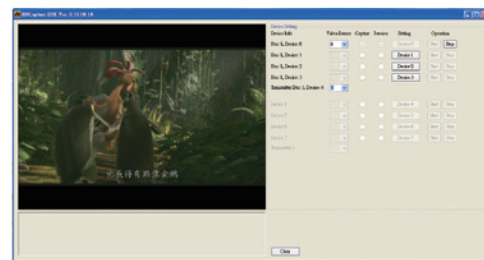
IEI provides complete software solutions such as device drivers and software development kit (SDK), and the flexible open architecture allows easy integration of cameras, video signal processing, storage, and video management/security.

HDC series demo AP

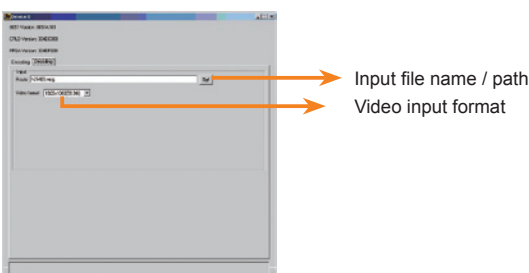
Encoding settings



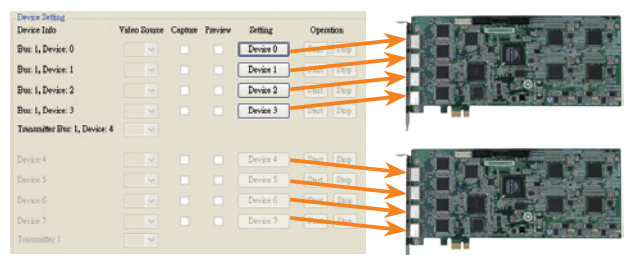
Video capture and preview



Decoding settings



Supports up to eight channels input



SD Video Capture Solutions

Market Coverage

Intelligent Transportation Systems (ITS)

Providing timely information on highway traffic conditions is a major function of intelligent transportation systems (ITS), and video surveillance systems are critical tools for ITS to monitor and control any emergency evacuation event.

The toll road payment stations process large numbers of micro transactions. The surveillance system minimizes fraud by recording all transactions including those carried out by potential gatecrashers.

Automotive Video Surveillance

Automotive video surveillance is now widely used to monitor vehicle interiors on public transportation systems to ensure the safety of the onboard passengers. Automotive video surveillance systems can record the interior of train, cars and buses and can also be adopted in police vehicles to monitor patrol activity.

Banking Security System

In a bank, the surveillance system easily monitors a teller line and automated teller machine transactions. Bank surveillance systems can also record robberies, unauthorized withdrawals, and other disputed transactions.

Building, Airport, Road Surveillance System

Video surveillance has emerged as a vital technology in the war against terror. Video surveillance enables the easy identification of culprits behind terrorist bombings. As a result, since 911, governments around the world have started to leverage high-performance surveillance equipment in their efforts to protect their country and people from terrorist attacks.

Industrial Automation

Latest Supervisory Control And Data Acquisition (SCADA) systems adopt video capturing technologies to collect factory data and thereby provide operators and supervisors access to real-time data and video feeds enabling them to make increasingly accurate assessments faster.

Standard Definition Compression Capture Card

The world has seen increasing demand for security applications, and the video surveillance system has been a popular security tool for years. Security cameras are an everyday occurrence, and chances are, you're used to watching yourself walk into a store on a security monitor. 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.



2011 New Solution	Capture Chip	4 Channels	8 Channels
PCIe Slot	Conexant CX25853		IVCE-C608
	Conexant CX25850	IVCE-C604	
PCIe Mini Slot	Conexant CX25854	IVCME-C604	
2010 Solution	Capture Chip	4 Channels	
PCI Slot	Techwell TW6802/6805	IVC-168G	
		IVC-268G	
	Conexant BT878A	IVC-100G	
		IVC-200G	
Multiplexer AT2041	IVC-8371P		
PCIe Slot	Techwell TW6802/6805	IVCE-268G	
	Conexant BT878A	IVCE-8784	
PCI-104	Conexant BT878A	PM-1056	
	Multiplexer AT2041	PM-1059	

New Features

1. Single card with 8 channels capture up to 128 channels
2. Direct PCIe bus with better bandwidth flow
3. Less power consumption
4. Real time video/audio output for monitoring
5. MP3 quality audio capture

Space Saving

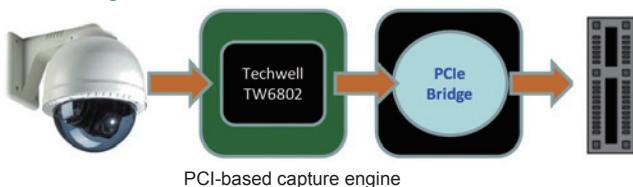
16 channels via 4 capture cards

16 channels via 2 capture cards

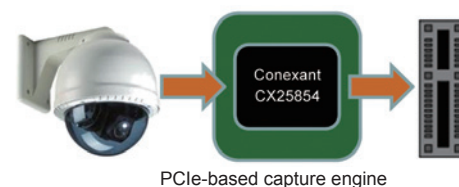


Direct PCIe Solution

PCIe Bridge Solution



New Direct PCIe Solution



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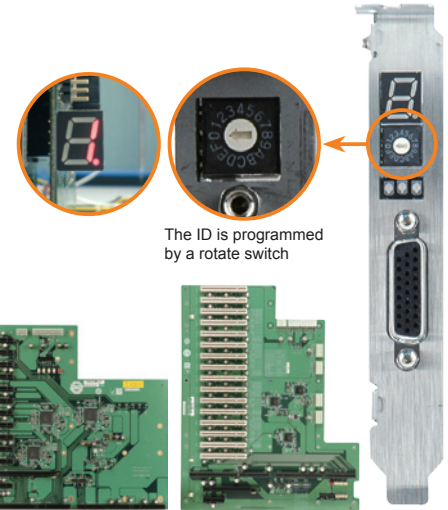
5
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Multiple Card with Digit LED Card ID Support

One Digit LED for Card Identification (ID)

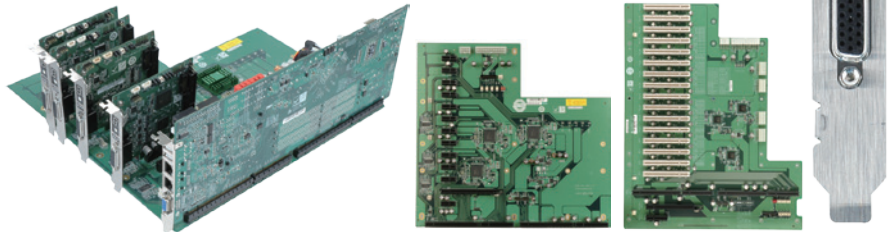
Because the IEI IVC series support multiple IVC cards, users need to know which card is related to which device name in the Device Manager of Windows® 7. Each IVC card provides one digit LED to show its ID (identification), and the ID is programmed by a rotate switch. The IEI IVC SDK also provides an application programming interface (API) to get device name and the demo application software shows how to display device names on screen. The advantages are for ease of maintenance and debugging. When a display channel malfunctions, the users can quickly find out which IVC card should be checked for error via the device name and LED ID.



The ID is programmed by a rotate switch

Multiple Card Support

The IEI IVC series are designed to support multiple IVC cards in a system. Its driver can recognize and support multiple IVC cards plugged into a system. The limitation of how many IVC cards can be plugged into a system is dependent on system resources such as CPU performance, interface bandwidth, and number of available IRQs.




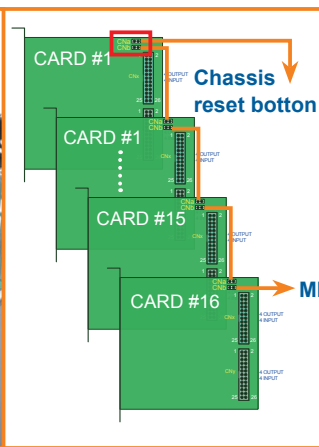
Card Number	Card 1	Card 2	Card 3	Card 4	Card 5	Card 6	Card 7	Card 8
Card ID	0	1	2	3	4	5	6	7
Card Number	Card 9	Card 10	Card 11	Card 12	Card 13	Card 14	Card 15	Card 16
Card ID	8	9	A	B	C	D	E	F

Multiple Card Cascade Reset

One Bottom Cascade Reset

The latest IEI software compressive capture (IVC series) provides multiple card cascade reset function. It can enable system restore via external hardware reset button when system failure occurs.






Chassis reset button

MB reset signal

IVC Series Connector Pin Define


CARD TYPE	CNa	CNb
IVCE-C604-R10	CN4	CN5
IVCE-C608-R10	CN4	CN5



Multiple Zones Real Time Monitoring

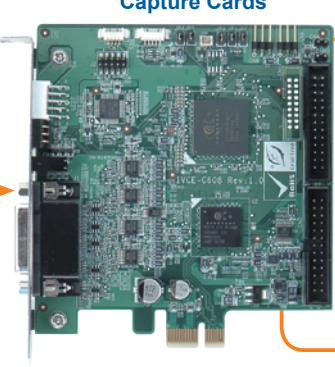
IEI video capture card is capable of video and audio output for second location real-time monitoring. Using this function, local on-site monitoring can focus on capturing video and audio with no need to operate system control. Local channel switch can be assigned by the system administrator or switch by GPIO module.

Source



4/8 channels video/ audio capture


Capture Cards




Complete 4 or 8 channels function control


2 channels video + 1 channel audio real-time information

Central control room
System monitor and control with video/audio capture



Local security site
Real-time monitoring with video and audio





Video in

Audio in

Video out

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Benefits

The software compression card is used to transfer analog NTSC/PAL signal to digital raw data signal. The uncompressed raw data can provide better video quality without distortion. It is useful for real-time video surveillance applications. The software compression process is first transferring data into PC through PCI or PCIe interface then the CPU compresses the video and stores it in the HDD. Since compression and de-compression are handled by the CPU, the software compression card needs a more powerful hardware requirement.



Raw video capturing data

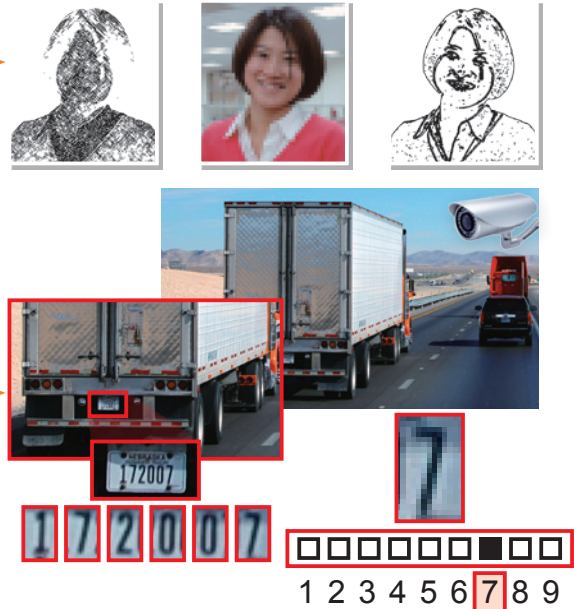


Un-compressed raw data w/o distortion



Data decoding from CPU w/ distortion

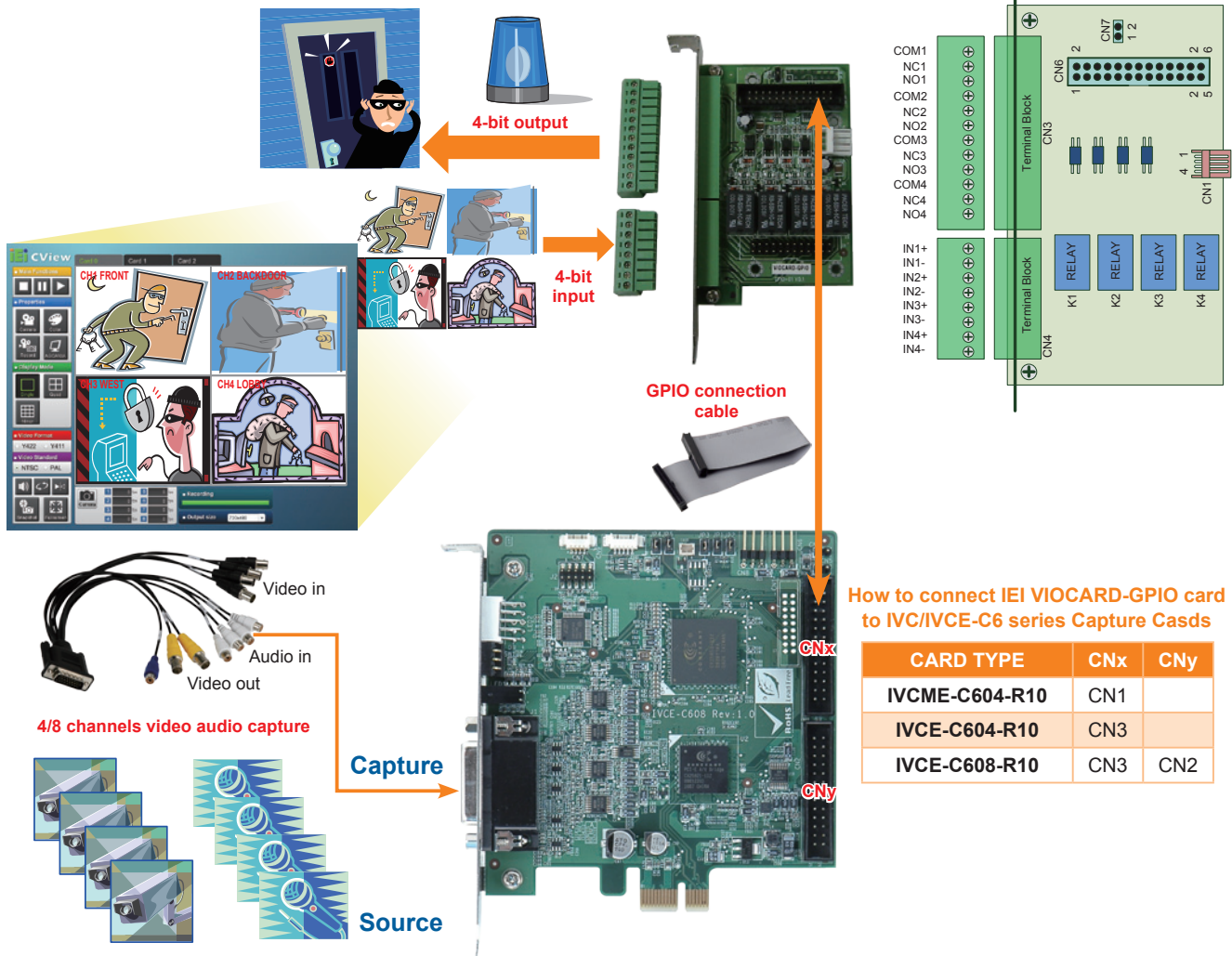
Video Analytics



GPIO Alarm

Optional GPIO port support

The optional IEI VIOCARD-GPIO card provides 4-bit alarm input and 4-bit alarm output with normal open relay. It is compatible with IVC software compression capture card to connect with external I/O sensors.



How to connect IEI VIOCARD-GPIO card to IVC/IVCE-C6 series Capture Cards

CARD TYPE	CNx	CNy
IVCME-C604-R10	CN1	
IVCE-C604-R10	CN3	
IVCE-C608-R10	CN3	CN2

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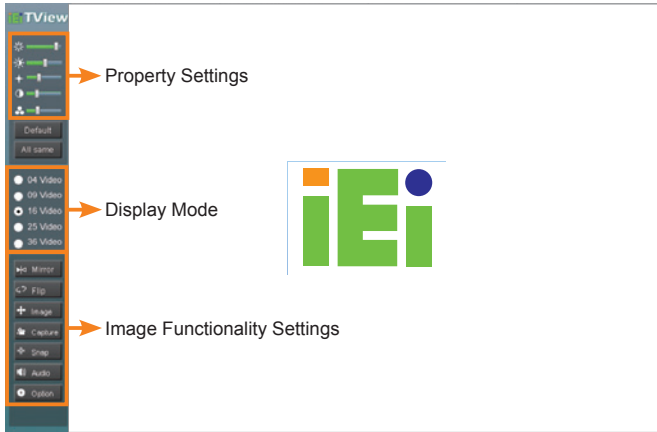
Video Capture Software

■ IVC SDK Demo AP

IEI provide CView, a demonstration application program (AP), for Conexant solutions. The program demonstrates the following functions:

- Video and audio capture

- Video and audio data recording to AVI file
- Testing of device I2C and GPIO ports
- Channel parameter configurations



Property Settings

- Brightness
- Saturation
- Sharpness
- Contrast
- Hue

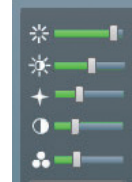


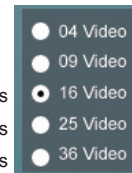
Image Functionality Settings

- Mirror
- Flip
- Image Position
- Capture
- Snap
- Audio Record
- Option

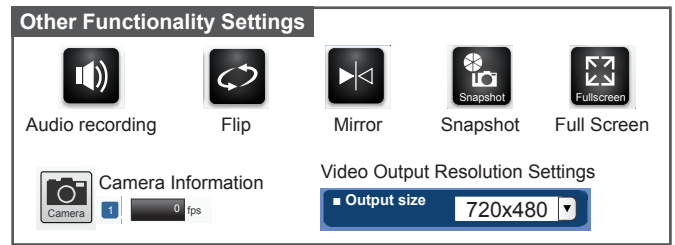
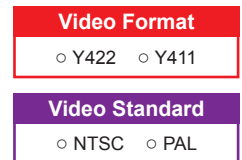
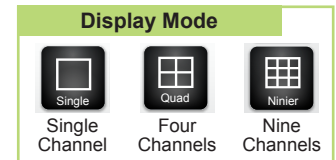
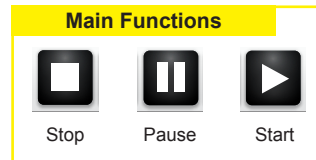
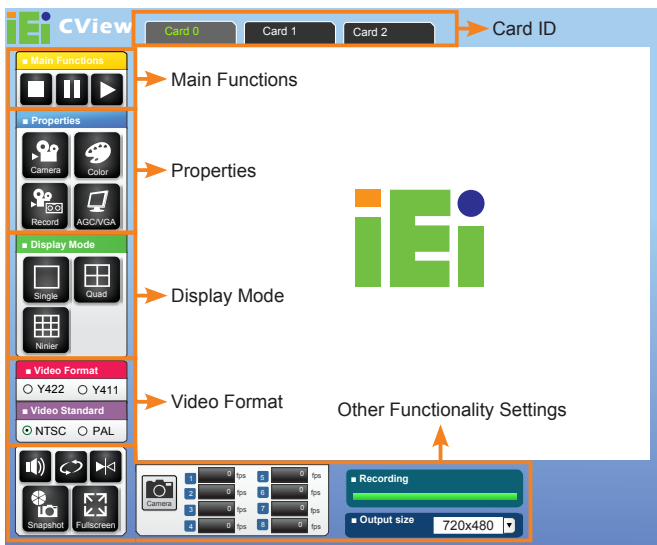


Display Mode

- 4 Channels
- 9 Channels
- 16 Channels
- 25 Channels
- 36 Channels



CView Demo AP Introduction



■ Software Compression Cards Selection Guide

Video Engine	Conexant CX25853	Conexant CX25850	Conexant CX25854	Techwell TW6805	Conexant CX25878	Techwell TW6805	Conexant CX25878
IEI Solution	IVCE-C608	IVCE-C604	IVCME-C604	IVCE-268G	IVCE-8784	IVC-268G	IVC-200G
Bus	PCIe	PCIe	PCIe Mini	PCIe	PCIe	PCI	PCI
Video Input	8 channels	4 channels	4 channels	4 channels	4 channels	4 channels	4 channels
Frame Rate	240/200 FPS	120/100 FPS	120/100 FPS	120/100 FPS	120/100 FPS	120/100 FPS	120/100 FPS
Video Input Format	NTSC/PAL EIA/CCIR	NTSC/PAL EIA/CCIR	NTSC/PAL EIA/CCIR	NTSC/PAL/SECAM	NTSC/PAL/SECAM	NTSC/PAL/SECAM	NTSC/PAL/SECAM
Video Output	2 channels	2 channels	N/A	N/A	N/A	N/A	N/A
Audio Sampling Rate	8 ~ 96 kHz	8 ~ 96 kHz	8 ~ 96 kHz	N/A	N/A	N/A	N/A
LED Indicator	Yes	Yes	Yes	Yes	N/A	Yes	N/A
Driver for Windows®	Windows® XP/7 32/64-bit	Windows® XP/7 32/64-bit	Windows® XP/7 32/64-bit	Windows® 2000/XP	Windows® 2000/XP	Windows® 2000/XP	Windows® 2000/XP
Driver for Linux 32/64-bit	Linux 2.6.27	Linux 2.6.27	Linux 2.6.27	Linux 2.6	N/A	Linux 2.6	Linux 2.4
Power Consumption	5.3W, 1.39A@3.3V, 0.06A@12V	3.51W, 0.9A@3.3V, 0.045A@12V	1.65W, 0.5A@3.3V	12W, 1A@12V	7.8W, 0.65A@12V	12W, 2A@5V	15W, 3A@5V

1 Industrial Computing Solutions

2 Video Capture Solutions

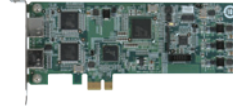
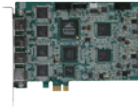
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High-Definition Hardware Compression Capture Card Selection Guide



Model Name	HDC-304E	HDC-302E	HDC-301E	HDC-301
Form Factor	PCIe	PCIe	PCIe	PCI
◆ Interface				
Video Input	4 channels	2 channels	1 channel	1 channel
Video Input Type	HDMI	HDMI	HDMI	HDMI
Audio Input	4 channels	2 channels	1 channel	1 channel
Audio Input Type	HDMI	HDMI	HDMI	HDMI
Video Output	1 channel	2 channels	1 channel	1 channel
Video Output Type	HDMI output cable kit	HDMI	HDMI	HDMI
Audio Output	1 channel	2 channels	1 channel	1 channel
Audio Output Type	HDMI output cable kit	HDMI	HDMI	HDMI
Bus Interface	PCIe x1	PCIe x1	PCIe x1	PCI
Loop Through	1 channel	2 channels	1 channel	1 channel
◆ Video Processing				
Video Compression	H.264/AVC High Profile Level 4.2			
Input Resolution & Frame Rate	1920 x 1080 x 60p / 59.94p / 50p 1920 x 1080 x 60i / 59.94i / 50i 1280 x 720 x 60p / 59.94p / 50p 720 x 480 x 60i / 59.94i 720 x 576 x 50i			
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p / 59.94p / 50p, encoding video bit rate from 6Mbps to 20Mbps 1920 x 1080 x 60i / 59.94i / 50i, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p / 59.94p / 50p, encoding video bit rate from 4Mbps to 20Mbps 720 x 480 x 60i / 59.94i, encoding video bit rate from 2Mbps to 10Mbps 720 x 576 x 50i, encoding video bit rate from 2Mbps to 10Mbps			
◆ Audio Processing				
Audio Compression	MPEG-1 Audio Layer 2			
Bit Rate	256k			
◆ Functionality				
Multiple Card Support	2 cards, 8 channels	4 cards, 8 channels	No	No
HDCP Compliant	Yes	Yes	Yes	Yes
◆ System Requirement				
System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video recording Recommends using a DXVA or CUDA capable graphics card for real-time video playback			
Memory	1GB or more			
OS Environment	Windows®: Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)			
◆ Software Support				
Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27			
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C			
◆ Others				
Dimensions	230 mm x 116 mm	155 mm x 98.6 mm	168 mm x 69 mm	168 mm x 64 mm
Operating Temperature	0°C ~ 65°C, non-condensing			
Power Consumption	12.7W (12V@0.61A, 3.3V@1.63A)	9.53W (12V@0.46A, 3.3V@1.21A)	6.07 W (12V@0.3A, 3.3V@0.72A)	5.29W (5V@0.73A, 3.3V@0.49A)

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Industrial
Computing
Solutions

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Video
Capture
Solutions

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Embedded
Computing
Solutions

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ORing
Network
Communication

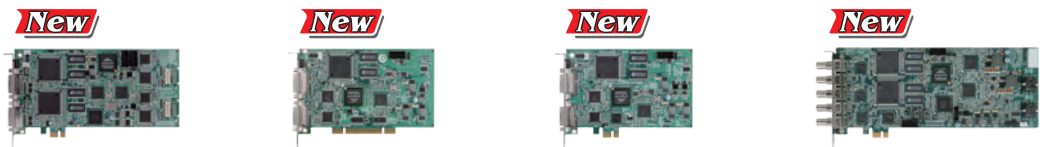
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Power Supply/
Peripherals

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Panel
Solutions
Introduction

High-Definition Hardware Compression Capture Card Selection Guide



Model Name	HDC-402E	HDC-401E	HDC-401	HDC-502E
Form Factor	PCIe	PCIe	PCI	PCIe
◆ Interface				
Video Input	2 channels	1 channel	1 channel	2 channels
Video Input Type	DVI-I	DVI-I	DVI-I	SDI
Audio Input	N/A	N/A	N/A	2 channels
Audio Input Type	N/A	N/A	N/A	SDI
Video Output	2 channels	1 channel	1 channel	1 channel
Video Output Type	DVI-I	DVI-I	DVI-I	SDI
Audio Output	N/A	N/A	N/A	1 channel
Audio Output Type	N/A	N/A	N/A	SDI
Bus Interface	PCIe x1	PCIe x1	PCI	PCIe x1
Loop Through	2 channels	1 channel	1 channel	2 channels
◆ Video Processing				
Video Compression	H.264/AVC High Profile Level 4.2			
Input Resolution & Frame Rate	Supports VESA video input up to 1920 x 1080 x 60p	Supports VESA video input up to 1920 x 1080 x 60p		1920 x 1080 x 60p / 50p / 30p / 25p / 24p 1920 x 1080 x 60i / 50i 1280 x 720 x 60p / 50p / 30p / 25p / 24p 720 x 480 x 60i 720 x 576 x 50i
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p, encoding video bit rate from 4Mbps to 20Mbps	1920 x 1080 x 60p, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p, encoding video bit rate from 4Mbps to 20Mbps		1920 x 1080 x 60p, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p, encoding video bit rate from 4Mbps to 20Mbps
◆ Audio Processing				
Audio Compression	N/A	N/A	N/A	MPEG-1 Audio Layer 2
Bit Rate	N/A	N/A	N/A	256k
◆ Functionality				
Multiple Card Support	4 cards, 8 channels	No	No	4 cards, 8 channels
HDCP Compliant	No	No	No	No
◆ System Requirement				
System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video recording Recommends using a DXVA or CUDA capable graphics card for real-time video playback			
Memory	1GB or more			
OS Environment	Windows®: Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)			
◆ Software Support				
Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27			
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C			
◆ Others				
Dimensions	210 mm x 111 mm	155 mm x 111 mm	106.7 mm x 167.6 mm	250 mm x 111 mm
Operating Temperature	0°C-65°C, non-condensing			
Power Consumption	14W (3.3V@1.48A, 12V@0.76A)	7.1W (12V@0.34A, 3.3V@0.89A)	6.32W (5V@0.83A, 3.3V@0.65A)	14.2W (12V@0.76A, 3.3V@1.52A)

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Industrial Computing Solutions

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Video Capture Solutions

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Embedded Computing Solutions

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ORing Network Communication

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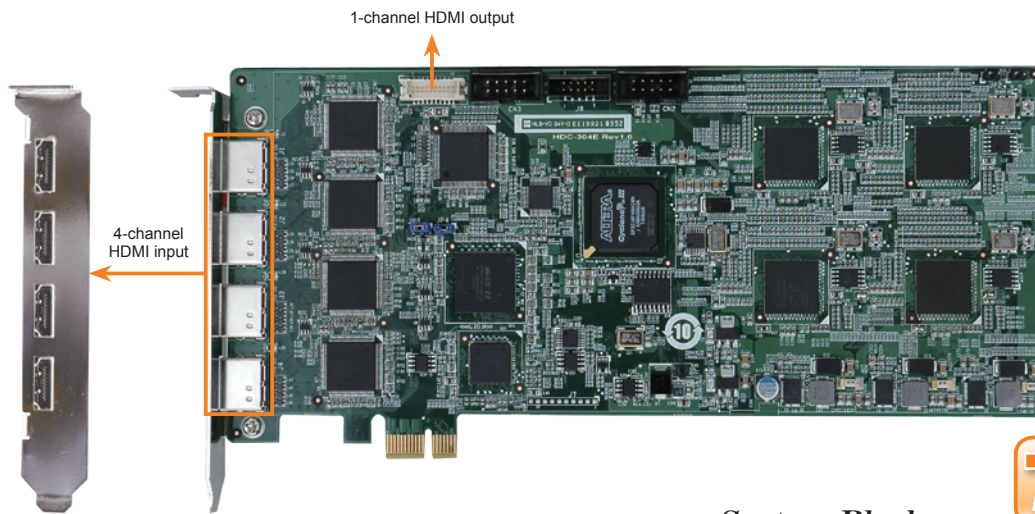
Power Supply/ Peripherals

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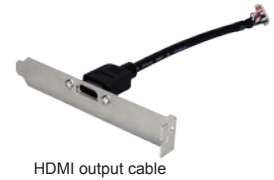
Panel Solutions Introduction

HDC-304E

PCI Express video/audio capture card with four HDMI input channels and one HDMI output channel, 1920x1080@60p, and H.264 hardware codec



H.264 Hardware Codec



Features

- Compatible with Windows® XP, Windows® 7 and Linux
- Equipped with four HDMI input ports
- Encoding or decoding up to 1080p HD video
- Pass through for transmitting uncompressed video up to 1080p resolution
- Reduces the amount of hard disk space needed by real-time H.264 recording compression capability
- Enables the system to support up to 8-channel input by adding multiple video capture cards
- SDK available for customer to create customized applications
- PCI Express interface provides higher bandwidth and great performance

Specifications

Interface

Video Input	4 channels
Video Input type	HDMI
Audio Input	4 channels
Audio Input Type	HDMI
Video Output	1 channel
Video Output Type	HDMI output cable kit
Audio Output	1 channel
Audio Output Type	HDMI output cable kit
Bus Interface	PCIe x1
Loop Through	1 channel

Video Processing

Video Compression	H.264/AVC High Profile Level 4.2	
Input Resolution & Frame Rate	1920 x 1080 x 60p / 59.94p / 50p 1920 x 1080 x 60i / 59.94i / 50i 1280 x 720 x 60p / 59.94p / 50p	720 x 480 x 60i / 59.94i 720 x 576 x 50i
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p / 59.94p / 50p, encoding video bit rate from 6Mbps to 20Mbps 1920 x 1080 x 60i / 59.94i / 50i, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p / 59.94p / 50p, encoding video bit rate from 4Mbps to 20Mbps 720 x 480 x 60i / 59.94i, encoding video bit rate from 2Mbps to 10Mbps 720 x 576 x 50i, encoding video bit rate from 2Mbps to 10Mbps	

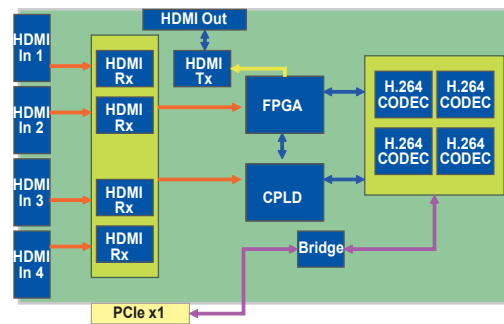
Audio Processing

Audio Compression	MPEG-1 Audio Layer 2
Bit Rate	256k

Packing List

1 x HDC-304E capture card	
1 x HDMI output kit	
1 x Utility CD	1 x QIG

System Block



Functionality

Multiple Card Support	2 cards, 8 channels
HDCP Compliant	Yes

System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)

Software Support

Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C

Others

Dimensions	230 mm x 116 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	12.7W (12V@0.61A, 3.3V@1.63A)

Ordering Information

Part No.	Description
HDC-304E-R10	PCI Express video/audio capture card with four HDMI input channels, 1920x1080@60p, and H.264 hardware codec

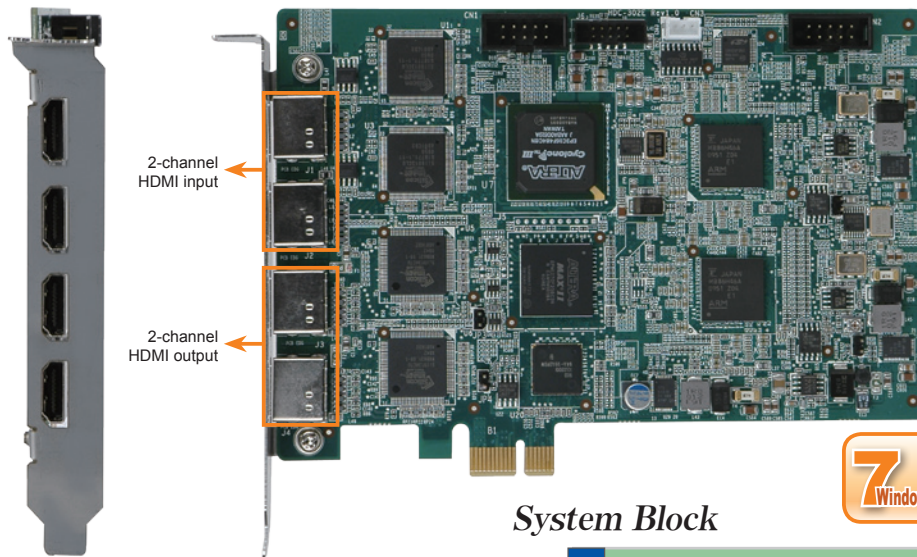
- 1 Industrial Computing Solutions
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- 6 Panel Solutions Introduction



HDC-302E

PCI Express video/audio capture card with two HDMI input channels and two HDMI output channels, 1920x1080@60p, and H.264 Hardware Codec

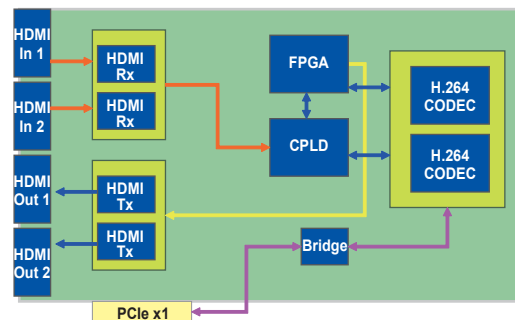
H.264 Hardware Codec



Features

- Compatible with Windows® XP, Windows® 7 and Linux
- Equipped with two HDMI input ports
- Encoding or decoding up to 1080p HD video
- Pass through for transmitting uncompressed video up to 1080p resolution
- Captures or records HD video in H.264 format
- Playbacks the recordings on HDMI display
- SDK available for customer to create customized applications

System Block



Specifications

◆ Interface

Video Input	2 channels
Video Input Type	HDMI
Audio Input	2 channels
Audio Input Type	HDMI
Video Output	2 channels
Video Output Type	HDMI
Audio Output	2 channels
Audio Output Type	HDMI
Bus Interface	PCIe x1
Loop Through	2 channels

◆ Video Processing

Video Compression	H.264/AVC High Profile Level 4.2
Input Resolution & Frame Rate	1920 x 1080 x 60p / 59.94p / 50p 720 x 480 x 60i / 59.94i 1920 x 1080 x 60i / 59.94i / 50i 720 x 576 x 50i 1280 x 720 x 60p / 59.94p / 50p
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p / 59.94p / 50p, encoding video bit rate from 6Mbps to 20Mbps 1920 x 1080 x 60i / 59.94i / 50i, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p / 59.94p / 50p, encoding video bit rate from 4Mbps to 20Mbps 720 x 480 x 60i / 59.94i, encoding video bit rate from 2Mbps to 10Mbps 720 x 576 x 50i, encoding video bit rate from 2Mbps to 10Mbps

◆ Audio Processing

Audio Compression	MPEG-1 Audio Layer 2
Bit Rate	256k

◆ Functionality

Multiple Card Support	4 cards, 8 channels
HDCP Compliant	Yes

◆ System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)

◆ Software Support

Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C

◆ Others

Dimensions	155 mm x 98.6 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	9.53W (12V@0.46A, 3.3V@1.21A)

Packing List

1 x HDC-302E
1 x Utility CD
1 x QIG

Ordering Information

Part No.	Description
HDC-302E-R10	PCI Express video/audio capture card with two HDMI input channels and two HDMI output channels, 1920x1080@60p, and H.264 Hardware Codec

1 Industrial Computing Solutions

2 Video Capture Solutions

3 Embedded Computing Solutions

4 ORing Network Communication

5 Power Supply/ Peripherals

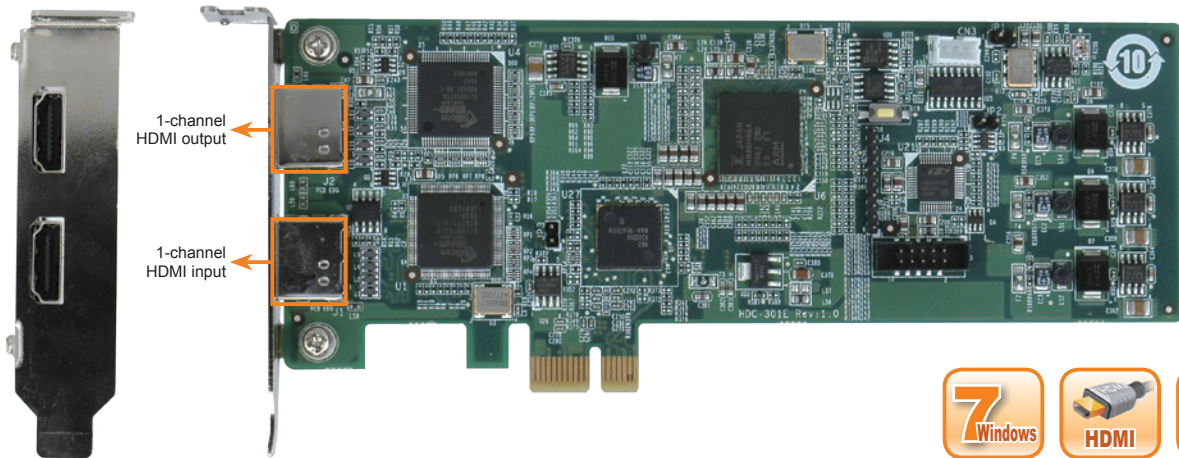
6 Panel Solutions Introduction

HDC-301E

PCI Express video/audio capture card with one HDMI input channel and one HDMI output channel, 1920x1080@60p, and H.264 Hardware Codec



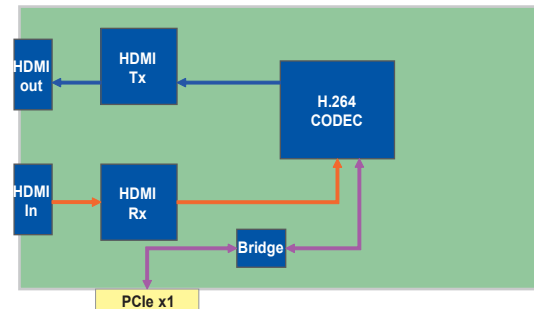
H.264 Hardware Codec



Features

- Compatible with Windows® XP, Windows® 7 and Linux
- Equipped with one HDMI input port
- Encoding or decoding up to 1080p HD video
- Pass through for transmitting uncompressed video up to 1080p resolution
- Captures or records HD video in H.264 format
- Playbacks the recordings on HDMI display
- SDK available for customer to create customized applications

System Block



Specifications

◆ Interface

Video Input	1 channel
Video Input type	HDMI
Audio Input	1 channel
Audio Input Type	HDMI
Video Output	1 channel
Video Output Type	HDMI
Audio Output	1 channel
Audio Output Type	HDMI
Bus Interface	PCIe x1
Loop Through	1 channel

◆ Video Processing

Video Compression	H.264/AVC High Profile Level 4.2	
Input Resolution & Frame Rate	1920 x 1080 x 60p / 59.94p / 50p 1920 x 1080 x 60i / 59.94i / 50i 1280 x 720 x 60p / 59.94p / 50p	720 x 480 x 60i / 59.94i 720 x 576 x 50i
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p / 59.94p / 50p, encoding video bit rate from 6Mbps to 20Mbps 1920 x 1080 x 60i / 59.94i / 50i, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p / 59.94p / 50p, encoding video bit rate from 4Mbps to 20Mbps 720 x 480 x 60i / 59.94i, encoding video bit rate from 2Mbps to 10Mbps 720 x 576 x 50i, encoding video bit rate from 2Mbps to 10Mbps	

◆ Audio Processing

Audio Compression	MPEG-1 Audio Layer 2
Bit Rate	256k

◆ Functionality

Multiple Card Support	No
HDCP Compliant	Yes

◆ System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)

◆ Software Support

Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C

◆ Others

Dimensions	168 mm x 69 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	6.07 W (12V@0.3A, 3.3V@0.72A)

Packing List

1 x HDC-301E	
1 x Full size bracket	
1 x Utility CD	1 x QIG

Ordering Information

Part No.	Description
HDC-301E-R10	PCI Express video/audio capture card with one HDMI input channel and one HDMI output channel, 1920x1080@60p, and H.264 Hardware Codec

1 Industrial Computing Solutions

2 Video Capture Solutions

3 Embedded Computing Solutions

4 ORing Network Communication

5 Power Supply/ Peripherals

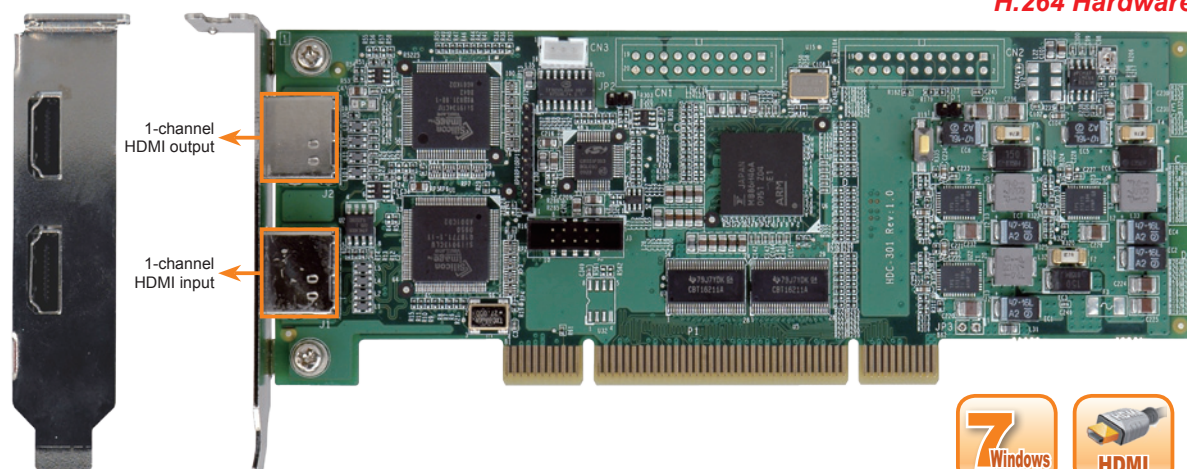
6 Panel Solutions Introduction



HDC-301

PCI video/audio capture card with one HDMI input channel and one HDMI output, 1920x1080@60p, and H.264 Hardware Codec

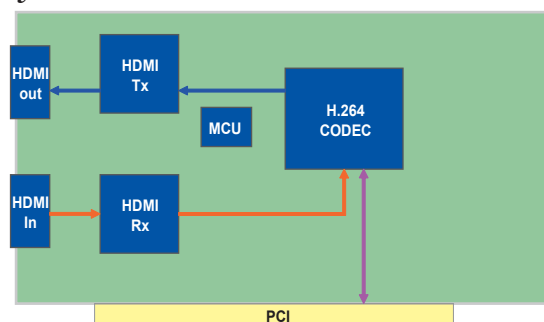
H.264 Hardware Codec



Features

- Compatible with Windows® XP, Windows® 7 and Linux
- Equipped with one HDMI input port
- Encoding or decoding up to 1080p HD video
- Pass through for transmitting uncompressed video up to 1080p resolution
- Captures or records HD video in H.264 format
- Reduce the amount of hard disk space needed by real-time H.264 recording compression capability
- SDK available for customer to create customized applications

System Block



Specifications

◆ Interface

Video Input	1 channel
Video Input Type	HDMI
Audio Input	1 channel
Audio Input Type	HDMI
Video Output	1 channel
Video Output Type	HDMI
Audio Output	1 channel
Audio Output Type	HDMI
Bus Interface	PCI
Loop Through	1 channel

◆ Video Processing

Video Compression	H.264/AVC High Profile Level 4.2
Input Resolution & Frame Rate	1920 x 1080 x 60p / 59.94p / 50p 720 x 480 x 60i / 59.94i 1920 x 1080 x 60i / 59.94i / 50i 720 x 576 x 50i 1280 x 720 x 60p / 59.94p / 50p
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p / 59.94p / 50p, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p / 59.94p / 50p, encoding video bit rate from 4Mbps to 20Mbps 720 x 480 x 60i / 59.94i, encoding video bit rate from 2Mbps to 10Mbps 720 x 576 x 50i, encoding video bit rate from 2Mbps to 10Mbps

◆ Audio Processing

Audio Compression	MPEG-1 Audio Layer 2
Bit Rate	256k

Packing List

1 x HDC-301 capture card	
1 x Full size bracket	
1 x Utility CD	1 x QIG

◆ Functionality

Multiple Card Support	No
HDCP Compliant	Yes

◆ System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)

◆ Software Support

Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C

◆ Others

Dimensions	168 mm x 64 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	5.29W (5V@0.73A, 3.3V@0.49A)

Ordering Information

Part No.	Description
HDC-301-R10	PCI video/audio capture card with one HDMI input channel and one HDMI output, 1920x1080@60p, and H.264 Hardware Codec

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Power Supply/Peripherals

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Panel Solutions Introduction

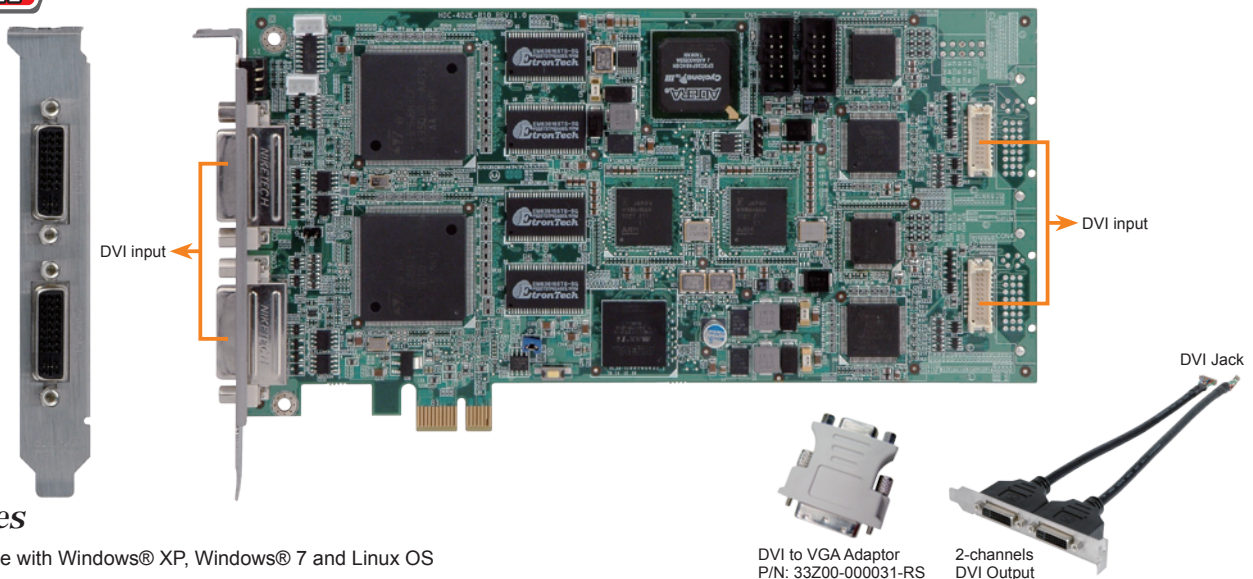
HDC-402E

PCI Express video/audio capture card with two DVI-I input channels and two DVI-I output channels, 1920x1080@60p, and H.264 Hardware Codec



New

H.264 Hardware Codec



Features

- Compatible with Windows® XP, Windows® 7 and Linux OS
- Equipped with two DVI-I input ports
- PCI Express interface provides higher bandwidth and great performance
- Pass through for transmitting uncompressed video up to 1080p resolution
- SDK available for customer to create customized applications

Specifications

Interface

Video Input	2 channels
Video Input Type	DVI-I (DVI/VGA)
Video Output	2 channels
Video Output Type	DVI-I (DVI/VGA)
Bus Interface	PCIe x 1
Loop Through	2 channels

Video Processing

Video Compression	H.264/AVC High Profile Level 4.2
Input Resolution & Frame Rate	Supports VESA video input up to 1920 x 1080 x 60p
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 60p encoding bit rate from 6Mbps to 20Mbps 1280 x 720 60p encoding bit rate from 4Mbps to 20Mbps

Functionality

Multiple Card Support	4 cards, 8 channels
HDCP Compliant	No

System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version)

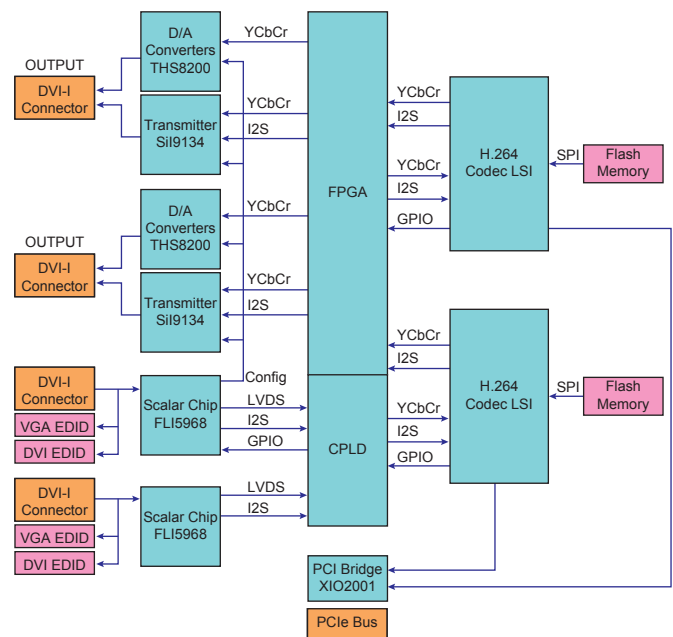
Software Support

Device Driver	Compatible with Windows® XP, Windows® 7 and Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and demo program with sample source code in C

Others

Dimensions	210 mm x 111 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	14W (3.3V@1.48A, 12V@0.76A)

System Block



Packing List

1 x HDC-402E capture card
1 x DVI output kit
1 x Utility CD
1 x QIG

Ordering Information

Part No.	Description
HDC-402E-R10	PCI Express video/audio capture card with two DVI-I input channels and two DVI-I output channels, 1920x1080@60p, and H.264 Hardware Codec
33Z00-000031-RS	DVI to VGA adaptor

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HDC-401E

PCI Express video/audio capture card with one DVI-I input channel and one DVI-I output channel, 1920x1080@60p, and H.264 Hardware Codec

H.264 Hardware Codec

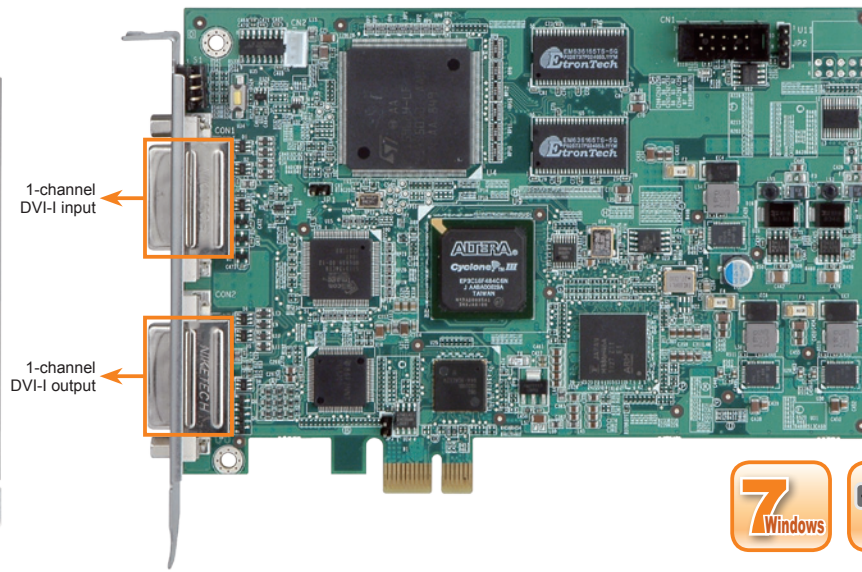
New



The ID is programmed by a rotate switch



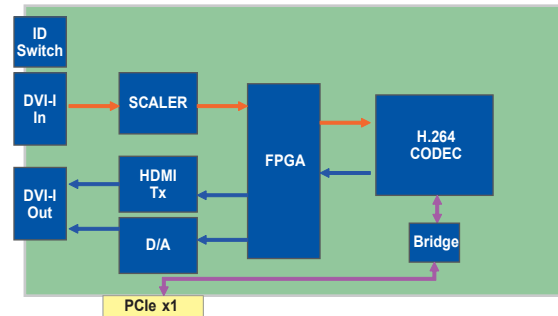
DVI to VGA Adaptor
P/N: 33Z00-000031-RS



Features

- Compatible with Windows® XP, Windows® 7 and Linux
- Equipped with one DVI-I input port
- Encoding or decoding up to 1080p HD video
- Pass through for transmitting uncompressed video up to 1080p resolution
- Captures or records HD video in H.264 format
- Playbacks the recordings on DVI-I display
- SDK available for customer to create customized applications

System Block



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Specifications

◆ Interface

Video Input	1 channel
Video Input Type	DVI-I (DVI/VGA)
Video Output	1 channel
Video Output Type	DVI-I (DVI/VGA)
Bus Interface	PCIe x1
Loop Through	1 channel

◆ Video Processing

Video Compression	H.264/AVC High Profile Level 4.2
Input Resolution & Frame Rate	Supports VESA video input up to 1920 x 1080 x 60p
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p, encoding video bit rate from 4Mbps to 20Mbps

◆ Functionality

Multiple Card Support	No
HDCP Compliant	No

◆ System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)

◆ Software Support

Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C

◆ Others

Dimensions	155 mm x 111 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	7.1W (12V@0.34A, 3.3V@0.89A)

Packing List

1 x HDC-401E capture card
1 x Utility CD
1 x QIG

Ordering Information

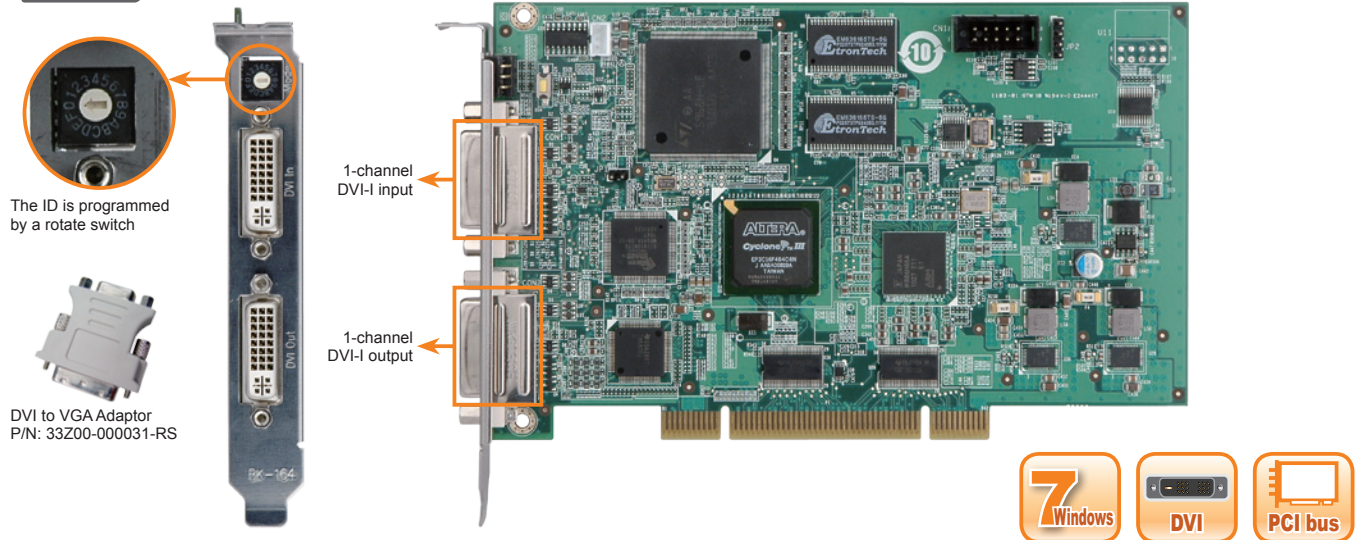
Part No.	Description
HDC-401E-R10	PCI Express video/audio capture card with one DVI-I input channel and one DVI-I output channel, 1920x1080@60p, and H.264 Hardware Codec
33Z00-000031-RS	DVI to VGA adaptor

HDC-401

PCI video/audio capture card with one DVI-I input channel and one DVI-I output channel, 1920x1080@60p, and H.264 Hardware Codec

New

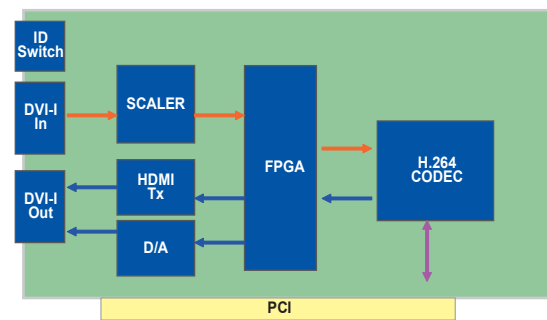
H.264 Hardware Codec



Features

- Compatible with Windows® XP, Windows® 7 and Linux
- Equipped with one DVI-I input port
- Encoding or decoding up to 1080p HD video
- Pass through for transmitting uncompressed video up to 1080p resolution
- Captures or records HD video in H.264 format
- Playbacks the recordings on DVI-I display
- SDK available for customer to create customized applications

System Block



Specifications

◆ Interface

Video Input	1 channel
Video Input Type	DVI-I (DVI/VGA)
Video Output	1 channel
Video Output Type	DVI-I (DVI/VGA)
Bus Interface	PCI
Loop Through	1 channel

◆ Video Processing

Video Compression	H.264/AVC High Profile Level 4.2
Input Resolution & Frame Rate	Supports VESA video input up to 1920 x 1080 x 60p
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p, encoding video bit rate from 4Mbps to 20Mbps

◆ Functionality

Multiple Card Support	No
HDCP Compliant	No

◆ System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)

◆ Software Support

Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C

◆ Others

Dimensions	106.7 mm x 167.6 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	6.32W (5V@0.83A, 3.3V@0.65A)

Packing List

- 1 x HDC-401 capture card
- 1 x Utility CD
- 1 x QIG

Ordering Information

Part No.	Description
HDC-401-R10	PCI video/audio capture card with one DVI-I input channel and one DVI-I output channel, 1920x1080@60p, and H.264 Hardware Codec
33Z00-000031-RS	DVI to VGA adapter

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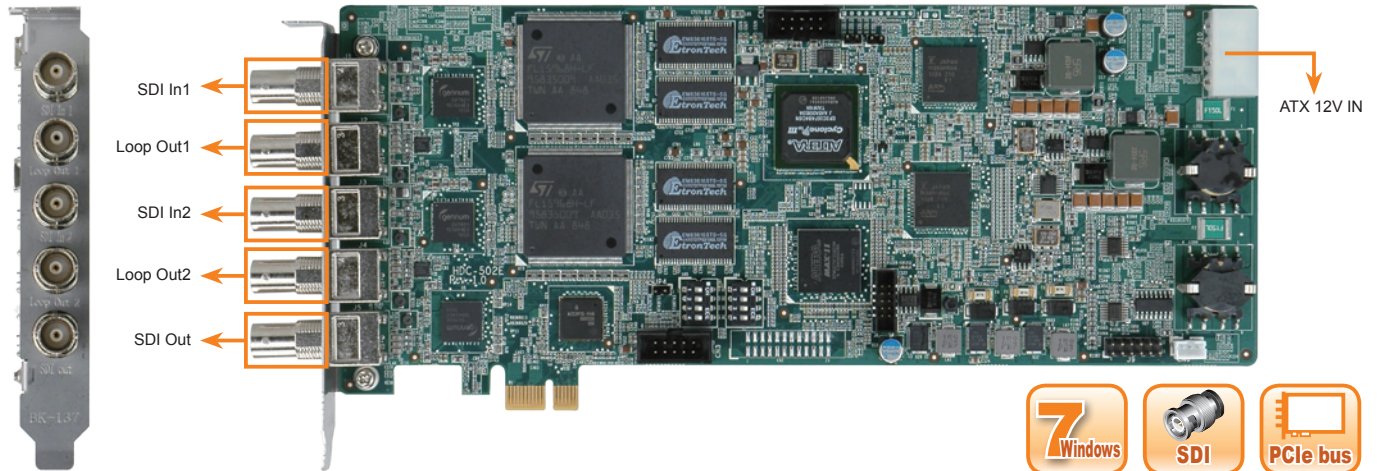
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Panel Solutions Introduction

HDC-502E

PCI Express video/audio capture card with 2 SDI input channels, 2 loop-out channels, 1 SDI output channel, 1920x1080@60p, and H.264 Hardware Codec

New

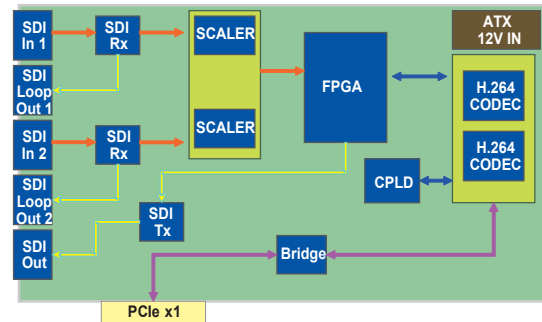
H.264 Hardware Codec



Features

- Compatible with Windows® XP, Windows® 7 and Linux
- High quality and long distance video compression solution
- Encoding or decoding up to 1080p HD video
- Reduces the amount of hard disk space needed by real-time H.264 recording compression capability
- Applications: professional studio, broadcast and transportation video applications
- SDK available for customer to create customized applications

System Block



Specifications

◆ Interface

Video Input	2 channels
Video Input Type	SDI
Audio Input	2 channels
Audio Input Type	SDI
Video Output	1 channel
Video Output Type	SDI
Audio Output	1 channel
Audio Output Type	SDI
Bus Interface	PCIe x1
Loop Through	2 channels

◆ Video Processing

Video Compression	H.264/AVC High Profile Level 4.2	
Input Resolution & Frame Rate	1920 x 1080 x 60p / 50p / 30p / 25p / 24p 1920 x 1080 x 60i / 50i 1280 x 720 x 60p / 50p / 30p / 25p / 24p	720 x 480 x 60i 720 x 576 x 50i
Record Resolution / Frame Rate / Bit Rate	1920 x 1080 x 60p, encoding video bit rate from 6Mbps to 20Mbps 1280 x 720 x 60p, encoding video bit rate from 4Mbps to 20Mbps	

◆ Audio Processing

Audio Compression	MPEG-1 Audio Layer 2
Bit Rate	256k

Packing List

1 x HDC-502E capture card
1 x Utility CD
1 x QIG

◆ Functionality

Multiple Card Support	4 cards, 8 channels
HDCP Compliant	No

◆ System Requirement

System	x86 PC compatible computer, Intel® Pentium® 4 2.0GHz or above for video record Recommends using a DXVA or CUDA capable graphics card for real-time video playback
Memory	1GB or more
OS Environment	Microsoft® Windows® XP Service Pack 2 (SP2) (32-bit version) Microsoft® DirectX 9.0c (32-bit) Microsoft® .NET Framework 2.0 (32-bit version) Linux: Fedora 10 (Kernel 2.6.27)

◆ Software Support

Device Driver	Compatible with Windows® XP, Windows® 7, Linux Kernel 2.6.27
SDK	Windows®: Provides SDK and demo program with sample source code in C# Linux: Provides SDK and driver/demo program with sample source code in C

◆ Others

Dimensions	250 mm x 111 mm
Operating Temperature	0°C ~ 65°C, non-condensing
Power Consumption	14.2W (12V@0.76A, 3.3V@1.52A)

Ordering Information

Part No.	Description
HDC-502E-R10	PCI Express video/audio capture card with 2 SDI input channels, 2 loop-out channels, 1 SDI output channel, 1920x1080@60p, and H.264 Hardware Codec

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Panel Solutions Introduction

HD-SDI-BOX

High-Definition Serial Digital Interface, long distance signal transmission box (Master/Slave) up to 100M, video input format 720p/1080i

New

HD-SDI-BOX-M-R10



HD-SDI-BOX-S-R10



Long Distance and High Quality BOX

The HD-SDI-BOX kit, combining the HD-SDI-BOX-M (Master) and the HD-SDI-BOX-S (Slave), provides a high-definition serial digital interface (SDI) for long distance signal transmission.

With the HD-SDI-BOX kit, the HDMI or VGA video signal can be transmitted directly through a 100 m coaxial cable without compression. The HD-SDI-BOX kit also supports touch-screen remote control. The touch-screen remote control is linked through the RJ-45 Cat5 cable and RS-232 cable.



Features

- High-definition serial digital interface (HD-SDI) transmission box supports 720p 1080i video resolution
- Long distance signal transmission up to 100M (adds additional HD-SDI-BOX-S to extend the transmission distance)
- HD-SDI-BOX-M converts VGA/HDMI to HD-SDI
- HD-SDI-BOX-S converts HD-SDI to HDMI
- Remote touch control link
- Uncompressed transmission
- Applications: Broadcasting and Transportation Monitoring

Specifications

Model Name	HD-SDI-BOX-M-R10	HD-SDI-BOX-S-R10
Input	1 x HDMI (No HDCP compliant), 1 x VGA	1 x HD-SDI
Output	1 x HD-SDI	1 x HD-SDI Loop Through, 1 x HDMI
I/O Panel	Front: 1 x HDMI 1 x VGA IN 2 x LED (HDMI, VGA)	Front: 1 x HD-SDI IN 1 x RJ-45 Control In for remote touch link 1 x RS-232
	Rear: 1 x HD-SDI OUT 1 x RJ-45 Control Out for remote touch link	Rear: 1 x HD-SDI Loop Through 1 x HDMI Out 1 x Control Out
Supported Mode	Video mode: 720p (1280 x 720 @ 50/60Hz) 1080i (1920 x 1080 @ 50/60Hz)	Video mode: 720p (1280 x 720 @ 50/60Hz) 1080i (1920 x 1080 @ 50/60Hz)
	PC mode: 1280 x 720 @ 50Hz/60Hz 1920 x 1080 @ 50/60Hz	PC mode: 1280 x 720 @ 50Hz/60Hz 1920 x 1080 @ 50/60Hz
Data Rate	1.5Gb/s	1.5Gb/s
Power	Power Supply: 5V, 5A Power Consumption: 5W	Power Supply: 5V, 5A Power Consumption: 4W
Dimensions	136 mm x 103 mm x 32 mm	136 mm x 103 mm x 32 mm
Power Adapter	Input: 90VAC to 264VAC/47Hz to 63Hz Output: 5V DC	Input: 90VAC to 264VAC/47Hz to 63Hz Output: 5V DC

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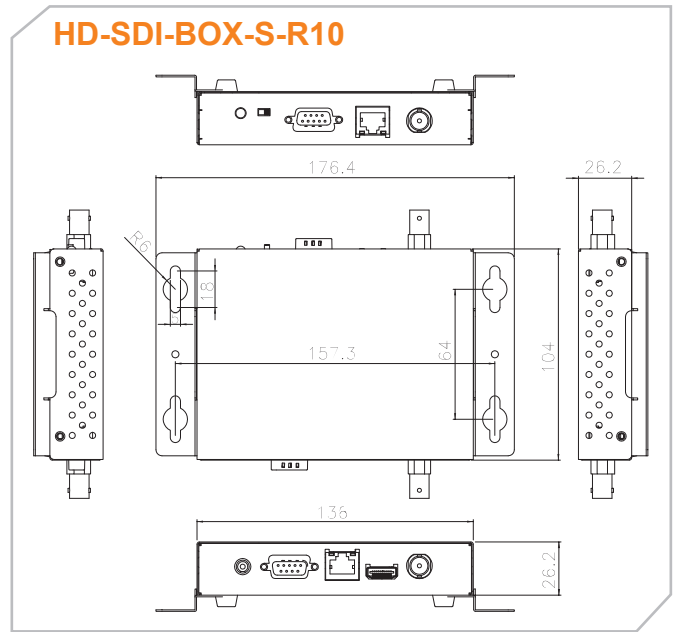
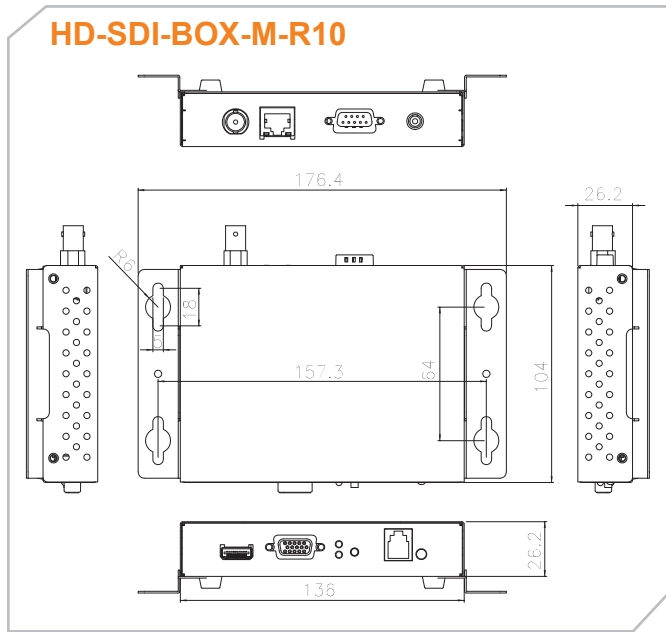
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Dimensions (Unit: mm)

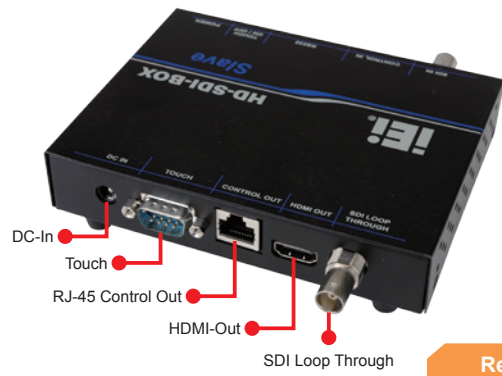


I/O Interface

HD-SDI-BOX-M-R10



HD-SDI-BOX-S-R10



Packing List

- 1 x HD-SDI-BOX set (Including master and slave boxes)
- 2 x EU power cord for master and slave boxes
- 2 x 5V adaptor for master and slave boxes
- 4 x Wall mounting bracket
- 8 x Screw
- 1 x User manual

Ordering Information

Part No.	Description
HD-SDI-BOX-R10	High-Definition Serial Digital Interface, long distance signal transmission box (master/slave) up to 100M, video input format 720p/1080i
HD-SDI-BOX-M-R10	High-Definition Serial Digital Interface, long distance signal transmission master box up to 100M
HD-SDI-BOX-S-R10	High-Definition Serial Digital Interface, long distance signal transmission slave box up to 100M

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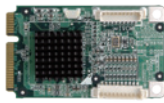
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Standard-Definition Software Compression Capture Card Selection Guide

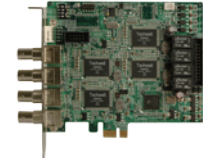
New



New



New



Model Name	IVCME-C604	IVCE-C608	IVCE-C604	IVCE-268G
Form Factor	PCIe Mini	PCIe	PCIe	PCIe
◆ Interface				
Video Input	4 channels composite video NTSC/ PAL auto sensing	8 channels composite video NTSC/ PAL auto sensing	4 channels composite video NTSC/ PAL auto sensing	4 channels composite video NTSC/ PAL/SECAM auto sensing
Video Input Type	BNC (BNC+RCA to DB-26 cable included)	BNC (BNC+RCA to DB-26 cable included)		BNC
Audio Input	4 channels	8 channels	4 channels	4 channels
Audio Input Type	RCA (BNC+RCA to DB-26 cable included)	RCA (BNC+RCA to DB-26 cable included)		Audio cable with 3.5mm audio jack
Bus Interface	Mini PCIe x1	PCIe x1	PCIe x1	PCIe x1
Alarm I/O	Yes	Yes	Yes	Yes
Card ID	N/A	Rotate switch selectable with LED for ID indication		DIP switch selectable with LED for ID indication
LED Indicator	N/A	Red LED for system alarm Green LED for AP running Yellow LED for watchdog		N/A

◆ Video Processing

Video Compression	Software compression							
Video Engine	1 x Conexant CX25854		1 x Conexant CX25853		1 x Conexant CX25850		4 x Techwell TW6805	
Resolution & Frame Rate	NTSC: 720 x 576 720 x 480 720 x 288 720 x 240 352 x 240 320 x 240 160 x 120	PAL/SECAM: 720 x 576 720 x 480 720 x 288 720 x 248 352 x 288 352 x 240 320 x 240 160 x 120	NTSC: 720 x 576 720 x 480 720 x 288 720 x 248 352 x 240 320 x 240 160 x 120	PAL: 720 x 576 720 x 480 720 x 288 720 x 248 352 x 288 352 x 240 320 x 240 160 x 120	NTSC: 720 x 576 720 x 480 720 x 288 720 x 240 352 x 240 320 x 240 160 x 120	PAL: 720 x 576 720 x 480 720 x 288 720 x 248 352 x 288 352 x 240 320 x 240 160 x 120	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 248 704 x 576 704 x 288 640 x 480 640 x 240 320 x 240 176 x 144 160 x 120
	NTSC: Total 120fps @ D1 for 8 channels PAL: Total 100fps @ D1 for 8 channels		NTSC: Total 240fps @ D1 for 8 channels PAL: Total 200fps @ D1 for 8 channels		NTSC: Total 120fps @ D1 for 4 channels PAL: Total 100fps @ D1 for 4 channels		NTSC: Total 120fps @ D1 for 4 channels PAL/SECAM: Total 100fps @ D1 for 4 channels	

◆ Audio Processing

Audio Compression	Software compression			
Sampling Rate	32kHz, 44.1kHz, 48kHz, 96kHz (hardware spec.)	32kHz, 44.1kHz, 48kHz, 96kHz (hardware spec.)	32kHz, 44.1kHz, 48kHz, 96kHz (hardware spec.)	8kHz, 32kHz, 44.1kHz and 48kHz (hardware spec.)
Quantization	24-bit (hardware spec.)	24-bit (hardware spec.)	24-bit (hardware spec.)	8-bit, 16-bit and 24-bit (hardware spec.)

◆ Functionality

Video/Audio Synchronization	N/A	N/A	N/A	Yes
Video Loss Detection	Yes	Yes	Yes	Yes
On-screen Display	Yes	Yes	Yes	Yes
Motion Detection	Yes (hardware spec.)	Yes	Yes	Yes

◆ System Requirement

System	x86 PC compatible computer	x86 PC compatible computer, PCI Express 1 lane, compatible with 1, 4, 8 and 16 lane PCIe slots		x86 PC compatible computer
Memory	512MB or above			256MB or above
Graphics	DirectX compatible VGA card supporting YUV overlay mode			

◆ Software Support

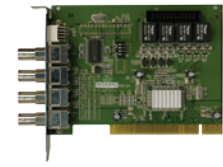
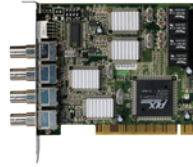
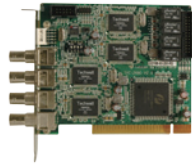
Device Driver	Windows® XP/7 Linux Kernel 2.6.27		Windows® 2000/XP Linux Kernel 2.6	
SDK	Provides SDK and demo program with source code in C++			

◆ Others

Dimensions	51 mm x 30 mm	111 mm x 102.4 mm	111.23 mm x 102.39 mm	119.91 mm x 106.68 mm
Operating Temperature	0°C ~ 60°C (32°F~140°F), non-condensing		-5°C ~ 65°C, non-condensing	
Power Consumption	1.65W, 3.3V@0.5A	5.3W, 3.3V@1.39A, 12V@0.06A	3.51W, 3.3V@0.9A, 12V@0.045A	12W, 1A@12V (with relay)

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Standard-Definition Software Compression Capture Card Selection Guide



Model Name	IVC-268G		IVC-200G-RS		IVC-168G		IVC-100G-RS	
Form Factor	PCI		PCI		PCI		PCI	
♦ Interface								
Video Input	4 channels composite video NTSC/PAL/SECAM auto sensing							
Video Input Type	BNC		BNC		BNC		BNC	
Audio Input	4 channels		N/A		1 channel analog audio Active channel selectable by software		N/A	
Audio Input Type	Audio cable with 3.5mm audio jack		N/A		Audio cable with 3.5mm audio jack		N/A	
Bus Interface	PCI Rev. 2.1 compliant		PCI Rev. 2.1 compliant		PCI Rev. 2.1 compliant		PCI Rev. 2.1 compliant	
Alarm I/O	Yes		Yes		Yes		Yes	
Card ID	DIP switch selectable with LED for ID indication							
LED Indicator	N/A							
♦ Video Processing								
Video Compression	Software compression				Software compression			
Video Engine	4 x Techwell TW6805		4 x Conexant CX25878		1 x Techwell TW6805		1 x Conexant CX25878	
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 240 640 x 248 704 x 576 704 x 288 640 x 480 640 x 240 352 x 288 320 x 240 240 x 180 176 x 144 160 x 120	NTSC: 720 x 480 720 x 288 720 x 240 640 x 480 640 x 288 640 x 240 352 x 288 320 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 240 640 x 248 704 x 576 704 x 288 640 x 480 640 x 240 352 x 288 320 x 240 240 x 180 352 x 240 320 x 240 240 x 176 176 x 144 160 x 120 128 x 96 160 x 120 128 x 96 88 x 72 80 x 60	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 240 640 x 248 704 x 576 704 x 288 640 x 480 640 x 240 352 x 288 320 x 240 240 x 180 176 x 144 160 x 120	NTSC: 720 x 480 720 x 288 720 x 240 640 x 480 640 x 288 640 x 240 352 x 288 320 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 240 640 x 248 704 x 576 640 x 480 640 x 288 640 x 240 352 x 288 320 x 240 240 x 180 352 x 240 320 x 240 240 x 176 176 x 144 240 x 180 240 x 176 176 x 144 240 x 180 160 x 120 128 x 96 160 x 120 128 x 96 88 x 72 80 x 60
	NTSC: Total 120fps @ D1 for 4 channels PAL/SEACAM: Total 100fps @ D1 for 4 channels		NTSC: Up to 120fps at all resolutions PAL/SEACAM: Up to 100fps at all resolutions		NTSC: Total 30fps @ D1 for 4 channels PAL/SEACAM: Total 25fps @ D1 for 4 channels		NTSC: Up to 30fps at all resolutions PAL/SEACAM: Up to 25fps at all resolutions	
♦ Audio Processing								
Audio Compression	Software compression		N/A		Software compression		N/A	
Sampling Rate	8kHz, 32kHz, 44.1kHz, 48kHz (hardware spec.)		N/A		8kHz, 32kHz, 44.1kHz and 48kHz (hardware spec.)		N/A	
Quantization	8-bit, 16-bit and 24-bit (hardware spec.)		N/A		8-bit, 16-bit and 24-bit (hardware spec.)		N/A	
♦ Functionality								
Video/Audio Synchronization	Yes		N/A		Yes		Yes	
Video Loss Detection	Yes		Yes		Yes		Yes	
On-screen Display	Yes		Yes		Yes		N/A	
Motion Detection	Yes		N/A		Yes		N/A	
♦ System Requirement								
System	x86 PC compatible computer							
Memory	256MB or above							
Graphics	DirectX compatible VGA card supporting YUV overlay mode							
♦ Software Support								
Device Driver	Windows® 2000/XP Linux Kernel 2.6		Windows® 98/SE/ME/2000/XP Linux Kernel 2.4		Windows® 2000/XP Linux Kernel 2.6		Windows® 98/SE/ME/2000/XP Linux Kernel 2.4	
SDK	Provides SDK and demo program with source code in C++							
♦ Others								
Dimensions	119.91 mm x 106.68 mm		119.91 mm x 106.68 mm		119.91 mm x 106.68 mm		119.91 mm x 106.68 mm	
Operating Temperature	0°C ~ 60°C (32°~140°F), non-condensing							
Power Consumption	12W, 2.4A@5V (with relay)		15W, 3A@5V (with relay)		10W, 2A@5V (with relay)		10.7W, 2.14A@5V (with relay)	

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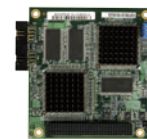
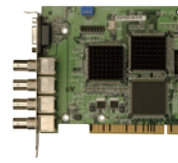
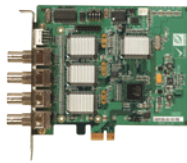
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Power Supply/ Peripherals

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Panel Solutions Introduction

Standard-Definition Software Compression Capture Card Selection Guide



Model Name	IVCE-8784		PM-1056		IVC-8371P		PM-1059	
Form Factor	PCIe		PCI-104		PCI		PCI-104	
◆ Interface								
Video Input	4 channels composite video NTSC/PAL/SECAM auto sensing							
Video Input type	BNC		BNC		BNC		BNC	
Audio Input	N/A		N/A		4 channels		4 channels	
Audio Input Type	N/A		N/A		DB-9 to 3.5mm phone jack audio cable		DB-9 to 3.5mm phone jack audio cable	
Bus Interface	PCIe x1		PCI Rev. 2.1 compliant		PCI Rev. 2.1 compliant		PCI Rev. 2.1 compliant	
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		DIP switch selectable	
LED Indicator	N/A							
◆ Video Processing								
Video Compression	Software compression		Software compression		MPEG-4 Advanced Simple Profile @ Level5 MPEG-2 main Profile @ Main level MPEG-1 H.263		MPEG-4 Advanced Simple Profile @ Level5 MPEG-2 main Profile @ Main level MPEG-1	
Video Engine	4 x Conexant CX25878		4 x Conexant CX25878		MPEG-4 Hardware Encode/Decode		MPEG-4 Hardware Encode/Decode	
Resolution & Frame Rate	NTSC:	PAL/SECAM:	NTSC:	PAL/SECAM:	NTSC:	PAL/SECAM:	NTSC:	PAL/SECAM:
	720 x 480	720 x 576	720 x 480	720 x 576	720 x 480	720 x 576	720 x 480	720 x 576
	720 x 288	720 x 480	720 x 288	720 x 480	720 x 240	720 x 288	720 x 240	720 x 288
	720 x 240	720 x 288	720 x 240	720 x 288	640 x 480	640 x 576	640 x 480	640 x 576
	640 x 480	720 x 240	640 x 480	720 x 240	640 x 240	640 x 288	640 x 240	640 x 288
	640 x 288	704 x 576	640 x 288	704 x 576	360 x 240	360 x 288	360 x 240	360 x 288
	640 x 240	640 x 480	640 x 240	640 x 480	320 x 240	320 x 288	320 x 240	320 x 288
	352 x 288	640 x 288	352 x 288	640 x 288				
	352 x 240	640 x 240	352 x 240	640 x 240				
	320 x 240	352 x 288	320 x 240	352 x 288				
240 x 180	352 x 240	240 x 180	352 x 240					
240 x 176	320 x 240	240 x 176	320 x 240					
176 x 144	240 x 180	176 x 144	240 x 180					
160 x 120	240 x 176	160 x 120	240 x 176					
128 x 96	176 x 144	128 x 96	176 x 144					
88 x 72	160 x 120	88 x 72	160 x 120					
80 x 60	128 x 96	80 x 60	128 x 96					
	88 x 72		88 x 72					
	80 x 60		80 x 60					
	NTSC: Up to 120fps at all resolutions PAL/SECAM: Up to 100fps at all resolutions		NTSC: Total 30fps @ D1 for 4 channels PAL/SECAM: Total 25fps @ D1 for 4 channels		NTSC: Total 30fps @ D1 for 4 channels PAL/SECAM: Total 25fps @ D1 for 4 channels		NTSC: Total 30fps @ D1 for 4 channels PAL/SECAM: Total 25fps @ D1 for 4 channels	
◆ Audio Processing								
Audio Compression	N/A		N/A		Encoding Standard G.726 (ADPCM/PCM)		G.726 (ADPCM/PCM)	
Sampling Rate	N/A		N/A		8kHz, 44.1kHz and 48kHz		8kHz, 44.1kHz and 48kHz	
Quantization	N/A		N/A		8-bit data depth		8-bit data depth	
◆ Functionality								
Video/Audio synchronization	Yes		Yes		Yes		Yes	
Video Loss Detection	Yes		Yes		Yes		Yes	
On-screen Display	Yes		Yes		Yes		Yes	
Motion Detection	Yes		Yes		Hardware built-in		Hardware built-in	
Watermarking	N/A		N/A		128-bit secret key, adjustable length		128-bit secret key, adjustable length	
◆ System Requirement								
System	x86 PC compatible computer							
Memory	256MB or above							
Graphics	DirectX compatible VGA card supporting YUV overlay mode							
◆ Software Support								
Device Driver	Windows® 98/SE/ME/2000/XP		Windows® 98/SE/ME/2000/XP Linux Kernel 2.4		Windows® 2000/XP		Windows® 2000/XP	
SDK	Provides SDK and demo program with source code in C++							
◆ Others								
Dimensions	119.91 mm x 106.68 mm		95.89 mm x 90.17 mm		119.91 mm x 106.68 mm		95.89 mm x 90.17 mm	
Operating Temperature	0°C ~ 60°C (32°~140°F), non-condensing							
Power Consumption	7.8W, 0.65A@12V (without relay)		3.5W, 0.7A@5V (with relay)		7.5W, 1.5A@5V (without relay)		7.5W, 1.5A@5V (without relay)	

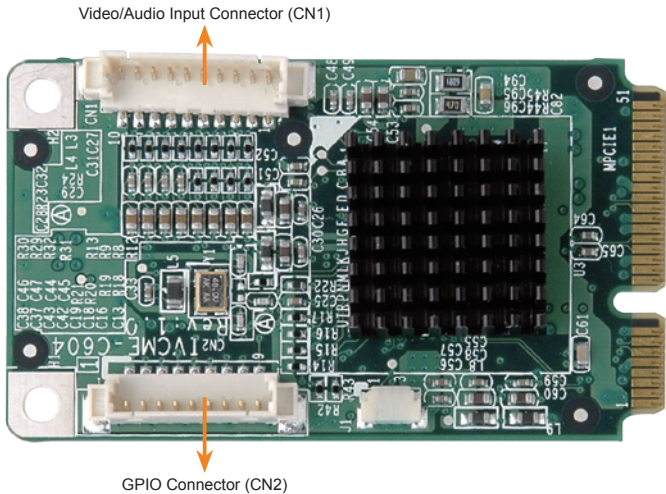
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IVCME-C604

PCIe Mini video/ audio capture card with 4-channel video/ audio input, total 120fps@D1 for 4 channels (NTSC)



New



Features

- Single card 4-channel composite video (NTSC/PAL) solution
- PCIe Mini card interface supported
- Compatible with Linux, Windows® XP and Windows® 7 (32-bit and 64-bit)
- Total 120fps @ D1 for 4 channels (NTSC)
- External GPIO daughter board with 4 inputs and 4 outputs (optional)
- SDK available for customer to create customized applications



Specifications

Interface

Video Input	4 channels composite video NTSC/PAL auto sensing
Video Input Type	BNC (BNC to DB-9 cable included)
Audio Input	4 channels analog
Audio Input Type	RCA (RCA to DB-9 cable included)
Bus Interface	PCIe Mini x1
Alarm IO	Yes

Video Processing

Video Compression	Software compression	
Video Engine	1 x Conexant CX25854	
Resolution	NTSC:	PAL:
	720 x 576	720 x 576
	720 x 480	720 x 480
	720 x 288	720 x 288
	720 x 240	720 x 248
Frame Rate	NTSC: Total 120fps @ D1 for 4 channels	
	PAL: Total 100fps @ D1 for 4 channels	

Audio Processing

Audio Compression	Software compression
Sampling Rate	8kHz, 16kHz, 32kHz, 44.1kHz and 48kHz
Quantization	16-bit

Functionality

Video Loss Detection	Yes
On-screen Display	Yes
Motion Detection	Yes (hardware spec.)

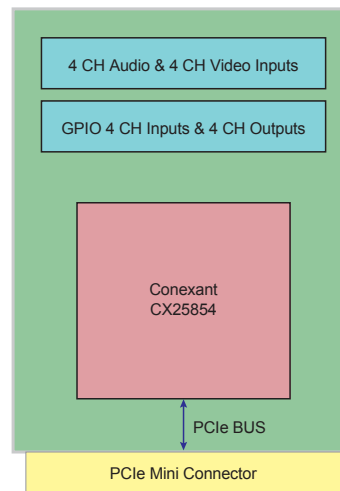
System Requirement

System	x86 PC compatible computer
Memory	512MB or above

Others

Dimensions	51 mm x 30 mm
Operating Temperature	0°C ~ 60°C, non-condensing
Power Consumption	1.65W (3.3V@0.5A)

System Block



Video/Audio Input Connector (CN1)

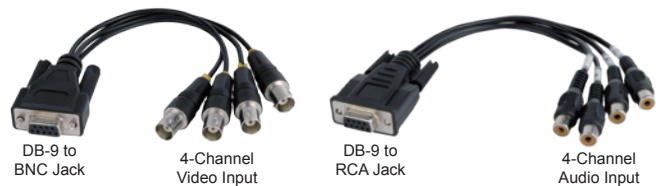
Pin No.	Signal
1	GND
2	Video In CH1
3	Video In CH2
4	Video In CH3
5	Video In CH4
6	Audio In CH1
7	Audio In CH2
8	Audio In CH3
9	Audio In CH4
10	GND

GPIO Connector (CN2)

Pin No.	Signal
1	GND
2	DI1
3	DI2
4	DI3
5	DI4
6	DO1
7	DO2
8	DO3
9	DO4

Packing List

- 1 x IVCME-C604 capture card
- 1 x BNC to DB-9 cable
- 1 x RCA to DB-9 cable
- 1 x Video/Audio input cable kit
- 1 x Utility CD
- 1 x QIG



Ordering Information

Part No.	Description
IVCME-C604-R10	PCIe Mini video/audio capture card with 4-channel video/ audio input, total 120fps@D1 for 4 channels (NTSC)
VIOCARD-GPIO-RS-R10	8 GPIO channels (4 digital inputs and 4 relay outputs)
32225-002200-100-RS	GPIO card to IVC capture card connection cable

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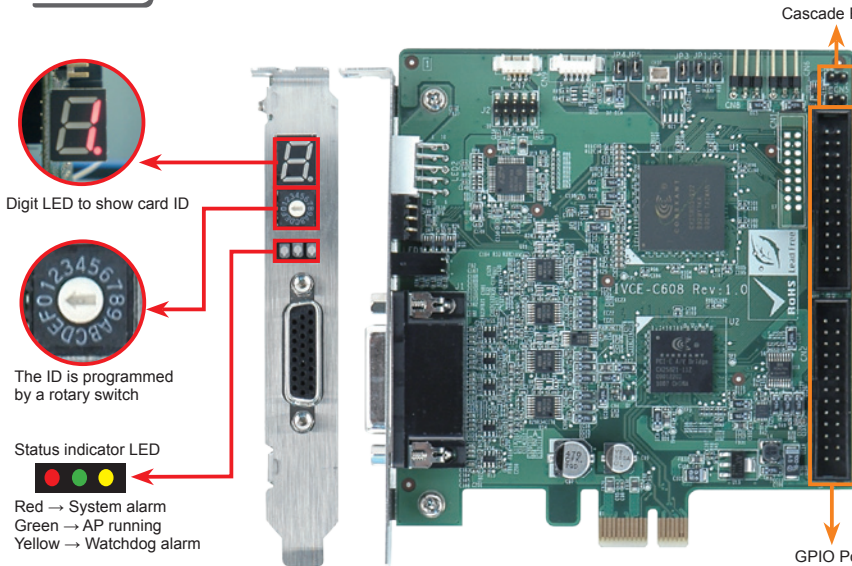
6 Panel Solutions Introduction

IVCE-C608

PCIe video/audio capture card with 8-channel video/audio input, total 240fps@D1 for 8 channels (NTSC)



New



Digit LED to show card ID

The ID is programmed by a rotary switch

Status indicator LED

Red → System alarm
Green → AP running
Yellow → Watchdog alarm

Features

- Single card 8-channel solution
- PCI Express interface provides higher bandwidth and great performance
- Compatible with Linux, Windows® XP and Windows® 7 (32-bit and 64-bit)
- Total 240fps @ D1 for 8 channels (NTSC)
- Supports multiple cards up to 128 channels video/audio input
- External GPIO daughter board supports up to 8 inputs and 8 outputs (optional)
- SDK available for customer to create customized applications
- Supports 8 channels video/audio input and 2 channels video output



Specifications

◆ Interface

Video Input	8 channels composite video NTSC/PAL auto sensing
Video Input Type	BNC (BNC+RCA to DB-26 cable included)
Audio Input	8 channels
Audio Input Type	RCA (BNC+RCA to DB-26 cable included)
Video Output	2 channels
Video Output Type	BNC (BNC+RCA to DB-26 cable included)
Bus Interface	PCIe x1
Alarm I/O	Yes
Card ID	Rotary switch selectable with LED for ID indication
LED Indicator	Red LED for system Green LED for AP running Yellow LED for watchdog

◆ Video Processing

Video Compression	Software compression	
Video Engine	1 x Conexant CX25853	
Resolution	NTSC: 720 x 576 720 x 480 720 x 288 720 x 240 352 x 240 320 x 240 160 x 120	PAL: 720 x 576 720 x 480 720 x 288 720 x 248 352 x 288 352 x 240 320 x 240 160 x 120
Frame Rate	NTSC: Total 240fps @ D1 for 8 channels PAL: Total 200fps @ D1 for 8 channels	

◆ Audio Processing

Audio Compression	Software compression
Sampling Rate	32kHz, 44.1kHz, 48kHz, 96kHz (hardware spec.)
Quantization	24-bit (hardware spec.)

◆ Functionality

Video Loss Detection	Yes
On-screen Display	Yes
Motion Detection	Yes (hardware spec.)

◆ System Requirement

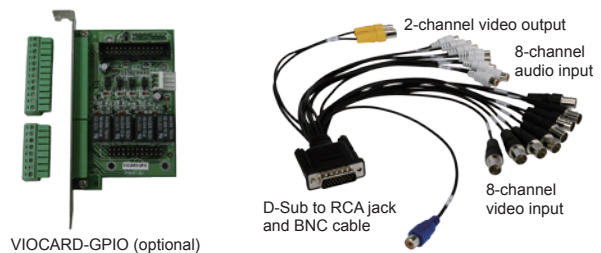
System	x86 PC compatible computer, PCI Express 1 lane, compatible with 1, 4, 8 and 16 lane PCIe slots
Memory	512MB or above

◆ Others

Dimensions	111 mm x 102.4 mm
Operating Temperature	-5°C ~ 65°C, non-condensing
Power Consumption	5.3W (3.3V@1.39A, 12V@0.06A)

Packing List

1 x IVCE-C608 capture card	
1 x Video/Audio input cable kit	1 x Utility CD
1 x Reset cable	1 x QIG



Ordering Information

Part No.	Description
IVCE-C608-R10	PCIe video/audio capture card with 8-channel Video/audio input, total 240fps@D1 for 8 channels (NTSC)
VIOCARD-GPIO-RS-R10	8 GPIO channels (4 digital inputs and 4 relay outputs)
32225-002200-100-RS	GPIO card to IVC capture card connection cable

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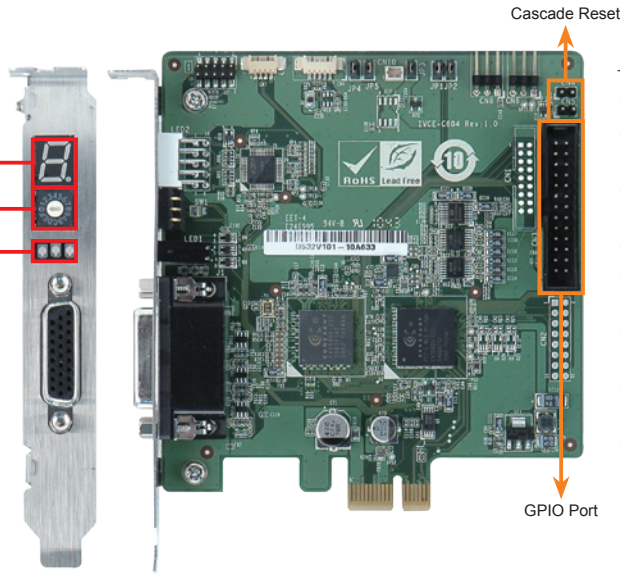
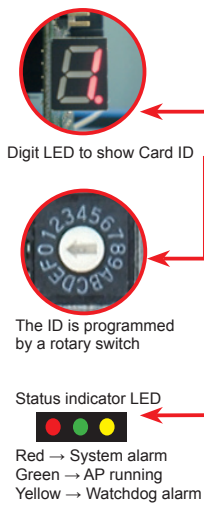
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IVCE-C604

PCIe video/audio capture card with 4-channel video/audio input, total 120fps@D1 for 4 channels (NTSC)



New



Features

- Single card 4-channel solution
- PCI Express interface provides higher bandwidth and great performance
- Compatible with Linux, Windows® XP and Windows® 7 (32-bit and 64-bit)
- Total 120fps @ D1 for 4 channels (NTSC)
- Supports multiple cards up to 64 channels video/audio input
- External GPIO daughter board with 4 inputs and 4 outputs (optional)
- SDK available for customer to create customized applications
- Supports 4 channels video/audio input and 2 channels video output



Specifications

◆ Interface

Video Input	4 channels composite video NTSC/PAL auto sensing
Video Input Type	BNC (BNC+RCA to DB-26 cable included)
Audio Input	4 channels
Audio Input Type	RCA (BNC+RCA to DB-26 cable included)
Video Output	2 channels
Video Output Type	BNC (BNC+RCA to DB-26 cable included)
Bus Interface	PCIe x1
Alarm I/O	Yes
Card ID	Rotary switch selectable with LED for ID indication
LED Indicator	Red LED for system Green LED for AP running Yellow LED for watchdog

◆ Video Processing

Video Compression	Software compression	
Video Engine	1 x Conexant CX25850	
Resolution	NTSC: 720 x 576 720 x 480 720 x 288 720 x 240 352 x 240 320 x 240 160 x 120	PAL: 720 x 576 720 x 480 720 x 288 720 x 248 352 x 288 352 x 240 320 x 240 160 x 120
Frame Rate	NTSC: Total 120fps @ D1 for 4 channels PAL: Total 100fps @ D1 for 4 channels	

◆ Audio Processing

Audio Compression	Software compression
Sampling Rate	32kHz, 44.1kHz, 48kHz, 96kHz (hardware spec.)
Quantization	24-bit (hardware spec.)

◆ Functionality

Video Loss Detection	Yes
On-screen Display	Yes
Motion Detection	Yes (hardware spec.)

◆ System Requirement

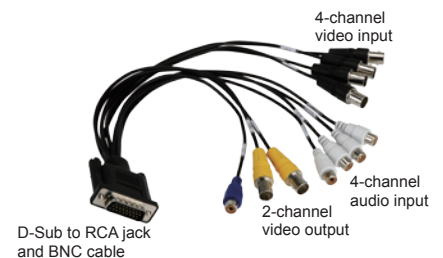
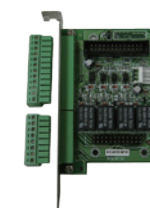
System	x86 PC compatible computer, PCI Express 1 lane, compatible with 1, 4, 8 and 16 lane PCIe slots
Memory	512MB or above

◆ Others

Dimensions	111.23 mm x 102.39 mm
Operating Temperature	-5°C ~ 65°C, non-condensing
Power Consumption	3.51W (3.3V@0.9A, 12V@0.045A)

Packing List

1 x IVCE-C604 capture card	
1 x Video/Audio input cable kit	1 x Utility CD
1 x Reset cable	1 x QIG



Ordering Information

Part No.	Description
IVCE-C604-R10	PCIe video/audio capture card with 4-channel video/audio input, total 120fps@D1 for 4 channels (NTSC)
VIOCARD-GPIO-RS-R10	8 GPIO channels (4 digital inputs and 4 relay outputs)
32225-002200-100-RS	GPIO card to IVC capture card connection cable

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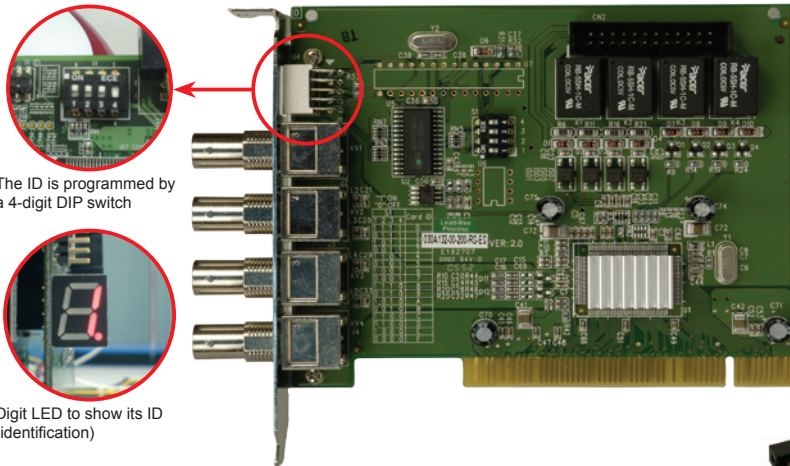
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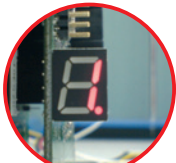
6 Panel Solutions Introduction

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)

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 cards (maximum 64 ports video input)
- Drivers for Windows® and Linux available
- Applications: Video surveillance, security, public transportations, police and government

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



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

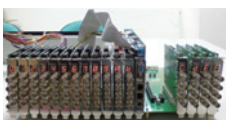
Device Driver	Windows® 2000, XP / Linux kernel 2.6
SDK	Provides SDK and demo program with sample source code in C++

◆ Video Processing

Video Engine	1 x Conexant Fusion BT878A	
Resolution	NTSC:	PAL / SECAM:
	720 x 480	720 x 576
	720 x 288	720 x 480
	720 x 240	720 x 288,
	640 x 480	720 x 240
	640 x 288	704 x 576
	640 x 240	640 x 480
	352 x 288	640 x 288
352 x 240	640 x 240	
352 x 288	352 x 288	
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	Max. Channel / Resolution Support	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



Supports multiple cards (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
Operating 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
IVC-100-RS-R20	1 x IVC-100-RS-R20
	1 x Utility CD
	1 x QIG

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)

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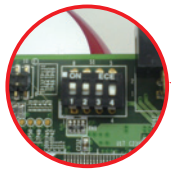
Power Supply/Peripherals

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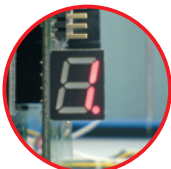
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IVC-200G-RS

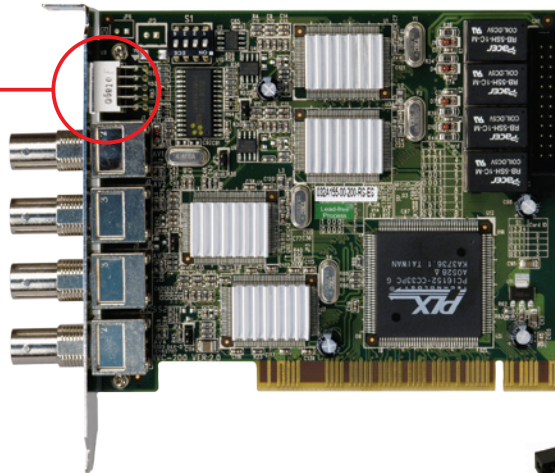
PCI video capture card with four video input channels, total 120 fps@720x480 (NTSC)



The ID is programmed by a 4-digit DIP switch



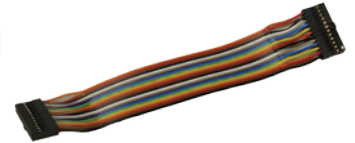
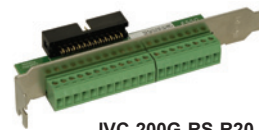
Digit LED to show its ID (identification)



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 cards (maximum 16 ports video input)
- Drivers for Windows® and Linux available
- Applications: Video surveillance, security, public transportations, police and government

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



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 4 outputs (IVC-200G-RS-R20 only)

◆ Software Support

Device Driver	Windows® 98 SE, ME, 2000, XP / Linux kernel 2.4
SDK	Provides 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	720 x 576
	720 x 288	720 x 480
	720 x 240	720 x 288
	640 x 480	720 x 240
	640 x 288	704 x 576
	640 x 240	640 x 480
	352 x 288	640 x 288
352 x 240	640 x 240	
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	Max. Channel / Resolution Support	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
Operating 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
IVC-200-RS-R20	1 x QIG
	1 x IVC-200-RS-R20
	1 x Utility CD
	1 x QIG

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)

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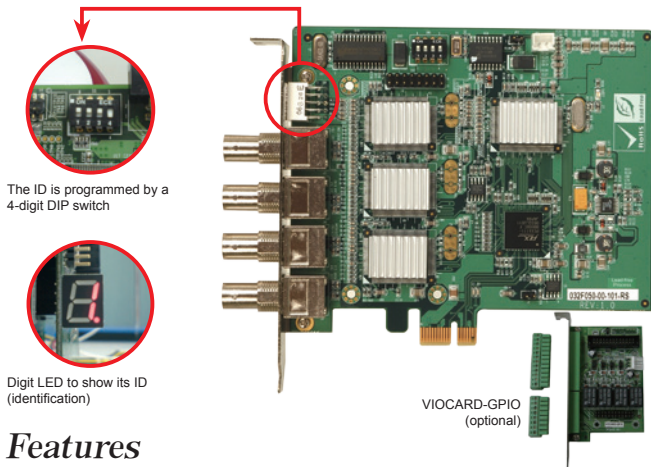
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Panel Solutions Introduction

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
- Supports multiple cards (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

Software Support

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

Video Processing

Video Engine	4 x Conexant Fusion BT878A		
Resolution	NTSC: 720 x 480, 720 x 288, 720 x 240, 640 x 480, 640 x 288, 640 x 240,	PAL / SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 640 x 480	
Frame Rate	NTSC: Up to 120 fps per channel PAL/SECAM: Up to 100 fps per channel		

System Requirement

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

Functionality

Card	Video Port	Audio Port	Max. Channel / Resolution Support	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
Graphics	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
Operating Temperature	0°C ~ 60°C (32°F~140°F), non-condensing
Power consumption	7.8W, 0.65A@12V (without relay)

Packing List

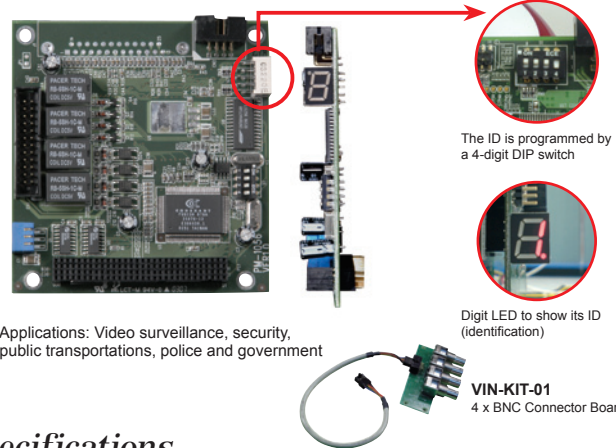
1 x IVCE-8784	
1 x Utility CD	1 x QIG

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-R21

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)

- 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	Provides SDK and demo program with sample source code in C++

Video Processing

Video Engine	1 x Conexant Fusion™ BT878A		
Resolution	NTSC: 720 x 480, 720 x 288, 720 x 240, 640 x 480, 640 x 288, 640 x 240	PAL / SECAM: 720 x 576, 720 x 480, 720 x 288, 720 x 240, 704 x 576, 640 x 480	
Frame Rate	NTSC: Total 30fps @D1 for 4 channels PAL/SECAM: 25fps @D1 for 4 channels		

Multiple Card Support

Card	Video Port	Audio Port	Max. Channel / Resolution Support	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
Graphics	DirectX compatible VGA card with YUV overlay mode supporting

Functionality

Video / Audio synchronization	Yes
Video Loss Detection	Yes
Motion Detection	Hardware built-in
Watermarking	128-bit secret key, adjustable length

Others

Dimensions	95.89 mm x 90.17 mm
Operating 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 Utility CD	1 x User manual
1 x Audio cable (P/N: 32000-038100-RS)	1 x Video flat cable (P/N: 32000-038100-RS)	

Ordering Information

Part No.	Description
PM-1056-4P-RS-R21	PCI-104 video capture card with four video input channels, total 30 fps@720x480 (NTSC)
PM-1056-4PB-RS-R21	PCI-104 video capture card with four video input channels, total 30 fps@720x480 (NTSC), and VIN-Kit-01

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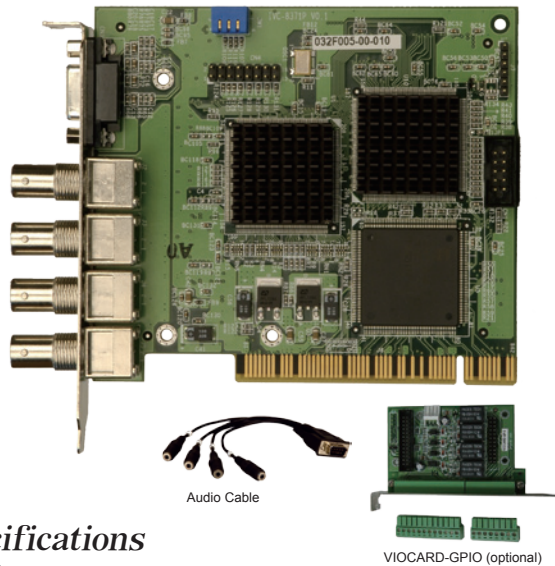
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IVC-8371P

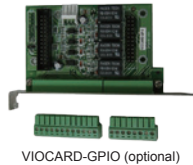
PCI video/audio capture card with four video input channels, total 30 fps@720x480(NTSC), four audio input channels, and MPEG-4 hardware codec



H.263 / MPEG-4 Hardware Codec



Audio Cable



VIOCARD-GPIO (optional)

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	Provides 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:		PAL / SECAM:	
	720 x 480	640 x 240	720 x 576	640 x 288
	720 x 240	360 x 240	720 x 288	360 x 288
	640 x 480	320 x 240	640 x 576	320 x 288

System Requirement

System	x86 compatible computer works perfectly with system using 400MHz CPU
Graphics	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 Bit Rate Control	VBR, CBR for each channel

Others

Dimensions	119.91 mm x 106.68 mm
Operating 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 jack 4-channel audio cable
1 x Utility CD	1 x QIG

Ordering Information

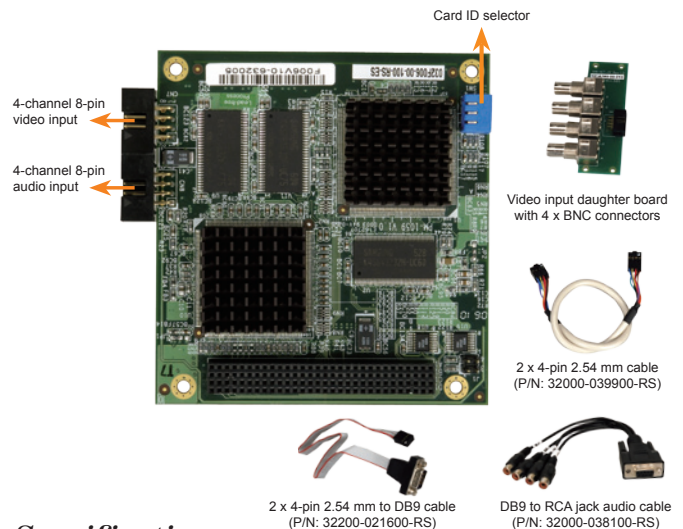
Part No.	Description
IVC-8371P-R10	PCI video/audio capture card with four video input channels, total 30 fps@720x480 (NTSC), four audio input channels, and MPEG-4 hardware codec
VIOCARD-GPIO-RS-R10	8 GPIO channels (4 digital inputs and 4 relay outputs)

PM-1059

PCI-104 video/audio capture card with four video input channels, total 30 fps@720x480(NTSC), four audio input channels, and MPEG-4 hardware codec



MPEG-4 Hardware Encoder / Decoder



4-channel 8-pin video input
4-channel 8-pin audio input

Card ID selector



Video input daughter board with 4 x BNC connectors



2 x 4-pin 2.54 mm cable (P/N: 32000-039900-RS)



2 x 4-pin 2.54 mm to DB9 cable (P/N: 32200-021600-RS)



DB9 to RCA jack audio cable (P/N: 32000-038100-RS)

Specifications

Interface

Video Input	4 channels composite video
Video Input Interface	8-pin 2.54 mm connector on board
Audio Input	4 channels
Audio Input Interface	8-pin 2.54 mm connector on board
PCI-104 Interface	PCI Rev. 2.1 compliant
Card ID	DIP switch selectable

Software Support

Device Driver	Driver for Windows® 2000 or XP
SDK	Provides 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:		PAL / SECAM:	
	720 x 480	640 x 240	720 x 576	640 x 288
	720 x 240	360 x 240	720 x 288	360 x 288
	640 x 480	320 x 240	640 x 576	320 x 288

System Requirement

System	x86 compatible computer
Graphics	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 Bit Rate Control	VBR, CBR for each channel

Audio Processing

Audio Compression	G.726 (ADPCM/PCM)
Sampling Rate	8kHz, 44.1kHz and 48kHz
Quantization	8-bit data depth

Others

Dimensions	96 mm x 91 mm
Operating 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 Video input daughter board	1 x Utility CD
1 x DB-9 to RCA jack audio cable	1 x 2 x 4-pin 2.54 mm cable	1 x QIG
1 x 2 x 4-pin 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 4 hardware codec

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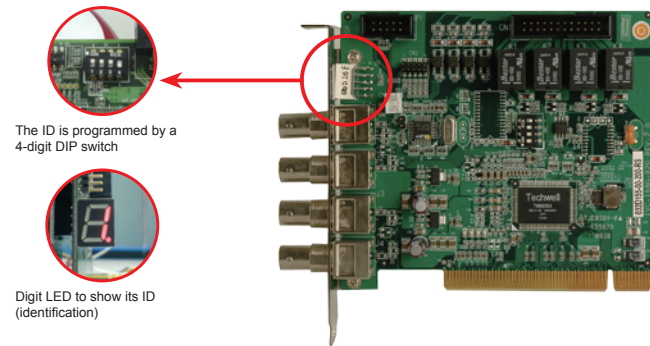
Power Supply/ Peripherals

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Panel Solutions Introduction

IVC-168G

PCI video/audio capture card with four video input channels, total 30 fps@720x480 (NTSC), and one audio input channel



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

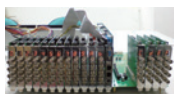
Device driver	Windows® 2000, XP, Linux kernel 2.6
SDK	Provides SDK and demo program with sample source code in C++
Surveillance software support	Software supports 25/30fps@1 channel video/audio monitoring and recording

Video Processing

Video Engine	1 x Techwell TW6805		
Resolution	NTSC:	PAL / SECAM:	
	720 x 480	720 x 576	640 x 480
	720 x 240	720 x 480	640 x 240
	640 x 480	720 x 288	352 x 288
	640 x 240	720 x 240	320 x 240
	320 x 240	704 x 576	176 x 144
160 x 120	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 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 cards (maximum 64 ports video input)

System Requirement

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

Others

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

Packing List

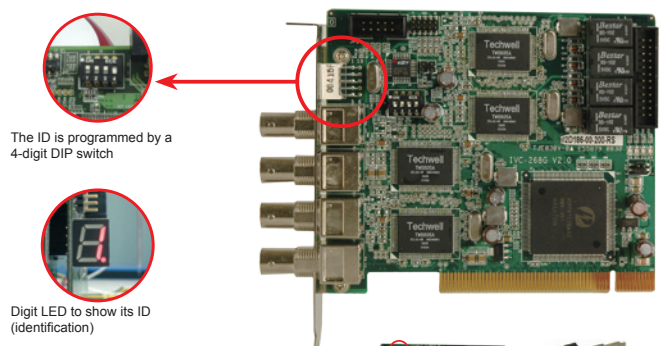
1 x IVC-168G	1 x GPIO kit
1 x Audio input kit	1 x GPIO cable
1 x Utility CD	1 x QIG

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



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	Provides 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:	PAL / SECAM:	
	720 x 480	720 x 576	640 x 480
	720 x 240	720 x 480	640 x 240
	640 x 480	720 x 288	352 x 288
	640 x 240	720 x 240	320 x 240
	320 x 240	704 x 576	176 x 144
160 x 120	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, 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
Operating Temperature	0°C ~ 60°C (32°F~140°F), non-condensing
Power Consumption	12W, 2.4A@5V (with relay)

Others

Dimensions	119.91 mm x 106.68 mm
Operating 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 Audio input kit	1 x GPIO cable
1 x Utility CD	1 x QIG

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

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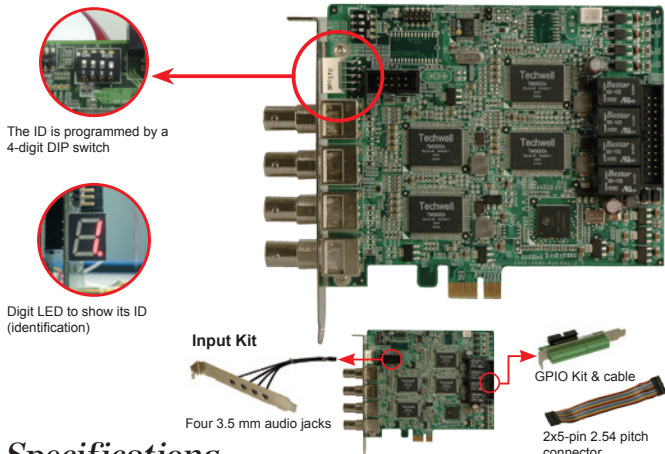
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IVCE-268G

PCI Express video/audio capture card with four video input channels, total 120 fps@720x480 (NTSC), and one audio input channel



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	Provides 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:	PAL / SECAM:	
	720 x 480	720 x 576	640 x 480
	720 x 240	720 x 480	640 x 240
	640 x 480	720 x 288	352 x 288
	640 x 240	720 x 240	320 x 240
Frame Rate	320 x 240	704 x 576	176 x 144
	160 x 120	704 x 288	160 x 120
	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
Operating Temperature	0°C ~ 60°C (32°F~140°F), non-condensing
Power Consumption	12W, 1A@12V (with relay)

Packing List

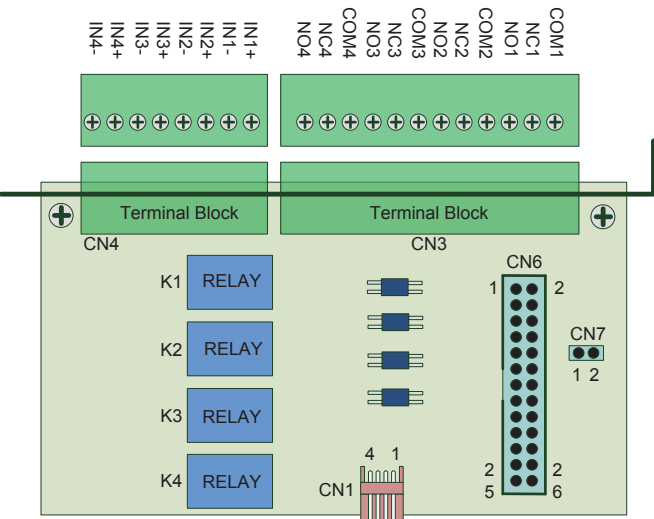
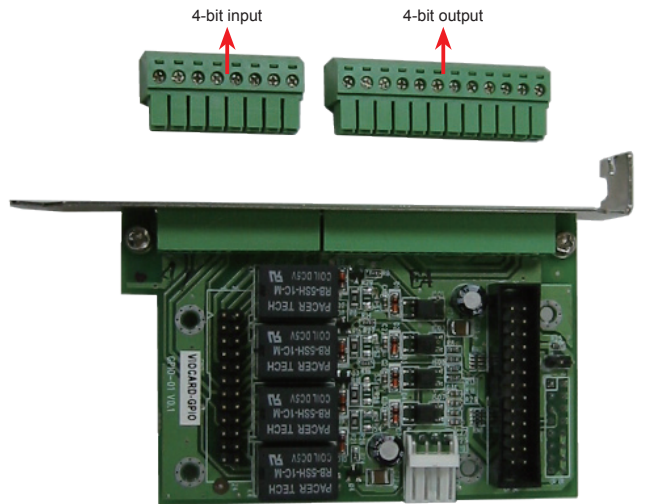
1 x IVCE-268G	1 x GPIO kit
1 x Audio input kit	1 x GPIO cable
1 x Utility CD	1 x QIG

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

VIOCARD-GPIO-RS-R10

4-bit input and 4-bit output GPIO card



Packing List

- 1 x VIOCARD-GPIO board
- 1 x QIG

Ordering Information

Part No.	Description
VIOCARD-GPIO-RS-R10	4-bit input and 4-bit output GPIO card
32225-002200-100-RS	GPIO card to IVC capture card connection cable



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