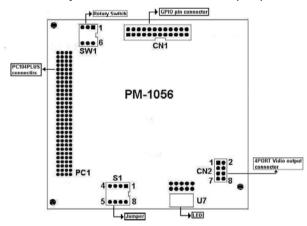
PM-1056 Hardware Diagrams

PM-1056-4PG/4PGB PM-1056-4P/PM-1056-4PB w/o GPIO (CN1)



The driver program and operation of PM-1056-4P/4PB/4PG/4PGB and IVC-100/G are the same. PM-1056-4P/4PB/4PG/4PGB is the interface of PCI/104.

PCI Signal Grouping Selection

• SW1 (Rotary Switch): Group selection of PCI configuration for PCI/104 modules

Group	SW1 Position
0	0, 4
1	1, 5
2	2, 6
3	3, 7

• Signal Grouping Description

Group	PCICLK	ID Address	INT0	INT1	REQ	GNT
0	PCICLK0	IDSEL0	INTA	INTB	REQ0	GNT0
1	PCICLK1	IDSEL1	INTB	INTC	REQ1	GNT1
2	PCICLK2	IDSEL2	INTC	INTD	REQ2	GNT2
3	PCICLK3	IDSEL3	INTD	INTA	REQ3*	GNT3*

*Note: REQ3# and GNT#3 are not signals defined in PC/104-PLUS.

Do not use MODE3 if your card does not have these signals on PC/104-PLUS connector.

4-Channel Video Capture Card with GPIO Module

IVC-100/200-RS PM-1056-4P-RS Quick Installation Guide

Version 2.1

May. 26, 2011

Package Contents

IVC-100/200 package includes the following items:

- Video capture card x 1
- CD x 1
- Hard copy of user manual x 1
- GPIO module: (for IVC-100G and IVC-200G only)
 GPIO daughter board x 1, flat cable x 1, input connector x 1 and output connector x 1



Specifications

- Function: PCI Single Universal Board Plug and Play, 4 channel video capture card
- Analog Video Capture Engine: Conexant Fusion TM 878A NTSC/ PAL / SECAM Video Decoding
- Input/Output Interface:

Video Input: pin connector for 4 channels BNC Connector Video Output: One channel Video Output selected from the driver GPIO: 4 inputs and 4 outputs (use CT-800 GPIO daughter board)

• Functionality Support:

Multiple Video Resolutions

NTSC: 720x480, 704x480, 640x480, 352x240, 320x240, 176x112 PAL: 720x576, 704x576, 640x576,352x288, 320x288, 176x144

Capture Frame Rate-Max 30 fps for 4 channels

Support Video Loss Detection Multi-screen support

Support resolution adjustment

Support image brightness, contrast, and saturation adjustment

LED for card ID configuration and identification

- Software Support: Provide WDM driver and SDK for developer
- Supporting OS: Window 98 SE, ME, 2000, XP,Linux

Others: Power Consumption: 3.5W@5V
Operating Temperature: 0~50oC
Board Size: 120.19mm x 100m

Ordering Information

IVC-100

4 Channels Video Capture card(30 FPS)

<u>IVC-100G</u>

4 Channels Video Capture card(30 FPS) with GPIO module IVC-200

High-end 4 channels video capture card(120FPS)

IVC-200G

High-end 4 channels video capture card(120FPS) with GPIO module $\underline{PM-1056-4P}$

PCI/104 4 Channels Video Capture Module (30 FPS)

PM-1056-4PG

PCI/104 4 Channels Video Capture Module (30 FPS) with GPIO module

- i. Double click "Demo" folder.
- ii. Double click "ivc-200.exe".
- iii. Click "Select Device" to choose the video capture card.
- iv. Click "Video Size" to choose the resolution. The available resolutions are 160 x 120 and 320 x 240
- v. Click "Video Channel" to activate the video input channels.
- vi. Click "GPIO" to control the input/output devices

Recording the Captured Image

- i. Open the folder Demo and double click amcap.exe.
- ii. Click Devices to select the video capture card.
- iii. Click "Options and then Preview to view the captured image.
- iv. Click Video Crossbar then select the recording channel from the Input list.



- v. Click Capture then Start Capture.
- vi. Set the directory and folder to save the captured file. Then click OK to start recording the video image.
- vii. Click Stop Capture to stop recording.

Uninstalling the Program

- i. Click Start then choose Settings and double click Control Panel.
- ii. Double click Add/Remove Programs.
- iii. Select the software of Video Capture Card and click Add/Remove.
- iv. Click Yes to uninstall the Video Capture Card software.
- v. Select "Restart my computer now" and click Finish

Demo Programs

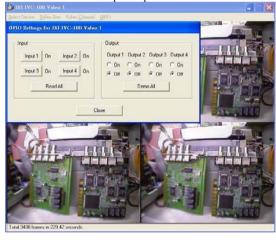
Video Image Preview for IVC-100G/100

To preview a video image, follow the steps below:

- i. Double click Demo folder.
- ii. Double click ivc-100.exe.
- iii. Click Select Device to choose the video capture card.



- iv. Click Video Size to choose the resolution. The available resolutions are 160 x 120 and 320 x 240.
- v. Click Video Channel to activate the video input channels.
- Vi. Click GPIO to control the input/output devices.

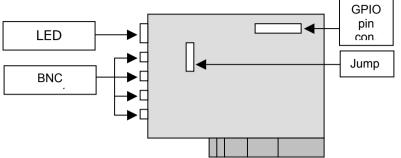


Video Image Preview for IVC-200G/200

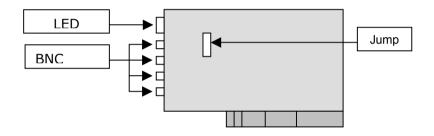
Hardware Connections & Settings Illustration for Video Capture Card

IVC-100G

GPIO = general purpose input output

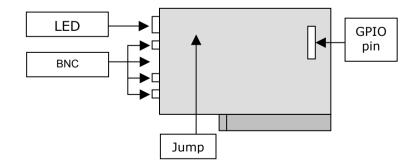


IVC-100

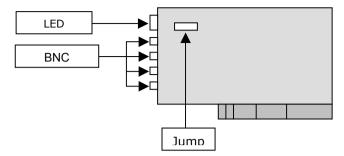


IVC-200G

GPIO = general purpose input output



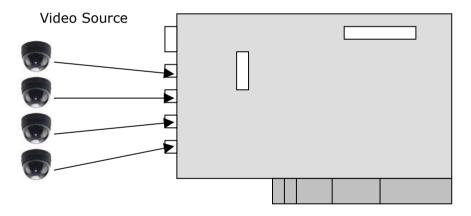
IVC-200



Connections to the Video Source

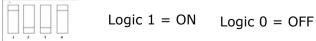
Connect your video source to the BNC connector of the video capture card. Take IVC-100G for example:

IVC-100G



LED Jumper Settings

The jumper setting controls the card number on the LED.



Jumper Setting Table

1	2	3	4	Card Number on the LED		
1	1	1	1	0		
0	1	1	1	1		
1	0	1	1	2		
0	0	1	1	3		
1	1	0	1	4		
0	1	0	1	5		
1	0	0	1	6		
0	0	0	1	7		
1	1	1	0	8		
0	1	1	0	9		
1	0	1	0	A		
0	0	1	0	В		
1	1	0	0	С		
0	1	0	0	D		
1	0	0	0	E		
0	0	0	0	F		

Installation Procedures-Driver Installation

IEI driver installation program makes the driver installation of multiple cards an easy job. The steps of driver installation are described as below:

Steps:

- i. Adjust the jumper setting of the video capture card.
- ii. Insert the video capture card(s) into the computer system, and then turn on the computer.
- The system will find a new device on the system and ask you to install the driver. Click Cancel to close the dialog box.
- iv. Run the program ieisetup.exe from the IEI Installation CD.
- v. The window will show a welcome message for installation. Click the Next button for next step.
- vi. The window will then show a message of current configuration, click Next to start the installation
- vii. The window will show a message to warn you that the software does not contain a Microsoft digital signature. Click Yes to continue the installation.
- viii. There will be another window message to ask you to install an audio driver. Click Yes to continue.
- ix. For multi-card system, you will be asked to install video and audio drivers for every card in your system. Click Yes to continue the installation.



- x. After the driver has been successfully installed, click Finish.
- XI. Restart your computer when you finish installing DirectX.