MP-878D Series

Mini-PCI Video Capture Card

User's Manual



Edition	Release Date
1.0	2007/01/25
1.1	2008/06/10
1.2	2008/09/22
1.3	2009/06/29
1.4	2014/06/04

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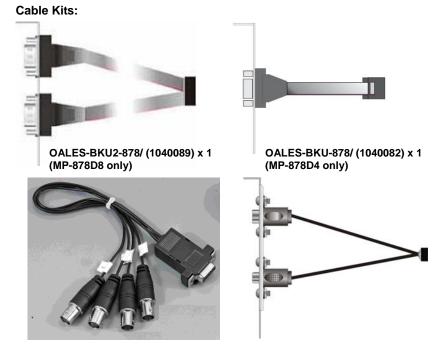
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Any questions please visit our website at http://www.commell.com.tw

Packing List:

Please check the package content before you starting using the board.



OALBNCE4/ (1040061) x 2 (MP-878D8 only) OALBNCE4/ (1040061) x 1 (MP-878D4 only)

OALTV-OUT-SE/ (1040152) x1 (MP-878D only) OALTV-OUT-SE/ (1040152) x2 (MP-878D2 only)

Hardware:

- 1 x MP-878 series Mini-PCI Video Capture card
- 1 x Cable support S-video & Composite for MP-878D
- 2 x Cable support S-video & Composite for MP-878D2
- 1 x BNC cable & 10-pin header to D-sub 9-pin cable for MP-878D4
- 2 x BNC cable & 10-pin header to D-sub 9-pin cable for MP-878D8
- 1 x Utility CD

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Chapter 1 < Introduction>

1.1 < Product Overview>

COMMELL MP-878D series is a Video input Video Capture Card. That supports up to D1 resolution at 30/25 fps (one Chip). Also MP-878D/D4 series supports NTSC/PAL signals.(MP-878D2/D8 is allow 2 Cards which installed in one PC system. If user wants to use more than two MP-878D2/D8 Mini-PCI capture card in one system, User needs to be aware of that each 878 chip on the card needs to be set for different PCI Subsytem ID in EEPROM device. And please inform COMMELL to set different ID before purchase. Also note , MP-878D2/D8 ONLY compatible with COMMELL's Motherboard

1.2 <Hardware requirement>

I. Intel Pentium III 1.0 GHz or above (The CPU speed depends on the video Frame rate, channels and resolution)
II. 256 MB RAM or above
III. Free Mini-PCI slot

1.3 <Software requirement>

Microsoft Windows 2000/XP with DirectX 9.0 or above

1.4 <Dimensions>

44.6 x 59.5 mm (Mini-PCI Type-III B)



Figure 1.2

1.5 <Hardware Interface >

Connector: CN_DVR2

Type: onboard 2 x 5-pin header, pitch=2.0mm

Pin	Description	Pin	Description
1	Ground	2	COMP11
3	Ground	4	COMP12
5	Ground	6	C1
7	Ground	8	COMP10
9	Ground	10	COMP13

Connector: CN_DVR1

Type: onboard 2 x 5-pin header, pitch=2.0mm

Pin	Description	Pin	Description
1	Ground	2	COMP21
3	Ground	4	COMP22
5	Ground	6	C2
7	Ground	8	COMP20
9	Ground	10	COMP23

1.6 <Hardware installation >

- 1. Turn off your computer and unplug the power cord.
- 2. Remove the cover of your computer.
- Touch the metal part on the surface of your computer to neutralize Any static electricity that might be on your body.
- 4. Place the MP-878D series into the Motherboard's Mini-PCI slot and connect Corresponding accessories to the MP-878D series.
- 5. Replace the cover of your computer chassis
- 6. Plug in the power cord and turn on the computer.

1.7 <Software installation >

When you completed the Hardware installation, the system will auto –detect And a message pops up as following:

Found New Hardware Wizard				
	Welcome to the Found New Hardware Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy Can Windows connect to Windows Update to search for software? Yes, this time only Yes, now and every time I connect a device No, not this time			
	< Back Next > Cancel			

Please all select "Cancel"

Then, Insert the driver CD into your system's CD-ROM to Set up MP-878D series.

Run Setup.exe

(E:/Media/SINGLE.EXE_IMAGE/Disk Image/Disk/Setup.exe)

Please select "Next" to continue.

TCC878InstallCD - InstallShield Wizard				
	MP-878Dx Installation			
	The InstallShield Wizard will install MP-878Dx Device Driver on your computer. To comtinue, click Next.			
	It is strongly recommended that you exit all Windows			
	< Back Next > Cancel			

Please read the following License Agreement. Press the Page Down key to see the rest of agreement and click "Yes" to continue the installation.

TCC878InstallCD - InstallShield Wizard				
License Agreement Please read the following license agreement carefully.				
Taiwan Commate Computer(TCC) Inc. Software License Agreement IMPORTANT - READ CAREFULLY: This TCC License Agreement is a legal agreement between you (either an individual or a single entity, purchaser or end user of the product) and Taiwan Commate Computer Inc., for the software identified, which includes computer software and may include associated media, printed materials, additional computer software applications, and online or electronic documentation (SOFTWARE). By downloading, installing, copying, or otherwise using the SOFTWARE, you agree to be bound by the terms of this LICENSE. If you do not agree to the terms of this LICENSE, do not install or use the SOFTWARE; this license grants you a non-exclusive, and limited license to install and use only a single copy of the SOFTWARE on a single product.				
 I accept the terms of the license agreement I do not accept the terms of the license agreement 				
InstallShield Cancel				

Please fill in your User Name & Company Name. Then, click "Next ".

TCC878InstallCD - InstallShield Wizard	
Customer Information Please enter your information.	
Please enter your name and the name of the company for which you work.	
User Name:	
user	
Company Name:	
user	
InstallShield	
< Back Next >	Cancel

Please select Install in this page.

TCC878InstallCD - InstallShield Wizard	
Ready to Install the Program The wizard is ready to begin installation.	K
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. Click Ca the wizard.	ancel to exit
InstallShield	Cancel



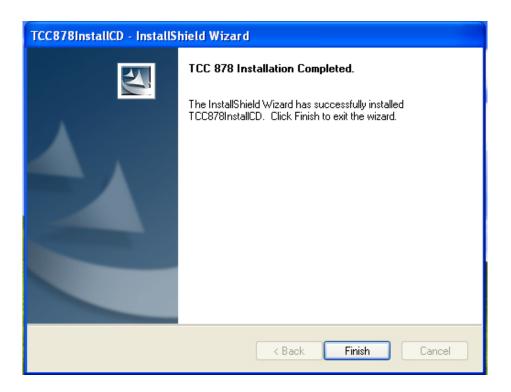




Har dwa	re Installation
<u>.</u>	The software you are installing for this hardware: TCCD22XBar, WDM Crossbar has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation



When the following message appears, click "Finish" to complete the installation and restart Windows or your computer.



1.8 <Sample Program>

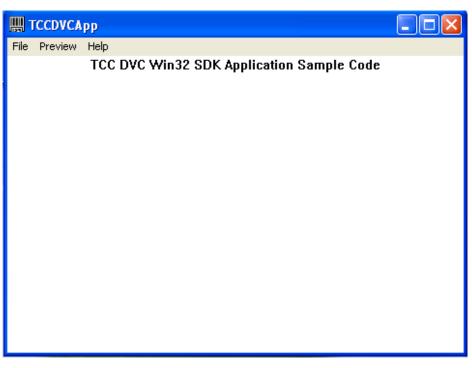
When you completed hardware & software installation, you can use COMMELL "TCCVDCApp" sample program to test.

You can find TCCDVCApp.exe on desktop.



Please double -click "TCCDVCApp.exep, It'll pops up as following.

Then Please Push "Preview" on the left-upper Menu.



You'll get the program interface as following.

Preview Window Dialog		\mathbf{X}
		Video Control Device ID: 0 V
		Channel 0 V Status: Idle Color: N/A V Video Size View Rate: V/S
		Video Resolution: N/A Video Standard: None Image Adjustment START SnapShot
		Channel No Setup Device Ch 0 Video Input Select Comp S-Video C Callback Test Close

Explanation of Sample program function

	Video Control
	Channel 0 👻
[Status: Idle
	Color: N/A
	Video Size View
	Rate: 0 🚽 f/s
	Video Resolution: N/A <mark>▼</mark>
	Video Standard:
	None
	Image Adjustment
	START SnapShot
	Channel No Setup
]	Device Ch
U	0 🛛 1 🔽
Γ	Video Input Select —
2	omp CS-Video C
0	Callback Test Close

Device ID: It is mean BT878I Chipset. Channel ID: Support Video input per device. Snapshot: Catch the image on working channel. Callback Test: Catch the series image on working channel Note: Every channel is work separately, when you want to change any setting, please stop all channels which working.

<Video Motion>

Please choose "Video Motion", then you can see program interface as following.

Video Motion Demo Dialog	×
Video Motion Detection	-1
Enable 🔽 Action On Motion: 🗖 Indicator: 🛙	-
Threshold: 3	

Enable:

If user "check" this box, it will enable video motion detection.

Action On Motion:

If this box is checked, the registered call back function will be executed, when video motion is been detected. The call back function needs to be registered during application initialization.

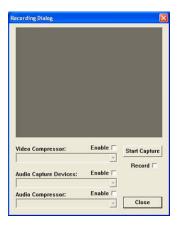
Indicator:

If this box is checked, it will show red spots as an motion indication, when the video motion is been detected.

Threshold:

Select motion detection sensitivity level, the number smaller, the sensitivity stronger.

<Recording Dialog> RESERVE !! No Function at the moment



Video Compressor:

Enable video compressor link, the list box window will list all video compressor components in the system. The user can select its own video compressor from the list, if user has installed own video compressor.

Audio Capture Devices:

Enable audio capture device link, the list box window will list all audio capture device in the system. The user can select one of audio device from the list.

Audio Compressor:

Enable audio compressor link, the list box window will list all audio compressor components in the system. The user can select its own audio compressor from the list, if user has installed own audio compressor.

Start Capture Button:

Press the button, the test program will start to run, user will see real time video on the preview window.

Record:

User check this, it will start to record the video.

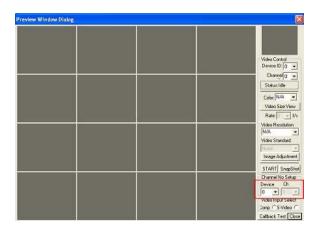
1.9 <How to Get the video> (Based on MP-878D /D2 /D4 /D8) :

For example to get 1 video input (MP-878D) / 4 video input (MP-878D4)

1. Set Video input channel / per chip :

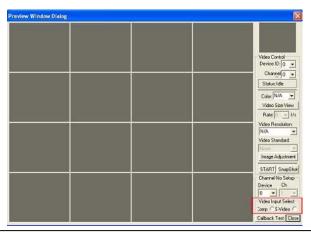
Device : Select 0 (Mean 1st BT878 chip ID)

- Ch : Select 1 (Mean 1 x Video input for MP-878D)
- Ch : Select 4 (Mean 4 x Video input for MP-878D4)



2. Video Input Source Select :

Select Comp (Composite) or S-video for each channel



3. Video Control setting

Device ID : 0 (Mean first BT878 chip)

Channel : 0 (First channel - video input for MP-878D / MP-878D4)

- Channel : 1 (2nd channel video input for MP-878D4)
- Channel : 2 (3rd channel video input for MP-878D4)

Channel : 3 (4th channel - video input for MP-878D4)

Preview Window Dialog		X
		Video Control Device ID 0 - Channel 0 -
		Status:Idle Colos:N/A • Video Size View Rate: • • 1/a
		Video Resolution N/A ····································
		START SnapShot Channel No Setup Device Ch 0 • • • Video Input Select Jorip C S-Video C

4. Push Start , then you'll get the video .

Note : You'll need to push "Start" for each channel after Video Control setting

Preview Window Dialog	<u>1</u>		Ē
			Video Control Device ID () Changel () Statust de Color, IMA Video Size View
			Rate U Ua Video Resolution N/A Video Standard Minne Image Adjustment
			START SnepSho Channel No Setup Device Ch O Video Input Select Zomp C S-Video C

For example to get 2 video input (MP-878D2) / 8 video input (MP-878D8)

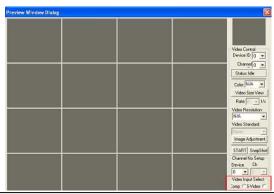
1. Set Video input channel / per chip :

Device : Select 0 (Mean 1st BT878 chip ID) Ch : Select 1 (Mean 1 x Video input for MP-878D2) Ch : Select 4 (Mean 4 x Video input for MP-878D8) Device : Select 1 (Mean 2nd BT878 chip ID) Ch : Select 1 (Mean 1 x Video input for MP-878D2) Ch : Select 4 (Mean 4 x Video input for MP-878D8)

Preview Window Dialog		
	•	Video Control Device ID 0 -
		Channel 0 V Status: Idle Color: N/A V Video Size View Rate: Uz
		Video Resolution N/A • Video Standard Finne • Image Adjustmerk START SnepShot
		Channel No Setup Device Ch 0 • • Video Input Select Jomp C S-Video C

2. Video Input Source Select :

Select Comp (Composite) or S-video for each channel



3. Video Control setting

Device ID : 0 (Mean 1st BT878 chip)

Channel : 0 (First channel - video input for MP-878D2 / MP-878D8)

- Channel : 1 (2nd channel video input for MP-878D8)
- Channel : 2 (3rd channel video input for MP-878D8)
- Channel : 3 (4th channel video input for MP-878D8)
- Device ID: 1 (Mean 2nd BT878 chip)
- Channel : 0 (2nd / 5th channel video input for MP-878D2 / MP-878D8)
- Channel : 1 (6th channel video input for MP-878D8)
- Channel : 2 (7th channel video input for MP-878D8)
- Channel : 3 (8th channel video input for MP-878D8)

Preview Window Dialog		X
		Video Control Device ID: 0 - Channel 0 -
		 Status: Idle Colos: N/A v Video Size View Rate: View Video Resolution:
		Video Hesolution N/A Video Standard None - Image Adjustment START SnepShot
		Channel No Setup Device Ch 0 • · · Video Input Select Jomp C S-Video C

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4. Push Start , then you'll get the video .

Note : You'll need to push "Start" for each channel after Video Control setting

Preview Window Dialog		
		Video Control Device ID 0 - Channel 0 - Status: Idle Calas: N/A -
		Rate // //// Video Resolution: N/A · Video Standard Image Adjustment
		START SnepShot Channel No Setup Device Ch 0 • • Video Input Select Jorrp C S Video C Callback Test Close

Contact Information

Any advice or comment about our products and service, or anything we can help you please don't hesitate to contact with us. We will do our best to support you for your products, projects a business.

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