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Trident Cyber 9397 DVD 2D/3D Accelerator with LCD Panel controller and PanelLink Sil150 Digital interface using MDR20 Standard Connector

1. SP9397AL Features

High Performance Integrated 2D/3D Graphics and Multimedia Accelerator

- Integrated 64-bit graphics accelerator/24-bit RAMDAC/clock-synthesizer core
- Support resolution up to 1280x1024@85Hz (CRT), SXGA for TFT (LCD)
- 133MHz Sideband AGP

Supports SGRAM up to 83 MHz 4/8MB display memory configurations @3.3V
 3D Graphics Engine

The 3D engine is integrated with a triangle set-up engine

 3D Engine accomplishes Gouraud shading to provide smooth shading for colors across surfaces.

- Perspective correction texture mapping
- Bi-linear texture filtering for interpolating
- Alpha blending to compensate colors for the opacity of two colors blended.
- Z-buffering (16-bit/24-bit)
- Video texturing to overlay 2D video play-back onto 3D image.
- Fogging to simulate weather effects.
- Palletized texture mapping(1,4 or 8-bit) for memory and bandwidth reduction.
- Anti-aliasing to reduce or eliminate jaggies resulted from alias rendering

Improved Multimedia Acceleration

 TrueVideo[®] processing is performed by utilizing our proprietary edge recovery algorithm for sharper line visibility, de-interlacing, anti-tearing, multitap horizontal filtering, dithering, and scaling operations with bilinear interpolation in both horizontal and vertical directions

• VMI port for external video transfer, like H/W MPEG1/2 or Video Conference Support PanelLink Digital interface LCD Monitor.

- VESA P&D[™] and VESA FPDI-2[™] standard compliant
- Adjustable TMDSTM low-voltage swing signaling for long distance support
- Auto-expansion and centering for VGA text and graphics modes for LCD
- Universal transmitter, operates with Sil151, Sil141, Sil101, Sil201 receivers
- MDR20 PanelLink[™] standard connector

Dual-view and simultaneous displays in 24bit color with mixed video/graphics

Comprehensive Power Management

 DPMS and DDC Monitor communication for Green PC and CRT Plug and Play support

JJJJIIL DWITCH DL			
Panel ID	Panel Type	Resolution	SW[1:4]
А	TFT	640 X 480	0000
В	TFT	800 X 600	1000
С	TFT	1024 X 768	0100
D	TFT	1280 X 1024	1100

SP9397AL SWITCH SETTING

NOTE: 0 = ON1 = OFF

2. Board outline

SP9397AL using SGRAM 8MB on board, board size: 161 x 108 mm.



3 Hardware Installation

3.1 Package Contents

- 1. Trident 9397AL card.
- CD title or Software diskettes 2.
- 3. This manual.

3.2 Installing the Card

- 1.
- Turn off your computer. Remove the cover of the computer per the owner's manual. 2.
- Install the card in the AGP bus slots. 3.
- Replace the cover. 4.

3.3 Resolutions and colors supported:

9397AL AGP bus VGA cards are fully compatible VGA with the addition of Hi-Color and True Color modes depending on the amount of video memory stalled. The amount of memory needed to display various resolutions is shown below

Note: ✓ : Supported and accelerated by the graphics engine

X : Mode not Supported

Resolution & Colors	BPP	4MB SGRAM	8MB SGRAM
640X480-256	8	~	~
640X480-64K	16	~	~
640X480-16M	32	~	~
800X600-256	8	~	~
800X600-64K	16	~	~
800X600-16M	32	~	~
1024X768-256	8	~	~
1024X768-64K	16	~	~
1024X768-16M	32	~	~
1280X1024-256	8	~	~
1280X1024-64K	16	х	~
1600X1200-256	8	~	~

4. Smart Installation

4.1 Put the Smart Installation CD in your CD-ROM



4.2 Select the language for you. Default is same as system language. (Click small UP/DOWN arrow for more languages) Then click the **Driver installation** button



4.3 Comes up the Confirm Installation window

Click **OK**, if the information and driver location is fine.

Confirm Installation		×
System information Your operating system: Your video card: Your video chipset:	Windows 98 Trident T9397	Cancel Help
Driver information	e:\Drivers\Trident\9397\WIN98\ Browse	

4.4 The Driver Confirmation window

Then click Install button

Driver Confirmation	×
Trident Cyber 9397DVD PCI/AGP (v6.45.5422.95)	Linstall Cancel Help
Trident Cyber 9397DVD PCI/AGP (v6.45.5422.95)	
This driver is going to be installed onto your system. Click "Install" to accept or "Cancel" to quit the installation.	

4.5 Install complete, please restart your computer.

5. Manually install Windows 95 & Windows 98 drivers

5.1 Installation and Setup

5.1.1 Windows95 VER: OSR2.5

The Windows setup program installs and modifies all of the necessary files. Follow these steps to install the Windows 95 driver.

- Insert the "Window 95 Driver" Installation Diskette or DISC (CD Title Driver).
- Select Control Panel from the My Computer group.

🚇 My C	omputer	r	- 🗆 ×
<u>File</u>	it <u>V</u> iew	<u>H</u> elp	
	J.		
3½ Flopp	y (A:)	(C:)	
Cd_30	(D:)	ontrol Panel	1
1 object(s) selected	d	//

• Select the **Display** icon



- Double-click on the **Display** icon in the Setting -> **Control Panel** folder. You can
 also click the right mouse button anywhere on the desktop and select the
 Properties option form the pop-out menu.
- Click the **Settings** tab.
- Click the **Change** Display Type... button.

Display Properties	? ×
Background Screen Save	r Appearance Settings
Color palette	Desktop area
116 Color	640 by 480 pixels
Eont size	
Small Fonts	Custom
	Change Display <u>T</u> ype
	OK Cancel Apply

• Click the **Change** button

Advanced Display Pro	operties	? ×
Adapter Monitor Pe	formance	
Adapter / Driver info	I Graphics Adapter (VGA)	Change
Manufacturer:	(Standard display types)	
Current files:	4.0 Vita drv "Vdd	
	OK Ca	ncel <u>Apply</u>

• Click the Have Disk button.

Select D	evice	×
9	Click the Display adap you don't know which disk for this device, c	oters that matches your hardware, and then click OK. If model you have, click OK. If you have an installation lick Have Disk.
<u>M</u> anufac	turers:	Models:
🖳 🖳 (Star	ndard display types) 📥	🖳 Standard Display Adapter (VGA)
📃 📃 Actix	Systems 🚽	🖳 Standard PCI Graphics Adapter
📃 🖳 ATI 1	l echnologies	🖳 Standard PCI Graphics Adapter (VGA)
📃 🖳 Boca	a Research	🖳 Standard PCI Graphics Adapter (XGA)
📃 🖳 Card	inal Technologies 💌	🖳 Super VGA
		Have Disk
		OK Cancel

• Change directories and Select Trident Cyber 9397.

Diskette is A: or B:\WIN95 , Disc (CD Title) is E:\drivers\Trident\9397\WIN95

● ("A:" or "B:"→ Diskette Drive "E:"→CD Drive

Install Fr	om Disk	×
_	Insert the manufacturer's installation disk into the drive selected, and then click OK.	OK Cancel
	Copy manufacturer's files from:	<u>B</u> rowse

Open		? ×
File pame: trid95.inf trid95.inf	Eolders: e:\drivers\trident\9397\win95 e:\ e: drivers e: trident e: 9397 e: win95	OK Cancel
	Dri <u>v</u> es: Ø e:	

- Select Trident Cyber 9397DVD PCI/AGP driver form the list and click OK button. If a message stating that one or more driver files is older than the files on the system respond YES to overwrite the files.
- Click the Close button and Apply button, and restart your computer.
- 5.1.2 Windows98
- Select Control Panel from My Computer group.



• Select the **Display** icon

Display Properties ? 🗙
Background Screen Saver Appearance Effects Web Settings
Wallpaper Select an HTML Document or a picture: Itstoot Black Thatch Black Thatch Black Bivets Bubbles Conter
OK Cancel Apply

- Double-click on the **Display** icon in the Setting -> **Control Panel** folder. You can also click the right mouse button anywhere on the desktop and select the Properties option form the pop-out menu.
- Click the Settings tab.



 Then show [Unknown Device.] Properties tab Select Adapter



• Then show Standard PCI Graphics.... tab Select Change



• Then show Update Device tab Select Next



 Then show Update Device tab Select Search for a better.....
 Then select Next



 Then show Update Device tab If the Specify a location is wrong Please select Browse



• Then show **Browse for Folder** tab ,Select you need driver Then select **OK**

Browse for Folder
Select the folder that contains driver information (.INF file) for this device.
📄 🚔 Spcd507 (D:)
📄 📄 Drivers
📄 🕀 💼 3dfx 👘
🕀 💼 💼 Intel
😟 🕀 🧰 S3
i ⊕ · 🧰 Sis
🗖 📄 💼 Trident
🖻 – 🧰 9397
Nt40
Win95
± <u> </u>
n 🗐 👘 👘 👘 🔁 🔤
OK Cancel

• Then show Update Device Driver Wizard tab Select CD-ROM driver Click the Specify a locator, if right Then select Next



 Then show Update Device Driver Wizard tab Select Next

Update Device Driver Wizard	
	Windows driver file search for the device: Trident Cyber 9397DVD PCI/AGP (v6.45.5422.95)
	Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
	Location of driver:
	< <u>B</u> ack <u>Next></u> Cancel

• Then show Update Device Driver Wizard tab Select Finish

Update Device Driver Wizard		
	Trident Cyber 9397DVD PCI/AGP (v6.45.5422.95)	
	Windows has finished installing an updated driver for your hardware device.	
~	< Back	
	< Back Finish Cancel	

 Then show System Settings Change tab Select OK



5.2 How to Change Color Depth and Resolution

- 1. Make sure that you have installed the **WINDOWS95** Driver.
- 2. Click on the Start box in the lower left corner and proceed to Control Panel.
- 3. Inside the **Control panel** group , click on **Display** icon to open the **Display Properties** folder and select the **Setting table**
- 4. Click on the pull-down arrow from the **Color** palette area to select color depth or adjust the sliding bar to either **Less** or **More** from the **Desktop area**
- Select OK to restart WINDOWS95 and new color depth or the new resolution takes effect.

5.3 How to Change Display Device

- 1. Make sure that you have installed the **WINDOWS95** Driver.
- 2. Click on the Start box in the lower left corner and proceed to Control Panel.
- 3. Inside the **Control panel** group , click on **Display** icon to open the **Display Properties** folder and select the **Display Device**



6. Windows NT4.0 Setup

The following steps describe how to install WindowsNT4.0 display drivers

- 1. Select **Control Panel** from the **Main** group.
- 2. Select the **Display** icon.
- 3. Select Change Display Type.
- 4. Select Change from the Adapter Type area.
- 5. Select Other.
- 6. Place the Windows NT Installation Disk or Disc (CD Title) into Driver. Click OK.
- 7. Select Install and click "YES" when the Installing Driver dialog box appears.
- When the WINDOWS NT Setup dialog box appears select driver A or CD ROM, and click "Continue".

A message appears stating that drivers were successfully installed. Click **OK**. Another message appears stating that the driver could not be restarted dynamically. Restart **Windows NT** to run the new driver. Click **OK**.

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two condition.(1).this device may not cause harmful interference. (2).this device must accept any interference received, including interference that may cause undesired operation

Warning:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, used and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different form that to which the receiver in connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice:

(1) An Unshielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord by used.

(2) Use only shielded cables to connect I/O devices to this equipment.3

(3) Changes or modifications not expressly approved by the party responsible for compliance could void the use's authority to operate the equipment.

Trademark Acknowledgments

All brand names and trademarks are the property of their owners.