# SUNDAX ENTERPRISES LTD.

VGA CARD

FCC ID : XXXM64-VANTA

# FEDERAL COMMUNICATIONS COMMISSION

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

# NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that 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 from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables (except AV cable and S cable)must be used in order to comply with emission limits.

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

Ι

Congratulations and welcome your purchase of this advanced graphic accelerator or sound card. This enclosed setup CD contains all the information about the board. May you enjoy it doing it by yourself. Following is the important installation procedure in Chapter 1 and 2.

Chapter 1 Hardware Installation - Safely placing the card in your computer Chapter 2 Software Installation - Easily installing the enhanced driver Chapter 3 TV-out setup(Optional) Chapter 4 Video Mode Tables

#### Chapter 1 Hardware Installation - Safely placing the card in your computer

Please power off your computer and monitor, then disconnect the monitor from the back of your computer.
 Be aware to discharge your body's static electricity by touching the metal surface of computer chassis. Then remove the computer cover.

3. If there is an existing card in your system, replace it gently but save the screw. Or, you may need to remove the cover from the rear of expansion slot that you select.

4. Align your card with an empty corresponding expansion slot (PCI or AGP), then carefully grasp the card by top edge and put it firmly into the slot. Secure the screw to fasten the card in place and replace the computer cover.

5. Plug the monitor cable into your card, then turn on the computer and monitor.

6. Now you have finished the hardware installation and are ready to install the driver.

#### Chapter 2 Software installation - Easily installing the enhanced driver

The Setup CD title bring you to take advantage of your card's performance. But, there are some issues you should note in advance.

1. If it is the first time you install the card by the Plug and Play feature of Windows 95/98/2000. Windows will find a new hardware and ask for the driver. There are four (4) different kind conditions from Windows 98, Windows 2000, Windows 95 OSR 2, Windows 95 and Windows NT. The basic rule is to click " Next ", " Next"...until " Finish ". For Windows 2000:

(The general rule is to click Next", Next" ... until Finish")

After launch Windows 2000, you will see a dialog similar to the one (Add new hardware Wizard) in the window.



The default is "Next ", press "Next ", after that, you will see a dialog as follows.

Found New Hardware Wizard	
Install Hardware Device Drivers A device driver is a software program that enables a hardware device to work with an operating system.	
This wizard will complete the installation for this device:	
Video Controller (VGA Compatible)	
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.	
What do you want the wizard to do?	
<ul> <li>Search for a suitable driver for my device (recommended)</li> </ul>	
O Display a list of the known drivers for this device so that I can choose a specific driver	
Click Here	
< Back Next > Cancel	

The default is " Search for a suitable driver.... ", select it then press "Next ", after that, you will see a dialog as follows.

Found New Hardware Wizard
Locate Driver Files Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
Video Controller (VGA Compatible)
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
✓ Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update     Click Here
< Back Next > Cancel

The default is "Next ", press "Next ", after that, you will see a dialog as follows.



For Windows 98:

(The general rule is to click Next", Next" ... until Finish") After launch Windows 98, you will see a dialog similar to the one (Add new hardware Wizard) in the window. \_

Add New Hardware Wiz	ard				
	This wizard searches for new drivers for:				
	PCI Plug and Play Device				
	A device driver is a software program that makes a hardware device work.				
🍣 📚					
	Click here				
	< Back Next> Cancel				

The default is "Next", press "Next ", after that, you will see a dialog as follows.



The default is "Search for the best driver.... ", select it then press "Next ", after that, you will see a dialog as

# follows.

Add New Hardware Wiz	ard
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
	< <u>B</u> ack Next > Cancel

The default is "Next ", press "Next ", after that, you will see a dialog as follows.



The default is "Next ", press "Next ", after that, you will see a dialog as follows.



While Windows prompt you to restart Windows, please click "Yes " to restart your system. After Windows restarting, go to step 2.

#### For Windows 95 OSR2:

The general rules is to click Next", Next".... until Finish "

While Windows prompt you to restart Windows, Click "Yes " to restart Windows. After Windows restarting, go to step 2.

#### For Windows 95 (Original Version)

After launch Windows 95, you will see a dialog similar to the one (New Hardware Found) in the windows. Click " Do not install a driver (Windows will not prompt you again) " then press " OK ".

After that, if the card you are installing is a VGA card, you will see the below dialog; for the other cards, you can skip the following procedure and go directly to step 2.

While Windows prompt you restart Windows; please click " Yes " to restart your system. After Windows restarting go to step 2.

#### For Windows NT:

1. Please select VGA mode from boot menu, if it is your first time to start Windows NT.

2. Insert the Setup CD into your CD-ROM driver.

IF Windows 95/98/2000 runs the CD-ROM automatically, proceed to step 3.

3. It will auto-launch the setup program on Windows 95/98/2000 or Windows NT then click a proper driver.

4. If you are on the other platform on the setup program does not auto-run, please double click the

**<u>MSSETUP.EXE</u>** on the root of the setup CD. After a setup display in the specific setup window, you can conveniently install the driver and related software by the on-screen instructions to complete the installation.

While Windows prompt you to restart Windows, please click YES to restart your system.

#### Chapter 3 TV-out setup(Optional)

TV-out function is executable by connecting S cable or AV cable with television. First, you must choose CRT monitor or TV. If you choose TV, please choose correct TV-out system "NTSC" or "PAL" according to your TV signal specification.

**Caution:** 1. If you would like to transfer output function to connect with TV, please set up the resolution in 800x600 or 640x480 mode. Otherwise, you will fail to transfer to TV-out.

2. When your screen shows black and white image, please enter properties to adjust TV-out system complying with the one which your area belongs to.(NTSC/PAL)

SiS6326 AGP/PCI

0326 Pr	opercies			<u> </u>	
869	Video Setti	ing	🗱 Gamma Correction		
General <mark>\$</mark>	Adapter S Display N	Monitor 1odes	Performance	Color Management	
NTSC			PAL-		
640>	〈 480	-		<u> </u>	
Outpu	it Device — GA + TV	O TV Only	🔿 VGA Only	v(TV Off)	
Scree	n Position	Þ	AntiFlicker Mod C No Filter C Mild C Medium C Strong C Adaptive	e Y Filter C OFF C ON Strong Mild	
- Color Coars Fine	Calibration T :e	uning	-)- -)		
		(	DK Car	ncel Apply	

NVidia M64/Vanta/TNT2/TNT2 Ultra/GeForce 256

Display Properties			? ×
Background Scre Web Screen	en Saver   A e 296 😒 Dui	ppearance Iput Device	Effects Settings
Select the output device or C Analog Monitor C District Parts C TV Fgmai: NTSC-M United States of	Change TV-Out to NTSC or PAL	Indows:	Shor
TV ignolution and color of Video output format	depăr (640 x 430 Composite	High Color (16 Video-Dut	
	OK.	Cancel	Apply

Savage4 with TV

S3 Inc. Savage4 (	Engineering I	litFlip) Prop	nties	<u> ?</u> ×
General	Adapter	Monito	r   P	efomance
Color Managem	ent 🔁	S3 Gamma		S3 Displays
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Display Devices	Select			
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Panel Settings				
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TV Type:	NTSC			-
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			Advanced §	ettings
		0K	Cancel	(111)

Chapter 4 Video Mode tables Video Mode tables

GeForce 256	5 AGP							
Color	Depth	8-bit	16	5-bit	24-	bit	32-bit	
Resolution		Refresh	Rate	Refr	esh Rate	Refres	sh Rate	<b>Refresh Rate</b>
640x480	60-240	6	50-240	-	(	50-240		
800x600	60-240		60-240	-	(	50-240		
1024x768		60-170	60	)-170	-		60-170	
1152x864		60-120	60-	120	-		60-100	
1280x1024		60-85	60	)-85	-		60-75	
1600x1200		60-100	60	)-100	-		60	

Savage	2000	AGP	64MB
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Color	Depth	8-bit	16-bit	24-	bit	32-bit
Resolution		<b>Refresh Rat</b>	te Re	efresh Rate	<b>Refresh Rate</b>	<b>Refresh Rate</b>
640x480	60-200	60-200	)	-	60-200	
800x600	60-200	60-200		-	60-200	
1024x768		60-160	60-160	-	60-120	)
1152x864		60-120	60-120	-	60-120	)
1280x1024		60-120	60-120	-	60-85	
1600x1200		60-100	60-100	-	60	

#### SiS 300 AGP 16MB/32MB

Col	lor Depth	8-bit	16-bit	24	l-bit	32-bit
Resolution		<b>Refresh Rat</b>	e R	efresh Rat	e Refresh Rate	<b>Refresh Rate</b>
640x480	60-160	60-160		-	60-160	
800x600	60-160	60	)-160	-	60-120	
1024x768		60-120	60-120	) –	60-185	
1280x1024		60-185	60-85	-	43	
1600x1200		60-85	60-70	-	-	

#### SiS 305 AGP 16MB/32MB

Co	olor Depth	8-bit	16-b	oit	24-b	bit	32-bit
Resolution	L	Refresh	Rate	Refre	sh Rate	<b>Refresh Rate</b>	Refresh Rate
640x480	60-160	60-	160	-	60	0-160	
800x600	60-160		60-160	-	60	0-120	
1024x768		60-120	60-1	20	-	60-185	
1280x1024		60-185	60-8	35	-	43	
1600x1200		60-85	60-7	0'	-	-	

#### nVidia TNT AGP/16MB

Color Depth8-bit16-bit24-bit32-bitResolutionRefresh RateRefresh RateRefresh RateRefresh Rate

640x480	60-170	60-17	0	-	60-170	
800x600	60-144	60-144		-	60-144	
1024x768		60-100	60-100		-	60-100
1152x864		60-100	60-100	-		60-100
1280x1024		60-85	60-85	-		60-85
1600x1200		60-75	60-75	-		60-75

#### Trio 3D AGP/8MB

Colo	r Depth	8-bit	16-bit		24-bit	32-bit
Resolution	_	<b>Refresh Rat</b>	te Refre	esh Rate	<b>Refresh Rate</b>	<b>Refresh Rate</b>
640x480	60-85	60-75	60-75	-	-	
800x600	56-85	56-85	56-85	-	-	
1024x768		43-85	43-85	43-85	-	
1280x1024		43-60	43-60	43-60	-	
1600x1200		-	-		-	

### nVidia TNT2 AGP/16/32MB

Colo	r Depth	8-bit	16-bit	24-bit		32-bit	
Resolution		<b>Refresh Ra</b>	te Re	fresh Rate	Refre	sh Rate	<b>Refresh Rate</b>
640x480	60-170	60-170	)	- (	50-170		
800x600	60-144	60-144		- (	50-144		
1024x768		60-100	60-100	-		60-100	
1152x864		60-100	60-100	-		60-100	

1280x1024	60-85	60-85	-	60-85
1600x1200	60-75	60-75	-	60-75

### nVidia TNT2 Ultra AGP/16/32MB

(	Color Depth	8-bit	16-bit	24-bit	32-bit	
Resolutio	n	<b>Refresh Rat</b>	te Ref	fresh Rate	<b>Refresh Rate</b>	<b>Refresh Rate</b>
640x480	70-120	70-120		- 7	0-120	
800x600	60-240	60-240		- 6	60-240	
1024x768		60-170	60-170	-	60-100	
1152x864		60-150	60-150	-	60-140	
1280x102	4	60-120	60-120	-	60-100	
1600x120	0	60-85	60-8	- 55	60-75	

## SiS6326 AGP/PCI 8MB

Color	r Depth	8-bit	16-bit	24-bit	32-bit	
Resolution		<b>Refresh Rate</b>	e Ro	efresh Rate	<b>Refresh Rate</b>	<b>Refresh Rate</b>
640x480	60-120	60-120		60-120	-	
800x600	56-120	56-120		56-120	-	
1024x768		43-120	43-120	43-	-120 -	
1280x1024		43-85	43-85	43-85	-	
1600x1200		60-75	60-75	-	-	

#### nVidia M64 AGP/16/32MB

Colo	r Depth	8-bit	16-bit	24	-bit	32-bit	
Resolution		<b>Refresh F</b>	Rate I	Refresh F	Rate	<b>Refresh Rate</b>	<b>Refresh Rate</b>
640x480	60-170	60-17	70	-	6	0-170	
800x600	60-144	60-144		-	6	0-144	
1024x768		60-100	60-10	0	-	60-100	
1152x864		60-100	60-100	-		60-100	
1280x1024		60-85	60-85		-	60-85	
1600x1200		60-75	60-75		-	60-75	

Riva 128	ZX AGP/8MB Color Depth	8-bit	16-1	bit	24-bit		32-bit	
Resolutio	n	Refresh	n Rate	Refi	esh Rate	Refi	resh Rate	<b>Refresh Rate</b>
640x480	60-75	60	-75	-	(	50-75		
800x600	60-75		60-75	-	(	50-75		
1024x768		60-75	60-	75	-		60-75	
1152x864		60-75	60-7	5	- (	50-75		
1280x102	4	60-75	60-	75	-		60-75	
1600x120	0	60	60		-		60	

Vanta AG	P/16/32MB	8-bit 14	5-bit	24_bit	32-bit	
U	olor Depth	0-Dit 1	)-DIL	24- DIL	5 <b>2-</b> 01t	
Resolution	ı	<b>Refresh Rate</b>	Refres	h Rate	<b>Refresh Rate</b>	<b>Refresh Rate</b>
640x480	60-170	60-170	-	6	0-170	

800x600	60-100		60-100	-	60-100	)
1024x768		60-85	60-85		-	60-85
1152x864		60-100	60-100	-		60-100
1280x1024		60-85	60-85		-	60-85
1600x1200		60	60	-		60
Savage4 AG	P/16/32MB					
Colo	r Depth	8-bit	16-bit	2	4-bit	32-bit

Desolution Defresh Date Defresh Date D	ofrach Data
Kesolulion Kerresii Kale Kerresii Kale K	ellesn Kate
640x480 60-160 60-160 - 60-160	
800x600 56-85 56-85 - 56-85	
1024x768 60-85 60-85 - 60-85	
1152x864 60-100 60-100 - 60-100	
1280x1024 60-85 60-85 - 60-85	
1600x1200 60 60 - 60	

# Cirrus Logic 5465 AGP/ 4MB

	Color Depth	8-bit	16-bit	24-b	it	32-bit
Resolut	ion	<b>Refresh Rate</b>	Refresh	Rate	<b>Refresh Rate</b>	<b>Refresh Rate</b>
640x480	) 60-85	60-85	60-85		-	
800x600	) 56-85	56-85	56-85		-	
1024x76	58	60-85	60-85	60-8	5	-
1152x86	54	70-85	70-85	70-8	5 -	
1280x10	)24	60-85	60-85	60-7	5	-
1600x12	200	60-96i	60-96i	-	-	

Remark: Refresh rate might be varied slightly according to user's monitor size.