

# PCA-5630 Industrial VGA Card with XGI Volari™ V3XE

Before you begin installing your card, please make sure that the following materials have been shipped:

- 1 PCA-5630 Industrial VGA card
- 1 PCA-5630 Startup Manual
- 1 CD with driver utility
- 1 DVI-VGA Adapter
- Warranty certificate

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Note: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: [www.adobe.com/products/acrobat/readstep2.html](http://www.adobe.com/products/acrobat/readstep2.html)

## Software Installation

The CD disc contains a driver installer program that will lead you through the installation of your VGA card.

## Caution

The computer is provided with a battery-powered Real-time Clock circuit. There is a danger of explosion if battery is incorrectly replaced. The battery doesn't need to be charged. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.

## FCC

This device complies with the requirements in part 15 of the FCC rule. 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.

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>

<http://www.advantech.com/network>

For technical support and service, please visit our support website at:

<http://www.advantech.com.tw/support>

This manual is for the PCA-5630 series Rev. A1.

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## Industrial VGA card specifications

- **GPU:** XGI Volari™ V3XE
- **Bus:** AGP 3.0, 4X
- **Memory:** 64bit, 200MHz, 128MB DDRI SDRAM
- **CRT1 output:** 2048 x 1536, up to 85Hz vertical rate
- **CRT2 output:** 1600 x 1200, up to 60 Hz vertical rate
- **TV-Out output:** S-Video/Composite port; HDTV upto 720p & 1080i
- **DVI:** Single Link TMDS up to UXGA (1600x1200 @60Hz).
- **Dual Display Mode:** Under Windows XP, all the 4 combinations shown below support mirror mode and extension mode, while under Windows 2000, these combinations support only mirror mode.
  - (1) CRT1 (CON3) + CRT2 (DVI1 + DVI-VGA Adapter)
  - (2) CRT1 + DVI
  - (3) CRT1 + S-Video
  - (4) S-Video + DVI
- Under Linux, this product only supports CRT1 + DVI mirror mode.
- **Triple-DAC Mode:** This product does NOT support triple-DAC display.
- **OS's Supported:** Microsoft® windows XP/2K/Linux

## 1. Jumpers and Connectors

The VGA card has a number of jumpers and connectors that allow you to configure your system to suit your application.

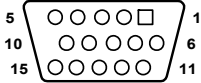
### JP6: NTSC/PAL Mode Selector under DOS

Jumper Setting	Description	Output Mode Under DOS
	Closed	Pal
	Open	NTSC

### Connectors

Label	Function
CON2	S-Video/Composite port
CON3	Port
DVI1	DVI port

### CON3 : VGA connector



Pin	Signal	Pin	Signal
1	RED	9	VCC
2	GREEN	10	GND
3	BLUE	11	N/C
4	N/C	12	SDT
5	GND	13	H-SYNC
6	GND	14	V-SYNC
7	GND	15	SCK
8	GND		

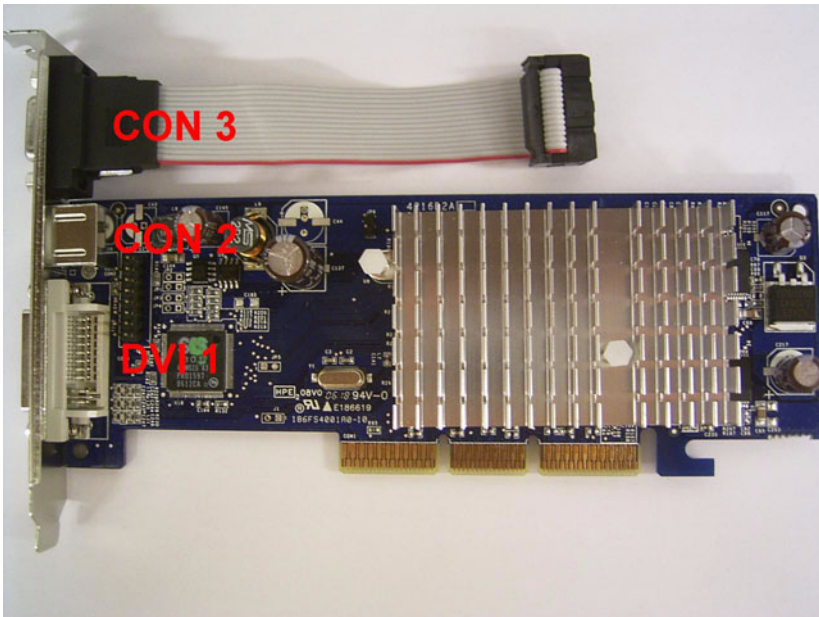
### CON2: TV-Out connector

Pin	Signal	Pin	Signal
1	TVY	2	TVCVBS
3	GND	4	TVC
5	N/C		

### DVI1: DVI port

Pin	Signal	Pin	Signal
1	TMDS2-	2	TMDS2+
3	TMDSSD	4	N/C
5	N/C	6	DDC2_SCLOUT
7	DDC2_SDAOUT	8	D2_VS1OUT
9	TMDS1-	10	TMDS1+
11	TMDSSD	12	N/C
13	N/C	14	AGP_5V
15	GND	16	HP0_DETECT
17	TMDS0-	18	TMDS0+
19	TMDSSD	20	N/C
21	N/C	22	TMDSSD
23	TMDCLK+	24	TMDCLK-
C1	CRT2_R1	C2	CRT2_G1
C3	CRT2_B1	C4	D2_HS1OUT
C5	TMDSSD	C6	TMSSD

## 2. Board Layout



*Board Layout: Jumper and Connector Locations*