

PCM-3524 VGA to TV Converter

Startup Manual



Packing List

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

- 1 ea. PCM-3524 module x 1 pc
- 4 ea. Screws (3mm) x 4 pcs
- 4 ea. Bronze stick (6mm) x 4 pcs
- 1 ea. D-sub 15 to D-sub 15 cable
- 1 ea. User's manual

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

Note 1: For detailed contents of the PCM-3524, please refer to the enclosed CD-ROM or disk (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/Prodindex/acrobat/readstep.html (Acrobat is a trademark of Adobe.)

Mechanical and environmental

- **Dimensions: (L x W):** 96mm x90mm (3.8" x3.6")
- **Weight:** 125 g
- **Operating temperature:** 0 ~ 60° C (32 ~ 140° F)
- **Storage temperature:** -40 ~ 85° C (-40 ~ 185° F)
- **Operating humidity:** 0% to 90% relative humidity, non-condensing
- **Power supply voltage:** 9V (external) or PC104
- **Power requirements:** 6 ~ 12V @ 600mA (9V Recommended)

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

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

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

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

This manual is for the PCM-3524

Part No. 2006352410
Printed in Taiwan

1st Edition
August, 2002

Specifications

Form Factor: PC/104 Form Factor

Chipset: Altech 2139 CRT-to-TV Converter Controller

External Memory: 1M*16 Type SDRAM

CRT-in: Standard RGB Signals with female D-type Connector and box-header

CRT-out: Standard RGB Signals with female D-type Connector and box-header

Video-out: Composite RCA Connector and pin-header

S-Video out: S-Video Connector and pin-header

DC Power-in: via PC/104 Interface or DC-Connector, auto switched

TV types: NTSC, NTSC-EIAJ and PAL S/D/G/H/I/M/N standards, auto detect

Input Mode: Auto Detection

Extension Interface: One 8-bit stack through PC/104

Graphics Modes

1024 x 768, up to 60Hz

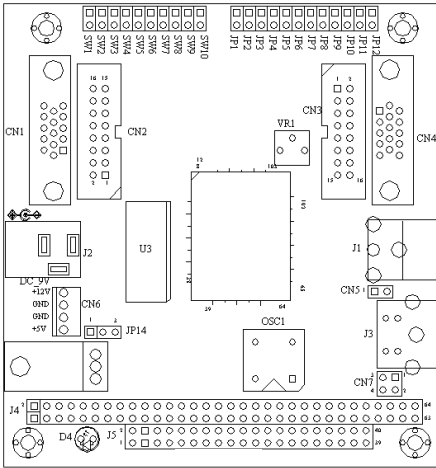
800 x 600, up to 85Hz

640 x 480, up to 85Hz

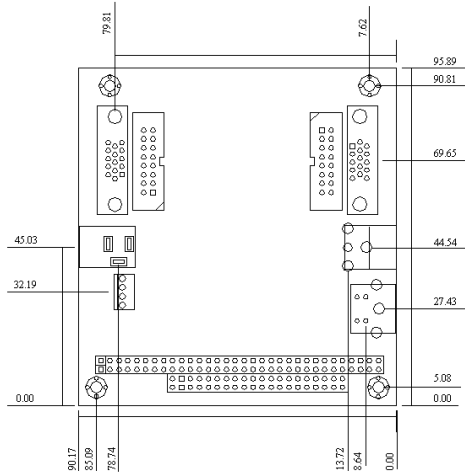
Features

- Flicker free VGA-to-TV signal converter
- 3-Channel 8 bit input conversion
- Multiple input formats: 640x480 60/75/85Hz, 800x600 60/75 Hz, 1024x768 60 Hz
- Multiple output formats - NTSC, NTSC-EIA, PAL-B/G/H/I
- Composite and S-video output formats
- Horizontal and vertical positioning control
- Configuration set by switches
- Internal color bars
- 3-Channel 9-bit output D/A converters
- Blanks to blue or black screen

Board Layout



Component Placement



Dimensions

Jumpers & Connectors

Jumpers

JUMPER	FUNCTION	Default
JP1	TD0	Short
JP2	TD1	Short
JP3	RESERVED	Open
JP4	PAL_NTSC	Short
JP5	PWRDN	Short
JP6	RGB_OUT	Short
JP7	RESERVED	Open
JP8	YUV_OUT	Short
JP9	RESERVED	Open
JP10	RESERVED	Open
JP11	RESERVED	Open
JP12	RESERVED	Open
JP14	POWER Selection	Short 2-3

TV Output Mode Settings

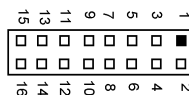
	JP4	JP2	JP1
NTSC	Short	Short	Short
NTSC-EIA	Short	Short	Open
PAL-BDGIH	Open	Short	Open
PAL-N	Open	Short	Short
PAL-Comb-N	Open	Open	Open
PAL-M	Short	Open	Short

Connectors

Label	Function
CN1	VGA output (DB15 female)
CN2	VGA output (16-pin box-header)
CN3	VGA input (16-pin box-header)
CN4	VGA input (DB15 female)
CN5	Composite Video output (2-pin header)
CN6	DC power in
CN7	S-Video output (4-pin header)
J1	Composite Video output (RCA jack)
J2	DC power in (DC power jack)
J3	S-Video output (4pin mini-DIN)

VGA Connector (CN2/CN3 16-pin)

Pin	Signal	Pin	Signal
1	Red	2	AGND
3	Green	4	N/A
5	Blue	6	AGND
7	N/A	8	DDC DAT
9	GND	10	AGND
11	GND	12	Horz Sync
13	AGND	14	Vert Sync
15	DDC CLK	16	N/C



VGA Connector (CN1/CN4 15-pin)

Pin	Signal	Pin	Signal	Pin	Signal
1	Red	2	Green	3	Blue
4	N/A	5	GND	6	AGND
7	AGND	8	AGND	9	N/A
10	GND	11	N/A	12	DDC DAT
13	H Sync	14	V Sync	15	DDC CLK

S-Video Output Connector (CN7/J3)

Pin	Signal
1	GND
2	CSYNC
3	CHROMA
4	LUMA

Composite Video Output Connector (CN5/J1)

Pin	Signal
1	COMP
2	GND

Switches and VR

Switches	FUNCTION
SW1	RESET
SW2	POS_U
SW3	POS_L
SW4	POS_R
SW5	POS_D
SW6	ZOOM
SW7	BLANK OUPUT
SW8	FREEZE OUTPUT
SW9	FILTER MODE SELECTS
SW10	OVERSCAN OR UNDERSCAN
VR1	BRIGHTNESS

DC Power Connector (CN6)

Pin	Signal
1	+12V
2	GND
3	GND
4	+5V

DC Power Connector Jack (J2)

6-12V @ 600mA (9V Recommended)



FILTER MODE SELECTION (SW9)

cycles through selections as follows:

3-line>2-line>no filter>color bars>no filter>2-line>3-line

Position Adjustment Switches

Switch	Position adjustment
SW2	up
SW3	left
SW4	right
SW5	down

