

## Notice

This guide is designed for experienced users to setup the system in the shortest time.

## Safety Precautions

### **Warning!**



*Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.*

### **Caution!**



*Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis*



## Product Warranty

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First of all, thank you for purchasing PER-V04B SDVO Card. This Quick Installation Guide will help you on the process of the installation. Please read it thoroughly before you start to install it. You may visit AAEON website for the latest version of the instruction. Please refer to [Http://www.aaeon.com](http://www.aaeon.com)

All products in AAEON are designed as the strictest specifications to ensure that the products will own the reliable performance in the typical industrial environments. Whether your purchase from AAEON is made to the purpose of the laboratory or the factory facility, you can be assured that every purchase in AAEON will provide the reliability and stability of operation.

## Technical Support

For the most frequently asked questions, you can easily find solutions in your product documentation. The guide is detailedly specified and please refer to it first. We strongly suggest you to read it before asking for a customer service over the phone. If you still cannot find the answer, please give a call to your dealer. All dealers of AAEON are well-trained and ready to provide you as many supports as we can. Based on the customer service we've encountered until now, most of problems are minor and able to be easily solved over the phone. We are always pleased to give advice regarding any installation and operation for AAEON products.

## **Ordering Information**

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- **TF-PER-V04B-A10**

SDVO to LVDS with Chronitel 7308B

## **Packing List**

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- 1 TF-PER-V04B-A10 SDVO module
- 1 170340030F SDVO Cable
- 1 Quick Installation Guide

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## Features

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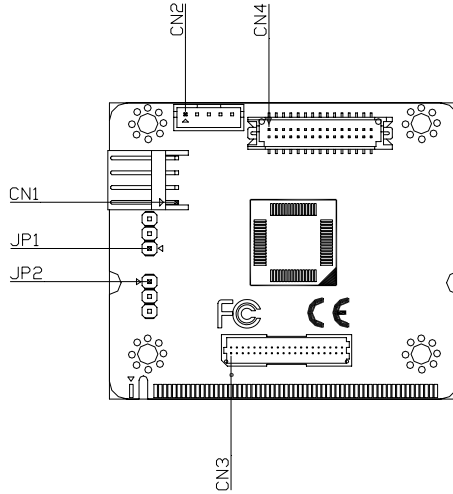
- 59.75mm x 50.95mm Form Factor To Be Locked by Mini-PCI Slot
- Supports 1920 x 1080 Resolution Displays
- Panel Protection And Power Sequencing
- Low Voltage Interface Supports To Graphics Device

## Specification

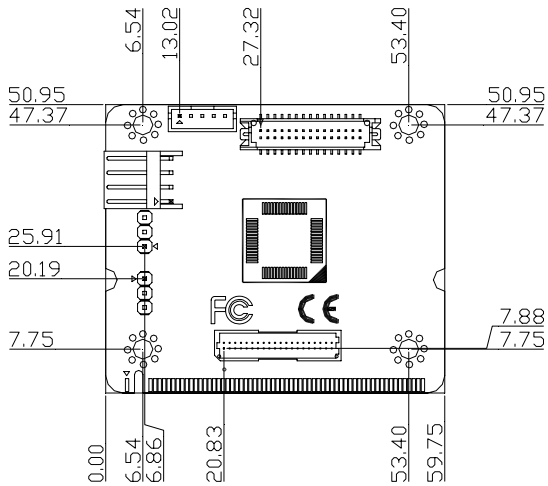
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|-------------------------|--|
| • Chipset               | Chrontel CH7308B   |
| • Input                 | High-speed SDVO (1G~2Gbps)<br>AC-coupled serial differential<br>RGB inputs |
| • Pixel rate            | 165M pixels/second   |
| • Resolution            | Up to 1920 x 1080  |
| • Graphic Engine        | 2D dither engine   |
| • Power Management      | Programmable power<br>management   |
| • Programming           | Fully programmable via the<br>serial port                                  |
| • Driver                | Complete Windows driver<br>support   |
| • Package               | 64-pin LQFP package  |
| • Operating Temperature | 32 °F ~140°F ( 0°C ~ 60°C)   |

## Location of Jumpers and Connectors



## Mechanical Drawing



## List of Jumpers

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Label	Function
JP1	LCD INVERTER Voltage Selection
JP2	LVDS Voltage Selection

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## List of Connectors

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Label	Function
CN1	External Power Input Connector
CN2	LCD Inverter Connector
CN3	SDVO Connector
CN4	LVDS LCD Connector

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## LCD Inverter Voltage Selection (JP1)

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JP1	Function
1-2	+5V (Default)
2-3	+12V

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## LCD Voltage Selection (JP2)

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JP2	Function
1-2	+5V
2-3	+3.3V (Default)

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## External Power Input Connector (CN1)

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Pin	Signal
1	+5V

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2	GND
3	GND
4	+12V

### LCD Inverter Connector (CN2)

Pin	Signal
1	+5V/+12V
2	Adjust backlight
3	GND
4	GND
5	ENBKL

### SDVO Connector (CN3)

Pin	Signal	Pin	Signal
1	SDVO_SPC	2	SDVO_RST #
3	SDVO_SPD	4	SMB_CLK
5	NC	6	SMB_DAT
7	GND	8	GND
9	SDVO_RED#	10	SDVO_FLDSTALL #
11	SDOV_RED	12	SDOV_FLDSTALL
13	GND	14	GND
15	SDVO_BLUE#	16	SDVO_INT#
17	SDVO_BLUE	18	SDVO_INT
19	GND	20	GND
21	SDVO_GREEN#	22	SDVO_CLK#



23	SDVO_GREEN	24	SDVO_CLK
25	GND	26	GND
27	+2.5V	28	+5V
29	+2.5V	30	+5V
31	+2.5V	32	GND
33	GND	34	+12V
35	+3.3V	36	+12V
37	+3.3V	38	GND
39	GND	40	GND

#### LVDS Connector (CN4)

Pin	Signal	Pin	Signal
1	ENBKL	2	NC
3	PPVCC	4	GND
5	LVDS1_TXCLK-	6	LVDS1_TXCLK+
7	PPVCC	8	GND
9	LVDS1_TX0-	10	LVDS1_TX0+
11	LVDS1_TX1-	12	LVDS1_TX1+
13	LVDS1_TX2-	14	LVDS1_TX2+
15	LVDS1_TX3-	16	LVDS1_TX3+
17	I2C_DATA	18	I2C_CLK
19	LVDS2_TX0-	20	LVDS2_TX0+
21	LVDS2_TX1-	22	LVDS2_TX1+
23	LVDS2_TX2-	24	LVDS2_TX2+

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25	LVDS2_TX3-	26	LVDS2_TX3+
27	PPVCC	28	GND
29	LVDS2_TXCLK-	30	LVDS2_TXCLK+

## Below Table for China RoHS Requirements

产品中有害有毒物质或元素名称及含量

## AAEON Main Board/ Daughter Board/ Backplane

部件名称	有害有毒物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板 及其电子组件	×	○	○	○	○	○
外部信号 连接器及线材	×	○	○	○	○	○
<p><b>O:</b> 表示该有害有毒物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。</p> <p><b>X:</b> 表示该有害有毒物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。</p> <p>备注: 此产品所标示之环保使用期限, 系指在一般正常使用状况下。</p>						