

EPIA Display Accessories – Easy Guide for Your Easy Use

Rev. 1.0

VIA LVDS-06 is a module designed for the EPIA SP Mini-ITX Mainboard to support LCD panel displays.

● Specifications

- ✦ LVDS Transmitter Chip: VT1631L
- ✦ Programmable dithering to support both 18-bit and 24-bit panel, selectable by SKU
- ✦ Both single and dual channel support, with resolutions from 640 x 480 up to 1600 x 1200
- ✦ Connector pin-definitions and jumper settings

1. Signal connector (PANEL_CONN) pin definition

PIN	SIGNAL	PIN	SIGNAL
1	A4M (Differential signal)	2	PVDD (+3.3V/+5V)
3	A4P (Differential signal)	4	PVDD (+3.3V/+5V)
5	GND	6	GND
7	A5M (Differential signal)	8	GND
9	A5P (Differential signal)	10	A0M (Differential signal)
11	GND	12	A0P (Differential signal)
13	A6M (Differential signal)	14	GND
15	A6P (Differential signal)	16	A1M (Differential signal)
17	GND	18	A1P (Differential signal)
19	CLK2M (Differential signal)	20	GND
21	CLK2P (Differential signal)	22	A2M (Differential signal)
23	GND	24	A2P (Differential signal)
25	A7M (Differential signal)	26	GND
27	A7P (Differential signal)	28	CLK1M (Differential signal)
29	NC	30	CLK1P (Differential signal)
31	NC	32	GND
33	NC	34	A3M (Differential signal)
35	NC	36	A3P (Differential signal)
37	NC	38	SPCLK
39	NC	40	SPDAT

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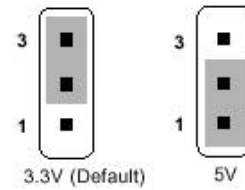
2. Inverter connector (INVERTER_CONN) pin definition

PIN	SIGNAL	PIN	SIGNAL
1	IVDD (+12V/+5V)	2	IVDD (+12V/+5V)
3	BLON (Backlight ON)	4	NC
5	BLON (Backlight ON)	6	NC
7	GND	8	GND

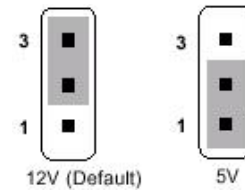
3. Jumper settings

NOTE: Wrong settings of voltage may cause damage to your panel or inverter.

(1) PVDD_SEL: You may select 3.3V or 5V according to the right voltage your LCD panel requires



(2) IVDD_SEL: You may select 5V or 12V according to the right voltage your inverter requires



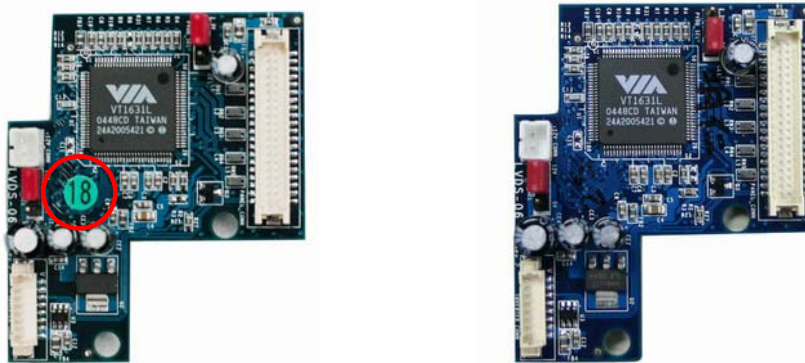
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● Assembly instructions

✦ In the LVDS-06 package, you will find:

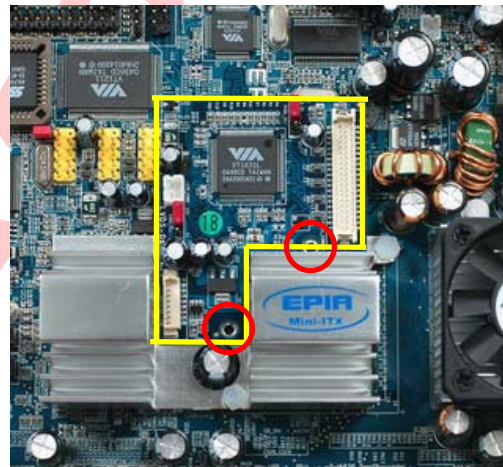
- (1) LVDS-06 module x 1
- (2) Screws x 2
- (3) Washers x 2
- (4) Power cable for panel x 1
- (5) Easy Guide x 1

1. The LVDS-06 is designed to support both 18-bit and 24-bit LCD panels – one SKU for 18-bit and the other for 24-bit. Parts are distinguished by a sticker. Below assembly instructions are shown with pictures of the 18-bit cards

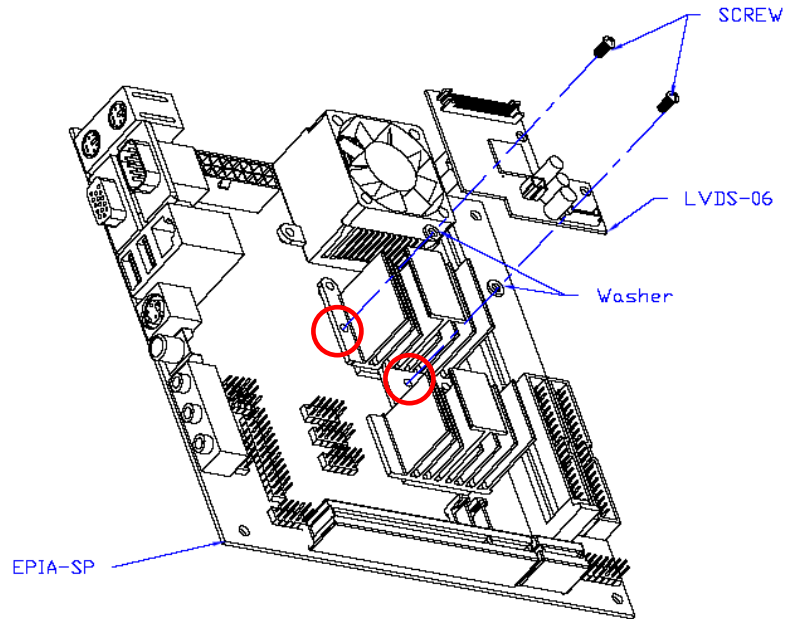


An extra label indicating “18” is stuck on the card supporting 18-bit panels

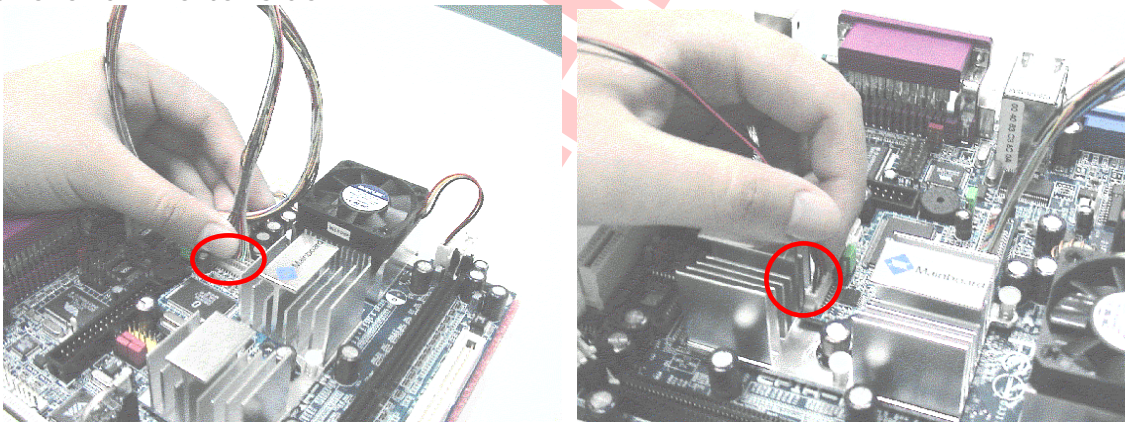
2. As you can see the screw-fixing holes indicated in the red circles below, hold the LVDS-06 module in the right position, corresponding the holes on module to the holes on the Dual heatsink



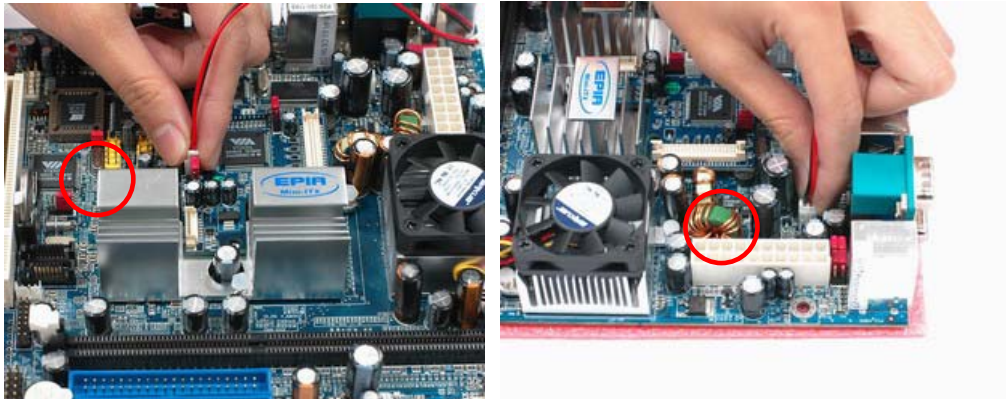
3. Fix the screws as attached to the indicated holes, with the two washers added in between.



4. Fix the panel and inverter cables to the right connectors.
NOTE: They are not included in our package, and you can have them from your panel and inverter side.



5. Connect the panel power cable, one side onto the LVDS-06 and the other side onto the +12V_CONN connector on the motherboard



6. Done! Now you have LVDS support out of an EPIA SP mini-iTX motherboard.

