



LVDS-01 Module – Easy Guide for Your Easy Use

Rev 1.0

VIA LVDS-01 is a module designed for the EPIA Mini-iTX series mainboards to support LCD panel displays. Models that comply are EPIA M, EPIA M2 and EPIA CL.

● Specifications

- ✦ LVDS Transmitter Chip: Chrontel 7019A - includes programmable dithering to support 18-bit and panel
- ✦ Single channel support, with resolutions up to 1024 x 768
- ✦ Connector pin-definitions and jumper settings

1. Signal connector (LVDS_PANEL) 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

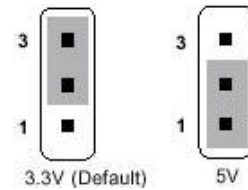
2. Inverter connector (INVERTER_CONN) pin definition

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

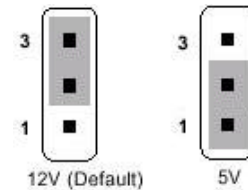
3. Jumper settings

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

(1) PVDD_SEL: Set to 3.3V or 5V to match the voltage required by the LCD



(2) IVDD_SEL: Set to 5V or 12V to match the voltage required by the inverter



+ Approved LCD Panels

- LG LP150X04-A2M1
- LG LP150X04-D2
- LG LP150X1
- LG-Philips LP141XA
- Hannstar HSD141PX11-A
- Torisan TM121XG-02L01
- Sharp LQ150X1LC77
- AU A201SN01

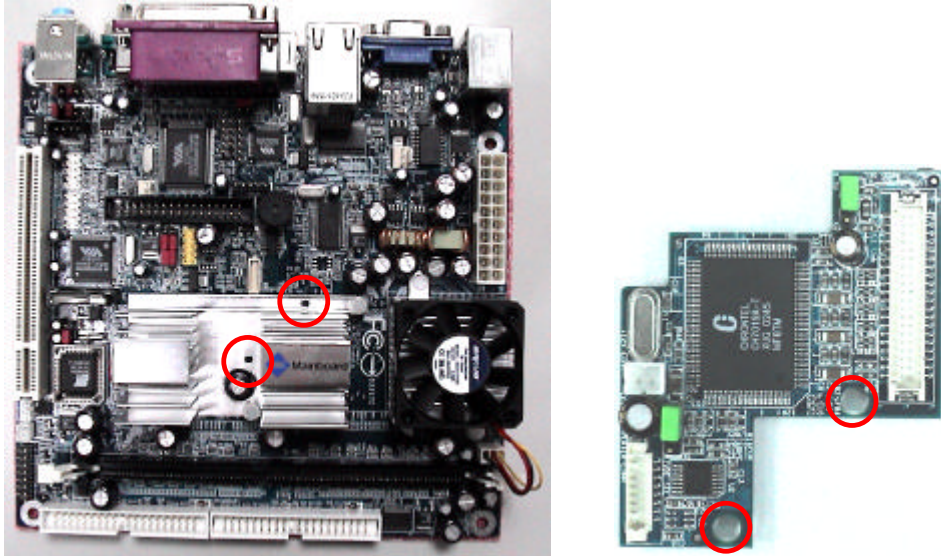
● Assembly instructions

+ In the LVDS-01 package, you will find:

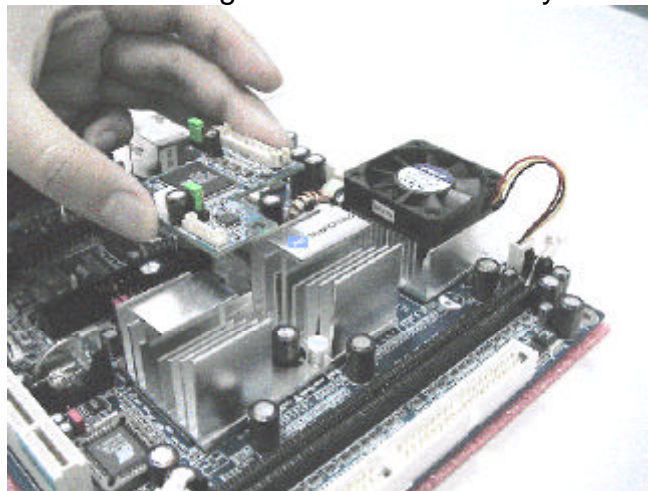
- (1) LVDS-01 module x 1
- (2) Screws x 2
- (3) Washers x 2
- (4) Power cable for panel x 1
- (5) LVDS-01 Easy Guide x 1

+ The following assembly instructions are based on the EPIA M Mini-iTX mainboard. For EPIA MII and EPIA CL, the relative screw positions are the same.

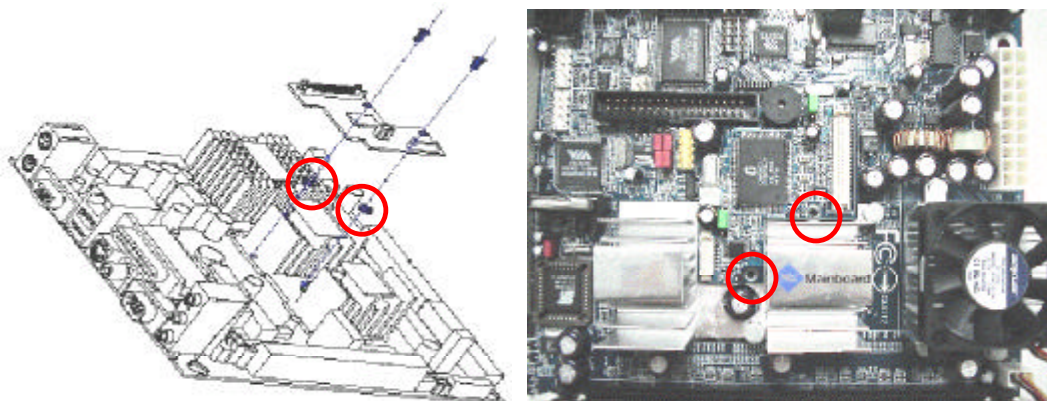
1. EPIA M mini-iTX motherboard and LVDS-01 module



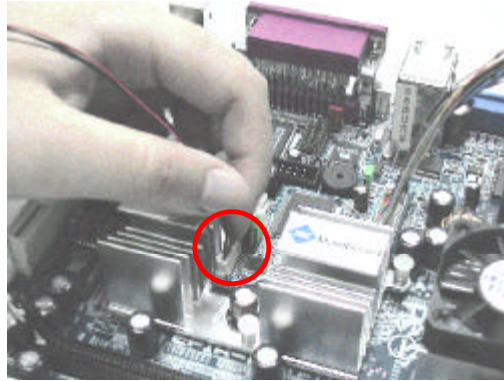
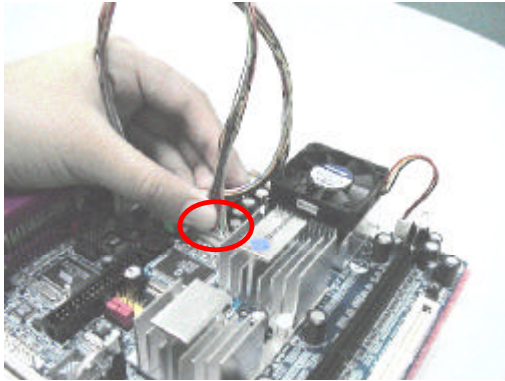
2. Line up the screw-fixing holes of the LVDS-01 module with the screw-fixing holes on the Dual heatsink. The screw-fixing holes are indicated by red circles above.



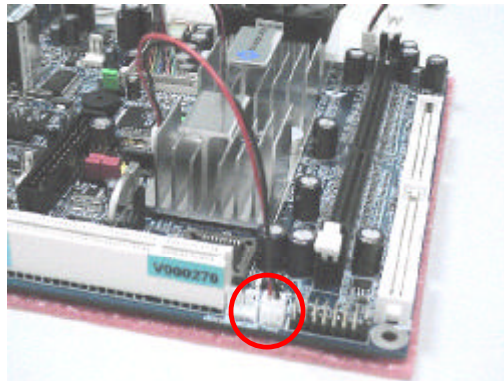
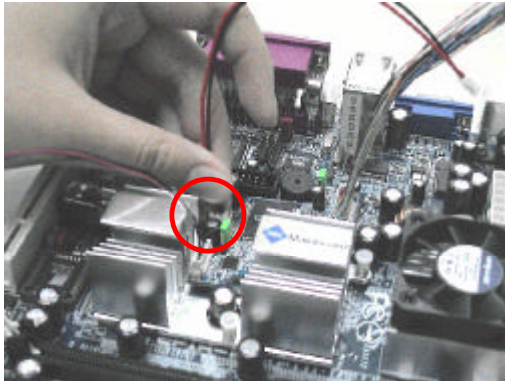
3. Fix the screws to the indicated holes. For each hole, add a washer in between the module and the heatsink.



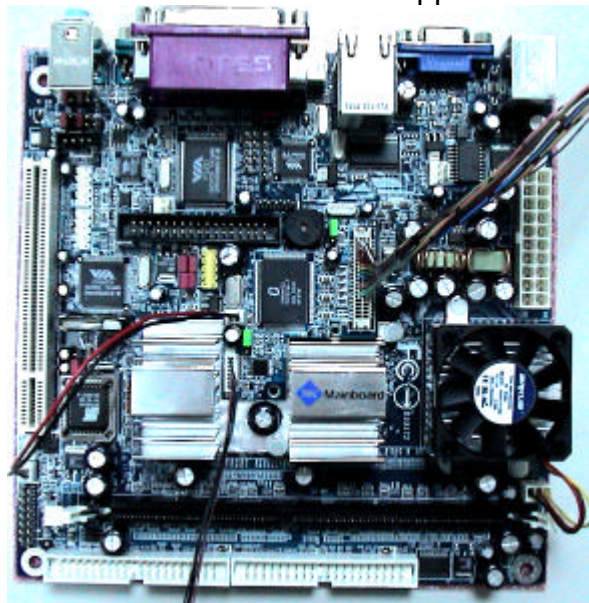
4. Connect the panel and inverter cables to the corresponding connectors.
NOTE: The cables are not included in our package. Check your panel side for them.



5. Connect the panel power cable, one side onto the LVDS-01 (+12V_CONN) and the other side onto the FAN3 connector on the motherboard.



6. Done! Now your EPIA M mini-iTX motherboard supports LVDS.





RGB-01 Module – Easy Guide for Your Easy Use

Rev 1.0

VIA RGB-01 is a module designed for the EPIA Mini-iTX series mainboards to support TTL panel displays. Models that comply are EPIA M, EPIA MII and EPIA CL.

● Specifications

- ✦ Support 18-bit panels
- ✦ Connector pin-definitions and jumper settings

1. Signal connector (LVDS_PANEL) pin definition

PIN	SIGNAL	18-bit	PIN	SIGNAL	18-bit
1	GND		2	GFPCLK (Display clock)	
3	GFPHS (Horizontal sync.)		4	GFPVS (Vertical sync.)	
5	GND		6	GFPD18	R0
7	GFPD19	R1	8	GFPD20	R2
9	GFPD21	R3	10	GFPD22	R4
11	GFPD23	R5	12	GND	
13	GFPD10	G0	14	GFPD11	G1
15	GFPD12	G2	16	GFPD13	G3
17	GFPD14	G4	18	GFPD15	G5
19	GND		20	GFPD2	B0
21	GFPD3	B1	22	GFPD4	B2
23	GFPD5	B3	24	GFPD6	B4
25	GFPD7	B5	26	GND	
27	GFPDE (Display enable)		28	PVDD (+3.3V/+5V)	
29	PVDD (+3.3V/+5V)		30	R/L (Horizontal display mode select signal)	
31	U/D (Vertical display mode select signal)		32	GFPD0	
33	GFPD1		34	GFPD8	
35	GFPD9		36	GFPD16	
37	GFPD17		38	GND	
39	GND		40	GND	

2. Inverter connector (INVERTER_CONN) pin definition

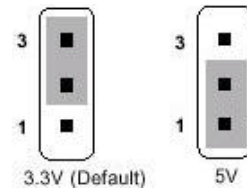
PIN	SIGNAL	PIN	SIGNAL
1	IVDD (+12V/+5V)	2	IVDD (+12V/+5V)
3	BLON (Backlight ON)	4	NC
5	BLON (Backlight ON)	6	NC
7	GND	8	GND



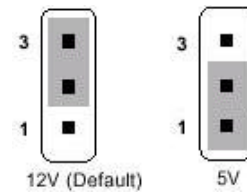
3. Jumper settings

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

- (1) PVDD_SEL: Set to 3.3V or 5V to match the voltage required by the LCD



- (2) IVDD_SEL: Set to 5V or 12V to match the voltage required by the inverter



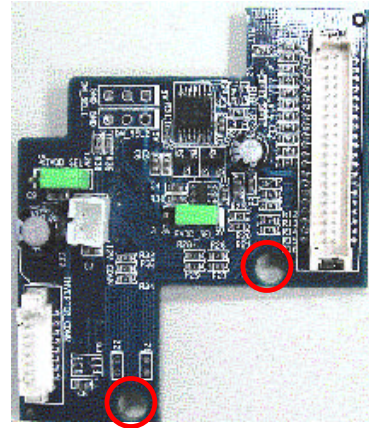
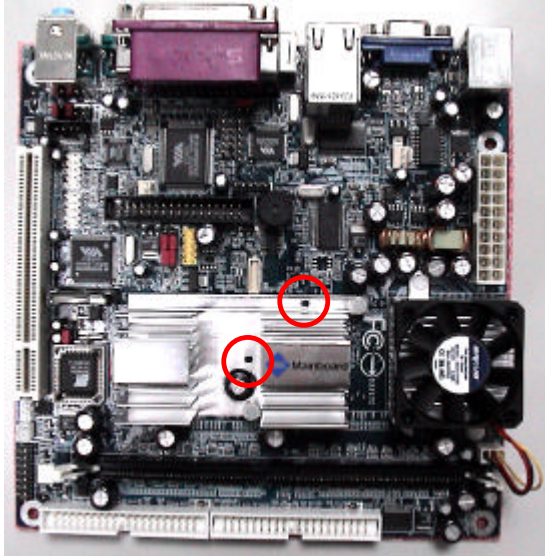
● Assembly instructions

- ✦ In the RGB-01 package, you will find:

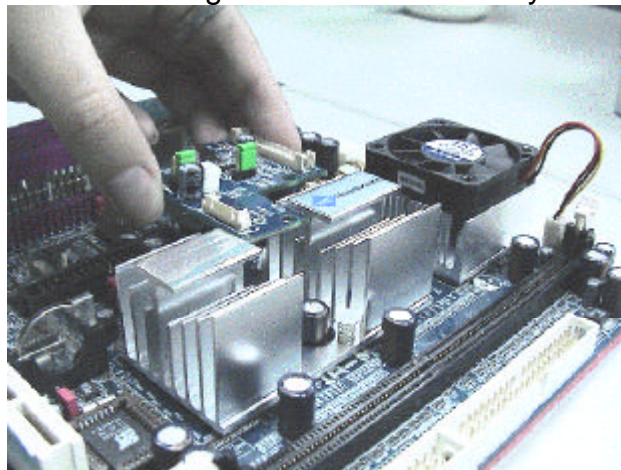
- (1) RGB-01 module x 1
- (2) Screws x 2
- (3) Washers x 2
- (4) Power cable for panel x 1
- (5) RGB-01 Easy Guide x 1

- ✦ The following assembly instructions are based on the EPIA M Mini-iTX mainboard. For EPIA MII and EPIA CL, the relative screw positions are the same.

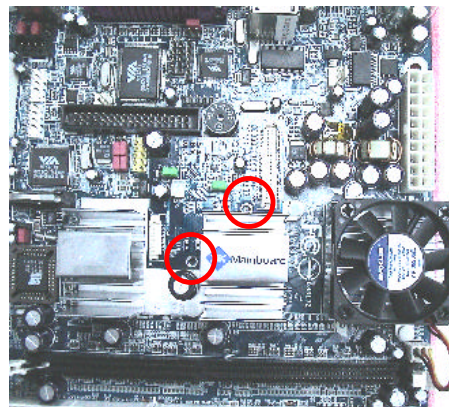
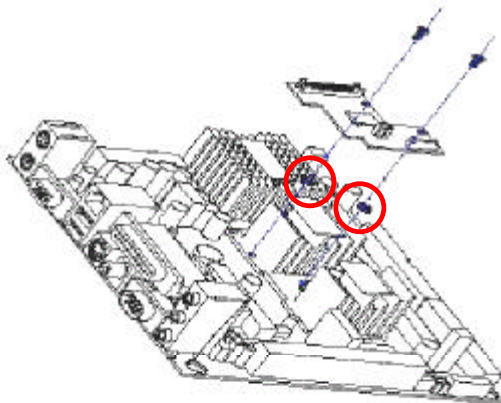
1. EPIA M mini-iTX motherboard and RGB-01 module



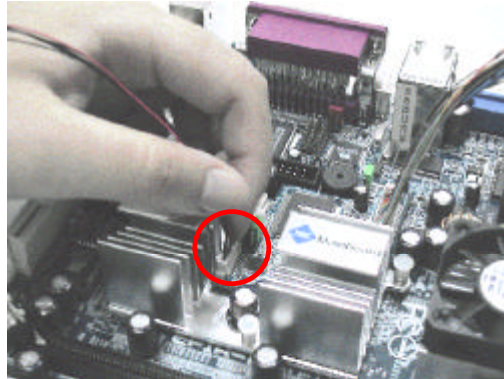
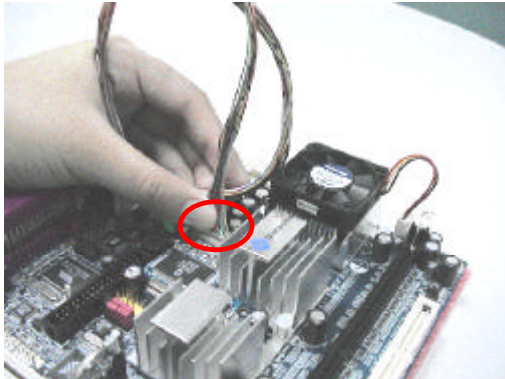
2. Line up the screw-fixing holes of the RGB-01 module with the screw-fixing holes on the Dual heatsink. The screw-fixing holes are indicated by red circles above.



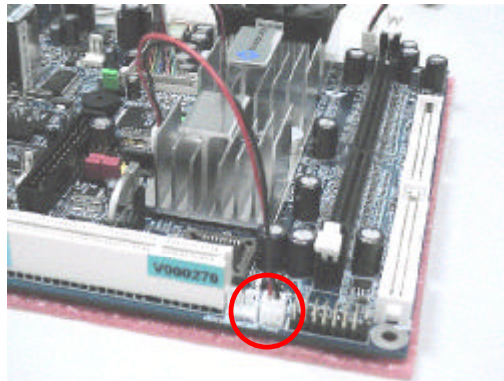
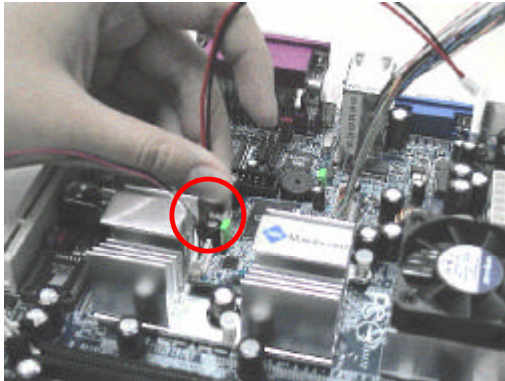
3. Fix the screws to the indicated holes. For each hole, add a washer in between the module and the heatsink.



4. Connect the panel and inverter cables to the corresponding connectors.
NOTE: The cables are not included in our package. Check your panel side for them.



5. Connect the panel power cable, one side onto the RGB-01 (+12V_CONN) and the other side onto the FAN3 connector on the motherboard



6. Done! Now your EPIA M mini-ITX motherboard supports RGB.

