



HDMI Converter Board

LCD-Mikroelektronik offers a HDMI interface board to drive TFT displays sized 3.5" to 7".

The board provides the necessary supply voltage for the display backlight.

By reading the inbuilt E2PROM via I2C bus of the HDMI interface, the video source can automatically detect the display resolution and adjust the video output signal.

E2PROM setting and backlight supply voltage will be adjusted by factory, depending on the used display or the customer requirement.

Brief specification:

- Board outline dimension 63,4 mm x 32,4 mm
- 3-pin female header for power supply & backlight PWM
- Mini HDMI connector for signal input
- ZIF connector for RGB display output to common 40 pin interface
- LED backlight supply voltage range 16V..23V
- Operating temperature range 0/+70°C

Options (on request):

- Customized display interfaces
- Inbuilt voltage generator for displays requiring multiple supply voltages

Display Interface

Pin	Symbol	Description	Pin	Symbol	Description
1	LEDK	Backlight kathode	30	DCLK	Display clock input
2	LEDA	Backlight anode	31	DISP	Display on/off control input
3	GND	Ground (0V)	32	HSYNC	Horizontal sync input
4	Vdd	Power supply (+3.3V)	33	VSYNC	Vertical sync input
5..12	R0..R7	Red data signal inputs	34	DEN	Display enable input
13..20	G0..G7	Green data signal inputs	35	NC	Not connected
21..28	B0..B7	Blue data signal inputs	36	GND	Ground (0V)
29	GND	Ground (0V)	37..40	NC	Not connected