



LCM TESTER MODEL 27011

To meet the high accuracy and low price requirements for LCM test device, Chroma 27011 that integrates the signal and power source provide a complete test solution for LCD Module. Its LVDS / TTL signal source fully complies with the digital signal standard, meanwhile with the 12V/5V/3.3V DC source output it is able to supply power to VDD/ Backlight for LCM test without obtaining external power source. Equipped with the interface of single key to switch the timing/pattern/program rapidly for test in auto or manual mode, the 27011 is able to provide a direct and convenient test environment for LCM by its complete hardware configuration and easy operation.

To fulfill the standard test signal requirements of various panels, this device supports LVDS signal with optional TTL signal available for use. It has 16 timings, 64 patterns, auto image rotation display system and multiple test functions settings. In addition an editor software is available for editing timing / pattern / program at PC site to create a product specific test program. The design of signal and power source integration for 27011 allows it to be utilized extensively in R&D/Quality Assurance/ Quality Inspection/After Sales Services/ Sales fields for LCM related tests.

The Programmable Logic Device is used in 27011 as the image generator to test the LCD Module. It supports VGA, SVGA, XGA, SXGA, UXGA and 1 Link / 2 Link digital signal output, also it has quartz oscillator built in to supply stable test signals as the standard signal source to the Device Under Test. This test device provides LVDS signal primarily, however, users can purchase the optional TTL signal conversion board for use to cope with the LCM features.

Besides the power source input of AC 90V~250V, it has the 12V / 5V / 3.3V DC power switch required by the LCM Vdd in the market and the 12V / 5V power for Backlight Inverter. Moreover, it has Signal/Vdd power on sequence to fit in the LCM Turn On test sequence.

As regards operation, 27011 can switch the Timing / Pattern and Program by the Mode key on the front panel directly to show the status on a 7-segament display. Users can select the required Timing and switch it to Pattern mode by pressing the Mode key, or switch it to program; and then conduct the test automatically or manually. It can execute tests easily and quickly with the convenient operation method and multiple function keys.

MODEL 27011

Key Features:

- LVDS / TTL (Opt) / TMDS (Opt) output
- Pixel rate up to 162 MHz (LVDSX2 Link)
- Display size up to UXGA (1600X1200)
- 16 timings selecting and editing
- 64 patterns library (32 sets by editing)
- 16 programs (total 3553 sequence)
- 12V / 5V output for backlight
- 12V / 5V / 3.3V output for Vdd
- Power on sequence for signal / Vdd
- ☐ Timing / Pattern editing via PC
- Up / down load function
- ☐ Timing / Pattern Auto / Manual Run
- Low cost





PANEL DESCRIPTIONS

Top View



Side View



Right Side



Left Side



- 1. Power / Output
- 2. Function
- 3. Up
- 4. Down
- 5. Display
- 6. 12 / 5 / 3.3V select
- 7. Data up / download
- 8. LVDS output
- 9. 5V output (for Backlight)
- 10. GND
- 11. 12V output (for Backlight)
- 12. AC Power switch
- 13. AC Input

SPECIFICATIONS

Model	27011 LVDS							
Output								
Option	TTL (A270111) / TMDS (A270112)							
Pixel Range								
Pixel Rate	1 Link	2 Link						
25.175MHz	VGA (25.175MHz)	-						
40MHz	SVGA (40MHz)	-	-					
32.5MHz	XGA (65MHz)	XGA (6	5MHz)					
54MHz	-	SXGA (108MHz)						
81MHz	-	UXGA (162MHz)						
Signal Interface								
Signal	LVDS (6 or 8 bit)							
Connector	Box Header 26 Pin Right Angle							
Power Requirement								
Input (AC)	1Ø 110~240V ±10% V _{LH} 47~63Hz							
Output (DC)	5V/2.5A max. and 12V/4A max. (for Backlight) 12V/5V/3.3V (for Vdd)							
Power Sequence Resolution	Main Board PWR	Vdd	Signal					
Turn-on	1ms	1ms	1ms 1ms					
Turn-off	-	- 1ms						
Operation								
Pattern Control	64 sets auto / manual (32 sets by editing)							
Timing Control	16 sets auto / manual							
Program Control	16 programs (Total 3553 sequence max.)							
Environment								
Operation Temperature	0 ~ 60°C							
Storage Temperature	-20 ~ +80°C							
Humidity	0 ~ 80 %							
Dimension (H x W x D)	84.4 x 103.5 x 232.2 mm / 3.32 x 4.07 x 9.14 inch							
Weight	1.4 kg / 3.08 lbs							

 $[\]ensuremath{^*}$ All specifications are subject to change without notice.

SPECIFICATIONS

	.CII ICATIONS				
1	Black	12	Vertical Line (2)	23	Red 256 Step
2	White	13	Cross Line	24	Green 256 Step
3	16 Gray Scale	14	Checkrow	25	Blue 256 Step
4	32Gray Scale	15	B/W Dot	26	Color Bar (1)
5	256 Gray Scale (1)	16	R/G/B Dot	27	Color Bar (2)
6	256 Gray Scale (2)	17	Text	28	Color Bar (3)
7	256 Gray Scale (3)	18	Text (Reverse)	29	Special (1)
8	Gray Scale (4)	19	Color Text	30	Special (2)
9	Gray Scale (5)	20	Red	31	Special (3)
10	Horizontal Line	21	Green	32	Special (4)
11	Vertical Line (1)	22	Blue	33 ~ 64	For Customer Design

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