Tel:0755-21010980 web:www.yhwdisplay.com

SPECIFICATION FOR LCD MODULE

Customer : _____

Product Model: YH068602G09-12M

Sample code: _____

Designed by	Checked by	Approved by

Final Approval by Customer

☐ **LCM Machinery OK** Checked By _____ ☐ **LCM Display OK** Checked By _____	☐ **LCM OK** ☐ **NG，Problem survey:** Approved By _____

※The specification of "TBD" should refer to the measured value of sample . If there is difference between the design specification and measured value, we naturally shall negotiate and agree to solution with customer.

二、目录

目　　录		
项目	主要内容	页次
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六	Porch设定/上电时序	
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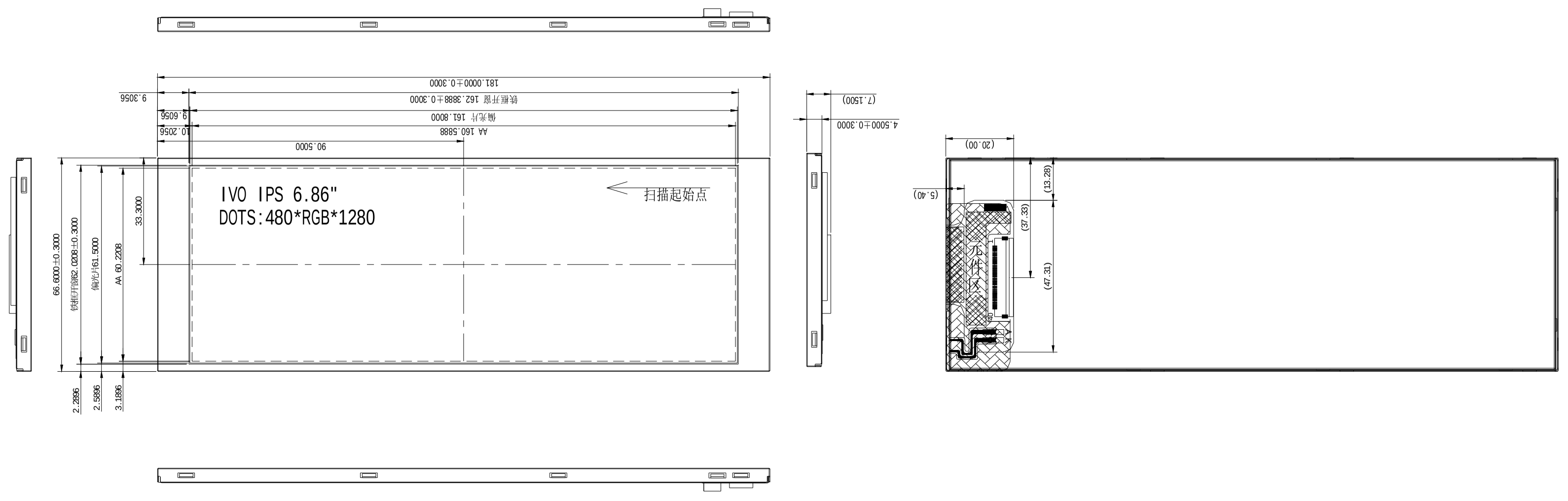
三、变更记录

变更记录表				
变更序号 Change No.	日期 Date	内容及理由 Subject And Reason	版本号 Version No.	负责人 Responser
1	2019.03.14	首次发行	A0	

四、模组成品图纸



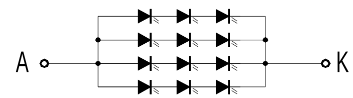
1.RoHS must be complied.
2.△Modification rev. number
3.Draft angle 1.0° :
4." * " ICON MEAN IMPORTANT DIM.
5.All radii without dimension R0.3 ,Unspecified Tolerances is: ±0.3
6.Driver IC:ICN9706

	Item	Symbol	min.	typ.	max.	Unit
LCM	Luminance	Lv	--	--		cd/m²
	Uniformity	Avg	80	85		%
	Colour Coordinate	X	0.26	0.30	0.38	
		Y	0.26	0.33	0.38	
		Vf	9.0	10.8	11.8	V
		If	--	--	--	mA
Viewing Angle (CR>10)	Honzontal	θx+	80	85	-	degree
		θx+	80	85	-	
	Vertical	θx+	80	85	-	
		θx+	80	85	-	

模组亮度值	
600cd/m²	If=120 mA (恒定电流测试)
700cd/m²	If=150 mA (恒定电流测试)
800cd/m²	If=180 mA (恒定电流测试)

●Operating Temperature:-20~+85° C ●Storage Temperature: -30~+85° C
●Storage condition Recommended: temperature (25° C±5° C) and humidity (65%RH±10%RH)

7.Circuit Diagram: 3X4=12



ISSUE	AMENDMENT	DATE
△0	NEW ISSUE	2018.03.06
△1	1.8V,上电时序随之更改	2018.04.13
	18pin和19pin由NC改为接IOVCC	

PIN	DESCRIPTION
1	GND
2	D0P
3	D0N
4	GND
5	D1P
6	D1N
7	GND
8	CLKP
9	CLKN
10	GND
11	D2P
12	D2N
13	GND
14	D3P
15	D3N
16	GND
17	GND
18	IOVCC △1
19	IOVCC △1
20	NC
21	SDA-NC
22	SCL-NC
23	NC
24	RSTB
25	STBYB
26	NC
27	GND
28	K
29	K
30	GND
31	NC
32	GND
33	GND
34	NC
35	A
36	A
37	GND
38	VDD-3V3
39	VDD-3V3
40	NC

MODEL NO.:			REV: V00
CUSTOMER'S NO.: IVO 6.86" IPS			REV: 0
SHEET 1 of 1	SCALE 1 : 1	THE THIRD ANGLE PROJECTION	UNIT: mm
DESIGN:			
CHECKED:			
COUNTERSIGN:			
APPROVED:			

五、PIN 定义

Pin No.	Symbol	Functional	Notes
1	GND	Ground	
2	NOP	MIPI data input	
3	DON	MIPI data input	
4	GND	Ground	
5	D1P	MIPI data input	
6	D1N	MIPI data input	
7	GND	Ground	
8	CLKP	MIPI data input	
9	CLKN	MIPI data input	
10	GND	Ground	
11	D2P	MIPI data input	
12	D2N	MIPI data input	
13	GND	Ground	
14	D3P	MIPI data input	
15	D3N	MIPI data input	
16	GND	Ground	
17	GND	Ground	
18，19	IOVCC	Power supply(1.8V)	
20~23	NC	No connection	
24	RSTB	Global reset pin	
25	STBYB	Standby mode, Normally pulled high	
26	NC	No connection	
27	GND	Ground	
28-29	BL-K	Back light-K	
30	GND	Ground	
31	NC	No connection	
32-33	GND	Ground	
34	NC	No connection	
35-36	BL-A	Back light-A	
37	GND	Ground	
38-39	VDD	Power supply for digital circuits +3.3V input	
40	NC	No connection	

六、Porch 设定/上电时序

480RGBx1280(4 Data Lanes)						
Parameter		Symbol	Min.	Typ.	Max.	Unit
MIPI data frequency		FDATA	300	320	350	Mbps
Clock frequency		FRAME		60		HZ
Hertical Section	Active	THD		480		us
	Period	TH	482.5	512	-	us
	HBP	THBP	1	12	-	us
	HFP	THFP	1	16	-	us
	HSYNC	THPW	0.2	4	-	us
Vorizontal Section	Active	TVD		1280		Line
	Period	TV	1286	1312	-	Line
	VBP	TVBP	2	12	-	Line
	VFP	TVFP	2	16	-	Line
	VSYNC	FTPW	2	4	-	Line

Table 7.1-1 Power On Sequence Timing

Symbol	Value			Unit	Remark
	Min.	Typ.	Max.		
T_{On1}	0			mS	
T_{On2}	0			mS	
T_{On3}	0			mS	
T_{On4}	0			mS	
T2		No limit		uS	
T3	0			mS	
T4	10			mS	
T5	20			mS	
T6	0		T4	mS	
T7	10			uS	
T8	120			mS	

7.1.2 Power ON- PCCS[1:0] =H,L Mode Sequence

Application Power: IOVCC, VCI

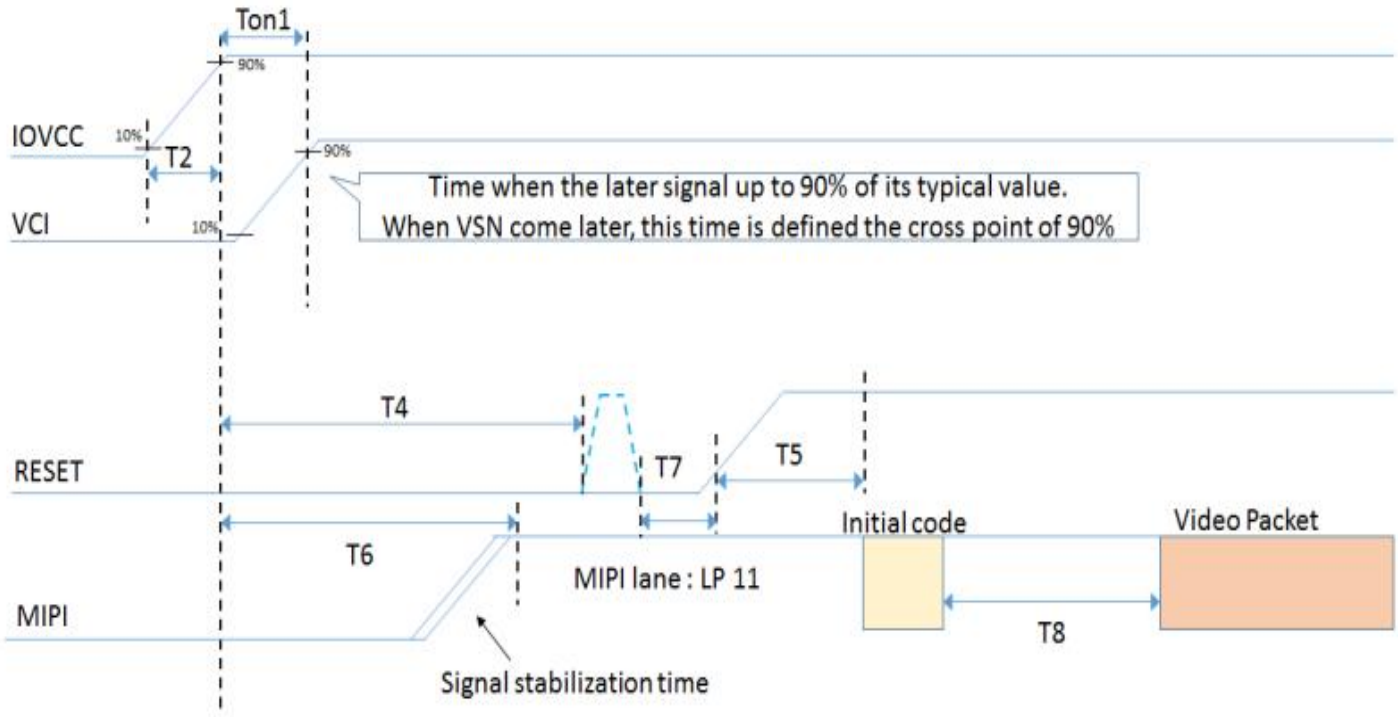


Figure 7.1.2-1: Power On-PCCS[1:0]= H,L mode sequence

Note1: Unless otherwise specified, timings herein show cross point at 50% of signal/power level.

Note2: This power-on sequence is based on adding schottky diode on VGL pin to ground.

七、驱动参数

Electrical Specifications					
No.	Item	Min	Typ	Max	Unit
1	Vcom voltage	-1.9	-1.9	-0.3	V
2	Frame Rate	55	60	65	Hz
3	VGH voltage	15	16	17	V
4	VGL voltage	-12	-11	-10	V
5	VDD	3.2	3.3	3.4	V