



上海冠显光电科技有限公司
Shanghai Top Display Optoelectronics Co., LTD

MODEL NO. : TY040WVC14CT

ISSUED DATE: 2019-08-22

VERSION : 1.0

☒ Preliminary Specification

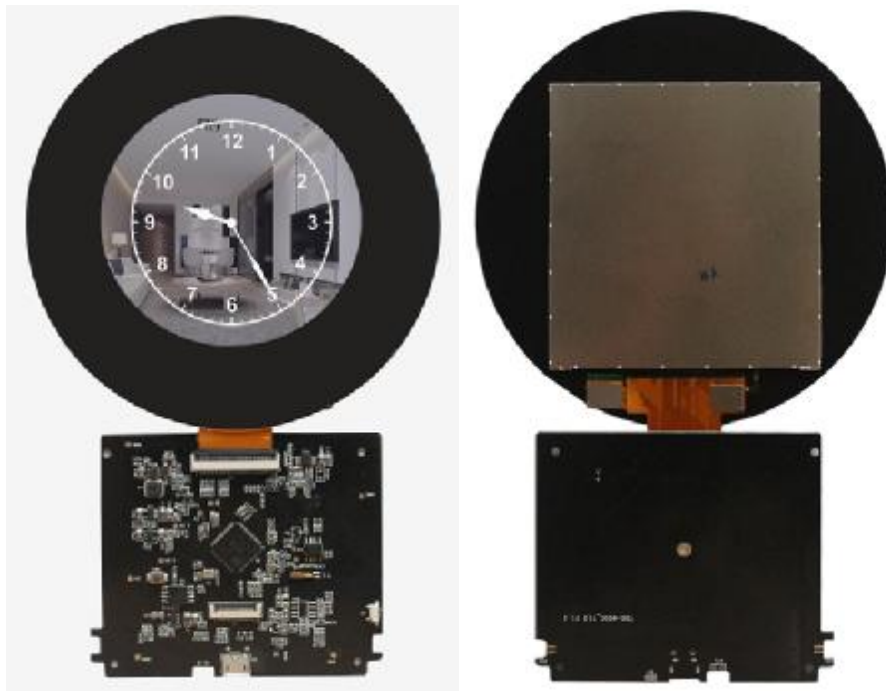
☐ Final Product Specification

Customer : _____

Approved by	Notes

Top Display:

Prepared by	Checked by	Approved by





I Revision History

Issued Date	Description	Ver.
2019-08-22	First release	1.0



I General specifications

Specs	parameters	Description
Display mode	TFT LCD	IPS
Backlight Type	LED	
Dimension	LCM: Radius=57.95 Driverboard:82.59(L)*68.8(W)*3.0(H)	mm
Color	262K	RGB18bit
Brightness	400 cd/m²	It can be adjusted at 64 levels
Active Area(mm)	Radius=35.96	Round CTP Cover glass
Touch panel type	Capacitance Touch panel	White/back cover glass optional
Resolution	480RGB×480	
Other hardware	1Watt audio amplifier and RTC reserved	Speaker is optional
Special feature	Boot video support, video play	Up to 1080P with most video format

I Environment and Electrical Characteristics

specs	parameters
Input voltage range	5VDC
Power consumption	5V/300mA (Maximum brightness)
Working temperature	-20℃~+60℃
Storage temperature	-30℃~+70℃
Working humidity	10%~90%RH
Three anti-treatment	NO

I Communication interface parameter

specs		parameters
Communication interface type		UART (3.3V TTL/CMOS LEVEL),follow TGUS® protocol
Serial baud rate	Minimum value	2400
	Typical value	9600
	Maximum value	115200
Data format		1 start bit -8 data bits - no parity bit -1 stop bit (8N1)
Micro USB		To update FW and UI
font		GBK (Replaceable) ,vector font
Users connection interface		20pin 0.5mm pitch ZIF



I Memory parameters

Parameters	Description	Applications
FLASH memory	SPI FLASH(16MB) on board	10MB for users to store picture, font ,icon, boot video..

I Pin description

Pin Assignment	Pin Name	Type	Description
1	/		It must be floating
2	/		It must be floating
3	GND		
4	/		It must be floating
5	/		It must be floating
6	GND		
7	/		It must be floating
8	/		It must be floating

J1: 20pin 0.5mm pitch ZIF (bottom contact)



9	GND		
10	UART2_RXD		UART Receive ,Connect to TXD of USER MCU
11	UART2_TXD		UART Transmit, Connect to RXD of USER MCU
12	/		It must be floating
13	/		It must be floating
14	GND	GND	
15	USB-DM		USB for updating the firmware
16	USB-DP		USB for updating the firmware
17	GND	GND	
18	VCC	POWER (Output)	3.3VDC output (100mA) ,it can be floating if user don't need it
19	VCC5V	POWER	5VDC input
20	VCC5V	POWER	5VDC input

Note: looking at the PCB drawing to find the PIN1 of connector J1

I Drawing

1> PCB Drawing of Driver board



1		2		3		4		5		6		7		8	
上海冠显光电科技有限公司 Shanghai Top Display Optoelectronics Co., Ltd				DESIGN: (设计)		CHECKED: (检查)		APPROVED: (批准)		SPECIFICATION		规格			
Date: (日期)				2019.04.12		Page: (页数)		1/1		图纸视角:		CUSTOMER'S CODE: (客户型号)		TID0'S CODE: (冠显型号)	
												TY040HDC11CT		EDITION: (版本号)	
														EDITION: (版本号)	
														01	

68.8±0.2

82.59±0.2

11.94±0.1

Component Height Max 3

LCD COM

4.0±0.2

Customer Name:		Approval Date:		Approved By:		Please Confirm This Drawing On/Before	
客户名称		承认日期		承认		请 登 回 此 图	
1		2		3		4	
5		6		7		8	

标示	日期	更改内容	签署
00	2018.06.30		
01	2019.04.12	changing the dimension of PCB from 12 to 11	

2> LCD Drawing

