



深圳市一众显示科技有限公司

SHEN ZHEN TEAM SOURCE DISPLAY TECH. CO, TD.

TFT-LCD Module Specification

Module NO.: TSS0103001

Version: V1.0

☐ APPROVAL FOR SPECIFICATION

☐ APPROVAL FOR SAMPLE

For Customer' s Acceptance:	
Approved by	Notes

Team Source Display:		
Presented by	Reviewed by	Approved by

REVISION HISTORY

Revision 版本号	Date 日期	Contents of Revision Change 修改内容	Remark 备注
V1.0	April.19th, 2022	Preliminary release	

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1. 概要信息 Summary Info

1.1. 参数概要 Parameter Summary

- 1) CPU: CPU ARM Cortex-M0
- 2) Storage: 128Mbit norFlash(available to custom)
- 3) Power supply: DC 5V, 500mA
- 4) Operation Type: Rotate, Press
- 5) Ambient light: RGB three-color light circle at the bottom, can be customized
- 6) Appearance: aluminum alloy car anodized sandblasting, black/white optional, cover glass 2.5D/2.0D optional
- 7) Storage temperature: -30~80°C
- 8) Operating temperature: -20~70°C

1.2. 产品图片 Product Photo



2.1. 串口通信定义 UART communication protocol

Pin NO. 序号	Symbol 符号	描述 Description	电压范围 Voltage Range	备注 Remarks
1	VCC	Power supply 4. 5V-5. 5V	4.5-5.5V	
2	GND	Connect to the ground		
3	THS	Burning port	3. 3V	
4	TCK	Burning port	3. 3V	
5	TX	Data Output	3. 3V	
6	RX	Data Input	3. 3V	

2.2. 显示性能参数 Display

参数 Item	数据 Parameter	说明 Description
Color	65K color	
AA	32.40(W)*32.40(H)	1.28 inch
Resolution	240*240 dots	Round LCD
Back light mode	LED	Not less than 30000Hrs (If continuing to work with the highest brightness continues to work, the brightness will decays 50% of the time)
Brightness	300nit	

2.3. 电性能参数 Voltage & Current

参数 Item	测试条件 Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Power Voltage	-	4.0	5.0	5.5	V
Operation Current	VCC= +5V,Backlight brightness max	50	100	150	mA
	VCC= +5V, Backlight off	-	50	-	mA

Recommended power supply:5V 1A DC

2.4. 工作环境和可靠性参数 Reliability Test

参数 Item	测试条件 Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Operating Temperature	5V voltage, humidity 60%	-20	25	70	°C
Storage Temperature	-	-30	25	85	°C
Working Humidity	25°C	10%	60%	90%	RH
ESD	-	Contact: ±4KV,Air: ±8KV			KV

2.5. 接口性能参数 Interface

参数 Item	测试条件 Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Serial port baud rate	User-defined	1200	115200	921600	bps
Burning port baud rate	9600	1200	115200	921600	bps
Serial output level (TXD)	Output 1, Iout = 1mA	3.0	3.3	-	V
	Output 0, Iout = 1mA	-	0	0.3	V
Serial input level (RXD)	Input 1, Iin = 1mA	2.4	3.3	5.0	V
	Input 0, Iin = 1mA	0	-	0.5	V
Communication mode	Choose one from IIC or SPI or UART				
User interface	XH2.54-10PIN				

2.6. 存储器特性 Storage Characteristics

存储器类别 Storage Category	参数 Parameter	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
RAM memory	Running memory	-	36		KB
Nor Flash	User code and resources (Resource images support png, jpg, png format)	-	2		MB

3. Mechanical Drawing

