Specification

QT240240XC-1.28

QT240240XC-1.28-Inch Series

Shenzhen Qintang Shengshi Technology Co., Ltd. is a professional serial port display solution provider,integrating R&D,production, and sales.The developed serial port displays are applicable to medical,industrial control,vehicle-mounted,home appliances,kitchenware, and smart home applications.The QT240240-1.28 series is an intelligent graphic display system developed based on Qintang Shengshi's serial port display hardware platform. Users can easily select functions via the knob or touchscreen of the serial port smart display terminal. The chip incorporates built-in serial port command functions including image display, GIF animation display, cyclic image display, startup screen display, progress bar display, and text string display.QR code generation,and display of geometric shapes such as drawing lines,circles, triangles,rectangles, and other functions

1. Product Display:

Touch Style



Touch-free version





II. Product Overview:

- ☐ 1.28 inches, 240×240 resolution;
- ☐ The knob screen enables human-computer interaction;
- ☐ The touchscreen enables human-computer interaction;
- ☐ UART communication supports a maximum rate of 115,200 bps.
- ☐ Can store images and font libraries, and can be updated via the serial port

➢ Storage capacity is customizable, supporting up to 128 MB

- ☐ Support RTC clock functionality

- ☐ Display data through variable operations
- ☐ UI develop
- ☐ program development
- ☐ Outer Shell Color Customization
- ☐ Spinner + Press + (Touch)

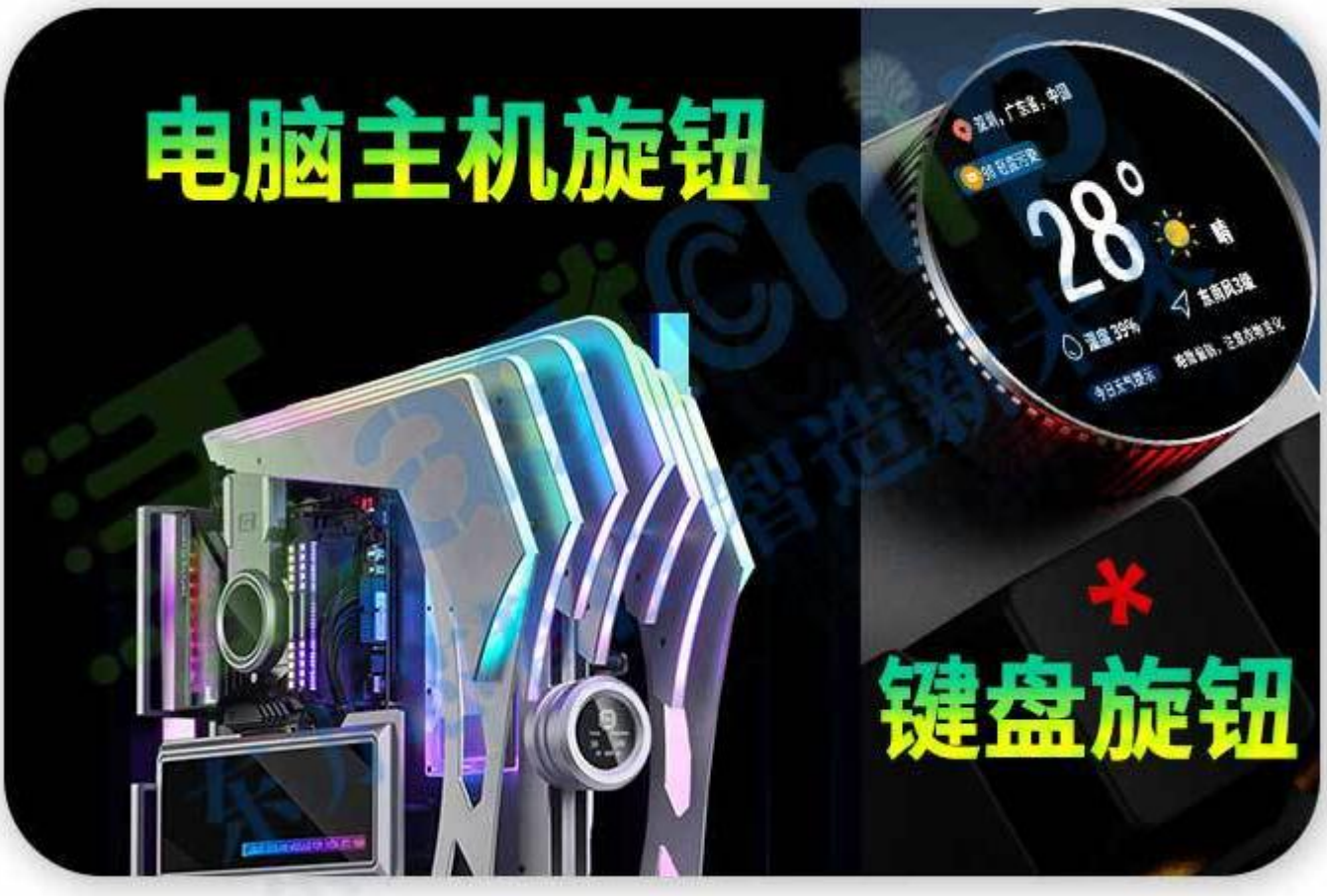
III.Practical Product Examples (Illustrated):

Smart Home



Oven







汽车旋钮屏



燃气灶旋钮屏

东莞彭智控科技（深圳）有限公司
Dongguan Pengzhi Intelligent Control Technology (Shenzhen) Co., Ltd

IV. Product Parameters:

	Parameter	Data	Explain
Display Performance Parameters	1.28 inches	Four-wire SPI	
	Display Size (A.A.)	32.0 (Long) *32.0 (Wide) mm	–
	Resolution ratio	240×240 pixels	
	Angle of view	IPS	Typical values: 70 °/70 °/50 °/70 ° (L/R/U/D)
	Backlight Mode	LED	–
	Luminance	400 Cd/㎡	–
		–	

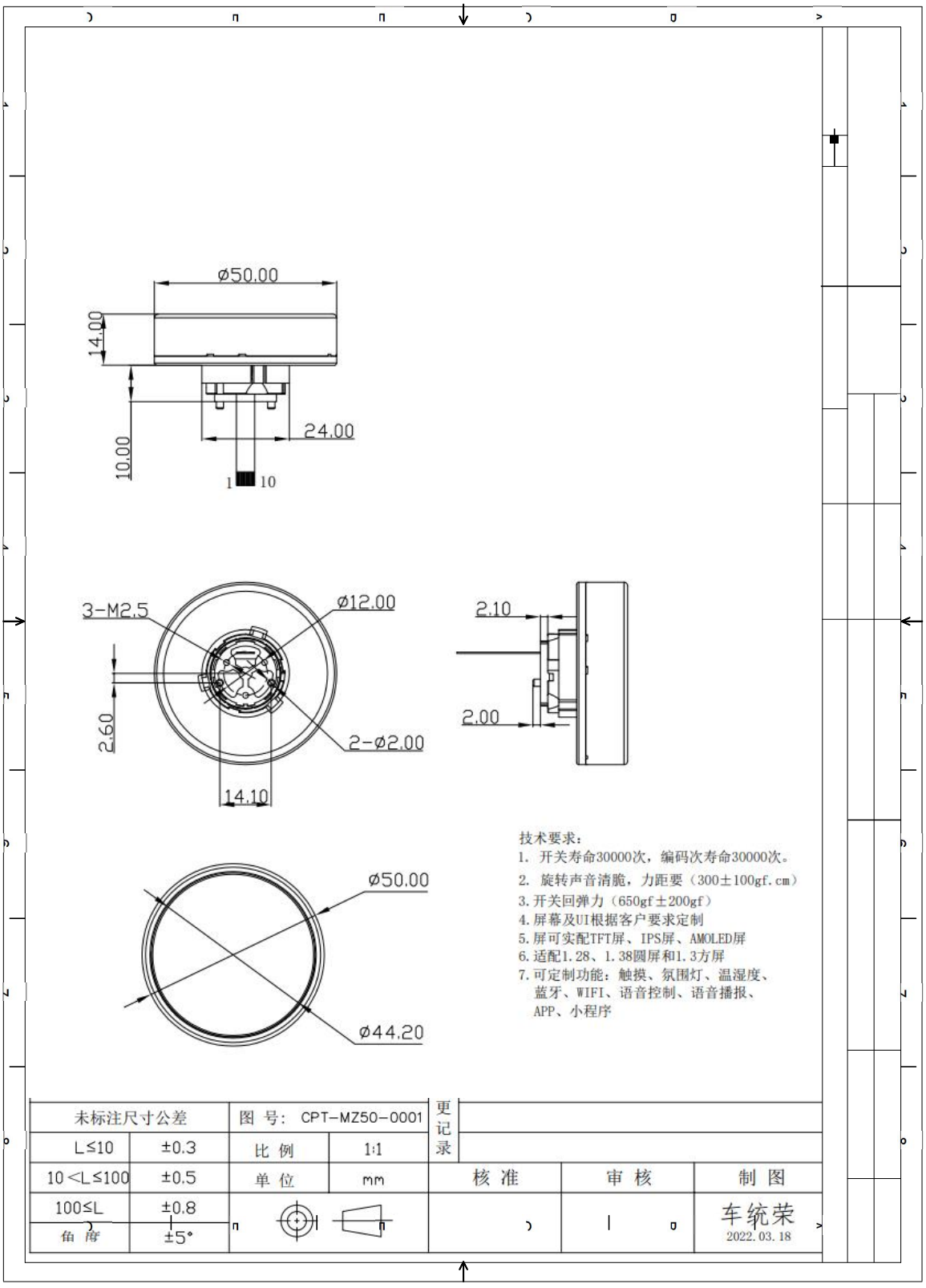
	Parameter	Test condition		Least value	Representative value	Crest value	Unit
Electrical Performance Parameters	Working voltage	–		–	5.0	–	V
	Working Current	*VCC=+5V*	Backlight is brightest	–	80	–	mA
			Turn off backlight	–	4	–	mA
	Recommended power supply: A 5V/1A DC regulated power supply						
Reliability Parameter	Working temperature	5 V voltage, 60% humidity		-20	25	70	℃
	Storage temperature	–		-30	25	80	℃
	Working Humidity	–		10%	60%	90%	RH
	Three-Defense Treatment	–		–	Not have	–	–
	ESD levels of protection	–		–	–	–	–
	Pre-manufacturing aging time	–		–	–	–	H
Interface Performance Parameters	Serial Port Rate	–		1200	115200	–	bps
		–		–	–	–	bps
	Serial Output Levels (TXD, BUSY)	Output 1, Iout=1mA		3.0	3.2	–	V
		Output 0, Iout=-1mA		–	0.1	–	V
		VOHmin=2.48V @IOH=-4mA VOLmax=0.44 @IOH=-4mA					
	Serial Input Level (RXD)	Enter 1, I in = 1 mA		1.5	3.3	15	V
		Enter 0, I_in = -1 mA		-15	0.0	0.5	V
		VIHmin=1.5V VILmax=0.5V					
	Serial Mode	UART 1					
	User Interface Method	UART					
	USB Interface	Not have					
	SD Card Interface	Not have					

	Type	Parameter	Least value	Representative value	Crest value	Unit
Memory Characteristics	FLASH memorizer	Gross capacity	–	–	128	MB
		Character Storage Space	–	–	32	MB
		Total images stored in full screen	–	–	200	Width

V. Software References:If Needed, Please Contact the Business Department.

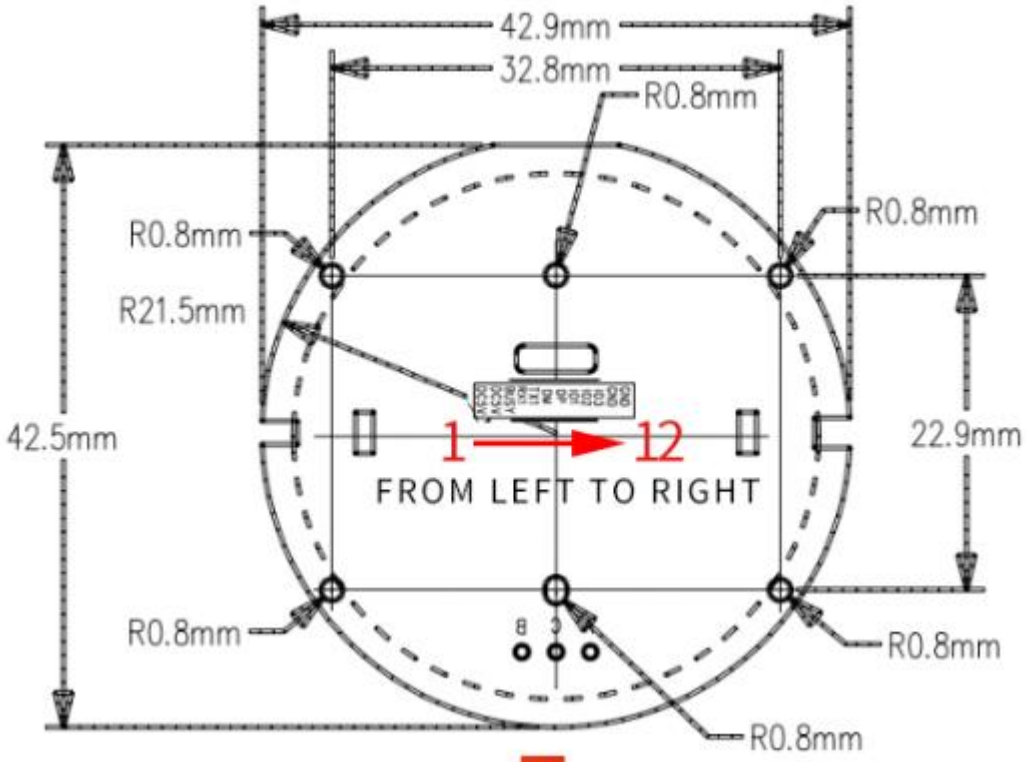
VI. Product Dimension Diagram:

- Structural components (default tolerance: ±0.30 mm; unit: mm):

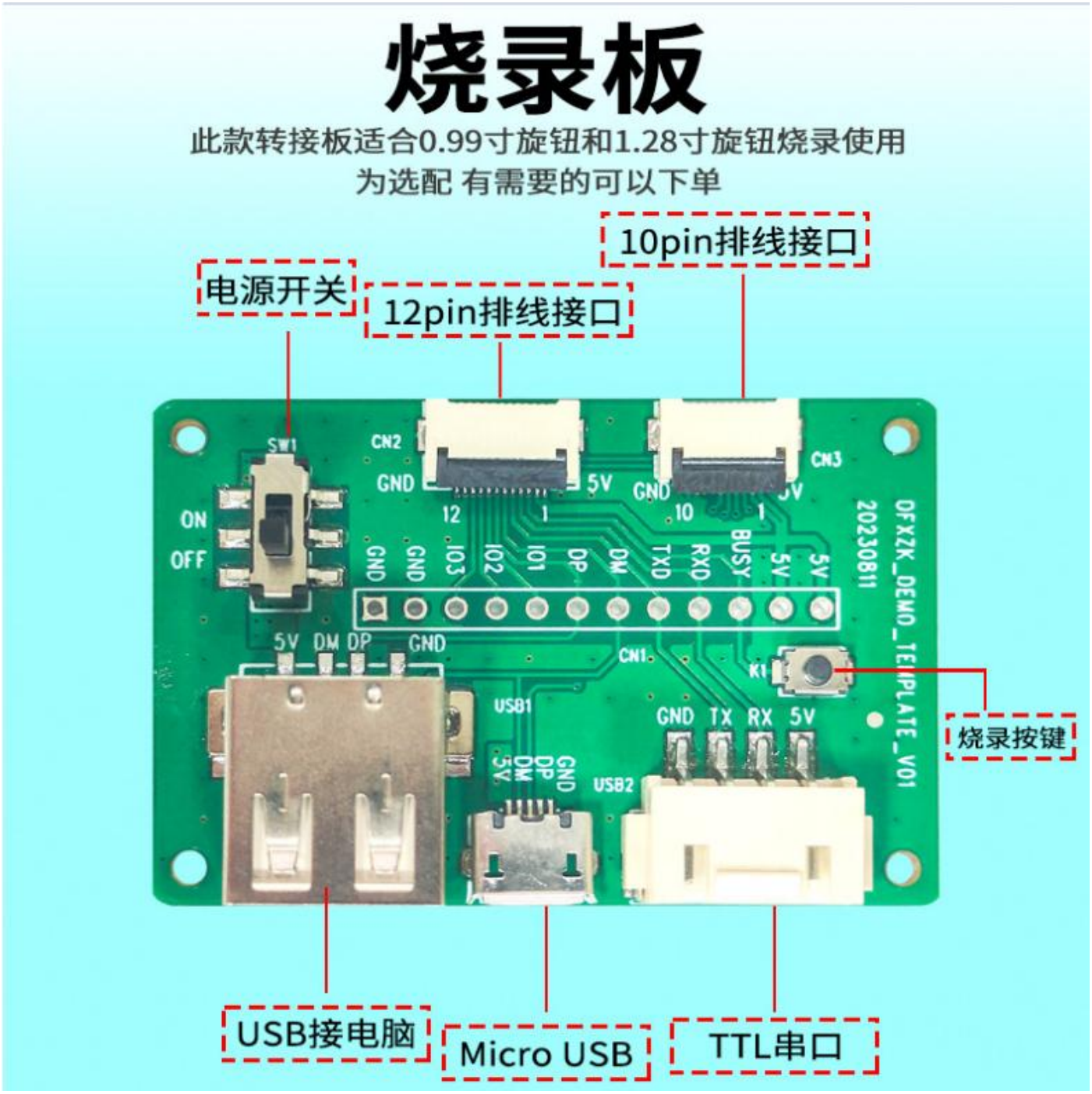


VI. Interface Definition:

1、 UART Interface Definition (FPC12P/0.5mm):



CON1引脚编号	引脚名称	引脚名称	说明
1	DC5V	电源输入+	-
2	DC5V	电源输入+	-
3	BUSY	接地后上电为升级模式	-
4	RXD	串口接收数据	-
5	TXD	串口发送数据	-
6	DM	USB数据线+	-
7	DP	USB数据线-	
8	IO0	GPIO	
9	IO1	GPIO	
10	IO2	GPIO	
11	GND	电源输入-	
12	GND	电源输入-	



The burn-in board is used for developing the burn-in process. It can be purchased separately if needed.