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

规格书
Pre-specfication

型号 MODEL:	TY070WVC01NJ
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版本 VERSION:	1.0

● 版本记录

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1. 硬件介绍 Hardware introduction

本章节主要介绍了产品规格与连接器定义

This section mainly introduces the product specifications and the definition of Connector Definitions

1.1. 产品规格 Product Specifications

● 产品参数 Product parameter	
型号 Model	TY070WVC01NJ
产品系列 Product serial	消费级 basic series
核心处理器 Core processor	TR240
尺寸 Size	7.0 inch
分辨率 Resolution	800RGB×480
屏幕有效显示区(mm) Active area(mm)	153.84(W)×85.63(H)
产品尺寸(mm) Product size(mm)	190.50(W)×105.40(H)×15.90(T)
颜色 Color	16.7M，24 位 RGB

存储空间 Storage	16 M Bytes
图片格式 Pictures format	JPG/PNG
固件升级方式 Firmware update	TF 卡 TF Card
UI 下载方式 Download pictures	TF 卡 TF Card
蜂鸣器 Buzzer	支持 Support
音频 Audio	支持 Support
RTC	支持 Support
● **屏幕参数 LCD screen**	
显示器类型 Display type	TFT LCD TN
背光 Back light	LED
亮度（cd/㎡） Brightness(cd/m²)	250
对比度	500

Contrast	
背光寿命（小时） Backlight life(hour)	30000
视角(T/B/L/R) Perspective(T/B/L/R)	(60/70/70/70)
● **触摸盖板 Touch panel**	
触摸类型 Touch mode	无触摸 None touch screen
● **环境电气参数 Environmental electrical parameters**	
输入电压 Voltage	4.5~15V，典型值 12V 4.5~15V，Typical 12V
功耗 Power consumption	12V/251mA (最大值，启动电流) 12V/251mA (Max Max brightness) 12V/49mA (关闭背光) 12V/49mA (Backlight off)
工作温度 Working temperature	-20℃～70℃
存储温度 Storage temperature	-30℃～85℃
工作湿度 Working humidity	10%~90%
存储湿度 Storage humidity	10%~90%

1.2. 连接器定义 Connector Definitions

引脚名称	类型	复位状态	内部可配置上下拉电阻	默认驱动能力(mA)	电压	功能
VCC	POWER	-	-	-	-	POWER-INPUT，DC4.5-15V
VCC	POWER	-	-	-	-	POWER-INPUT，DC4.5-15V
NC	-	-	-	-	-	浮空
TX	-	-	-	-	5V	UART2-TX，接用户 RX
RX	-	-	-	-	5V	UART2-RX，接用户 TX
NC	-	-	-	-	-	浮空
GND	POWER	0V	-	-	0V	POWER-GND
GND	POWER	0V	-	-	0V	POWER-GND

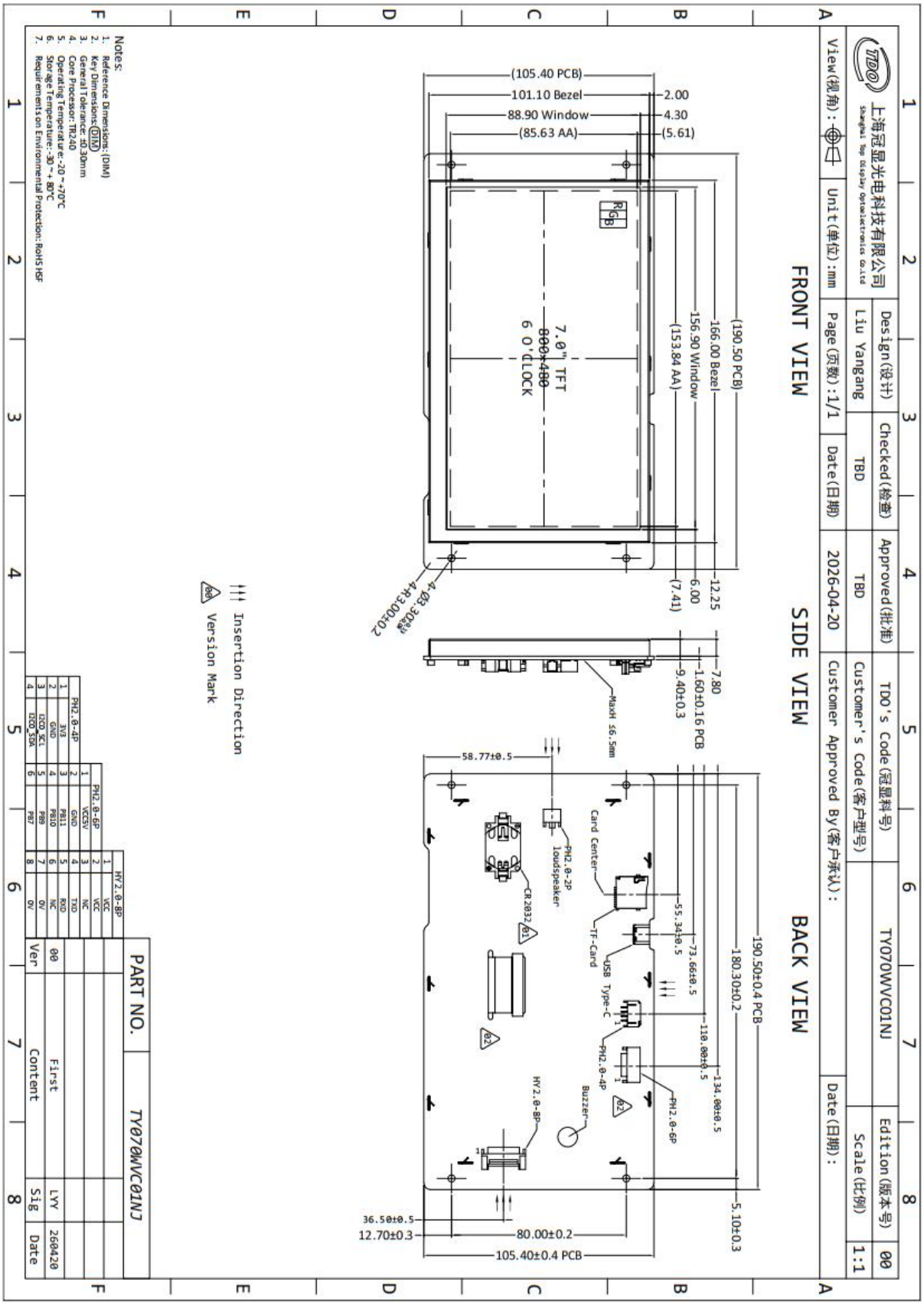
1.1. IO 引脚定义

引脚名称	类型	复位状态	内部可配置上下拉电阻	默认驱动能力(mA)	电压	功能
VCC5V	POWER	-	-	-	5V	POWER
GND	POWER	-	-	-	0V	POWER
PB11	-	-	-	-	-	
PB10	-	-	-	-	-	
PB9	-	-	-	-	-	
PB7	-	-	-	-	-	

引脚名称	类型	复位状态	内部可配置上下拉电阻	默认驱动能力(mA)	电压	功能
3V3	POWER	-	-	-	3.3V	
GND	POWER	-	-	-	0V	
I2C0_SCL	-	-	-	-	-	I2C0_SCL
I2C0_SDA	-	-	-	-	-	I2C0_SDA

● 通讯接口参数 Communication interface parameters	
通讯方式 Communication mode	TTL & RS232 & RS485(TTL 和 232 切换, RS485 做成独立的接口) TTL & RS232 & RS485 (TTL and 232 are switchable; RS485 is implemented as a separate interface)
通讯波特率 Baud	2400~115200，典型值 115200 2400~115200，typical value is 115200
数据帧格式 Data frame format	8N1
通讯插件规格 Communication plug-in specification	HY2.0-8in

2. 产品尺寸 Product Size

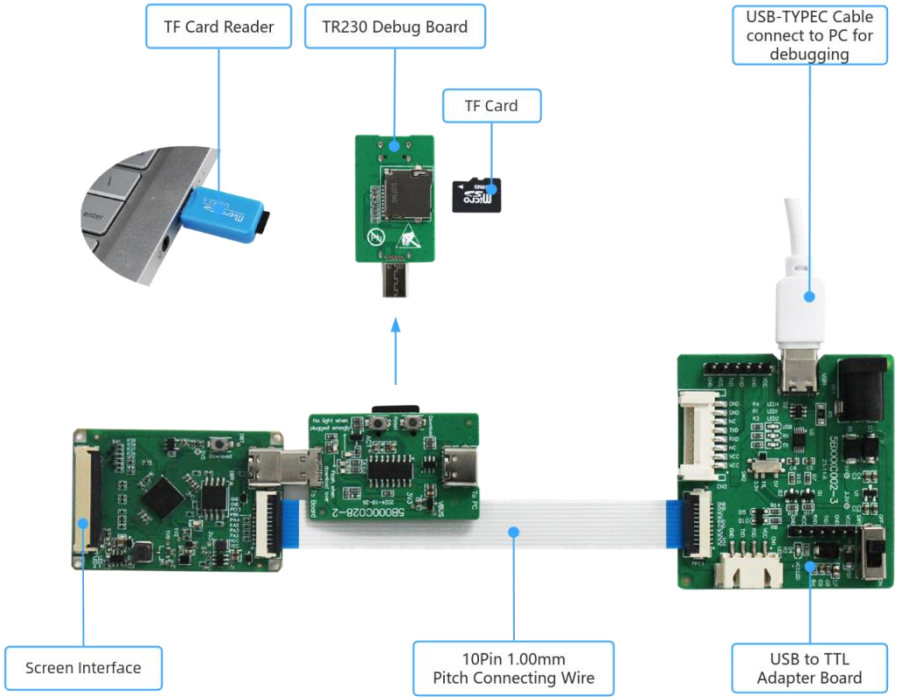


(Product drawings)

3. 调试工具 Debugging Tools

建议首次使用 TDO 智能显示串口屏的用户购买标准配件。详细信息可联系客服人员。

It is recommended for new users of TDO smart LCMs to purchase official accessories. For more details, please refer to customer service center.



上图为调试工具的使用示意图，非产品图。本产品实物图请参考文档 1.2

(The above diagram shows the use of the debugging tools, not the product diagram. Please refer to document 1.2 for the physical drawing of this product.)

4. 型号定义 Model Definition

TY 070 WV C 01 N J

12 3 4 5 6 7 8

① ： 1 码--TDO 缩写，固定。
1 position--TDO abbreviation, fixed。

② ： 1 码---U(U 系列串口）/P(并口)/Y(Y 系列串口)/H(HDMI 接口类)/S(转接板)
1 position--U(U series serial port)/P(parallel port)/Y(Y series serial port)/H(HDMI interface type)/S(adapter board)

③ ： 3 码--尺寸,eg.070->7.0 寸
3 position--size,eg..070->7.0 inch

④ ： 2 码--分辨率缩写
2 position--resolution abbreviation

⑤ ： 1 码--C（消费级）/ H（商业级）/ M（医疗级）/ L（MINI 板）/ P（带外壳）
1 position--H (standard series)/C (basic series)/L (MINI board series)/P (with housing series)/M (medical series)/A (AV series)

⑥ ： 2 码--流水号
2 position---serial number

⑦ ： 1 码--C(带电容触摸面板)/R(带电阻触摸面板)/N(不带触摸面板)
1 position---C (with capacitance touch panel)/R (with resistive touch panel)/N(with NO touch panel)

⑧ ： 1 码--平台号 F-TR660 / G-TR540 / H-TR230M / J -TR240 / K-TR661 / D-TR670 / 0-Android / 1-Linux
1 position-----Platform: F-TR660 / G-TR540 / H-TR230M /J -TR240 / K-TR661 / D-TR670 / 0-Android / 1-Linux

注意：未涉及关键结构工艺修改或布局大调整，仅产品工艺或可靠性方面的更迭，公司不对外发起变更，具体以收到的实物为准

Note: There is no key structural process modification or major layout adjustment, only changes in product process or reliability. The company will not initiate changes to the outside world. The specific items are subject to the received items.

5. 包装与物理尺寸 Packaging and Physical Dimensions

单品重量 Single product weight					
净重量（G）Net weight (G)	TBD				
包装标准和总重量 Packaging standard and total weight					
包装箱型号 Packing box model	包装箱尺寸（长*宽*高,单位：mm）Packing box size (length*width*height, unit: mm)	层数 Layers	数量（PCS）/层 Quantity (PCS)/layer	总数量（片）Total quantity (pieces)	总重量（KG）Total weight (KG)

6. 销售与服务 Sale and Service

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