

# DMG12800C070\_32WTC



## ● 系统硬件 System Hardware

参数 Properties	数据 Parameters
主板级别 Motherboard Level	商业级 Commercial-grade
CPU	RK3566, 四核 ARM Cortex-A55 1.8GHz 处理器 RK3566, Quad-core ARM Cortex-A55 1.8GHz Processor
操作系统 OS	Android 11
RAM	2Gbytes LPDDR4
存储器 Storage	8Gbytes eMMC

## ● 显示性能参数 Display Parameters

参数 Properties	数据 Parameters	说明 Description
尺寸 Size	7.0 inch	-
显示屏类型 LCD Type	IPS TFT 液晶屏 IPS, TFT LCD	-
视角 Viewing Angle	85°/85°/85°/85°	视角宽, 对比度高, 色彩还原好 Wide viewing angle, high contrast, and good color reproduction
有效显示区域 Active Area (AA)	94.20mm(W)×150.72mm (H)	-
可视区域 Viewing Area (VA)	94.60mm(W)×151.12mm (H)	-
分辨率 Resolution	800x1280	-
背光寿命 Backlight Service Life	>20000 Hrs	背光寿命: 指背光灯珠在测试条件下持续工作至亮度衰减为初始值 50%的时间 Backlight service life refers to the period the LED backlight operates under test conditions until brightness decreases to 50% of the initial level
亮度 Brightness	250nit	100 级亮度调节 (当亮度调节至最高亮度的 1%~30% 时, 可能出现闪烁现象, 不建议在此范围使用) 100-level brightness adjustment (Flickering may occur at 1%-30% of max brightness; not recommended for use in this range)

注: 长时间显示固定画面可能导致残影现象, 建议设置动态屏保进行规避。  
 Note: Use dynamic screen saver to prevent afterimages from prolonged fixed page display.

## ● 触摸参数 Touch Parameter

参数 Properties	数据 Parameters
触摸屏类型 Touch Type	电容触摸屏 Capacitive touch panel
触摸屏结构 Structure	G+G 结构, 表层为钢化玻璃 G+G structure with tempered glass surface

## ● 电源 Power Supply

参数 Properties	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
工作电压 Power Voltage	9.0	12.0	36.0	V

推荐工作电源: 12V 1A 的直流稳压电源。  
 Recommended power supply: 12V 1A DC.

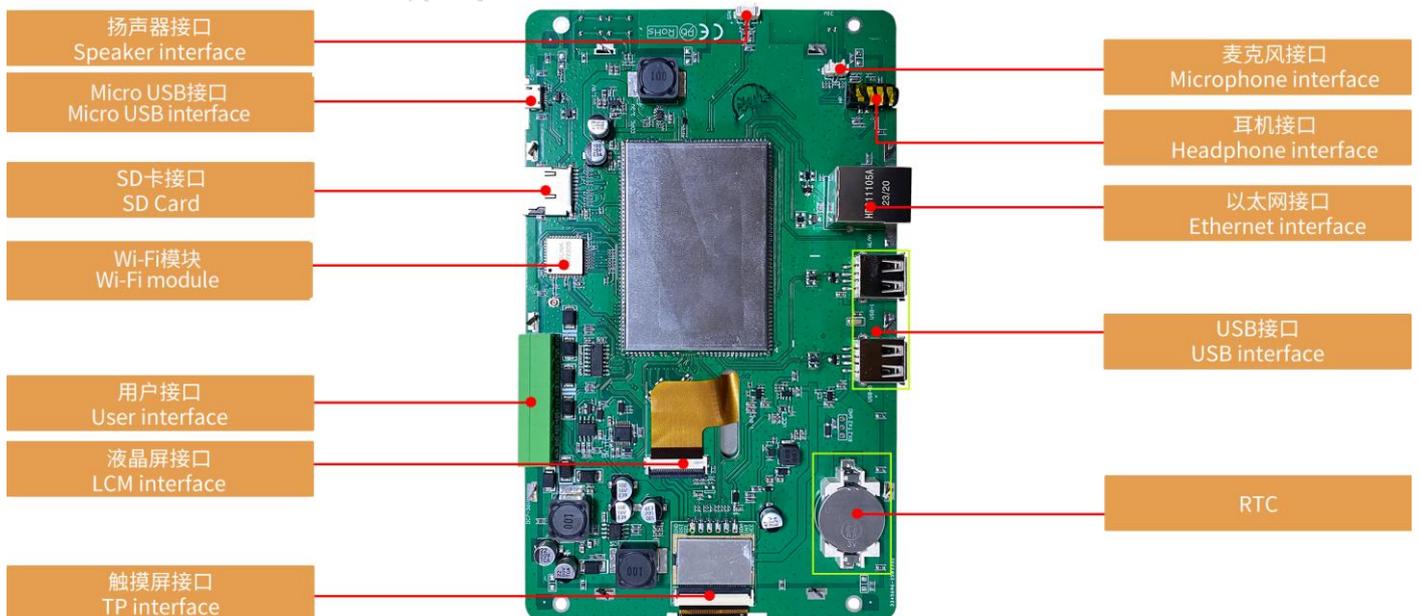
## ● 工作环境和可靠性参数 Environment & Reliability Test

参数 Properties	测试条件 Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
工作温度 Working Temperature	12V 电压下, 湿度 60% 60%RH at 12V voltage	-10	25	60	°C
储存温度 Storage Temperature	-	-20	25	70	°C
工作湿度	25°C	10%	60%	90%	RH

<b>Working Humidity</b>	
<b>三防漆 Conformal Coating</b>	有 Y
<b>ESD</b>	空气放电±8KV, 接触放电±6KV Air: ±8KV, Contact: ±6KV
<b>辐射骚扰 RE</b>	Class B
如在高于 60 摄氏度温度下使用需要额外增加散热措施。 Additional cooling required for operation above 60°C.	

● **外设接口 Peripheral and Interfaces**

参数 Properties	说明 Description
<b>User Interface</b>	10Pin_3.81mm 卧式插座 10Pin_3.81mm Horizontal socket
<b>COM</b>	RS232*2 (COM5 & COM9), RS485*1, RS232/TTL*1 (COM0, RS232 default)
<b>Ethernet</b>	10/100Mbps
<b>USB</b>	USB 2.0*2 (HOST), Micro USB*1 (OTG)
<b>SD Card</b>	最大 64G Max 64G
<b>RTC</b>	精度±20ppm @25°C Accuracy: ±20ppm @25°C
<b>Speaker</b>	2Pin_1.25mm interface*1
<b>Microphone</b>	2Pin_1.25mm interface*1
<b>Headphone</b>	3.5mm spacing interface*1
<b>Camera</b>	USB 2.0
<b>Wi-Fi</b>	IEEE 802.11b/g/n, 2.4GHz, Wi-Fi 4
<b>蓝牙版本 Bluetooth Version</b>	BT4.2



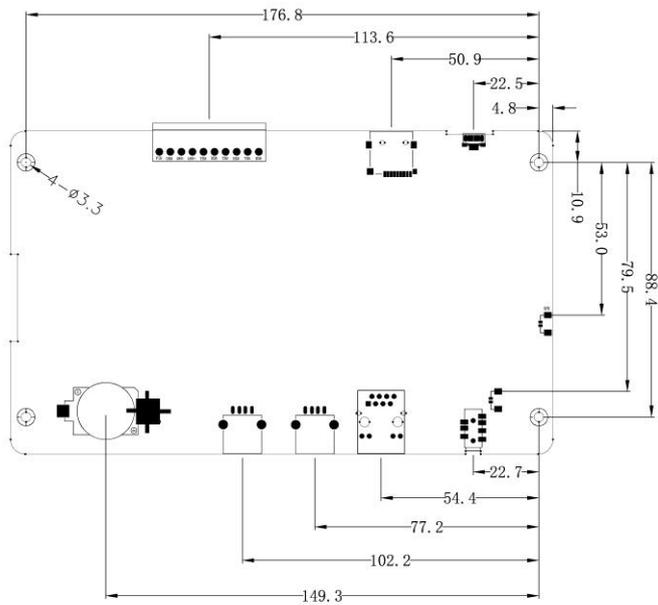
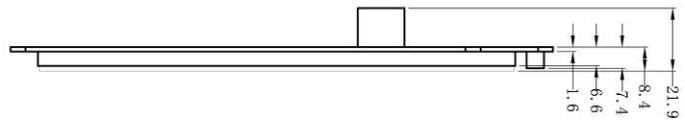
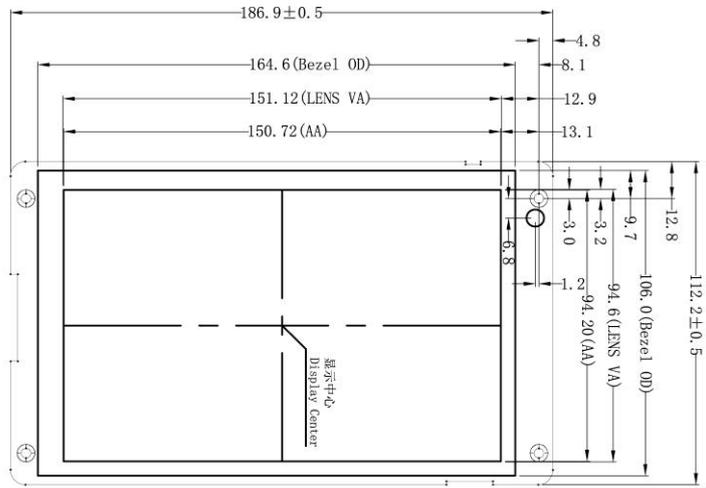
● 开发平台 Development Platform

开发方式 Development	
Android	Java, Kotlin, C++

● 包装和物理尺寸 Packing Capacity & Dimension

尺寸 Dimension				
外形尺寸 Dimension	112.2(W)×186.9(H)×21.9(T)mm			
净重量 Net Weight	305g			
包装标准 Packing Capacity				
包装箱型号 Model	包装箱尺寸 Size	层数(层) Layer	数量/层(片) Quantity/Layer	总数量(片) Quantity (Pcs)
1号箱 Carton1:	220mm(L)×160mm(W)×47mm	-	-	-
2号箱 Carton2:	250mm(L)×200mm(W)×80mm	2	1	2
3号箱 Carton3:	320mm(L)×270mm(W)×80mm	2	2	4
4号箱 Carton4:	450mm(L)×350mm(W)×300mm	1	10	10
5号箱 Carton5:	600mm(L)×450mm(W)×300mm	1	20	20

定义 Definition	序号 Pin#	类型 IO	说明 Description
VIN	1	P	电源输入 Power Input
GND	2	P	公共接地 GND
485-	3	B	RS485-
485+	4	A	RS485+
TX9	5	O	串口9输出 Output
RX9	6	I	串口9输入 Input
TX0	7	O	串口0输出 Output
RX0	8	I	串口0输入 Input
TX5	9	O	串口5输出 Output
RX5	10	I	串口5输入 Input



1. 尺寸定位基准为定位孔  
Location hole is used as position reference.
  2. 未标注公差为 $\pm 0.3\text{mm}$   
Unmarked Tolerance is  $\pm 0.3\text{mm}$
- 注: 虚线标注为有效显示区域

型号 Model	DMG12800C070-32WTC		
图框 Drawing	A4	绘制 Drawn	DWIN
比例 Scale	1:1	审核 Review	
单位 Unit	MM	批准 Approval	
		日期 Date	
		日期 Date	
迪文科技 DWIN Technologies			

● **修订记录 Revision Records**

版本 Rev.	日期 Revise Date	描述 Content	编辑人 Editor
00	2022-10-08	首次发布 First Edition	郑运佳
01	2024-11-18	增加开发平台的描述 Add the description of development platform	陈艳
02	2025-03-05	新增蓝牙描述 Add the description of Bluetooth	陈艳
03	2025-05-15	更新 Wi-Fi 模块描述 Update the description of Wi-Fi module	陈艳

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