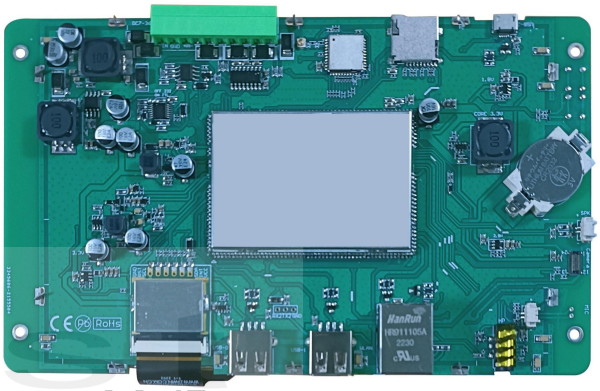
Represented by:

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DMG12800T070_32WTC





Features:

- **Industrial Android intelligent display terminal based on RK3566, running Android 11 operating system.**
- **7.0-inch, 1280*800 pixels resolution, 16.7M colors, IPS-TFT-LCD, wide viewing angle, Capacitive touch.**
- **Compatible with WIFI, bluetooth, microphone, camera and other rich peripherals.**
- **Available for USB and SD card updates.**
- **Available for downloading Android general apps to realize functions such as WiFi ,wired internet , browsing, music and video playback, data copy, etc.**
- **Available for RS232, RS485 and Ethernet port to connect and communicate with external devices.**

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Master Control Parameters

Properties	Parameters
Motherboard Level	Industrial
CPU	RK3566, Cortex-A55, quad-core
OS	Android 11
FLASH	8Gbytes EMMC
RAM	2Gbytes LPDDR4

Display Parameters

Properties	Parameters	Description
Color	16.7M (16777216) colors	24 bit color 8R8G8B
Panel Type	IPS	IPS process, TFT LCM with wide viewing angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best View: symmetrical
Active Area (A.A.)	149.76mm (W)*93.60mm (H)	1280*800 Pixel
Visible Area (V.A.)	150.76mm (W)*94.60mm (H)	1280*800 Pixel
Resolution	1280*800 Pixel	Available for 0°/90°/180°/270°rotated display
Backlight	LED	≥20000H(time of the brightness decaying to 50% on the condition of continuous working with the maximum brightness)
Brightness	250nit	100 levels adjustment(It's not recommend to set brightness to 1%~30% of the maximum, which may lead to LCD flicker.)
Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time.		

Voltage & Current

Properties	Conditions	Min	Typ	Max	Unit
Power Voltage	-	7.0	12.0	36.0	V
Operation Current	VCC = +12V, Backlight on	-	310	-	mA
	VCC = +12V, Backlight off	-	140	-	mA
Recommended power supply: 12V 0.5A DC					

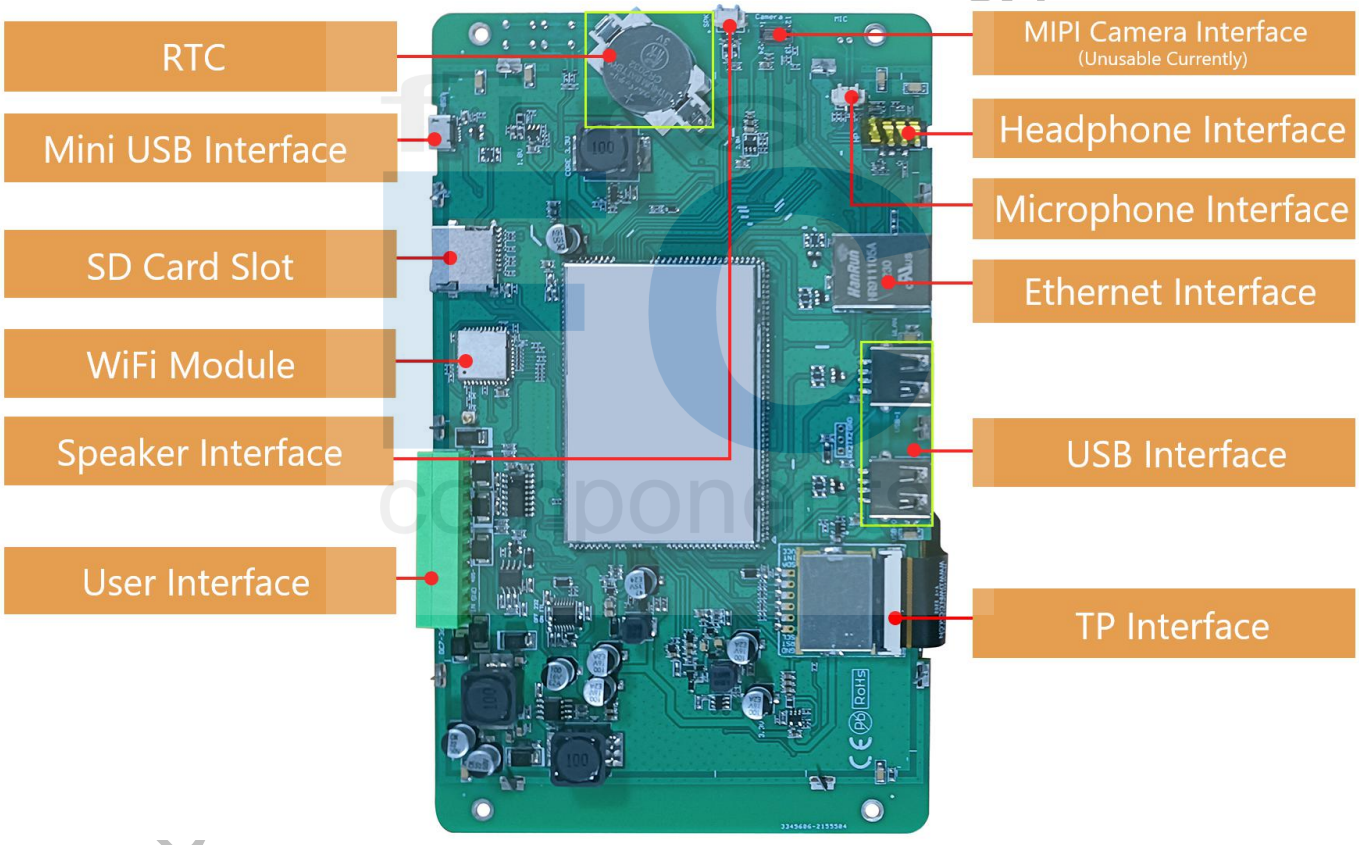
Reliability Test

Properties	Conditions	Min	Typ	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	70	℃
Storage Temperature	-	-30	25	80	℃
Working Humidity	25℃	10%	60%	90%	RH
Protective Paint	Yes				
ESD	Air discharge±8KV; Contact discharge±6KV				
EFT	Group pulse interference ±2KV				

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Peripherals and Interfaces

Properties	Parameters	Description
COM	2-way RS232	UART5 & UART9
	1-way RS485	UART8
	1-way TTL/COMS	UART0
USB Interface	3-way	HOST*2, OTG*1
Headphone Interface	1-way	3.5mm spacing interface
Speaker Interface	1-way	2Pin_1.25mm interface
Microphone Interface	1-way	2Pin_1.25mm interface
Camera Interface	1-way	USB, Not supported by Mipi
SD Card Slot	1-way	Drawer type card slot(Max 64G)
Ethernet Interface	1-way	10/100Mbps
WIFI Module	1-way	IEEE 802.11Bb/g/n,2.4G，Bluetooth
RTC	1-way	Button cell for power supply. Accuracy: ±20ppm @25℃



Interface

Properties	Conditions	Min	Typ	Max	Unit
Baud Rate	User Set	2400	115200	230440	bps
Output Voltage (TXD)	Output 1	-	-5.0	-	V
	Output 0	-	5.0	-	V
Input Voltage (RXD)	Input 1	-	-5.0	-	V
	Input 0	-	5.0	-	V
Baud Rate	User Set	2400	115200	921600	bps
(V_AB)	Output 1	2.5	5.0	-	V
	Output 0	-	-5.0	-2.5	V
(V_AB)	Input 1	0	2.5	-	V
	Input 0	-	-2.5	-0.2	V
Interface	Support TTL/COMS,RS232 or RS485 level				
Socket	10Pin_3.81mm Socket				

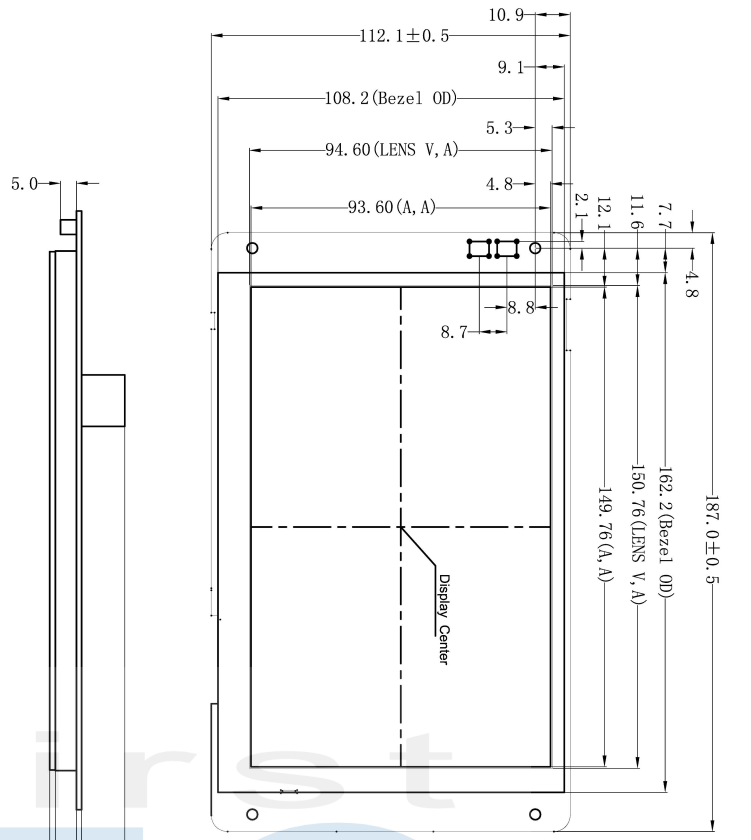
Packing Capacity & Dimension

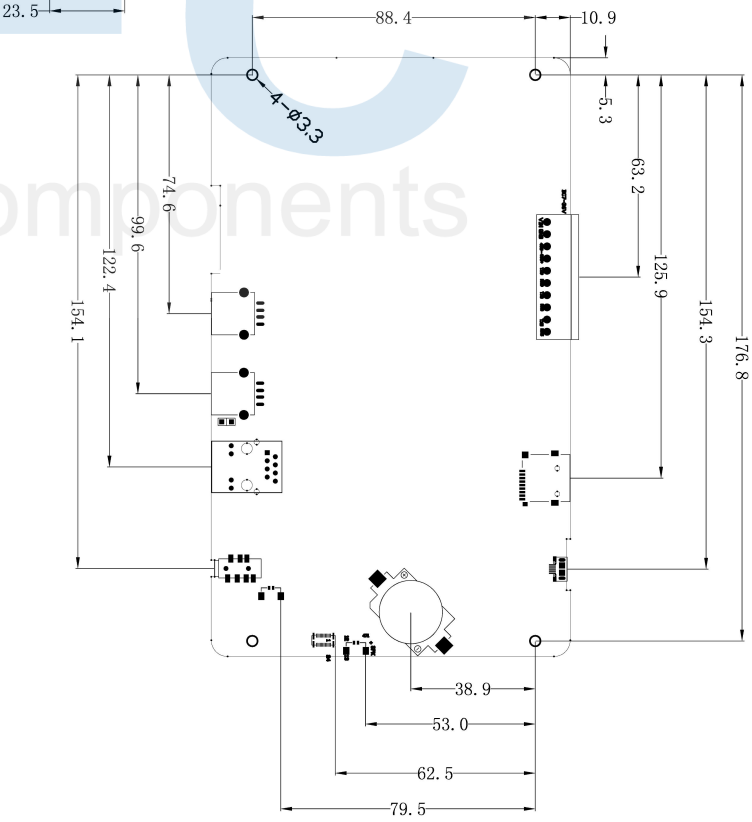
Dimension				
Dimension	187.0(W)*112.1(H)*23.5(T)mm			
Net Weight	310g			
Packing Capacity				
Model	**Size**	**Layer**	**Quantity/Layer**	**Quantity(Pcs)**
Carton1:	220mm(L)*160mm(W)*47mm (H)	-	-	-
Carton2:	250mm(L)*200mm(W)*80mm (H)	2	1	2
Carton3:	320mm(L)*270mm(W)*80mm (H)	2	2	4
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	20	20
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	34	34

Disclaimer: The product design is subject to alternation and improvement without prior notice.

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Pin#	Definition	Type	Description
1	VIN	P	Power Input
2	GND	P	GND
3	485-	B	RS485-
4	485+	A	RS485+
5	TX9	O	UART 9 Output
6	RX9	I	UART 9 Input
7	TX0	O	UART 0 Output
8	RX0	I	UART 0 Input
9	TX5	O	UART 5 Output
10	RX5	I	UART 5 Input





1. Location hole is used as position reference.
2. Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMG12800T070-32WTC				
Drawing	A 4	Drawn	J.G	Date	20230302
Scale	1:1	Review		Date	
Unit	MM	Approval		Date	
DWIN Technologies					

Record of Revision

Ver	Revise Date	Content	Editor
00	2023-03-14	First edition	YML

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