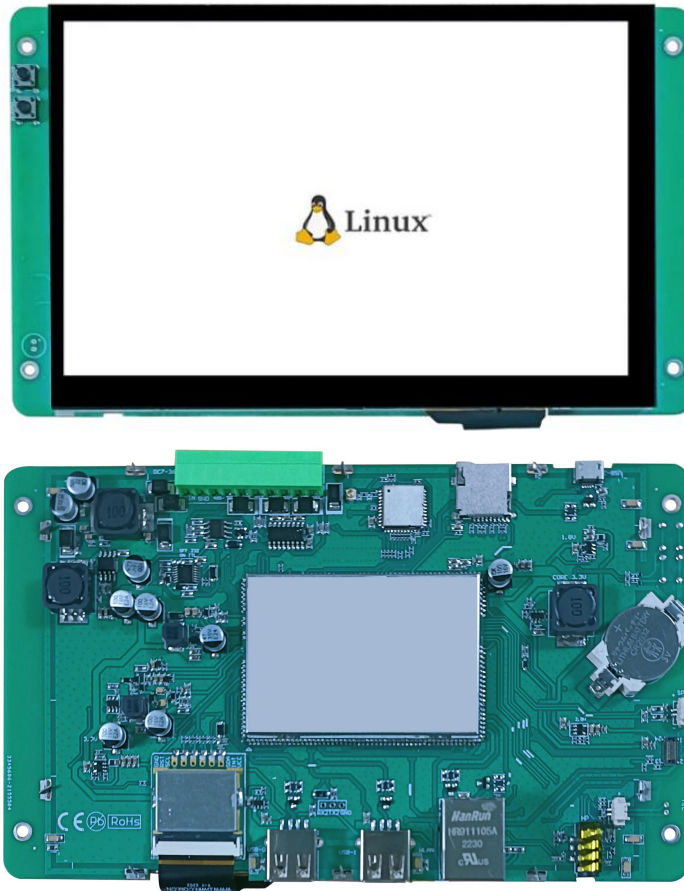


DMG12800T070_40WTC



System Hardware

Properties	Parameters
Motherboard level	Industrial-grade
CPU	RK3566, Quad-core ARM Cortex-A55, 1.8GHz Processor
OS	Linux 4.19
Storage	8Gbytes eMMC
RAM	2Gbytes LPDDR4

Display Parameters

Properties	Parameters	Description
Size	7.0 inch	-
LCD Type	IPS, TFT LCD	-
Viewing Angle	85° /85° /85° /85°	Wide viewing angle, high contrast, and good color reproduction
Active Area (AA)	149.76mm(W)x93.60mm(H)	-
Viewing Area(VA)	150.76mm(W)x94.60mm(H)	-
Resolution	1280x800	-
Backlight Service Life	>20000 Hrs	Backlight service life refers to the period the LED backlight operates under test conditions until brightness decreases to 50% of the initial level
Brightness	250nit	100-level brightness adjustment (Flickering may occur at 1%-30% of max brightness; not recommended for use in this range)
Note: Use dynamic screen saver to prevent afterimages from prolonged fixed page display.		

Touch Parameter

Properties	Parameters
Touch Type	Capacitive touch panel
Structure	G+G structure with tempered glass surface

Power Supply

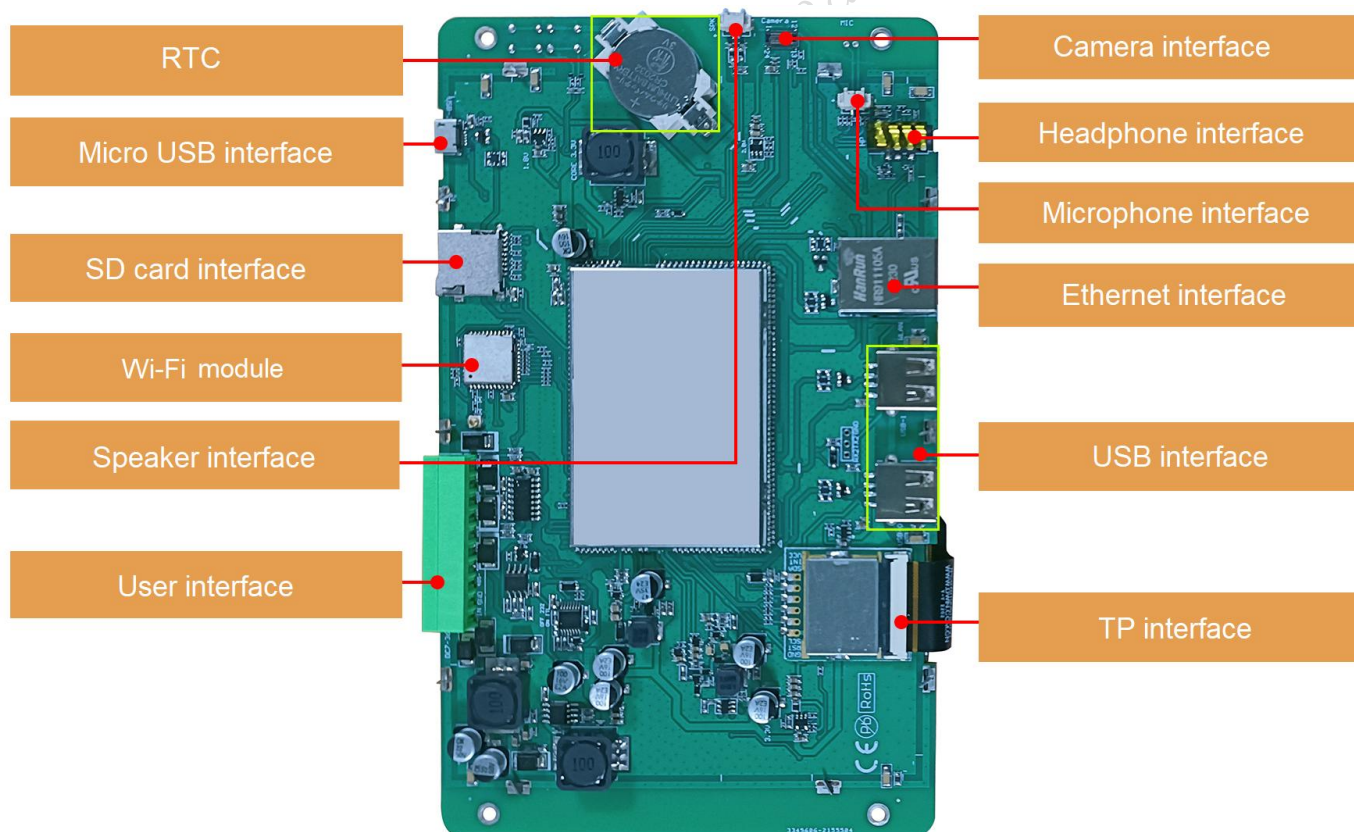
Properties	Min	Typ	Max	Unit
Power Voltage	9.0	12.0	36.0	V
Recommended power supply: 12V 1A DC.				

Environment & Reliability Test

Properties	Conditions	Min	Typ	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	65	℃
Storage Temperature	-	-30	25	80	℃
Working Humidity	25℃	10%	60%	90%	RH
Conformal Coating	Y				
ESD	Air: ±8KV; Contact: ±6KV				
EFT	±2KV				
RoHS Certification	Y				
CE Certification	Y				
Additional cooling required for operation above 65℃.					

● Peripherals and Interfaces

Properties	Description
User Interface	10Pin_3.81mm Horizontal socket
COM	RS232*2(COM5 & COM9), RS485*1, RS232/TTL*1(COM0, RS232 default)
Ethernet	10/100Mbps
USB	USB 2.0*2(HOST), Micro USB*1(OTG)
SD Card	Max 64G
RTC	Accuracy: $\pm 20\text{ppm}$ @25°C
Speaker	2Pin_1.25mm interface*1
Microphone	2Pin_1.25mm interface*1
Headphone	3.5mm spacing interface*1
Camera	MIPI interface
Wi-Fi	IEEE 802.11Bb/g/n, 2.4GHz, Wi-Fi 4
Bluetooth Version	BT4.2

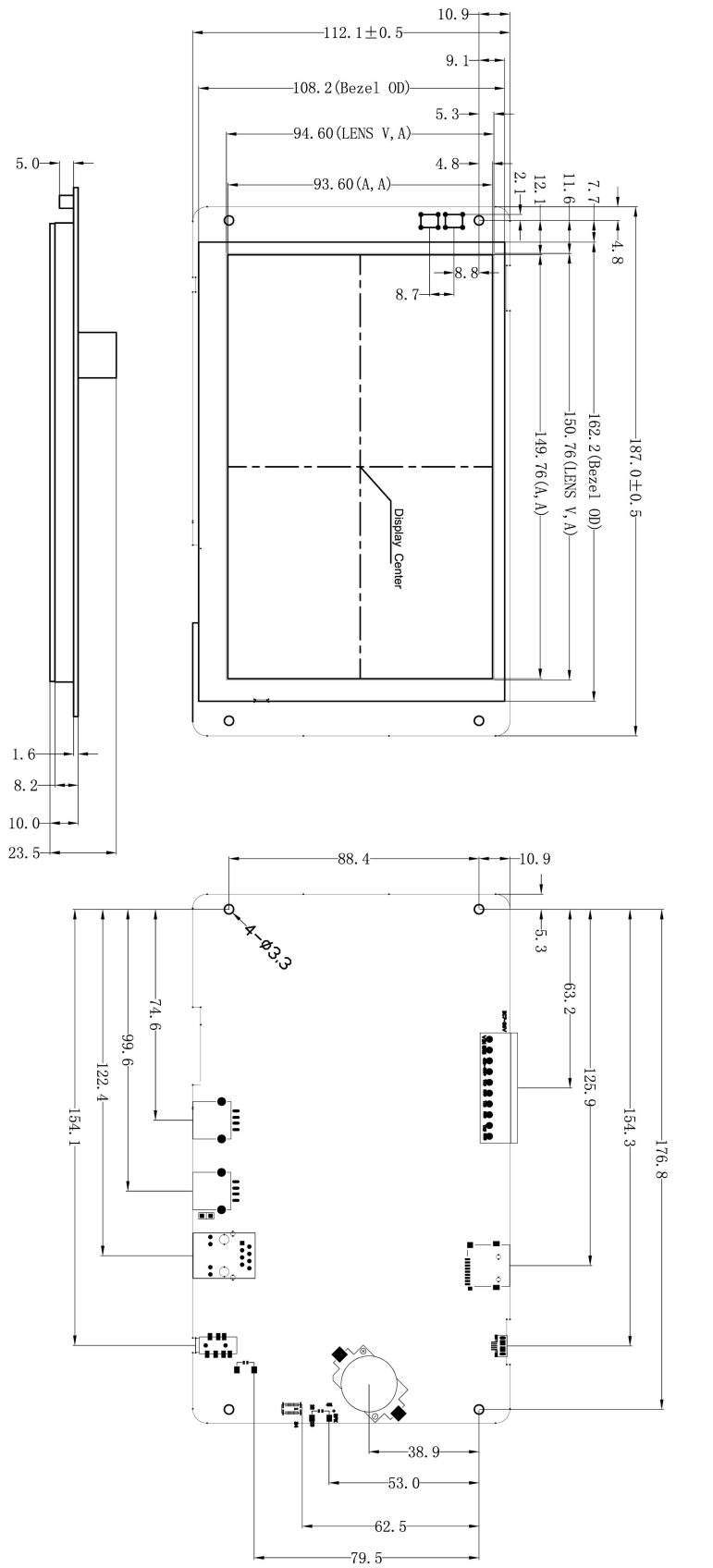


● Development Platform

Development	
Linux	QTCreator2.7.2 and above

● 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



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

Model	DMG12800T070-40WTC				DWIN Technologies			
Drawing	A 4	Drawn	J. G	Date				
Scale	1:1	Review		Date				
Unit	MM	Approval		Date				

1. Location hole is used as position reference.
 2. Unmarked Tolerance is $\pm 0.3\text{mm}$
- Active area is marked in Dash lines

Revision Records

Rev.	Revise Date	Content	Editor
00	2023-03-14	First edition	YML
01	2025-01-03	Modify the voltage value range, add development	Chen
02	2025-01-07	Modify values of working & storage temperature	Chen
03	2025-03-13	Add the description of Bluetooth	Chen
04	2025-06-17	Update the rang of temperature & Update the description of Wi-Fi module	Chen
05	2025-09-15	Add the RoHS and CE certification	Chen

Please contact us if you have any questions about the use of this document or our products, or if you would like to know the latest information about our products:

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Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!

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