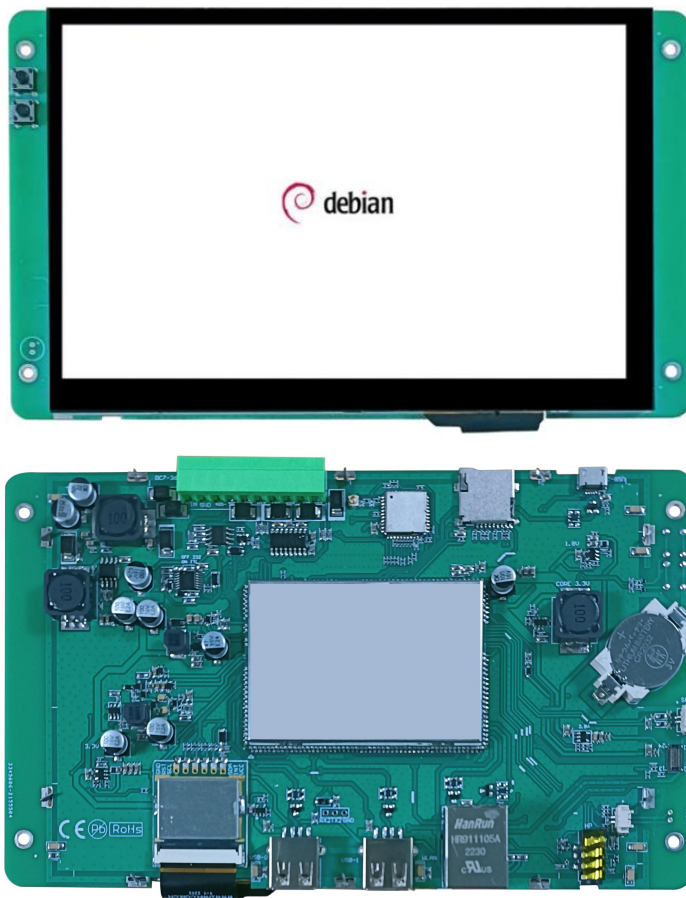


DMG12800T070_40WTCZOS-1



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

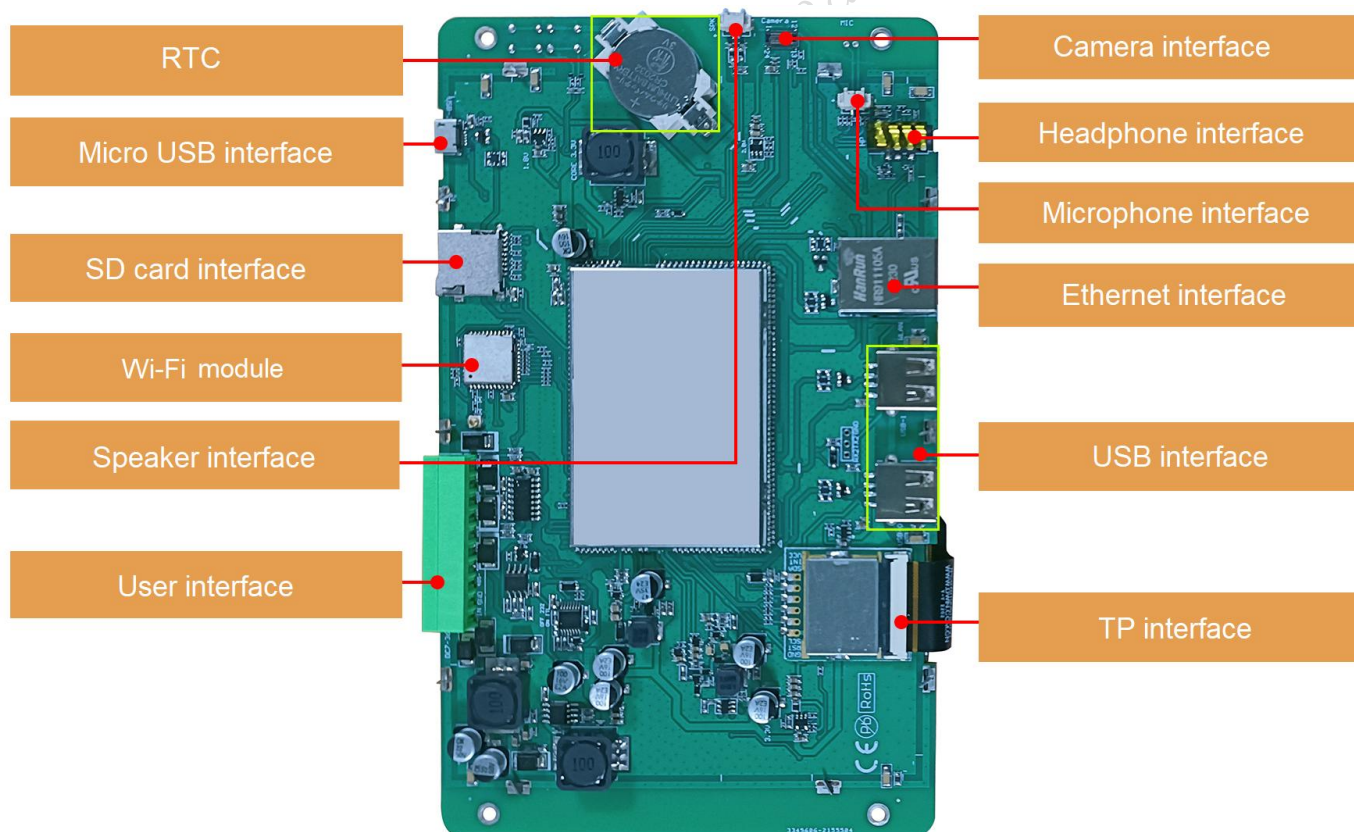
Properties	Min	Typ	Max	Unit
Power Voltage	9.0	12.0	36.0	V
Recommended power supply: 12V 1A DC.				

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				
CE Certification	Y				
RoHS 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

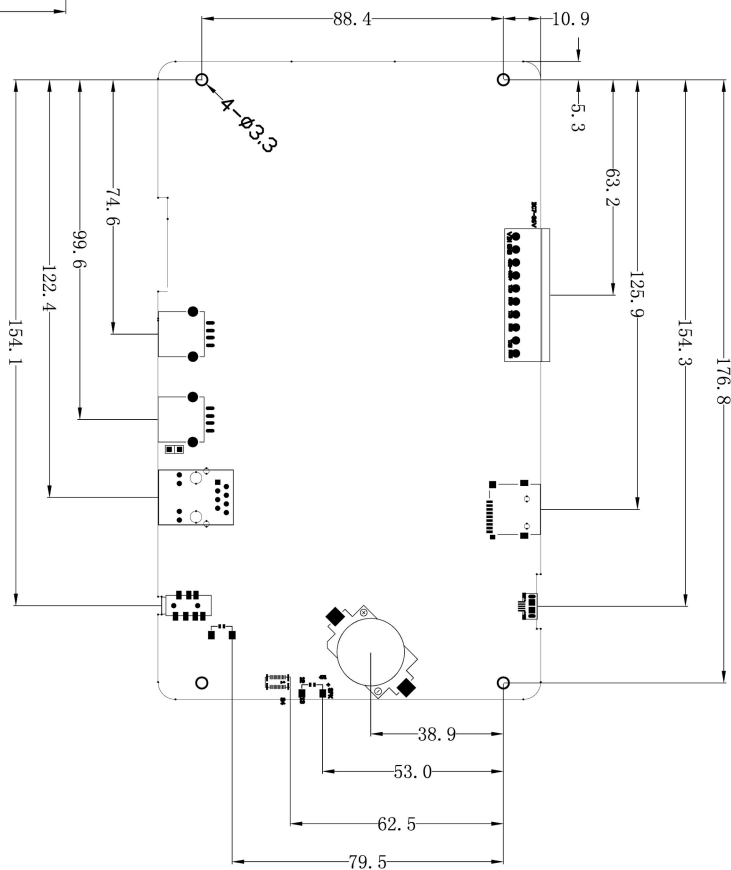
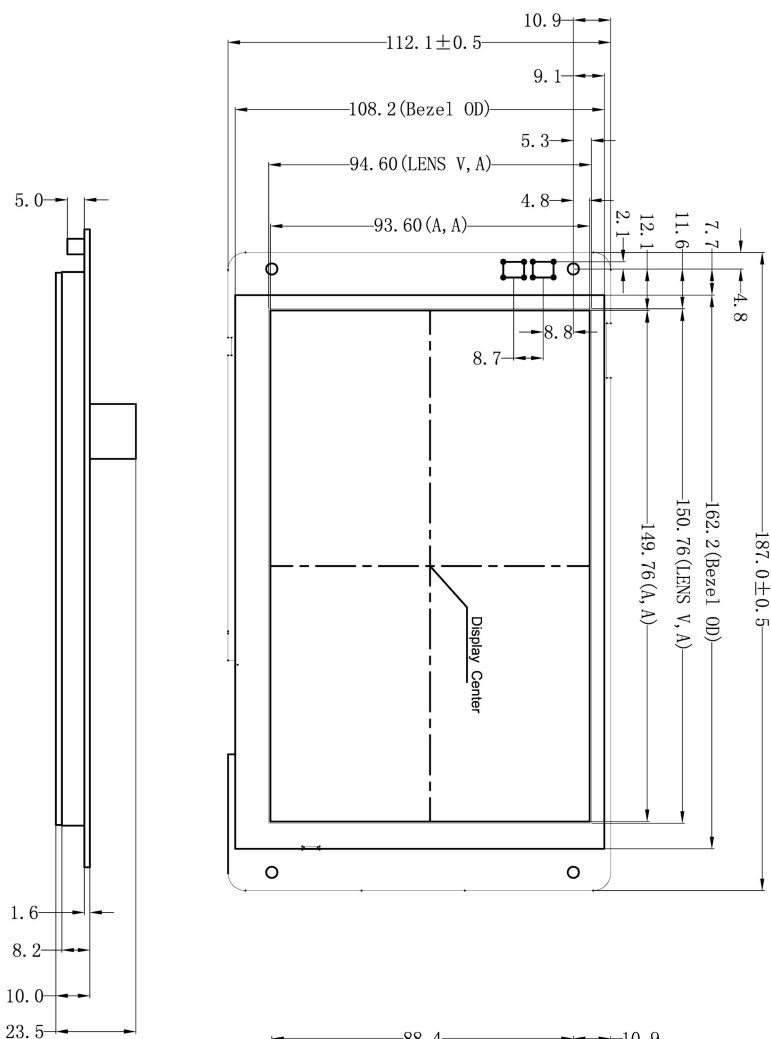


● Development Platform

Development	
Linux	Debian 10

● 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	1	UART 9 Input
TX0	7	0	UART 0 Output
RX0	8	1	UART 0 Input
TX5	9	0	UART 5 Output
RX5	10	1	UART 5 Input

Model	DMG12800T070-40WTCZOS-1				DWIN Technologies				
Drawing	A 4	Drawn	J. G	Date					20230302
Scale	1 : 1	Review		Date					
Unit	MM	Approval		Date					

1. Location hole is used as position reference.
 2. Unmarked Tolerance is +/-0.3mm
- Active area is marked in Dash lines

Revision Records

Rev.	Revise Date	Content	Editor
00	2023-09-22	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 certification	Chen

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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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