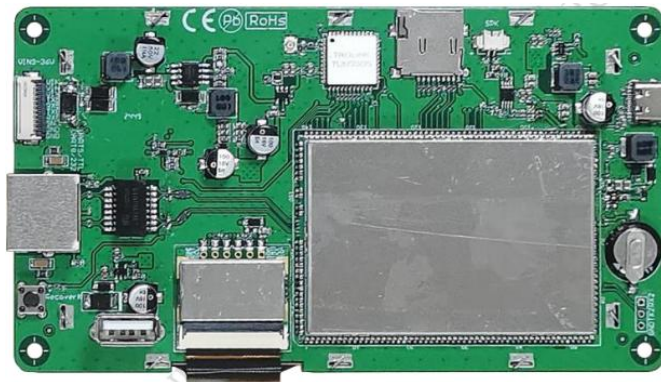


DMG80480T050_40WTCZOS-1



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	5.0 inch	-
LCD Type	IPS, TFT LCD	-
Viewing Angle	85° /85° /85° /85°	Wide viewing angle, high contrast, and good color reproduction
Active Area (AA)	108.0mm (W)*64.8mm (H)	-
Visible Area (VA)	108.6mm (W)*65.4mm (H)	-
Resolution	800*480	Available for 0°/90°/180°/270°rotated display
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.

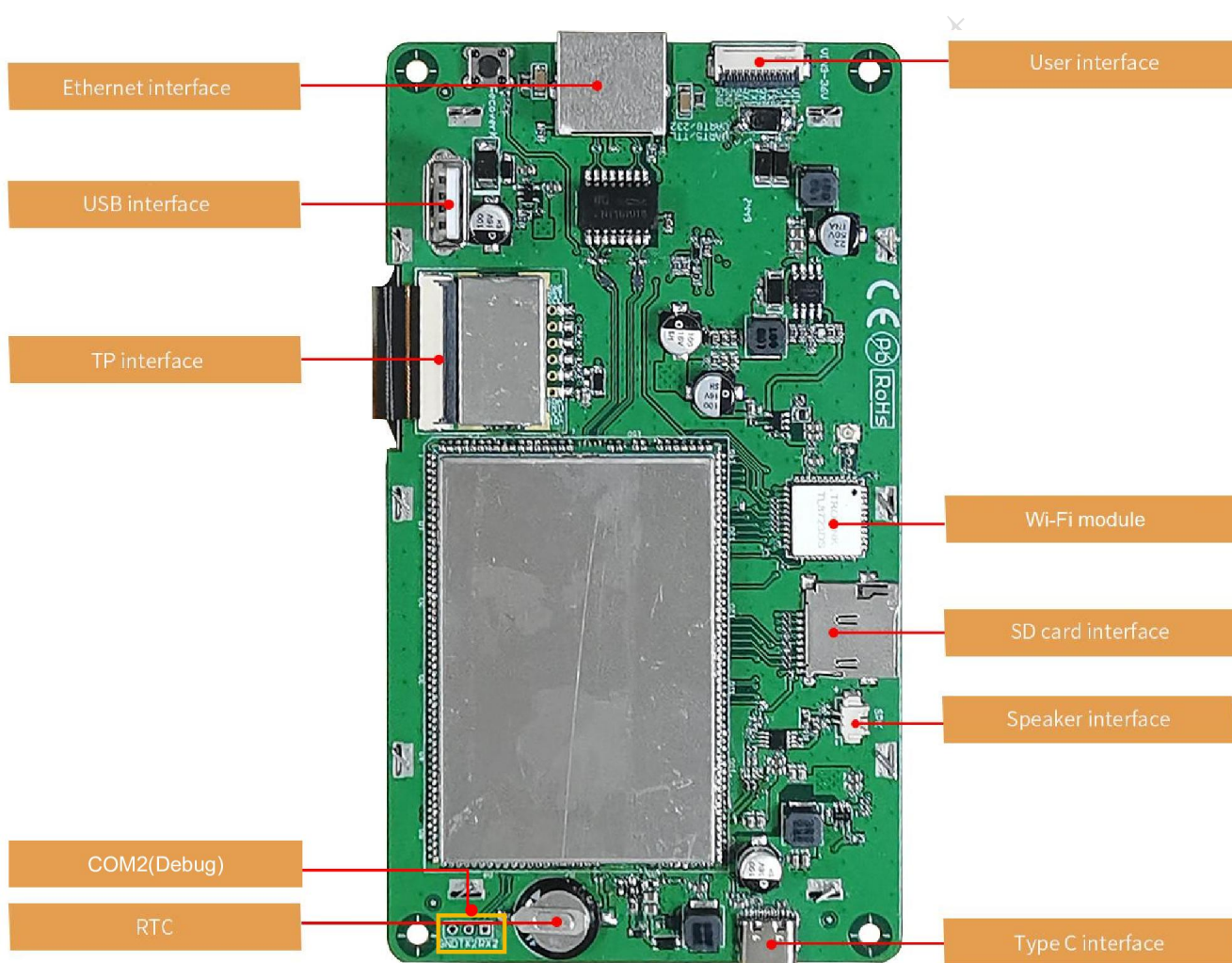
Environment & Reliability Test

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	Group pulse interference ±2KV				

Additional cooling required for operation above 65℃.

● Peripherals and Interfaces

Properties	Description
User Interface	10Pin_1.0mm socket
COM	RS232*1(COM8), TTL*1(COM5), TTL*1(COM2, debug)
USB	USB 2.0*1 (HOST), Type C*1 (OTG)
Wi-Fi	IEEE 802.11b/g/n, 2.4GHz, Wi-Fi 4
Bluetooth Version	BT4.2
Speaker	2Pin_1.25mm interface*1
SD card	Max 64G
RTC	Accuracy: $\pm 20\text{ppm}$ @25°C



Development Platform

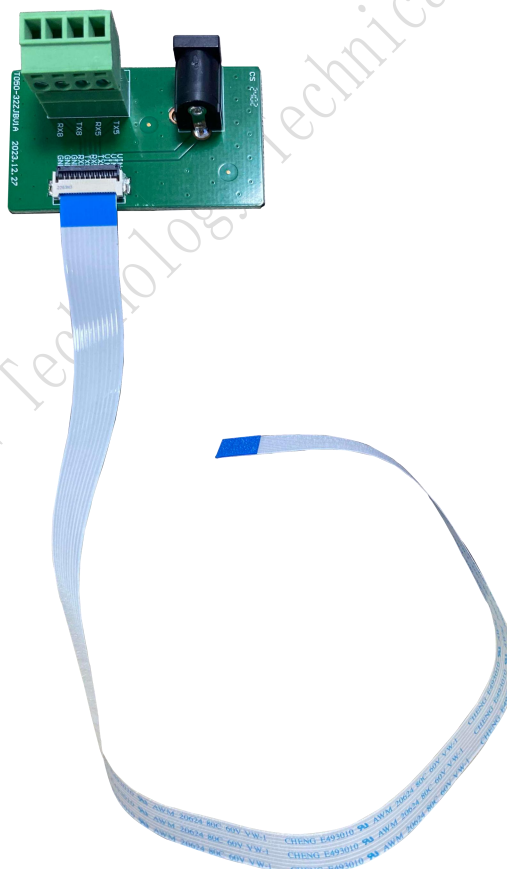
Development	
Linux	Debian 10

Packing Capacity & Dimension

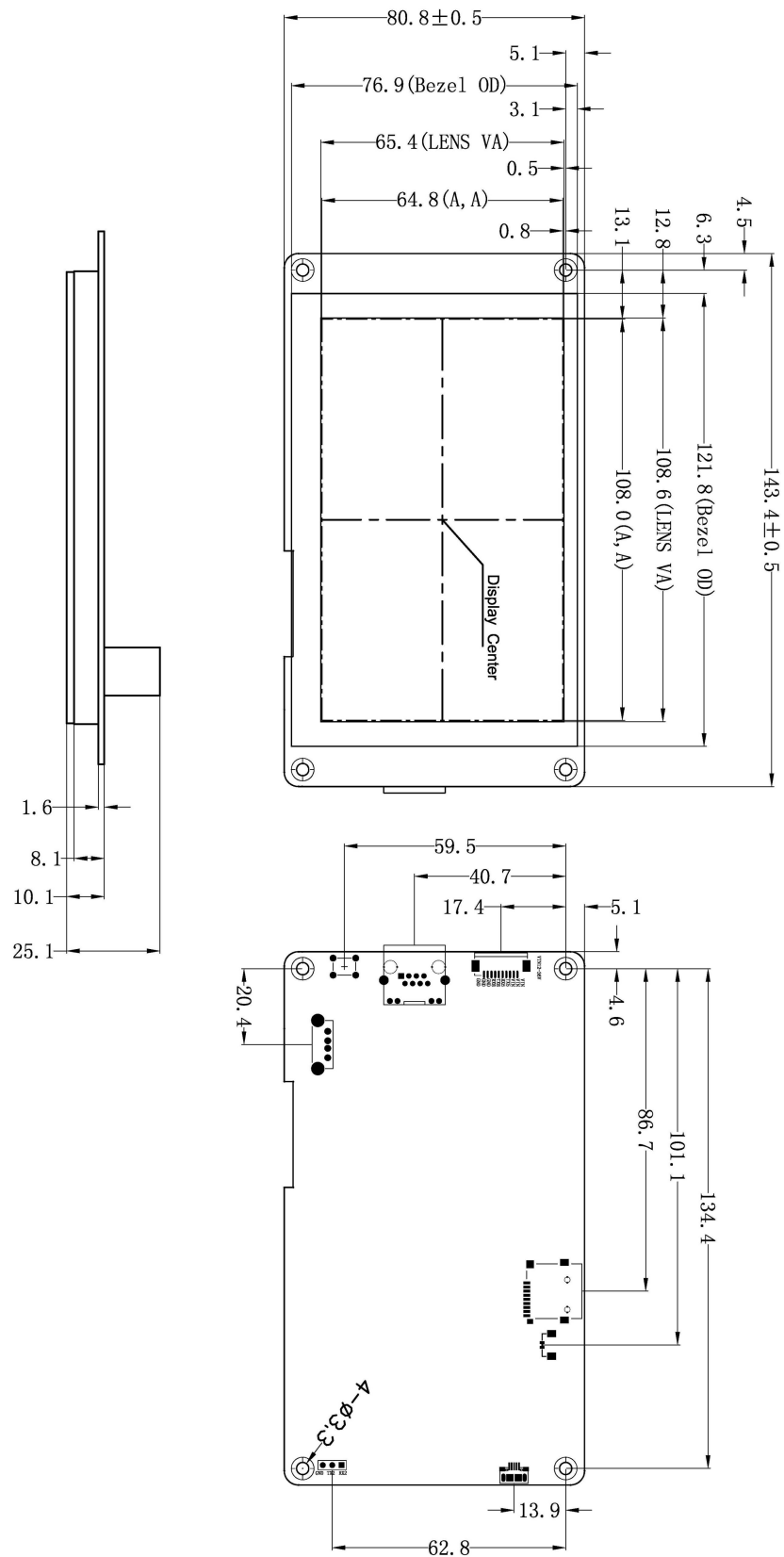
Dimension				
Dimension	143.4(W)*80.8(H)*25.1(T)mm			
Net Weight	185g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)*160mm(W)*47mm (H)	1	1	1
Carton2:	250mm(L)*200mm(W)*80mm (H)	2	2	4
Carton3:	320mm(L)*270mm(W)*80mm (H)	2	3	6
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	60	60
Carton5:	600mm(L)*450mm(W)*300mm(H)	2	60	120

Optional Accessories

Accessories Name	Description
T050-32ZJB	Power adapter, including adapter and cable



Power adapter diagram



Definition	Pin#	Type	Description
GND	8, 9, 10	P	GND
RX8	7	I	UART 8 Input
TX8	6	O	UART 8 Output
RX5	5	I	UART 5 Input
TX5	4	O	UART 5 Output
+5V	1, 2, 3	P	Power Input

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

Model	DMG80480T050_40WTCZOS-1					DWIN Technologies			
Drawing	A 4	Drawn	J. G	Date	20230516				
Scale	1 : 1	Review		Date					
Unit	MM	Approval		Date					

Revision Records

Rev.	Revise Date	Content	Editor
00	2023-09-22	First Edition	YML
01	2025-01-02	Modify the voltage value range, add development	Chen
02	2025-03-12	Add the description of Bluetooth	Chen
03	2025-04-07	Update the range of temperature, and add the power adapter diagram	Chen
04	2025-06-17	Update the description of Wi-Fi module	Chen

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