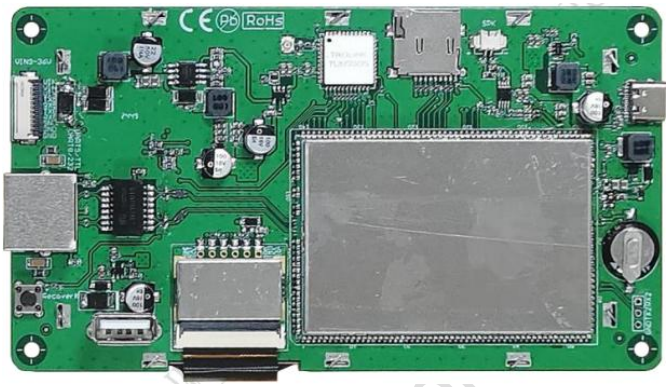
DMG80480T050_32WTC



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System Hardware

Properties	Parameters
Motherboard Level	Industrial-grade
CPU	RK3566, Quad-core ARM Cortex-A55, 1.8GHz Processor
OS	Android 11
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	-10	25	60	℃
Storage Temperature	-	-20	25	70	℃
Working Humidity	25℃	10%	60%	90%	RH
Conformal Coating	Y				
ESD	Air: ±8KV, Contact: ±6KV				
EFT	Group pulse interference ±2KV				

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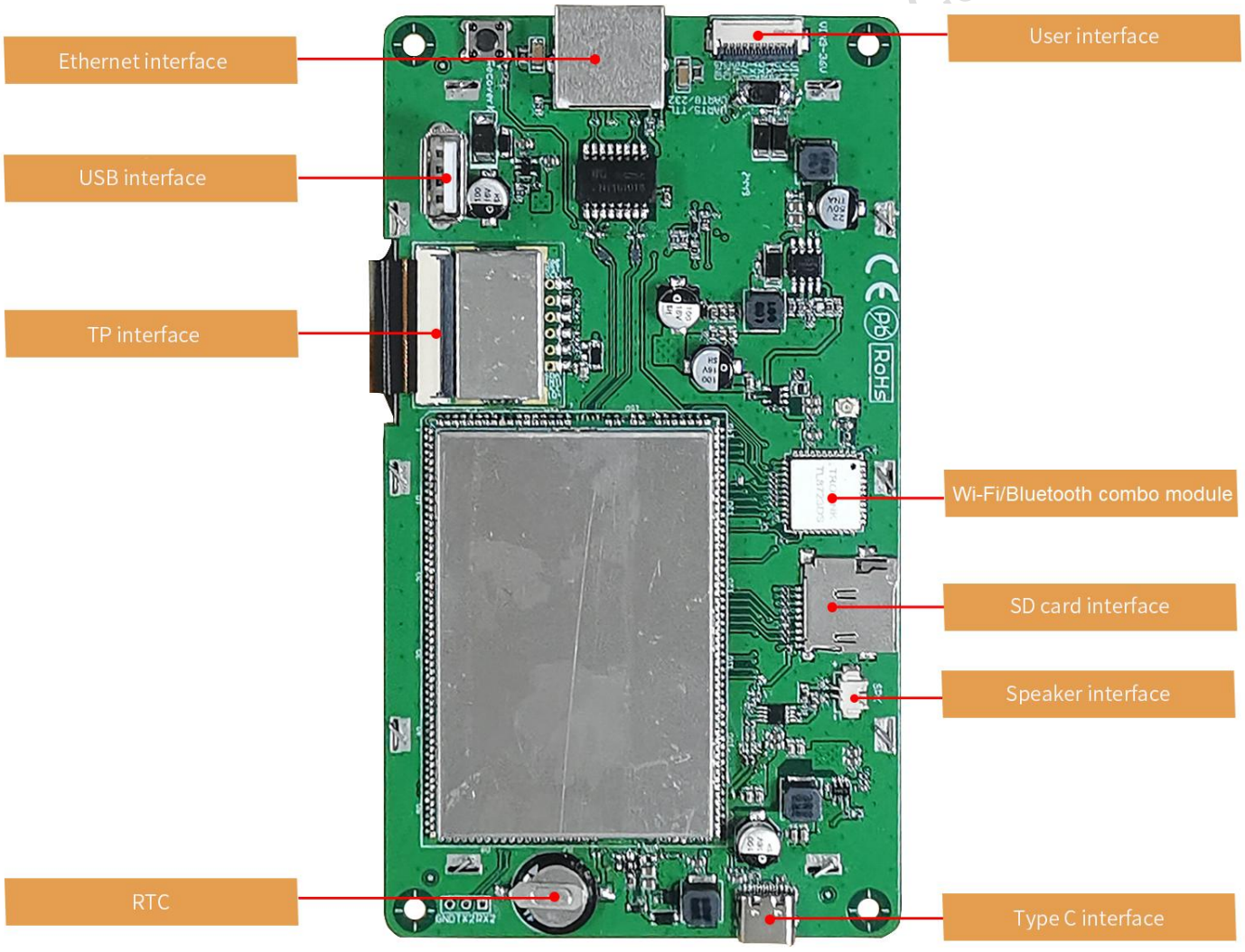
Peripherals and Interfaces

Properties	Description
User Interface	10Pin_1.0mm socket
COM	RS232*1(COM8), TTL*1(COM5)
USB	USB 2.0*1(HOST), Type C*1(OTG)
Wi-Fi	IEEE 802.11Bb/g/n, 2.4G, Bluetooth
Bluetooth	4.2GHz
Speaker	2Pin_1.25mm interface*1
SD card	Drawer type card slot(Max 64G)
RTC	Accuracy: ±20ppm @25℃



Development Platform

Development	
Android	Java, Kotlin, C++

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

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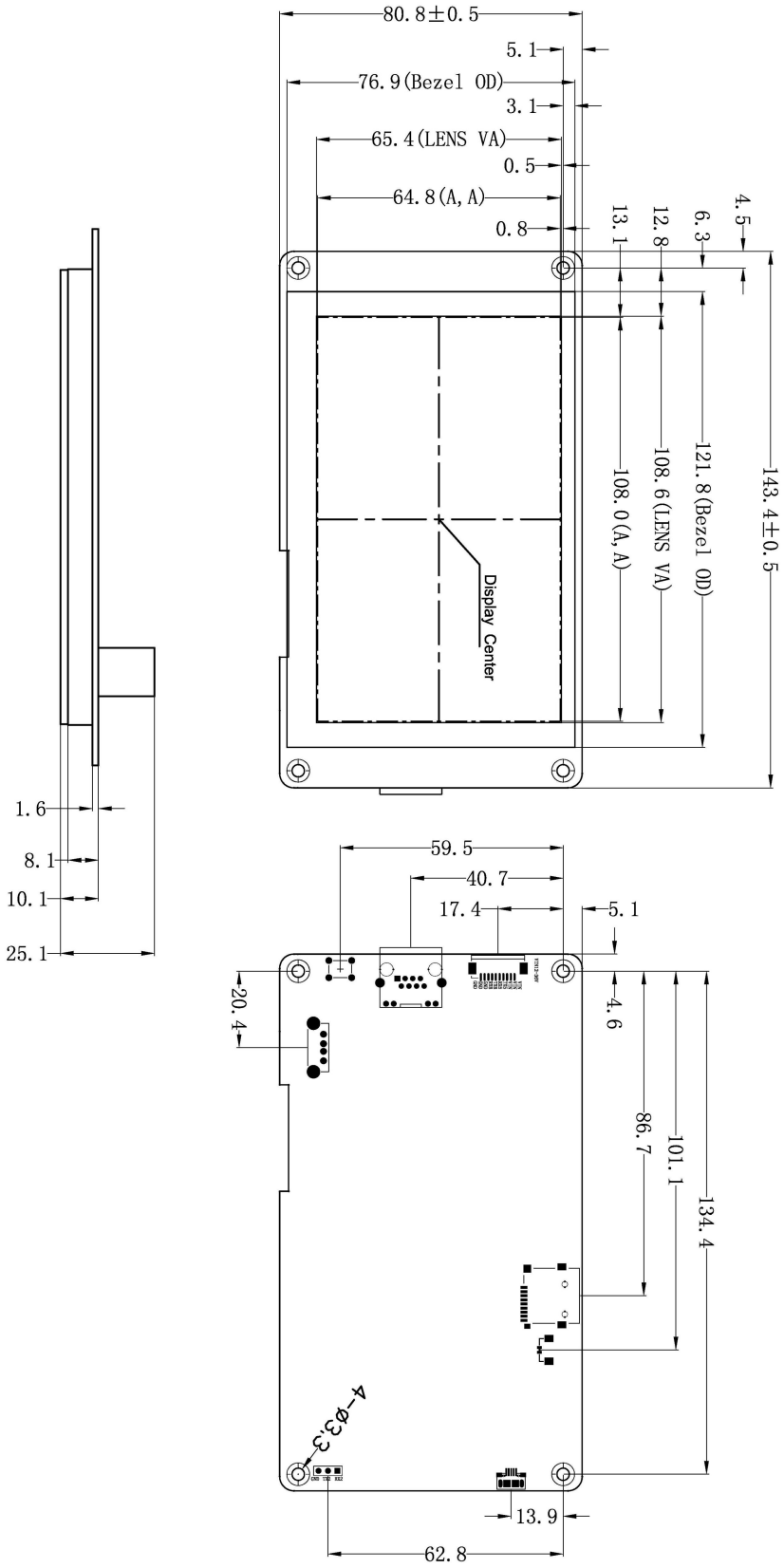
Pin#	Type	Description
1,2,3	P	Power Input
4	O	UART 5 Output
5	I	UART 5 Input
6	O	UART 8 Output
7	I	UART 8 Input
8,9,10	P	GND

Definition
+5V
TX5
RX5
TX8
RX8
GND



Location hole is used as position reference

Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMG80480T050_32WTC			
Drawing	A 4	Drawn	J.G	Date 20230516
Scale	1:1	Review		Date
Unit	MM	Approval		Date

Record of Revision

Ver	Revise Date	Content	Editor
00	2023-12-11	First edition	YML
01	2024-12-26	Modify the voltage value range, add development and update product picture	Chen
02	2025-03-12	Add the description of Bluetooth	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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