

DMG12452C065_32WTC



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Document

● System Hardware

Properties	Parameters
Motherboard Level	Commercial-grade
CPU	RK3566, Quad-core ARM Cortex-A55 1.8GHz Processor
OS	Android 11
RAM	2Gbytes LPDDR4
Storage	8Gbytes eMMC

● Display Parameters

Properties	Parameters	Description
Size	6.5 inch	-
LCD Type	IPS, TFT LCD	-
Viewing Angle	85°/85°/85°/85°	Wide viewing angle, high contrast, and good color reproduction
Active Area (AA)	148.50mm (W)×52.40mm (H)	-
Resolution	452×1280	-
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	350nit	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	In-cell

● Power Supply

Properties	Min	Typ	Max	Unit
Power Voltage	9.0	12.0	36.0	V

Recommended power supply:12V 1A DC.

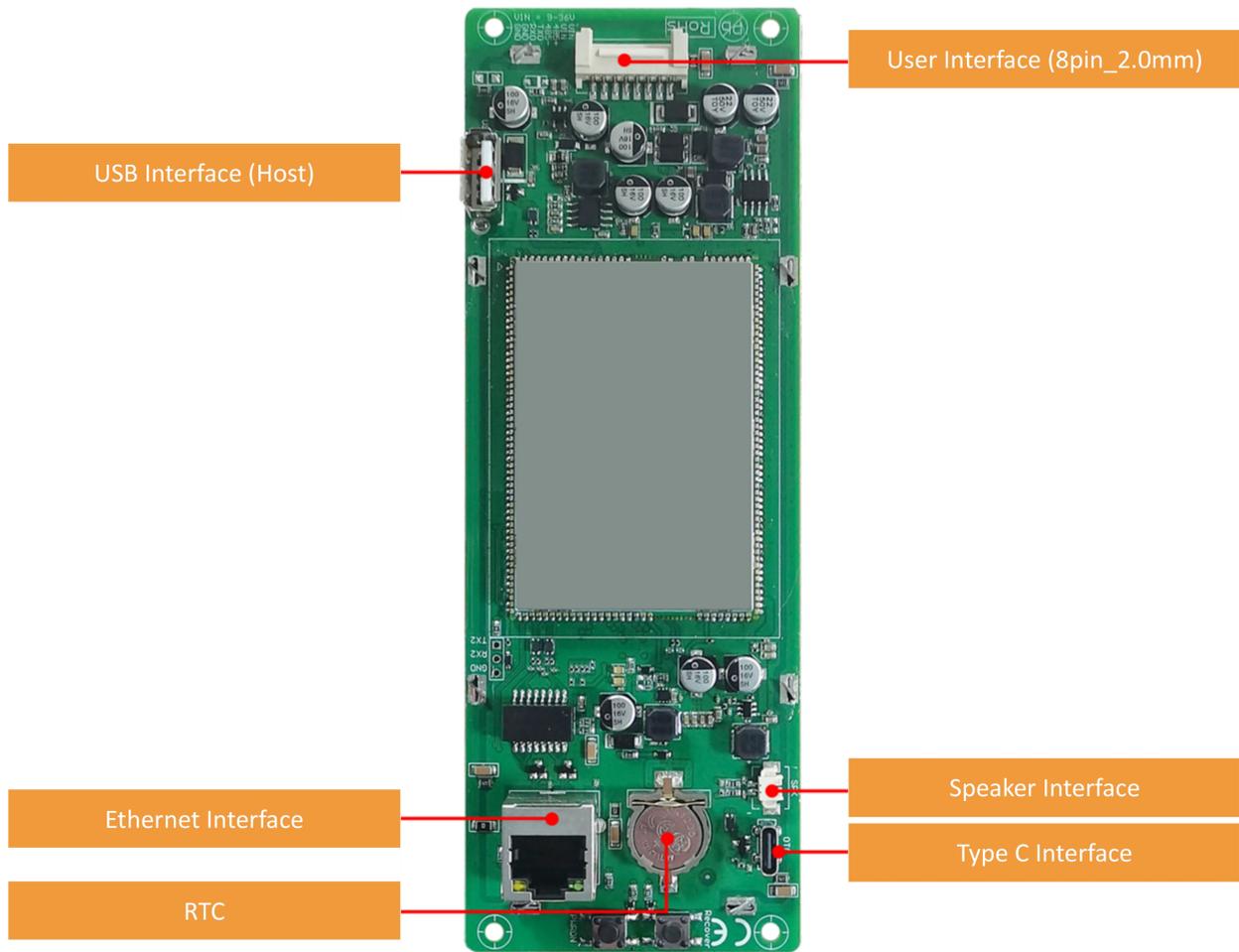
● Environment & Reliability Test

Properties	Conditions	Min	Typ	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	60	°C
Storage Temperature	-	-20	25	60	°C
Working Humidity	25°C	10%	60%	90%	RH
Conformal Coating	Y				
ESD	Air: ±8kV, Contact: ±6kV				
RE	Class B				
CE	Class B				

Additional cooling required for operation above 60°C.

● Peripheral and Interfaces

Properties	Description
User Interface	8Pin_2.0mm socket*1
COM	RS232/TTL*1(COM0, RS232 default), RS485*1 (COM7)
USB	USB 2.0*1 (HOST), Type C*1 (OTG)
Speaker	2Pin_1.25mm interface*1
RTC	Accuracy: $\pm 20\text{ppm @}25^\circ\text{C}$



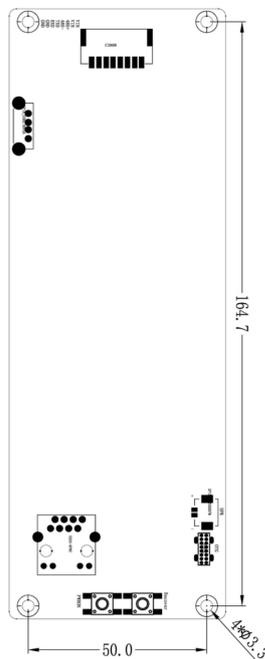
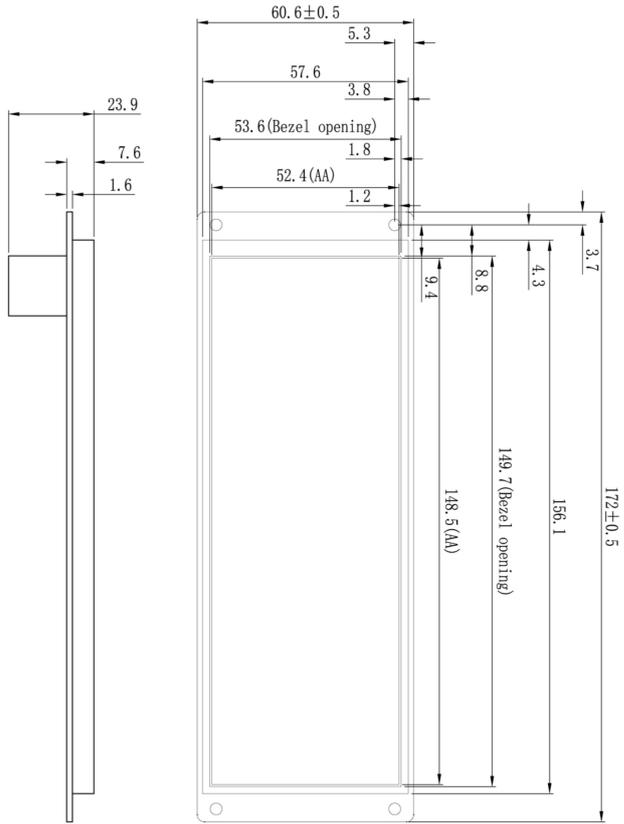
- **Development Platform**

Development	
Android	Java, Kotlin, C++

- **Packing Capacity & Dimension**

Dimension				
Dimension	172.00(W)×60.60(H)×23.9(T)mm			
Net Weight	135g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity (Pcs)
Carton1:	220mm(L)×160mm(W)×47mm	-	-	-
Carton2:	250mm(L)×200mm(W)×80mm	-	-	-
Carton3:	320mm(L)×270mm(W)×80mm	-	-	-
Carton4:	435mm(L)×335mm(W)×290mm	-	-	-
Carton5:	600mm(L)×430mm(W)×290mm	1	20	20

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Definition	Pin#	Type	Description
VIN	1,2	P	Power Input
485A+	3	A	485A+
485B-	4	B	485B-
TX0	5	0	UART0 Output DOUT
RX0	6	I	UART0 Input DIN
GND	7,8	P	GND

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

Model	DWIN TECHNOLOGY			
Drawing	A4	Drawn	DWIN	Date
Scale		Review		Date
Unit	mm	Approval		Date

● Revision Records

Rev.	Revise Date	Content	Editor
00	2026-03-13	First Edition	Joyce Jiang

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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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