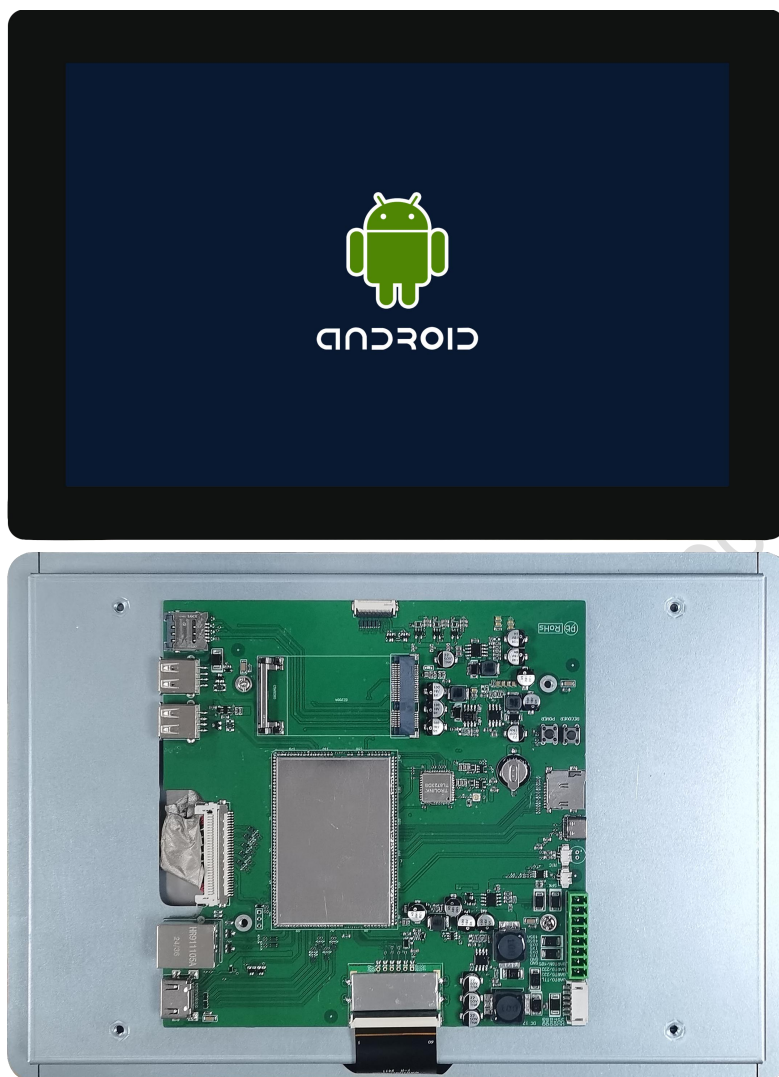


DMG12800T121_32WTC



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	12.1 inch	-
LCD Type	IPS, TFT LCD	-
Viewing Angle	85° /85° /85° /85°	Wide viewing angle, high contrast, and good color reproduction
Active Area (AA)	261.12mm(W)×163.20mm(H)	-
Resolution	1280×800	-
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	600nit	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

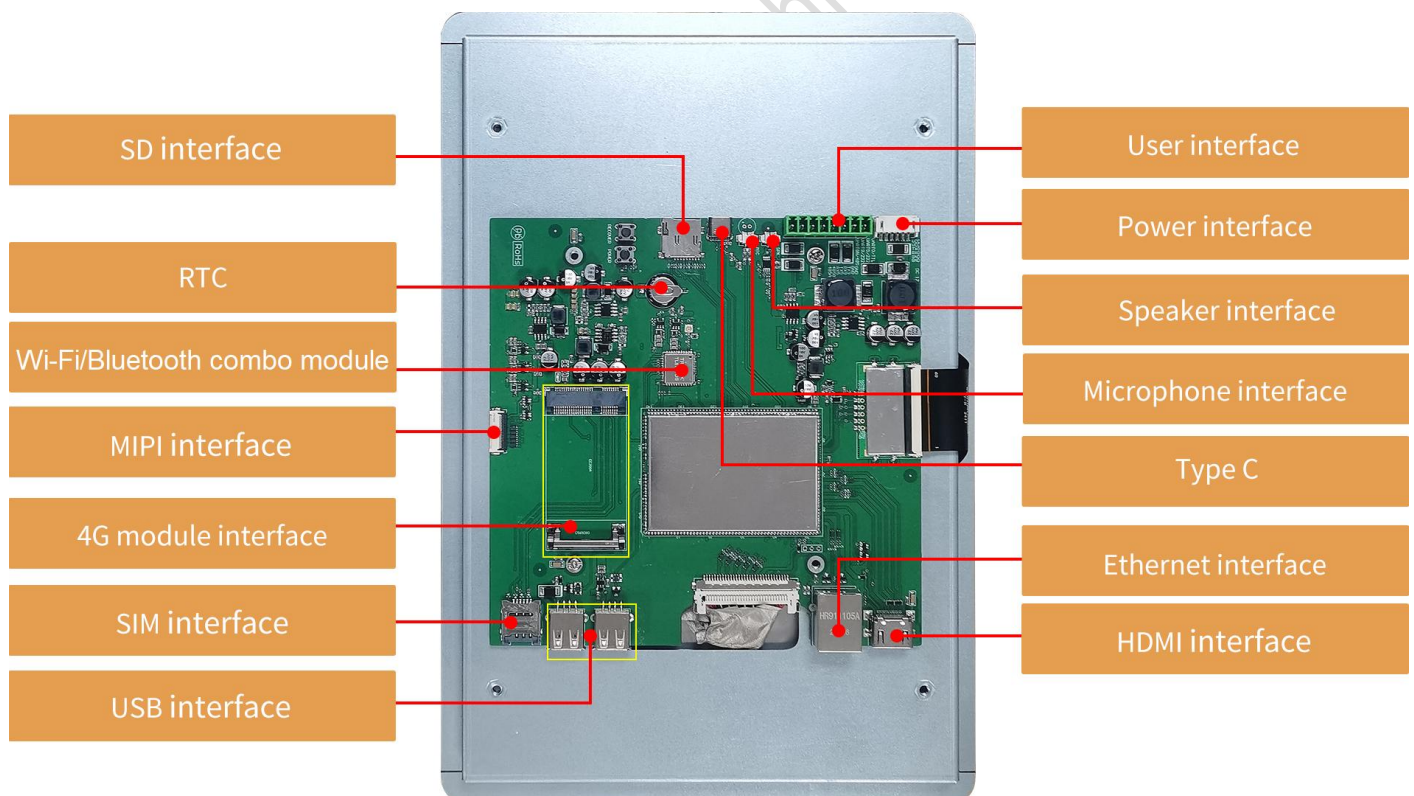
Properties	Min	Typ	Max	Unit
Power Voltage	12.0	12.0	36.0	V
Recommended power supply: 12V 1A DC.				

Environment & Reliability Test

Properties	Conditions	Min	Typ	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	70	℃
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				
RE	Class B				
CE Certification	Y				

● Peripherals and Interfaces

Properties	Description
User Interface	8Pin_3.81mm vertical socket, 6Pin_2.0mm horizontal socket
COM	RS232*2(COM5 & COM9), RS485*1(COM8), TTL*1(COM0)
Wi-Fi	IEEE 802.11Bb/g/n, 2.4GHz, Bluetooth
Bluetooth	4.2GHz
USB	USB 2.0*2(HOST), Type C*1(OTG)
Speaker	2Pin_1.25mm interface*1
Microphone	2Pin_1.25mm interface*1
Camera Interface	MIPI*1
4G Module	Factory not configured, customizable to add
SD card	Drawer type card slot(Max 64G)
RTC	Accuracy: $\pm 20\text{ppm}$ @25°C
Ethernet	10/100Mbps
HDMI	23PIN_HDMI_SH

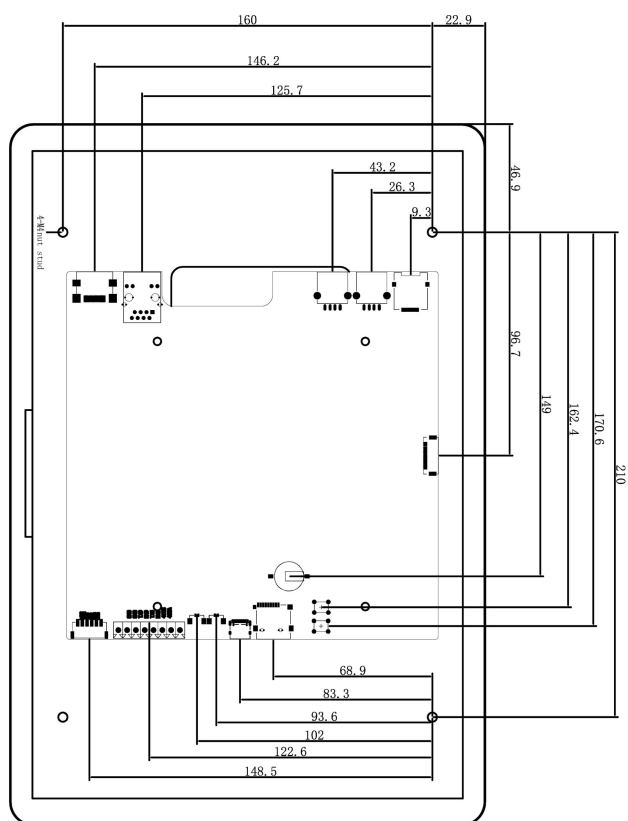
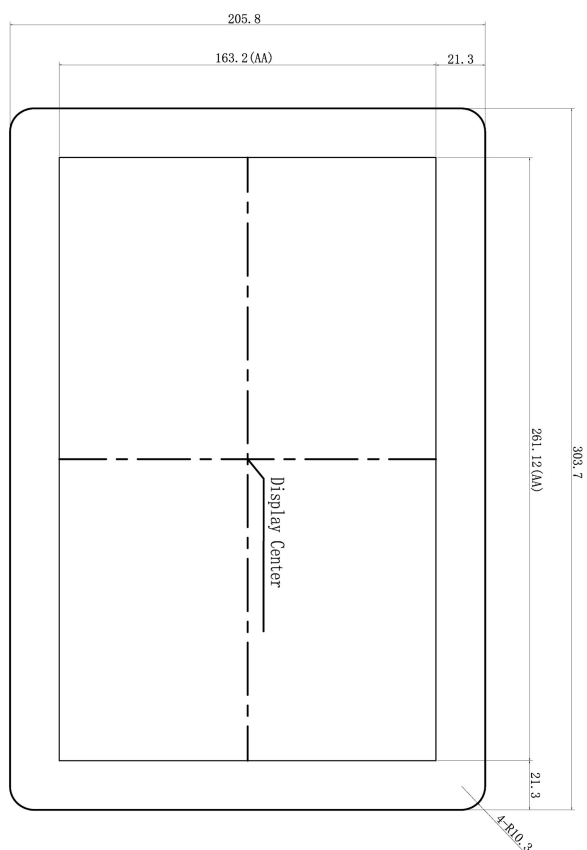


Development Platform

Development	
Android	Java, Kotlin, C++

Packing Capacity & Dimension

Dimension				
Dimension	303.70(W)×205.80(H)×32.10(T)mm			
Net Weight	1300g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)×160mm(W)×47mm (H)	-	-	-
Carton2:	250mm(L)×200mm(W)×80mm (H)	-	-	-
Carton3:	320mm(L)×270mm(W)×80mm (H)	2	1	2
Carton4:	450mm(L)×350mm(W)×300mm(H)	-	-	-
Carton5:	600mm(L)×450mm(W)×300mm(H)	1	10	10



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

Location hole is used as position reference.

Unmarked Tolerance Is $\pm 0.3\text{mm}$

Active area is marked in Dash lines

Model	DWG128001121_32.WTC								
Drawing	A 4	Drawn	DW/IN	Date		DW/IN Technology			
Scale		Review		Date					
Unit	MM	Approval		Date					

Revision Records

Rev.	Revise Date	Content	Editor
00	2025-01-08	First edition	Chen
01	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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