

DMG10768T150_32WTC



DWIN Technology Technical Document

● 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	15.0 inch	-
LCD Type	IPS, TFT LCD	-
Viewing Angle	85° /85° /85° /85°	Wide viewing angle, high contrast, and good color reproduction
Active Area (AA)	304.13mm(W)x228.10mm(H)	-
Viewing Area(VA)	305.50mm(W)x 229.50mm(H)	-
Resolution	1024x768	-
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	300nit	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

● Power Supply

Properties	Min	Typ	Max	Unit
Power Voltage	12.0	12.0	36.0	V

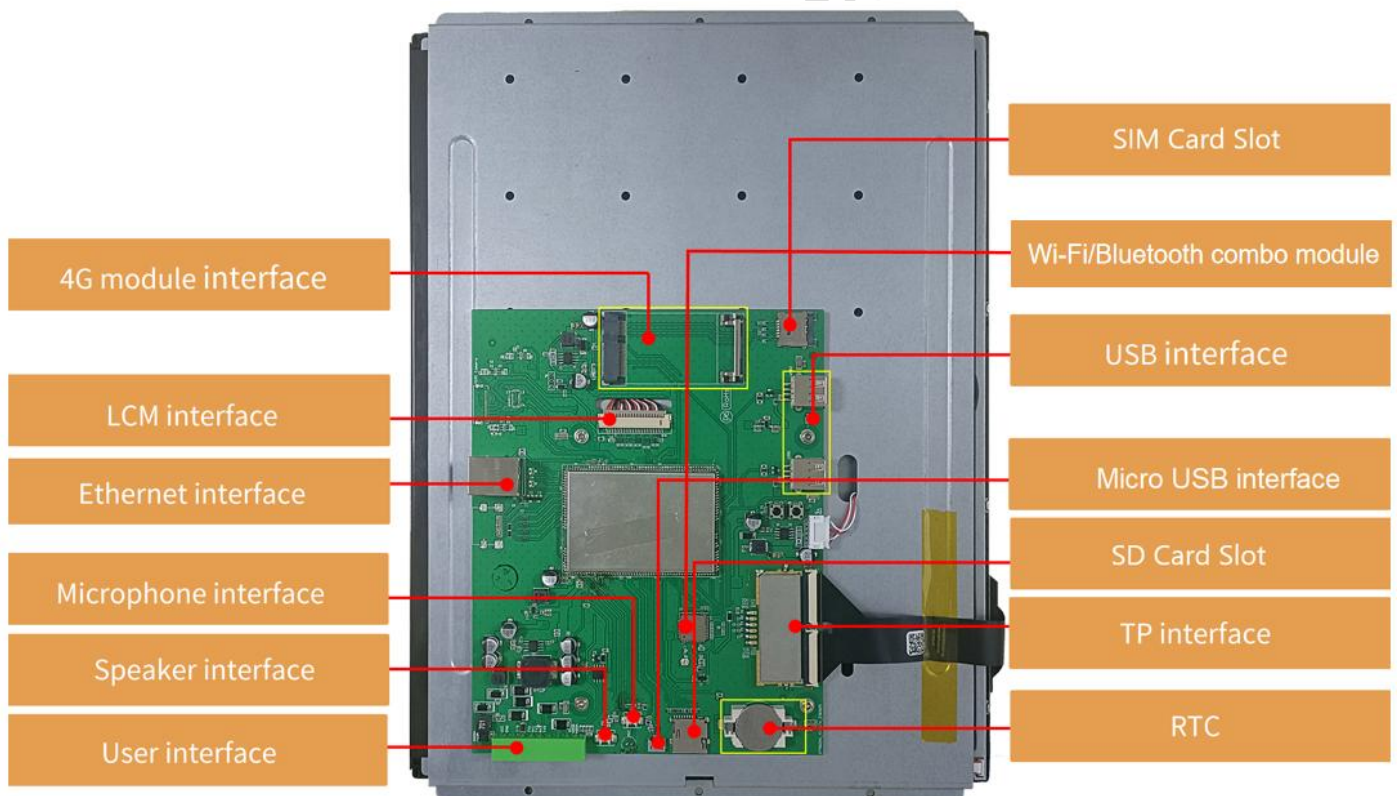
Recommended power supply: 12V 1A DC

● Environment & Reliability Test

Properties	Conditions	Min	Typ.	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	70	°C
Storage Temperature	-	-30	25	80	°C
Working Humidity	25°C	10%	60%	90%	RH
Conformal Coating	Y				
ESD	Air: ±8KV, Contact: ±6K				
EFT	Group pulse interference ±2KV				

● Peripherals and Interfaces

Properties	Description
User Interface	10Pin_3.81mm Horizontal socket
COM	RS232*2(COM5 & COM9), RS485*1, TTL*1(COM0)
Ethernet	10/100Mbps
USB	USB 2.0*2(HOST), Micro USB*1(OTG)
SD Card	Drawer type card slot (Max 64G)
RTC	Button cell for power supply. Accuracy: $\pm 20\text{ppm @}25^{\circ}\text{C}$
Speaker	2Pin_1.25mm interface*1
Microphone	2Pin_1.25mm interface*1
4G Module	Factory not configured, customizable to add
Camera	USB 2.0 interface
Wi-Fi	IEEE 802.11Bb/g/n, 2.4G, Bluetooth
Bluetooth	4.2GHz



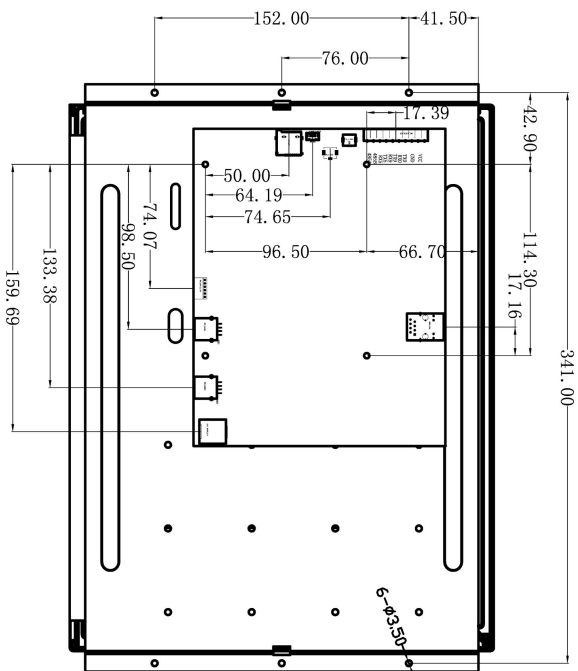
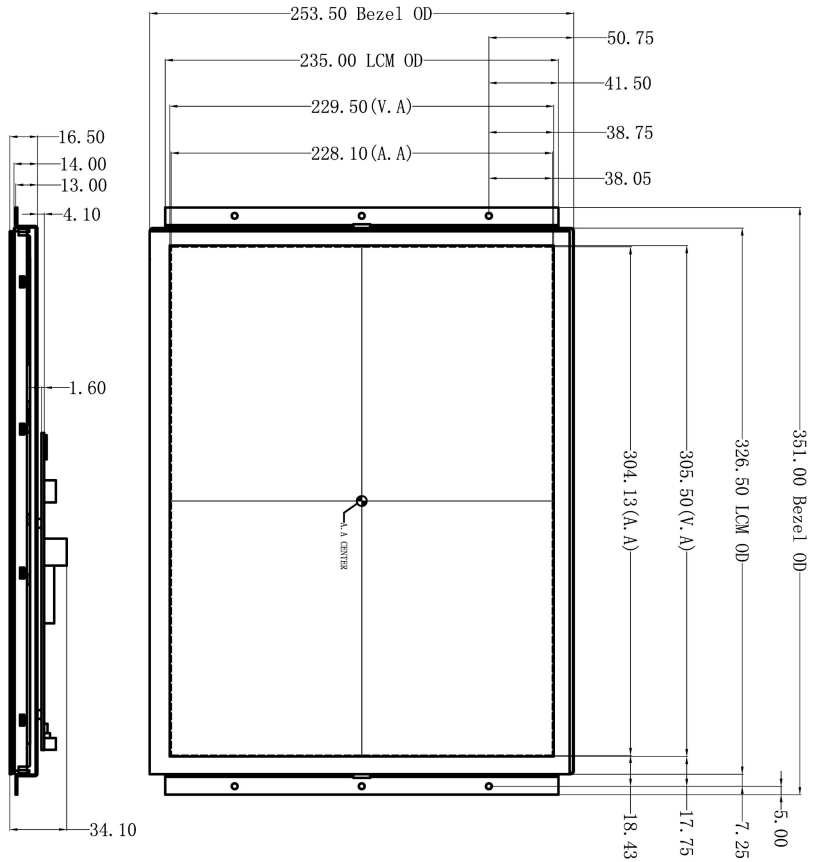
- **Development Platform**

Development	
Android	Java, Kotlin, C++

- **Packing Capacity & Dimension**

Dimension				
Dimension	351.00(W)*253.50(H)*34.10(T)mm			
Net Weight	1430g			
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)	-	-	-
Carton4:	450mm(L)*350mm(W)*300mm(H)	-	-	-
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	10	10

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Definition	Pin#	I/O	Description
VCC	1	P	Power Input
GND	2	P	GND
TX0	3	O	UART 0 Output
RX0	4	I	UART 0 Input
TX9	5	O	UART 9 Output
RX9	6	I	UART 9 Input
TX5	7	O	UART 5 Output
RX5	8	I	UART 5 Input
485B	9	B	RS485-
485A	10	A	RS485+

Location hole is used as position reference.

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

Active area is marked in Dash lines

Model	DMG10768T150_32WTC				
Drawing	A 4	Drawn	DWIN	Date	2023.10.26
Scale	1:1	Review		Date	
Unit	MM	Approval		Date	

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Revision Records

Rev	Revise Date	Content	Editor
00	2023-11-21	First edition	YML
01	2025-01-07	Add the description of development platform	Chen
02	2025-03-12	Add the description of Bluetooth	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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