

# DMG10768T150\_40WTC



## 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	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

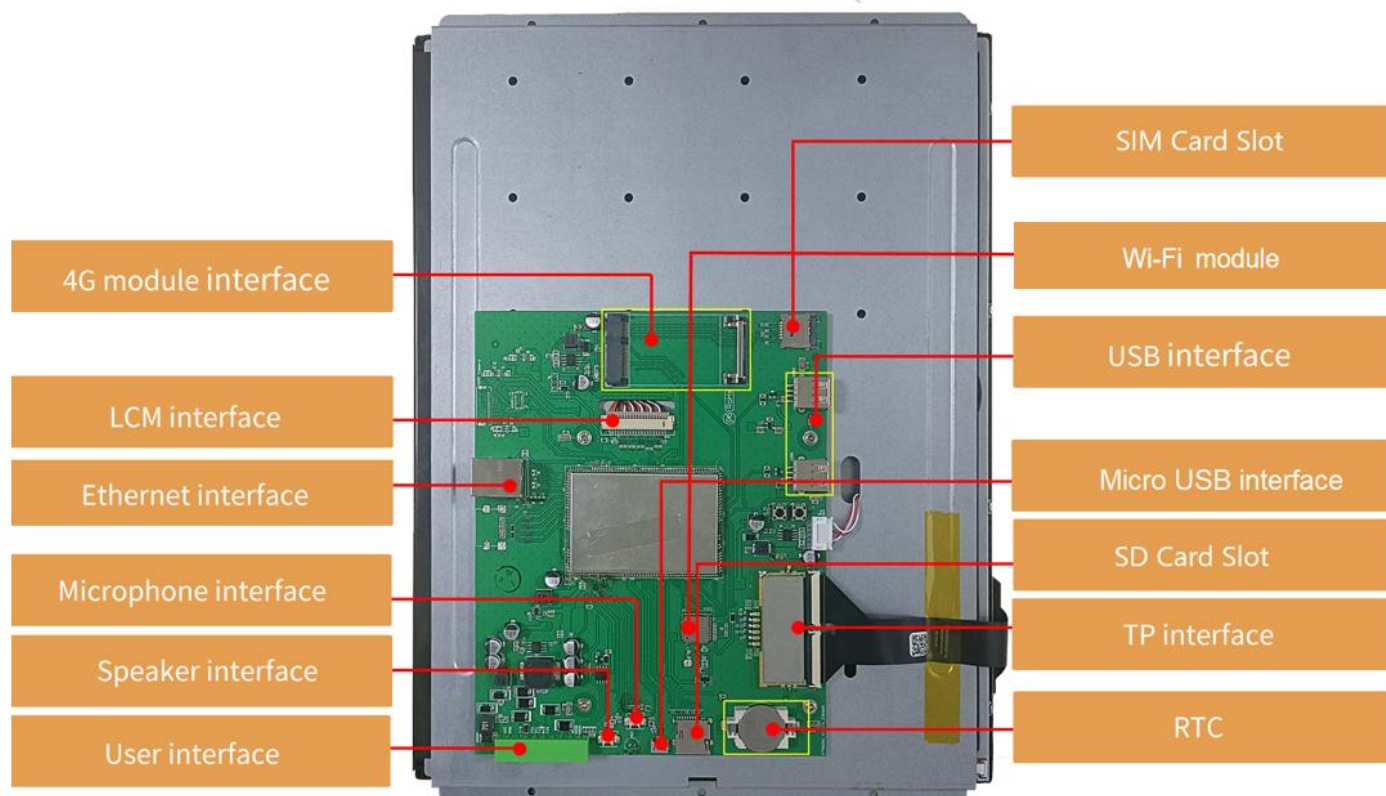
## Environment & Reliability Test

Properties	Conditions	Min	Typ.	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	65	℃
Storage Temperature	-	-30	25	80	℃
Working Humidity	25℃	10%	60%	90%	RH
Conformal Coating	Y				
ESD	Air: ±8KV, Contact: ±6K				
EFT	Group pulse interference ±2KV				

Additional cooling required for operation above 65℃.

## ● 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	Max. 64G
RTC	Button cell for power supply. Accuracy: $\pm 20\text{ppm}$ @25℃
Speaker	2Pin_1.25mm interface*1
Microphone	2Pin_1.25mm interface*1
4G Module	Factory not configured, customizable to add
Camera Interface	USB 2.0 interface
Wi-Fi	IEEE 802.11b/g/n, 2.4G, Wi-Fi 4
Bluetooth Version	BT4.2

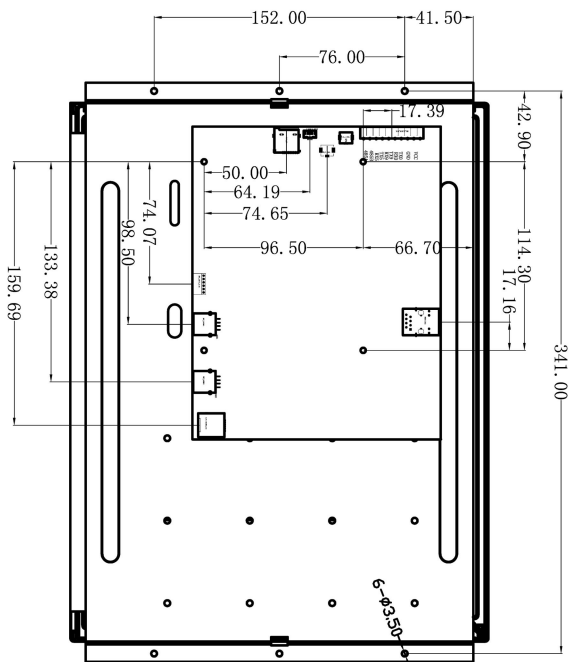
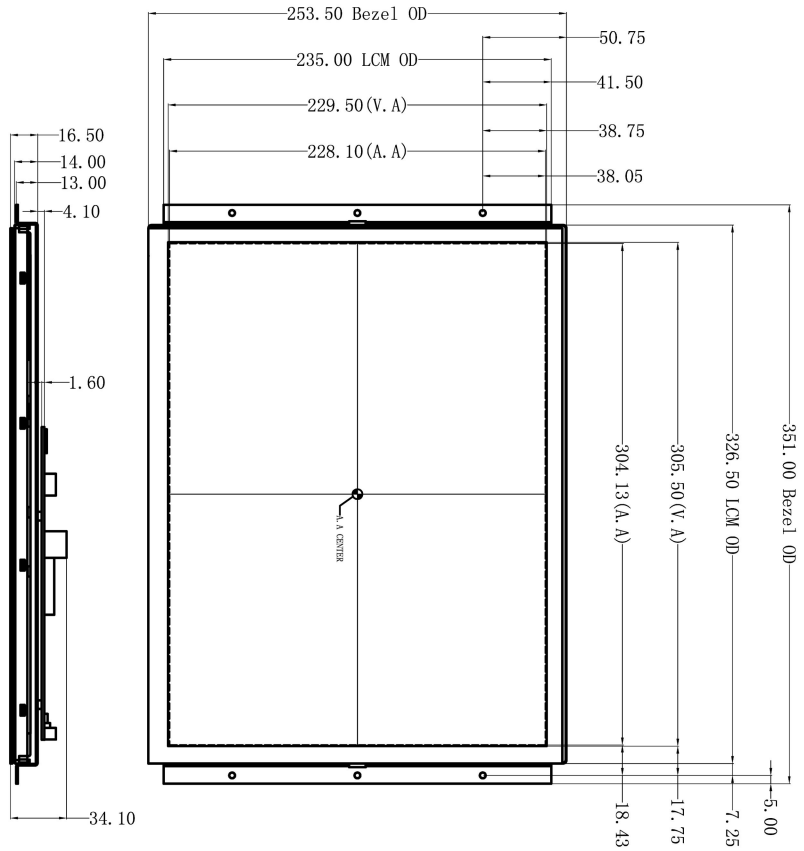


## ● Development Platform

Development	
Linux	QTCreator2.7.2 and above

## ● 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



Definition	Pin#	IO	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_40WTC				DWIN Technologies			
Drawing	A 4	Drawn	DWIN	Date				
Scale	1:1	Review		Date				
Unit	MM	Approval		Date				

## Revision Records

Rev	Revise Date	Content	Editor
00	2023-12-19	First edition	YML
01	2025-03-13	Add the description of Bluetooth	Chen
02	2025-06-17	Update the description of Wi-Fi module and the range of temperature	Chen

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