

DMG10768C080_32WTC



● 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	8.0 inch	-
LCD Type	IPS, TFT LCD	-
Viewing Angle	85°/85°/85°/85°	Wide viewing angle, high contrast, and good color reproduction
Active Area (AA)	162.05mm(W)×121.54mm (H)	-
Viewing Area (VA)	162.60mm(W)×122.20mm (H)	-
Resolution	1024×768	-
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.				

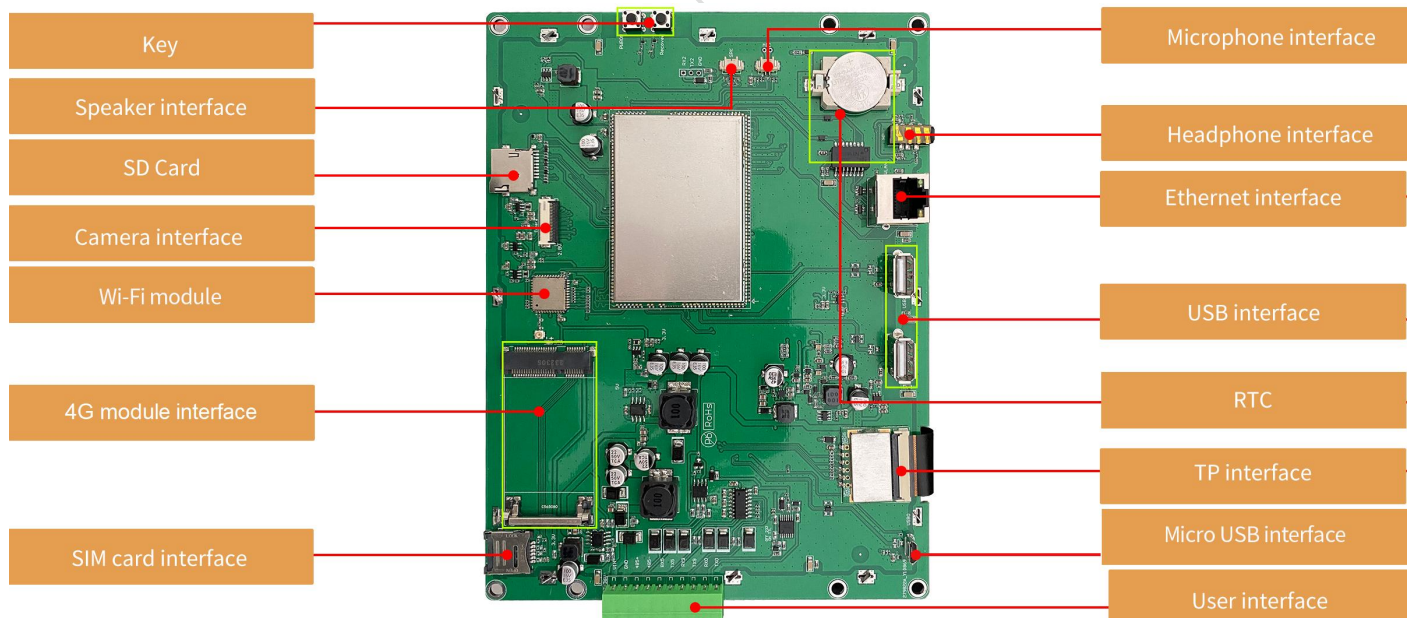
● Environment & Reliability Test

Properties	Conditions	Min	Typ	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	65	℃
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				

Additional cooling required for operation above 65°C.

● Peripheral and Interfaces

Properties	Description
User Interface	10Pin_3.81mm horizontal socket
COM	RS232*2 (COM5 & COM9), RS485*1 (COM8), TTL*1 (COM0)
Wi-Fi	IEEE 802.11b/g/n, 2.4GHz, Wi-Fi 4
Bluetooth Version	BT4.2
USB	USB 2.0*2 (HOST), Micro USB*1 (OTG)
Speaker	2Pin_1.25mm interface *1
Microphone	2Pin_1.25mm interface *1
Headphone	3.5mm spacing interface *1
Camera Interface	MIPI (24Pin_0.5mm interface)
4G Module	Factory not configured, customizable to add
SD card	Max. 64G
RTC	Accuracy: $\pm 20\text{ppm}$ @25°C
Ethernet	10/100Mbps

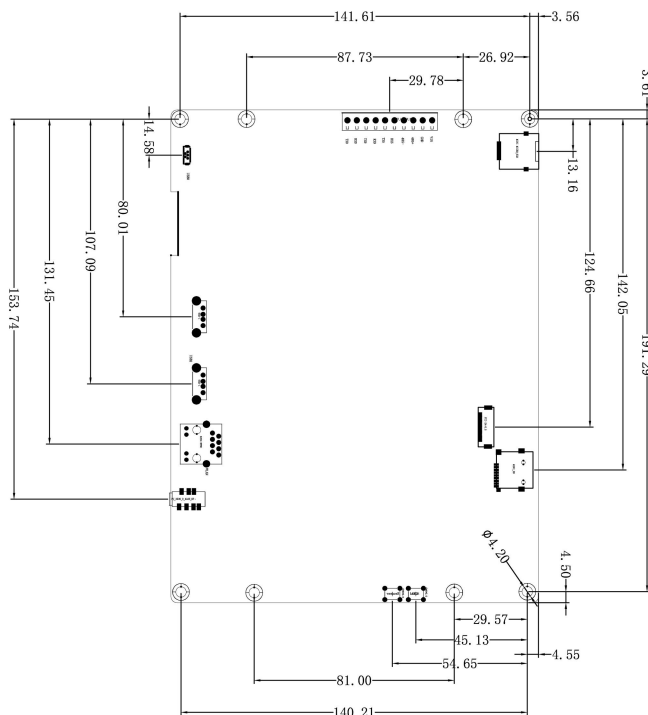
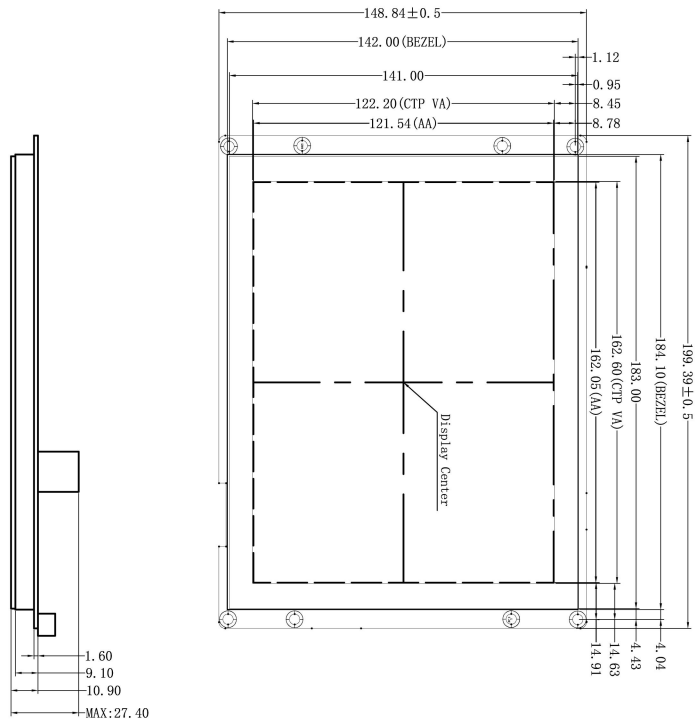


● Development Platform

Development	
Android	Java, Kotlin, C++

● Packing Capacity & Dimension

Dimension				
Dimension	199.39 (W)×148.84(H)×27.40(T)mm			
Net Weight	430g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity (Pcs)
Carton1:	220mm(L)×160mm(W)×47mm	-	-	-
Carton2:	250mm(L)×200mm(W)×80mm	2	1	2
Carton3:	320mm(L)×270mm(W)×80mm	2	2	4
Carton4:	450mm(L)×350mm(W)×300mm	1	10	10
Carton5:	600mm(L)×450mm(W)×300mm	1	20	20



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

Location hole is used as position reference.

Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMG10768C080-32WTC				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	2023-04-24	First edition	YML
01	2023-5-15	Remove the 4G module and update the physical image	YML
02	2023-10-24	Update the PCB and Interface pictures	YML
03	2025-09-08	Modify the voltage supply	Chen Xian

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