

DMG10768T080_33WTC



Features:

- Industrial Grade Android intelligent display based on RK3288, running Android 8.1 OS.
- 8.0-inch, 1024*768 pixels resolution, 16.7M colors, IPS-TFT-LCD, capacitive touch.
- Compatible with 4G, WIFI, Bluetooth, microphone, camera and other rich peripherals.
- Available for USB and SD card updates.
- Available for RS232, RS485 and Ethernet port to connect and communicate with external devices.
- Available for downloading Android general apps to realize functions such as WiFi ,wired internet , browsing, music and video playback, data copy, etc.

● Master Control Parameters

Properties	Parameters
Motherboard Level	Industrial
CPU	RK3288, ARM Cortex-A17, Quad-core
OS	Android 8.1
FLASH	8Gbytes EMMC5.0
RAM	2Gbytes DDR3

● Display Parameters

Properties	Parameters	Description
Color	16.7M(16777216)colors	24 bit color 8R8G8B
Panel Type	IPS	IPS process, TFT LCM with wide view angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best view angle : symmetrical
Active Area (A.A.)	162.1mm(W)*121.5mm(H)	1024*768 Pixel
Resolution	1024*768 Pixel	Available for 0°/90°/180°/270°rotated display
Backlight	LED	≥30000H(time of the brightness decaying to 50% on the condition of continuous working with the maximum brightness)
Brightness	250nit	100 levels adjustment(It's not recommend to set brightness to 1%~30% of the maximum, which may lead to LCD flicker.)

Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time.

● Voltage & Current

Properties	Conditions	Min	Typ.	Max	Unit
Power Voltage	-	7.0	12.0	36.0	V
Operating Current	VCC = +12V, Backlight on	-	460	-	mA
	VCC = +12V, Backlight off	-	160	-	mA

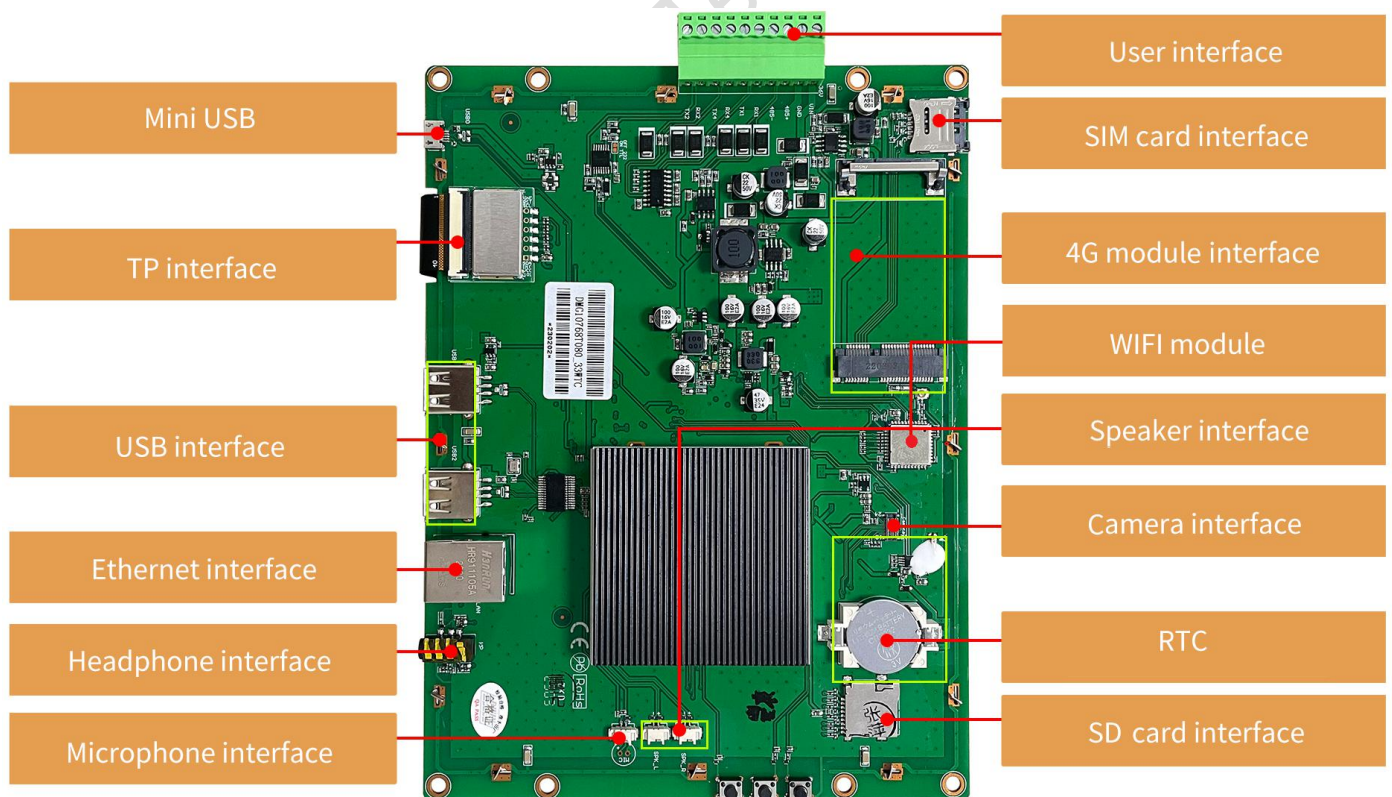
Recommended power supply: 12V 1A DC

● 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	Yes				
ESD Grade	Air discharge±8KV; Contact discharge±6KV				
EFT Test	Group pulse interference ±2KV				

● Peripherals and Interfaces

Properties	Parameters	Description
COM	2-way RS232	UART1 & UART4
	1-way RS485	UART3
	TTL/COMS	UART2(Debug interface)
USB Interface	3-way	HOST*2,OTG*1
Headphone Interface	1-way	3.5mm spacing interface
Speaker Interface	2-way	Left & right
Microphone Interface	1-way	-
Camera Interface	1-way	Mipi&USB
SD Card Slot	1-way	Drawer type card slot(Max 64G)
SIM Card Slot	1-way	Drawer type card slot
4G Module	1-way	Factory not configured, customizable to add
Ethernet	1-way	10/100Mbps
WIFI Module	1-way	IEEE 802.11Bb/g/n,2.4G,Bluetooth
RTC	Built-in	Button cell for power supply, Accuracy: $\pm 20\text{ppm}$ @25°C



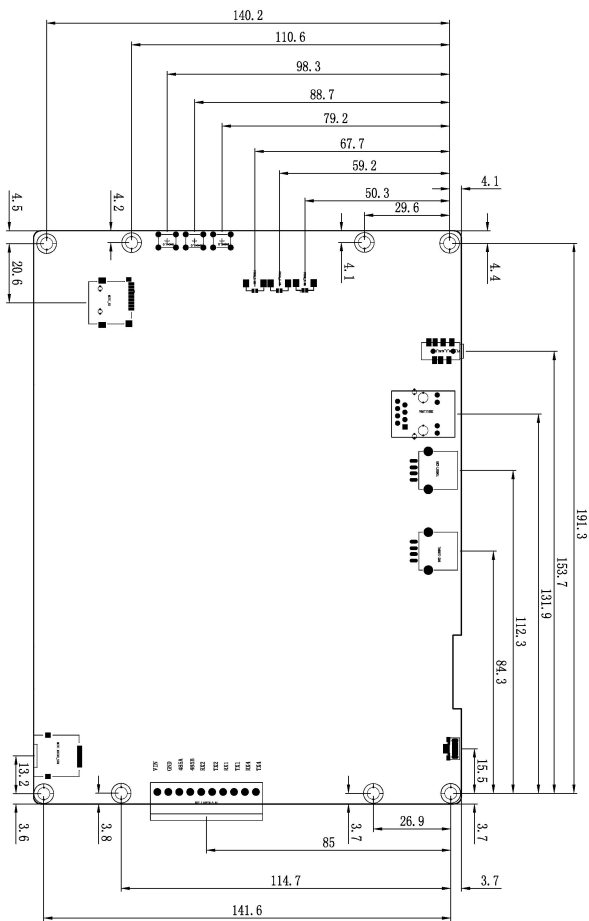
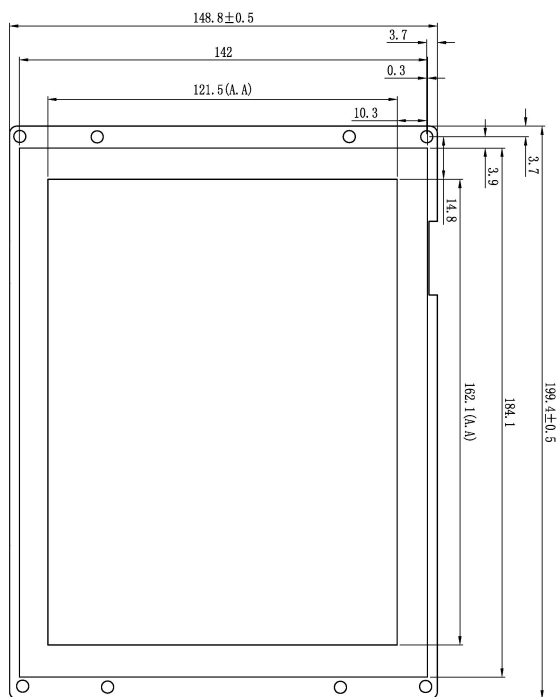
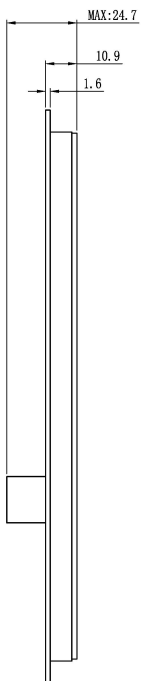
● Interface

Properties	Conditions	Min	Typ	Max	Unit
Baud Rate	User Set	2400	115200	230440	bps
Output Voltage (TXD)	Output 1	-	-5.0	-3.0	V
	Output 0	3.0	5.0	-	V
Input Voltage (RXD)	Input 1	-15.0	-5.0	-	V
	Input 0	-	5.0	15.0	V
Baud Rate	User Set	2400	115200	921600	bps
(V_AB)	Output 1	2.5	5.0	-	V
	Output 0	-	-5.0	-2.5	V
(V_AB)	Input 1	0	2.5	-	V
	Input 0	-	-2.5	-0.2	V
Interface	Support TTL/COMS,RS232 or RS485 level				
Socket	10Pin_3.81mm Socket				

● Packing Capacity & Dimension

Dimension				
Dimension	199.4(W)*148.8(H)*24.7(T)mm			
Net Weight	490g			
Packing Capacity				
Model	CartonSize	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)*160mm(W)*47mm (H)	-	-	-
Carton2:	250mm(L)*200mm(W)*80mm (H)	2	1	2
Carton3:	320mm(L)*270mm(W)*80mm (H)	-	-	-
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	16	16
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	30	30

Disclaimer: The product design is subject to alternation and improvement without prior notice.



Definition	Pin#	I/O	Description
VIN	1	P	Power Input
GND	2	P	GND
485A	3	485+	485+
485B	4	485-	485-
RX2	5	I	UART 2 Input
TX2	6	O	UART 2 Output
RX1	7	I	UART 1 Input
TX1	8	O	UART 1 Output
RX4	9	I	UART 4 Input
TX4	10	O	UART 4 Output

Location hole is used as position reference.

Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash Lines

Model	DMG10768T080-33WTC		
Drawing	A 4	Drawn	T. B
Scale	1:1	Review	Date
Unit	MM	Approval	Date
DWIN Technologies		Date	2022.08.19
		Date	

● Revision Records

Rev	Revise Date	Content	Editor
00	2022-11-28	First Edition	YML
01	2022-12-05	Correct Package Information	YML
02	2022-12-09	Properties Optimize	YML
03	2023-5-15	Remove the 4G module and update the physical image	YML

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Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!