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DMG10768T150_40WTC

Features:

● **Industrial Linux intelligent display terminal based on RK3566, Linux version 4.19.**

● **15.0-inch, 1024*768 pixels resolution, 16.7M colors, IPS-TFT-LCD, wide viewing angle, Capacitive touch**

● **Adopt QT environment for secondary development.**

● **Available for multi-language, vector font library, picture library, video library and audio library.**

● **Compatible with network cable connection with PC to download update project.**

● **Available for RS232, RS485 and Ethernet port to connect and communicate with external devices.**

- **Master Control Parameters**

Properties	Parameters
Motherboard Level	Industrial
CPU	RK3566, Cortex-A55, quad-core
OS	Linux 4.19
FLASH	8Gbytes EMMC
RAM	2Gbytes LPDDR4

- **Display Parameters**

Properties	Parameters	Description
Color	16.7M (16777216) colors	24 bit color 8R8G8B
Panel Type	IPS	IPS process, TFT LCM with wide viewing angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best View: symmetrical
Active Area (A.A.)	304.13mm(W) * 228.10mm(H)	1024*768 Pixel
View Area (V.A.)	305.50mm(W) * 229.50mm(H)	1024*768 Pixel
Resolution	1024*768 Pixel	Available for 0°/90°/180°/270°rotated display
Backlight	LED	≥20000H(time of the brightness decaying to 50% on the condition of continuous working with the maximum brightness)
Brightness	300nit	100 levels adjustment(It's not recommended 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	-	12.0	12.0	23	V
Operation Current	VCC = +12V, Max Backlight	-	1150	-	mA
	VCC = +12V, Backlight off	-	350	-	mA

Recommended power supply: 12V 1.5A DC

- **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
Protective Paint	Yes				
ESD	Air discharge±8KV, Contact discharge ±6K				
EFT	Group pulse interference ± 2KV				

● **Peripherals and Interfaces**

Properties	Parameters	Description
COM	2-way RS232	UART5 & UART9
	1-way RS485	UART8
	1-way TTL/COMS	UART0
USB Interface	3-way	Type-A*2,MICRO*1
Speaker Interface	1-way	2Pin_1.25mm interface
Microphone Interface	1-way	2Pin_1.25mm interface
Camera Interface	1-way	USB
4G Module Interface	1-way	Factory not configured, can be customized to add
SIM Card Slot	1-way	-
SD Card Slot	1-way	Drawer type card slot(Max 64G)
Ethernet Interface	1-way	10/100Mbps
WIFI Module	1-way	IEEE 802.11Bb/g/n,2.4G,Bluetooth
RTC	1-way	Button cell for power supply. Accuracy: ±20ppm @25℃
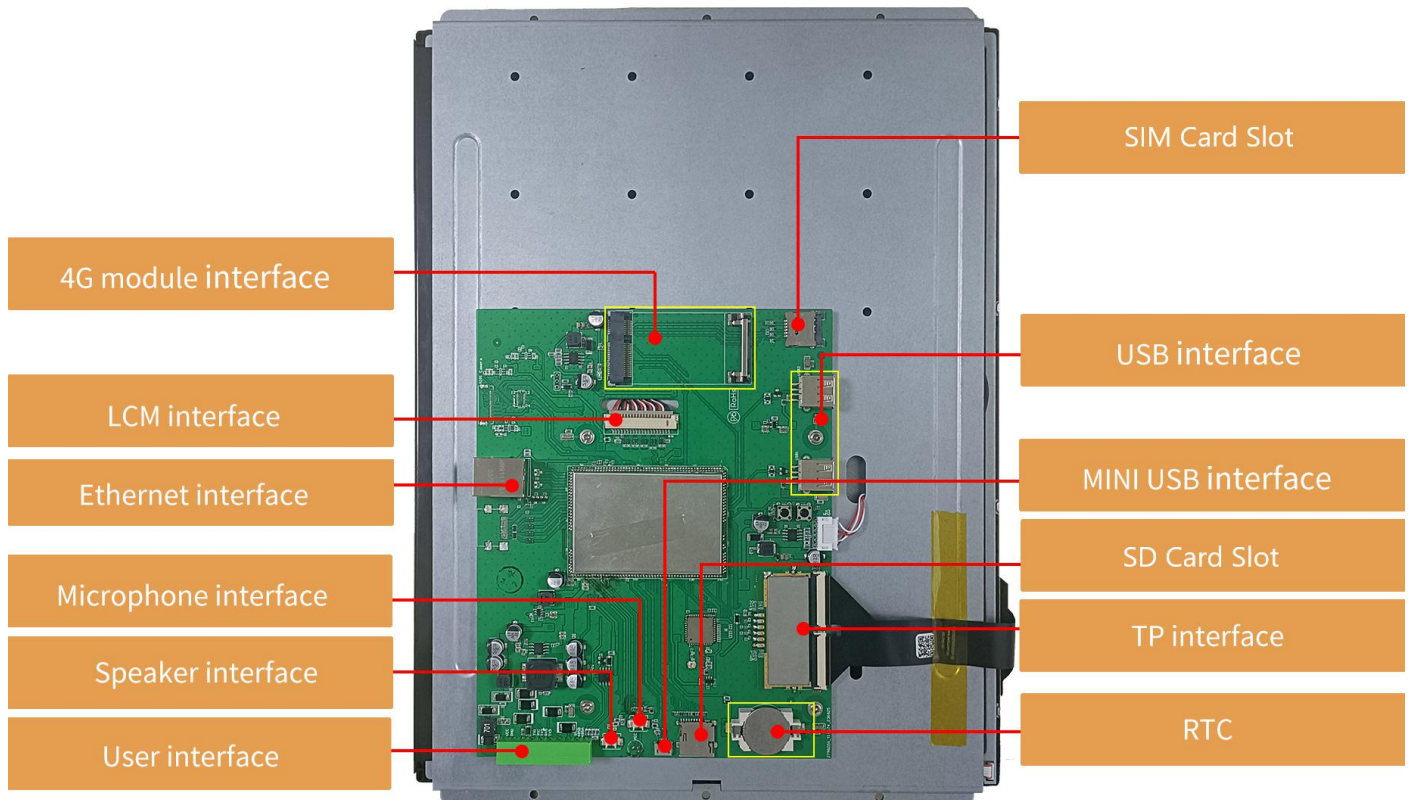
Disclaimer:

There are multiple parallel raw materials coexisting to guarantee the stable supply.If customers have particular raw material preferences or requirements, please contact the sales personnel.

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- **Interface**

Properties	Conditions	Min	Typ.	Max	Unit
Baud Rate	User Set	2400	115200	230440	bps
Output Voltage (TXD)	Output 1	-	-5.0	-	V
	Output 0	-	5.0	-	V
Input Voltage (RXD)	Input 1	-	-5.0	-	V
	Input 0	-	5.0	-	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	351.00(W)*253.50(H)*34.10(T)mm			
Net Weight	1430g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	525mm(L)*330mm(W)*80mm(H)	1	1	1
Carton2:	375mm(L)*340(W)mm*465mm(H)	6	1	6

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

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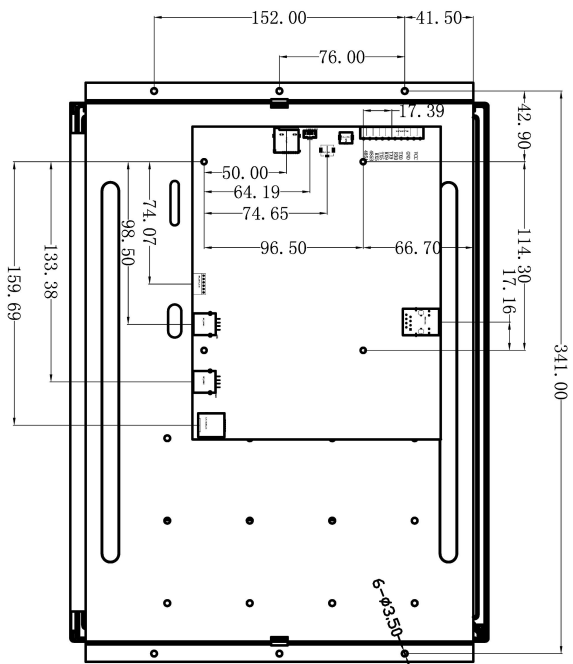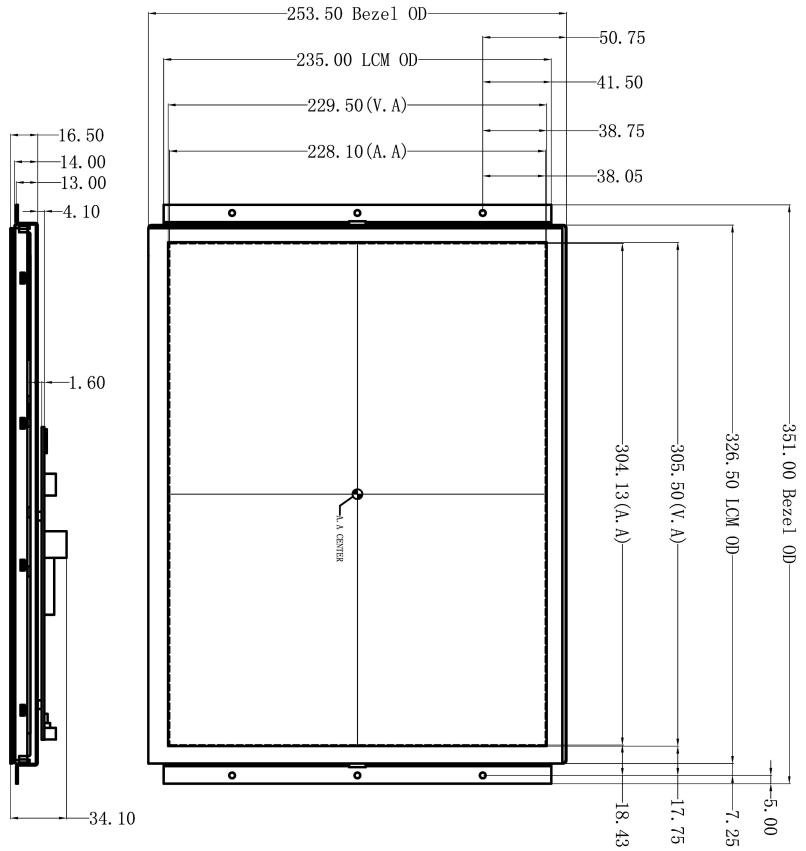
Definition	Pin#	IO	Description
VCC	1	P	Power Input
GND	2	P	GND
TX0	3	O	UART0 Output
RX0	4	I	UART0 Input
TX9	5	O	UART9 Output
RX9	6	I	UART9 Input
TX5	7	O	UART5 Output
RX5	8	I	UART5 Input
485B	9	B	RS485-
485A	10	A	RS485+

Location hole is used as position reference.

Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMG10768T150_40WTC		
Drawing	Drawn	Review	Approval
	DWIN		
Scale	1:1	Date	Date
		Date	2023.10.26
Unit	MM	A 4	

DWIN Technologies

Revision Records

Rev	Revise Date	Content	Editor
00	2023-12-19	First edition	YML

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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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