DMT10768T097_35WTC

Features:

- **Industrial Linux intelligent display terminal based on A40i, running Linux3.10 operating system.**

- **9.7-inch, 1024*768 pixels resolution, 16.7M colors, TN process TFT display, 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, RS422 and Ethernet port to connect and communicate with external devices.**

● **Master Control Parameters**

Properties	Parameters
Motherboard Level	Industrial
CPU	Allwinner A40i Quad-core ARM CortexTM-A7 Processor
OS	Linux3.10
FLASH	8Gbytes EMMC
RAM	1Gbytes DDR3

● **Display Parameters**

Properties	Parameters	Description
Color	16.7M (16777216) colors	24 bit color 8R8G8B
Panel Type	TN	TN process, TFT LCM with normal view angle
Viewing Angle	70/70/50/70(L/R/U/D)	-
Active Area (A.A.)	197.8mm(W)*148.66mm(H)	1024*768
View Area (V.A.)	197.8mm(W)*148.66mm(H)	1024*768
Resolution	1024*768	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	350nit	-

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	23	V
Operation Current	VCC = +12V, backlight on	-	640	-	mA
	VCC = +12V, backlight off	-	260	-	mA
Recommended power supply: 12V 1A DC					

● **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	Yes				
ESD	Air discharge±8KV; Contact discharge±6KV				
EFT	Group pulse interference ±2KV				
Protective Level	IP65(Front)				

● **Peripheral and Interfaces**

Properties	Parameters	Description
COM	1-way RS485	UART4
	1-way RS422	UART7
	1-way RS232	UART2
	1-way RS232 debug serial port	UART0
CAN	1-way	CAN_L&CAN_H
USB interface	2-way	HOST*2
SD card slot	1-way	Drawer type card slot(Max 64G)
Ethernet interface	1-way	10/100Mbps
RTC	Built-in	Button cell for power supply. Accuracy: ±20ppm @25℃
Buzzer	Built-in	3V passive buzzer
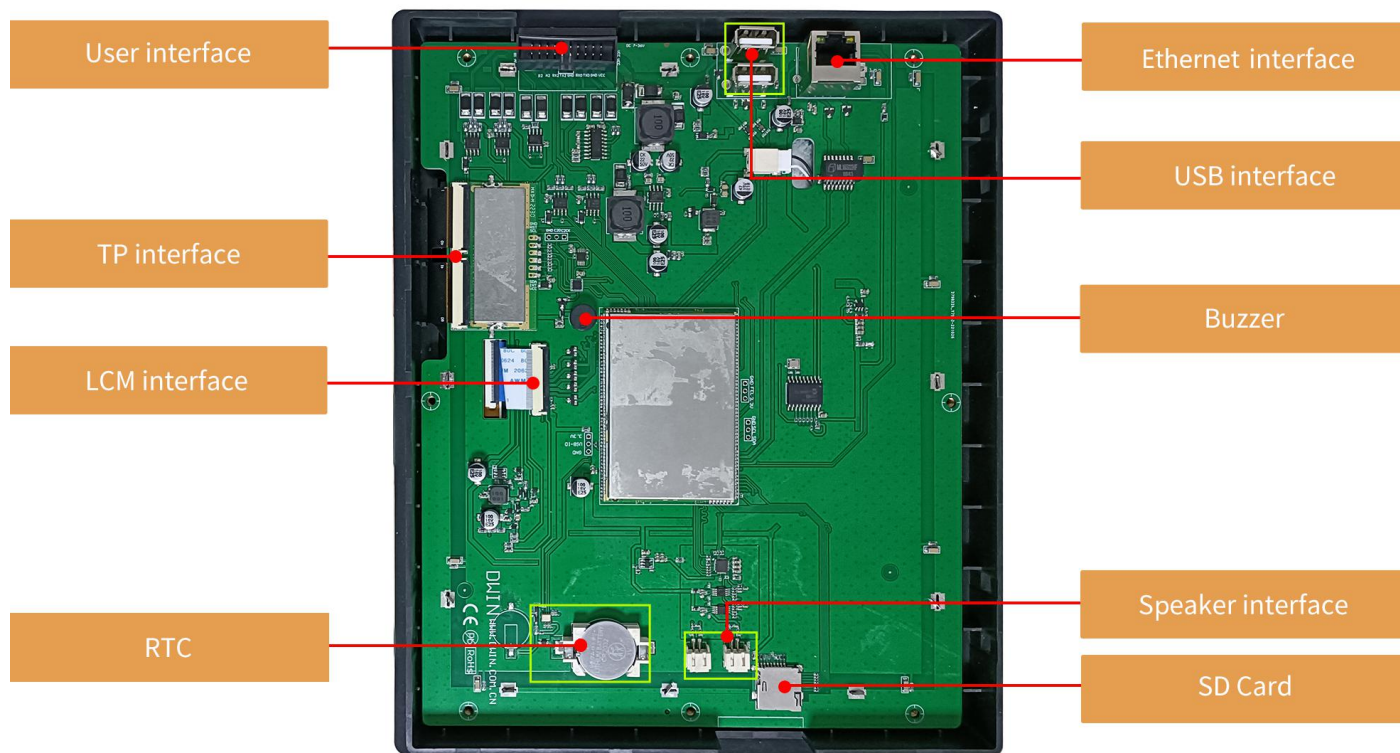
Disclaimer:

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.
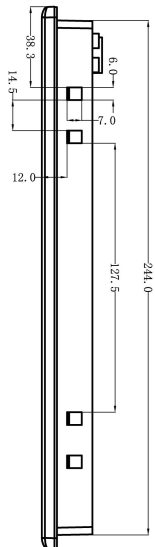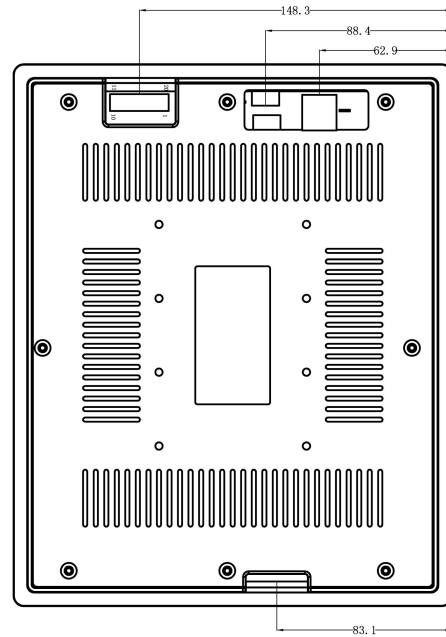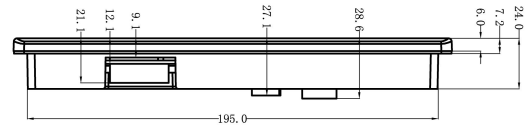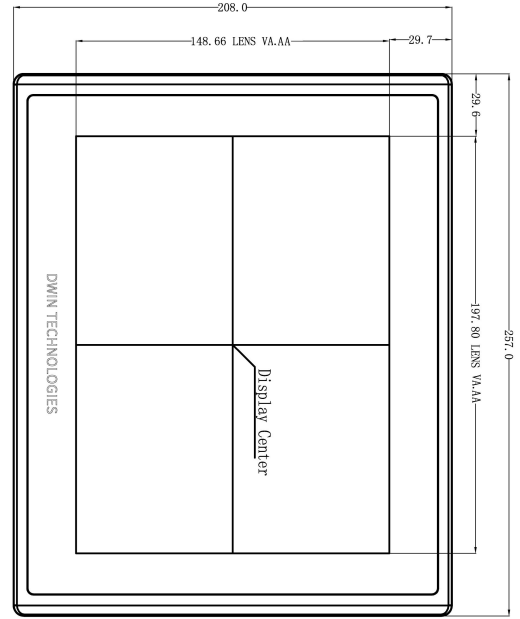
- **Interface Parameters**

Properties	Conditions	Min	Typ.	Max	Unit
Baud Rate	User-defined	3150	115200	3225600	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
Interface	RS232*2; RS485*1; RS422*1				
Socket	20Pin_2.54mm Socket				

- **Packing Capacity & Dimension**

Dimension				
Dimension	257.0 (W)mm*208.0(H)mm*28.6(T)mm			
Net Weight	1000g			
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)	2	1	2
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	10	10
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	16	16

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

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Definition	Pin#	Type	Description
VCC	1	P	Power Input
GND	2	P	GND
TX0	3	O	UART0output
RX0	4	I	UART0 Input
GND	5	P	GND
TX2	6	O	UART2 Output
RX2	7	I	UART2 Input
A2 (NC)	8	A+	RS485+
B2 (NC)	9	B−	RS485−
A1	10	A+	RS485+
B1	11	B−	RS485−
CANL	12	CAN	CAN_L
CANH	13	CAN	CAN_H
A	14	–	RS422
B	15	–	RS422
Y	16	–	RS422
Z	17	–	RS422
GND	18	P	GND
GND	19	P	GND
VCC	20	P	Power Input

DWIN TECHNOLOGIES

Display Center

208.0
148.66 LENS VA.AA
29.7
29.6
197.80 LENS VA.AA
257.0

21.1
12.1
9.1
27.1
28.6
6.0
7.2
24.0
195.0

148.3
88.4
62.9
244.0
127.5
83.1

38.3
14.5
6.0
7.0
12.0

Location hole is used as position reference.

Unmarked Tolerance is +/−0.3mm

Active area is marked in Dash lines

Model		DMT10768T097_35WTC				
Drawing	A4	Drawn	J.G			
Scale	1:1	Review	Date	Approval	Date	Date
Unit	MM	Approval				

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Revision Records

Rev	Revise Date	Content	Editor
00	2022-12-26	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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