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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)	-
View Area (V.A.)	197.8mm(W)*148.66mm(H)	-
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	250nit	-

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	23.0	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				

- **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

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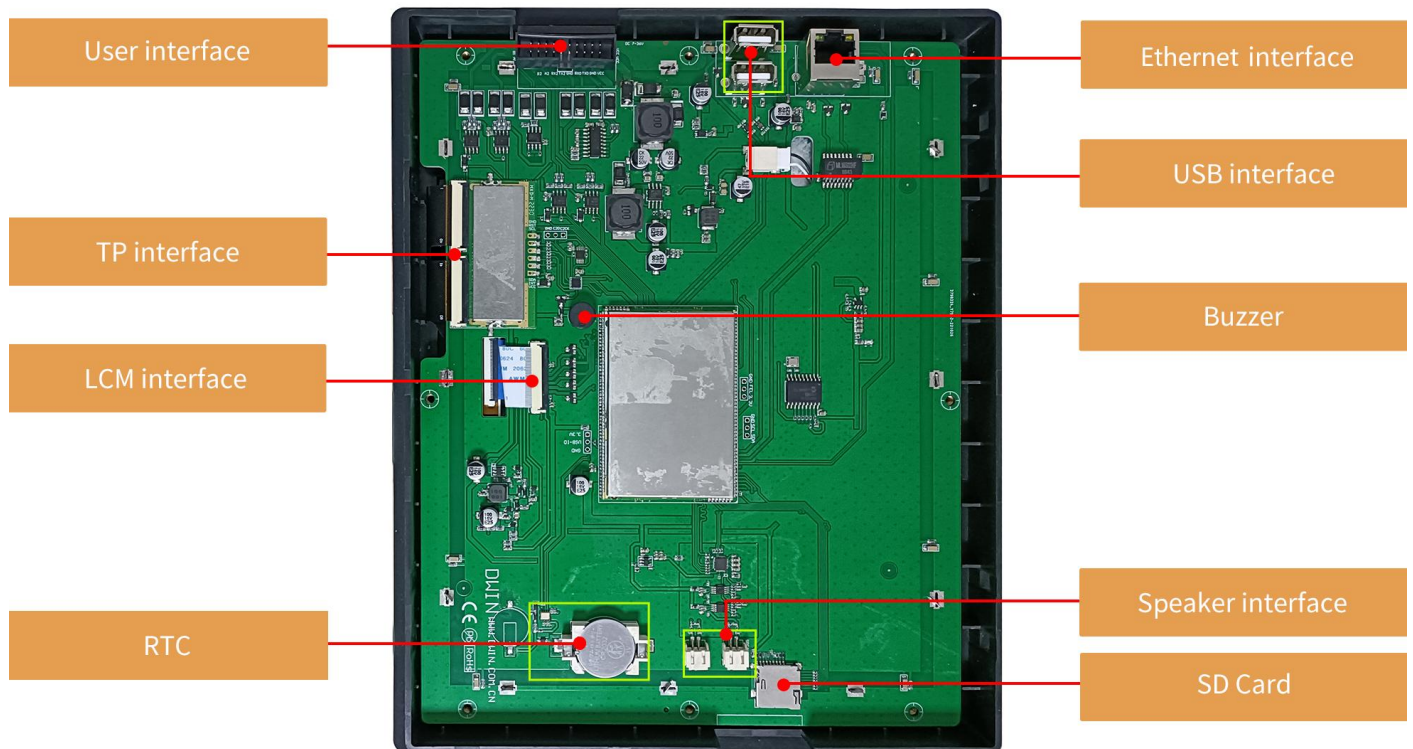
● **Interface Parameters**

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
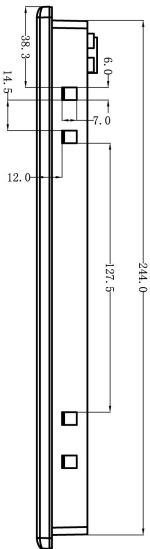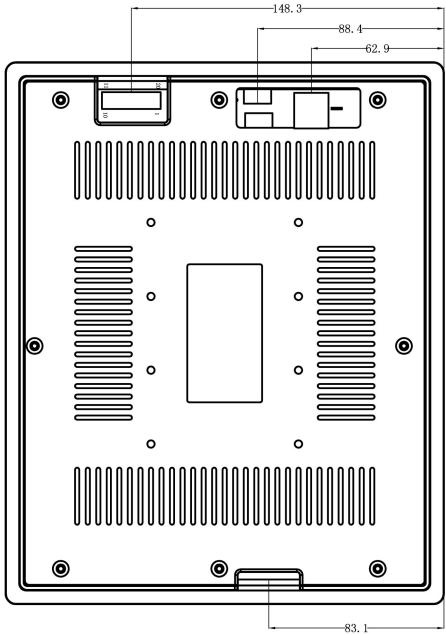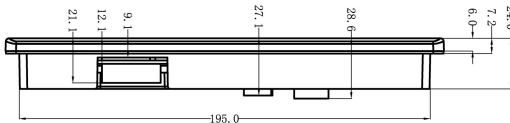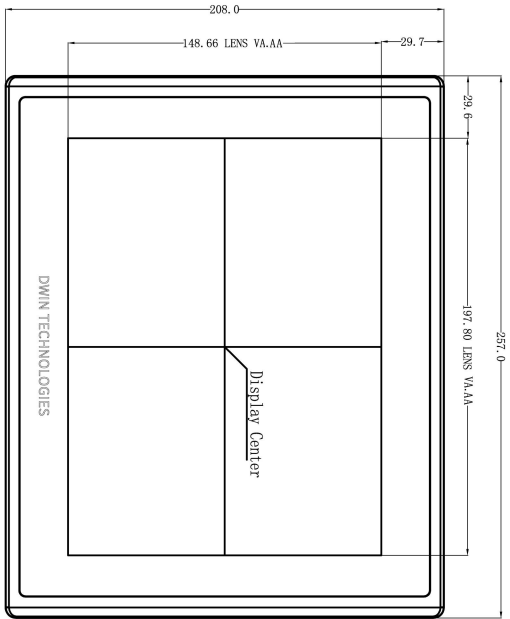
Definition	Pin#	Type	Description
VCC	1	P	Power Input
GND	2	P	Power Input
TX0	3	O	UART0Output
RX0	4	I	UART0 Input
GND	5	P	GND
TX2	6	O	UART2 Output
RX2	7	I	UART2 Input
A2 (NC)	8	A+	RS485+
B2 (NC)	9	B-	RS485-
A1	10	A+	RS485+
B1	11	B-	RS485-
CANL	12	CAN	CAN L
CANH	13	CAN	CAN H
A	14	-	RS422
B	15	-	RS422
Y	16	-	RS422
Z	17	-	RS422
GND	18	P	GND
GND	19	P	GND
VCC	20	P	Power Input

Location hole is used as position reference.

Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMT10768T097_35WTC				
Drawing	A 4	Drawn	J.G	Date	
Scale	1:1	Review	Date		
Unit	MM	Approval	Date		

DWIN Technologies

Revision Records

Rev	Revise Date	Content	Editor
00	2022-12-26	First Edition	YML
01	2025-05-16	Update Brightness	Chen

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