DMT12800T121_35WTC

Features:

- **Industrial Linux intelligent display terminal based on A40i, running Linux3.10 operating system.**
- **12.1-inch, 1280*800 pixels resolution, 16.7M colors, IPS-TFT-LCD, wide viewing angle, CTP.**
- **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, RS422 and CAN port to connect and communicate with external devices.**

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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	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.)	261.12mm(W)*163.2mm(H)	1280*800
View Area (V.A.)	262.1mm(W)*164.2mm(H)	1280*800
Resolution	1280*800	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	500nit	-
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	15.0	36.0	V
Operation Current	VCC = +15V, Backlight on	-	790	-	mA
	VCC = +15V, Backlight off	-	300	-	mA
Recommended power supply: 15V 1A DC					

Reliability Test

Properties	Conditions	Min	Typ.	Max	Unit
Working Temperature	60%RH at 15V voltage	-20	25	70	℃
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				

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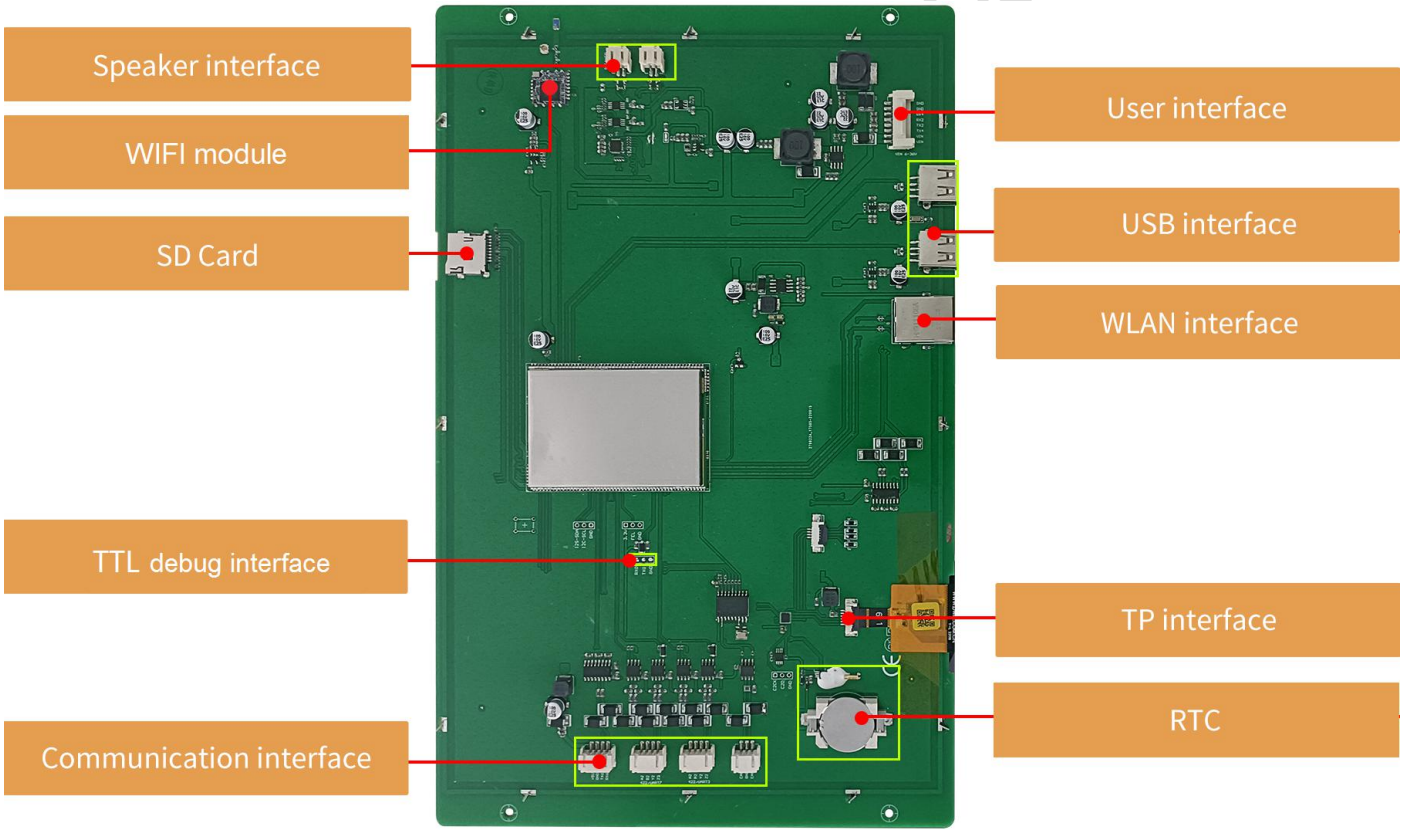
Peripheral and Interfaces

Properties	Parameters	Description
COM	2-way RS422	UART 3 & UART 7
	3-way RS232	UART 2 &UART 4 & UART 6
	1-way TTL 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)
LAN interface	1-way	10/100Mbps
WIFI interface	1-way	FSC-WF122, with antenna
RTC	Built-in	Button cell for power supply. Accuracy: ±20ppm @25℃
Speaker	2-way	Left & right



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*3; RS422*2				
用户接口方式 Socket	8Pin_2.0mm*1；4Pin_2.0mm*3；3Pin_2.0mm*1				

Packing Capacity & Dimension

Dimension				
Dimension	301.2 (W)mm*190.8(H)mm*28.3(T)mm			
Net Weight	990g			
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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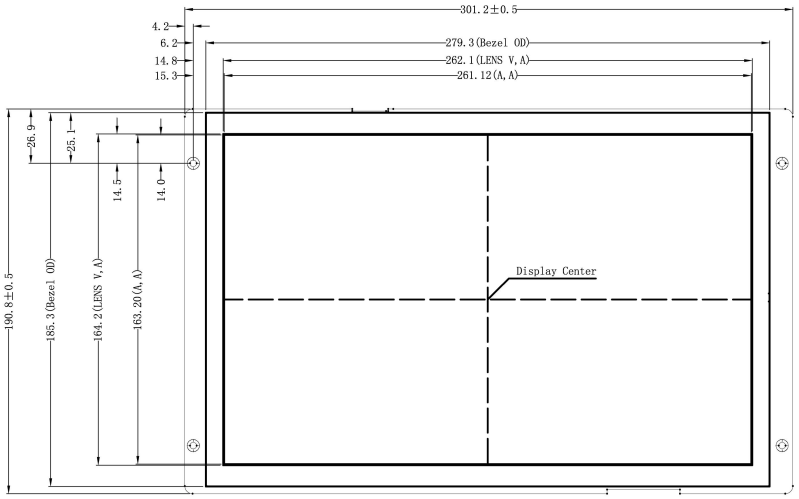

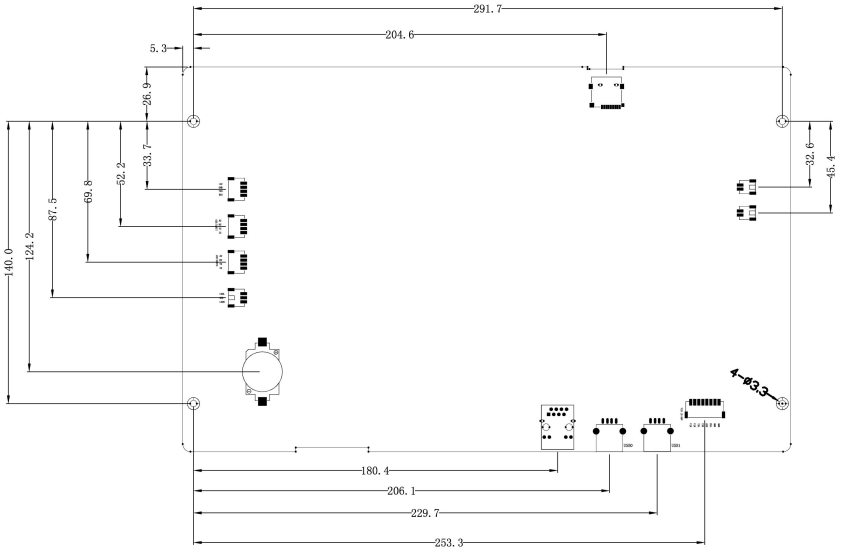

Definition	Pin#	Type	Description
VIN	1,2	P	Power Input
TX4	3	O	UART4 Output
TX2	4	O	UART2 Output
RX2	5	I	UART4 Input
RX4	6	I	UART2 Input
GND	7,8	P	GND

Location hole is used as position reference.

Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMG12800T121_35WTC					DWIN Technologies
Drawing	A 4	Drawn	J.G	Date		
Scale	1:1	Review		Date		
Unit	MM	Approval		Date		

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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