



### ● Master Control Parameters

Properties	Parameters
Motherboard Level	Industrial
CPU	Dual-core ARM Cortex™-A7 Processor
OS	Linux5.4
FLASH	8GBytes EMMC
RAM	128MBytes DDR3

### ● 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.)	216.96mm(W)*135.60mm (H)	-
View Area (V.A.)	217.96mm(W)*136.60mm (H)	-
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	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	-	12.0	12.0	23	V
Operation Current	VCC = +12V, Backlight on	-	440	-	mA
	VCC = +12V, Backlight off	-	140	-	mA

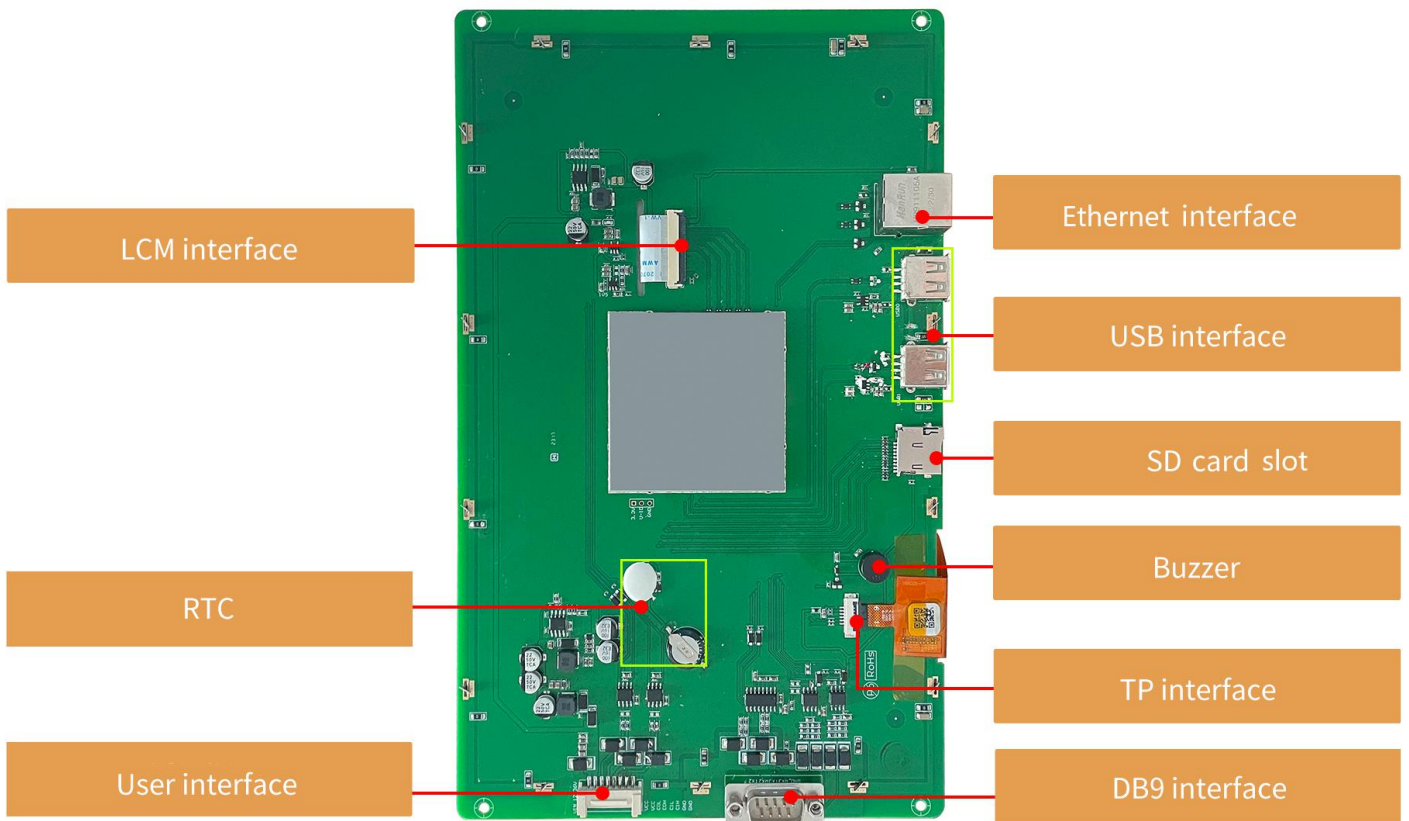
Recommended power supply: 12V 1A DC

### ● 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	Air discharge ±8KV; Contact discharge ±6KV				
EFT	Group pulse interference ±2KV				

**Peripheral and Interfaces**

Properties	Parameters	Description
Interface	2-way RS232	UART2 & UART3
	1-way RS422	A, B,Y,Z
	2-way CAN	CAN1 & CAN2
USB Interface	2-way	HOST*2
SD Card Slot	1-way	Drawer type card slot(Max 64G)
Ethernet	1-way	10/100Mbps
RTC	Built-in	Super-capacitor RTC. Accuracy: $\pm 20\text{ppm @}25^{\circ}\text{C}$
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.

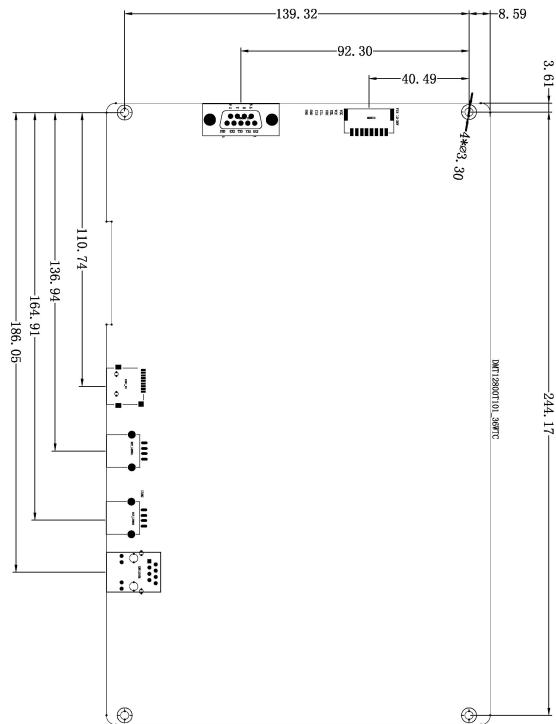
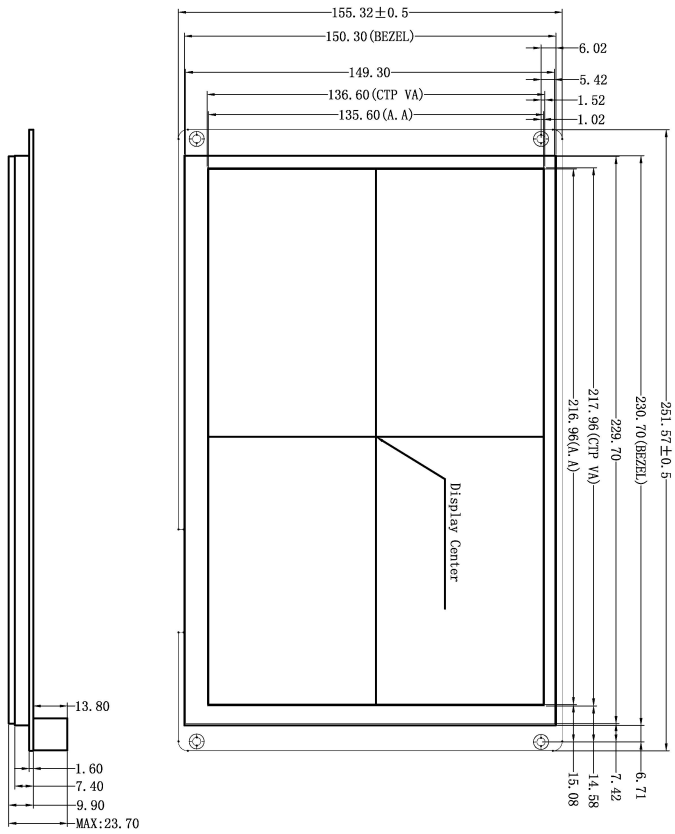
**● Interface Parameters**

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, RS422*1				
Socket	8Pin_2.0mm(CAN) DB9(RS232 & RS422)				

**● Packing Capacity & Dimension**

Dimension				
Dimension	251.57 (W) *155.32(H)*23.7(T)mm			
Net Weight	550g			
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)	1	2	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.



Definition	Pin#	IO	Description
RX2	1	I	UART 2 Input
TX2	2	O	UART 2 Output
TX3	3	O	UART 3 Output
RX3	4	I	UART 3 Input
GND	5	P	GND
A	6	A	RS422
B	7	B	RS422
Y	8	Y	RS422
Z	9	Z	RS422
Definition	Pin#	IO	Description
VCC	1,2	P	Power Input
COL	3	-	CAN0 CAN_L
COH	4	-	CAN0 CAN_H
CLL	5	-	CAN1 CAN_L
CHH	6	-	CAN1 CAN_H
GND	7,8	P	GND

1. Location hole is used as position reference.
  2. Unmarked Tolerance is  $\pm 0.3\text{mm}$
- Active area is marked in Dash lines

Model		DMT12800T101_36WTC	
Drawing	A 4	Drawn	G.Y
Date	2023.06.29	Date	
Scale	1 : 1	Review	
Date		Date	
Unit	MM	Approval	
		Date	

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**Revision Records**

<b>Rev</b>	<b>Revise Date</b>	<b>Content</b>	<b>Editor</b>
00	2023-08-09	First Edition	YML

Please contact us if you have any questions about the use of this document or our products, or if you would like to know the latest information about our products:

Customer service Tel: +86-400-018-9008

Customer service E-mail: [dwinhmi@dwin.com.cn](mailto:dwinhmi@dwin.com.cn)

Website: [www.dwin-global.com](http://www.dwin-global.com)

DWIN Developer Forum: <https://forums.dwin-global.com/index.php/forums>

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

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