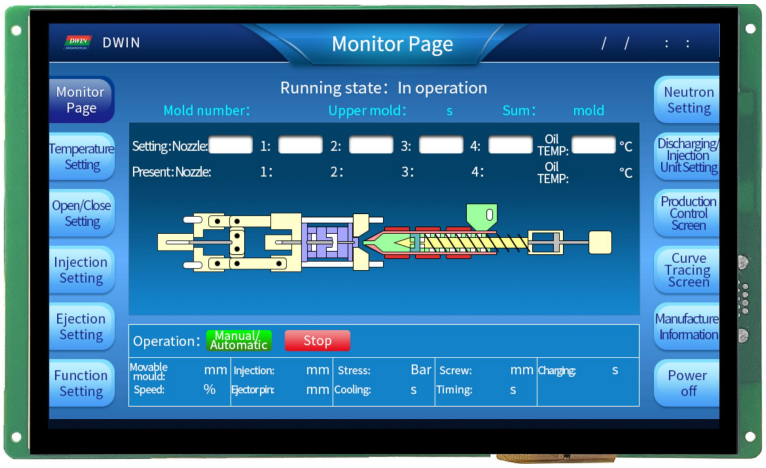
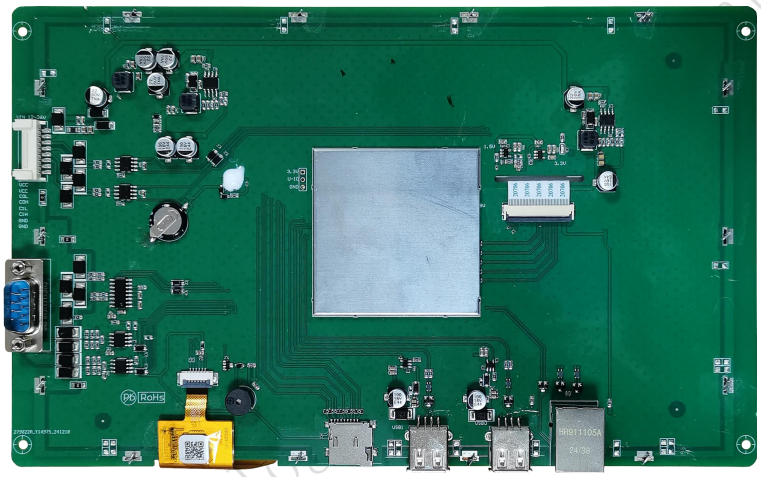
DMT12800T101_36WTC





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System Hardware

Properties	Parameters
Motherboard Level	Industrial
CPU	T113, Dual-core ARM CortexTM-A7 1GHz Processor
OS	Linux 5.4
FLASH	8GBytes eMMC
RAM	128MBytes DDR3

Display Parameters

Properties	Parameters	Description
LCD Type	IPS, TFT LCD	-
Viewing Angle	85°/85°/85°/85°	Wide viewing angle, high contrast, and good color reproduction
Active Area (AA)	216.96mm(W)x135.60mm(H)	-
Viewing Area (VA)	217.96mm(W)x136.60mm(H)	-
Resolution	1280x800	-
Backlight Service Life	>20000 Hrs	Backlight service life refers to the period the LED backlight operates under test conditions until brightness decreases to 50% of the initial level.
Brightness	250nit	100-level brightness adjustment (Flickering may occur at 1%-30% of max brightness; not recommended for use in this range)
Note: Use dynamic screen saver to prevent afterimages from prolonged fixed page display.		

Touch Parameter

Properties	Parameters
Touch Type	Capacitive touch panel
Structure	G+G structure with tempered glass surface

Power Supply

Properties	Min	Typ	Max	Unit
Power Voltage	12.0	12.0	36.0	V
Recommended power supply:12V 1A DC.				

Environment & 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
Conformal Coating	Y				
ESD	Air: ±8KV, Contact: ±6KV				
EFT	Group pulse interference ±2KV				
RE	Class A				
CE Certification	Y				

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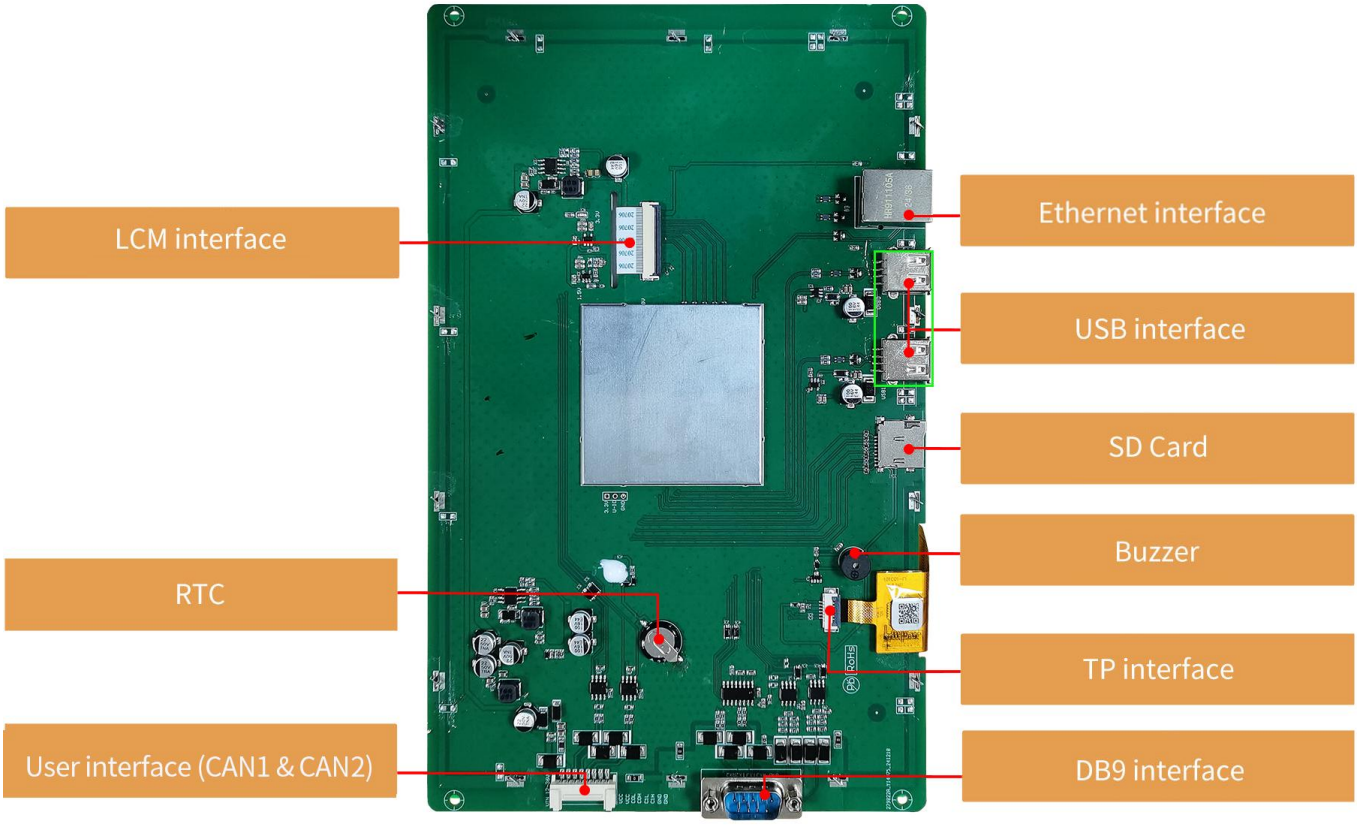
Peripheral and Interfaces

Properties	Description
User Interface	8Pin_2.0mm*1, DB9*1
COM	RS232*2 (COM2 & COM3), RS485*2 (COM4 & COM5)
Ethernet	10/100Mbps
USB	USB 2.0*2 (HOST)
SD Card	Max 64G
RTC	Accuracy: ±20ppm @25℃
CAN	CAN*2 (CAN1 & CAN2)
Buzzer	3V passive buzzer



Development Platform

Development	
QT	QtCreator2.7.2 and above

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)	2	1	2
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	10	10
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	20	20

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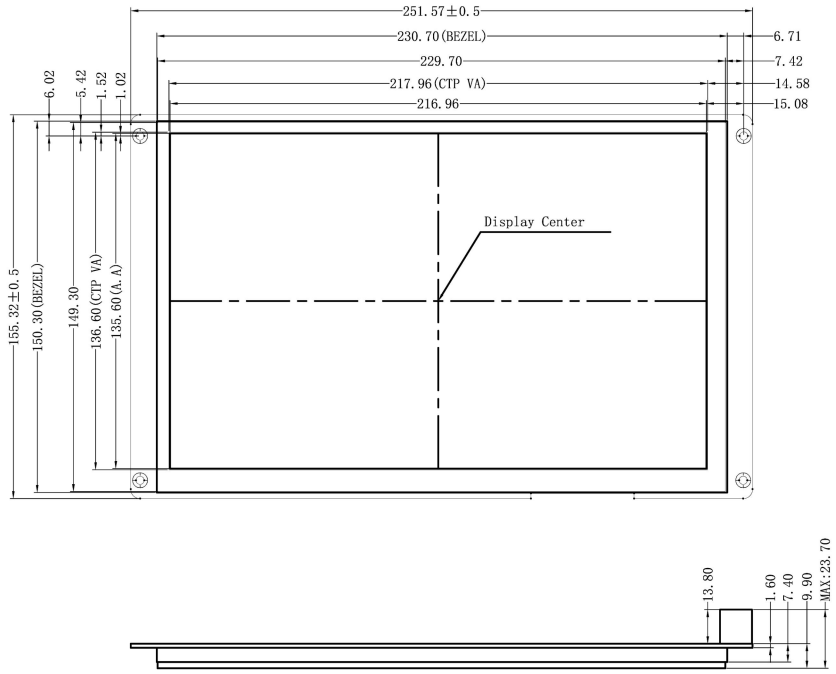

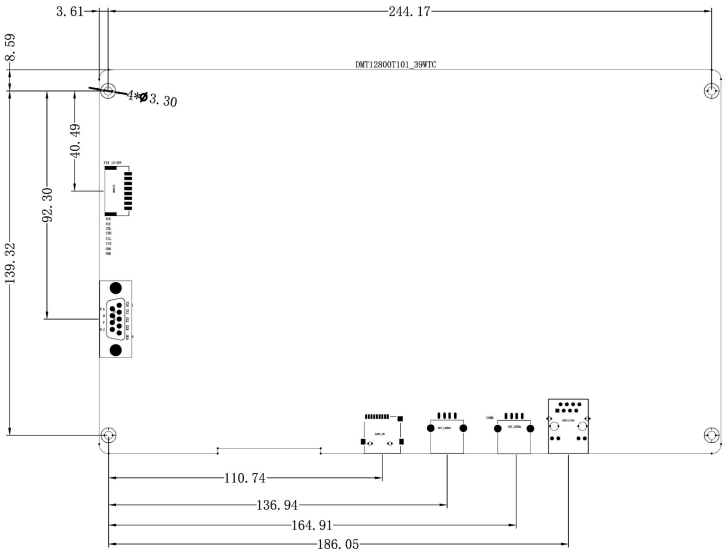

Definition	Pin#	IO	Description
RX2	1	I	UART 2 Input
TX2	2	O	UART 2 Output
TX3	3	O	UART 3 Output
RX3	4	I	UART 3 Input
GND	5	P	GND
A	6	A+	UART 4 485+
B	7	B-	UART 4 485-
Y	8	Y	UART 5 485+
Z	9	Z	UART 5 485-
Definition	Pin#	IO	Description
VCC	1,2	P	Power Input
C0L	3	-	CAN0 CAN_L
C0H	4	-	CAN0 CAN_H
C1L	5	-	CAN1 CAN_L
C1H	6	-	CAN1 CAN_H
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	DMT12800T101_36WTC					DWIN Technology
Drawing	A 4	Drawn	G.Y	Date	2023.06.29	
Scale	1:1	Review		Date		
Unit	MM	Approval		Date		

Revision Records

Rev.	Revise Date	Content	Editor
00	2023-08-09	First Edition	YML
01	2025-01-16	Revised appearance	Chen

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:

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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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