

# DMT10768T097\_35WTC



## System Hardware

| Properties        | Parameters                                       |
|-------------------|--|
| Motherboard Level | Industrial-grade                                 |
| CPU               | A40i, Quad-core ARM CortexTM-A7 1.2GHz Processor |
| OS                | Linux 3.10                                       |
| Storage           | 8Gbytes eMMC                                     |
| RAM               | 1Gbytes DDR3                                     |

## Display Parameters

| Properties             | Parameters              | Description  |
|------------------------|-------------------------|--|
| Size                   | 9.7 inch                | -  |
| LCD Type               | IPS, TFT LCD            | -  |
| Viewing Angle          | 70°/70°/50°/70°         | Wide viewing angle, high contrast, and good color reproduction   |
| Active Area (AA)       | 197.80mm(W)x148.66mm(H) | -  |
| Viewing Area(VA)       | 197.80mm(W)x148.66mm(H) | -  |
| Resolution             | 1024x768                | Available for 0°/90°/180°/270°rotated display  |
| 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 | 9.0 | 12.0 | 36.0 | V    |

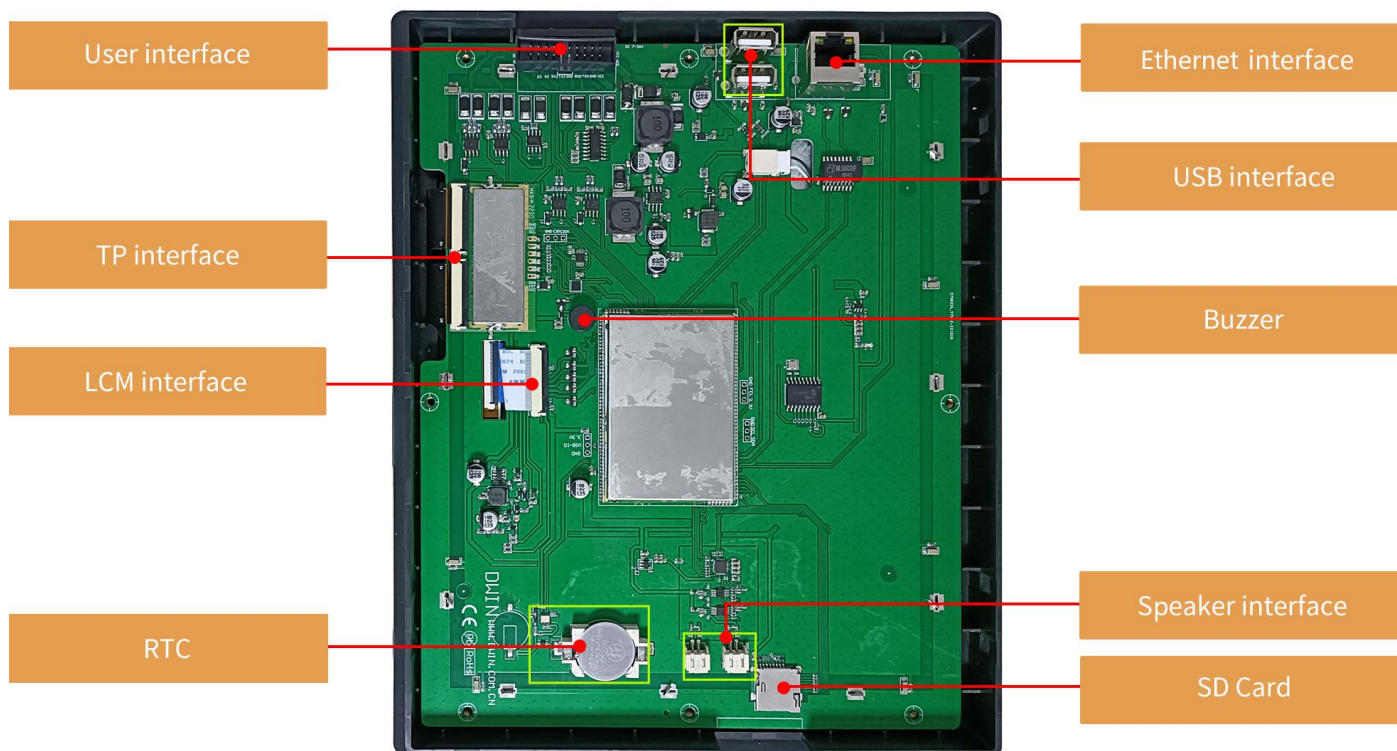
Recommended power supply:12V 1A DC.

## Environment & Reliability Test

| Properties          | Conditions                    | Min | Typ. | Max | Unit |
|---------------------|-------------------------------|-----|------|-----|------|
| Working Temperature | 60%RH at 12V voltage          | -20 | 25   | 65  | ℃    |
| Storage Temperature | -                             | -30 | 25   | 80  | ℃    |
| Working Humidity    | 25℃                           | 10% | 60%  | 90% | RH   |
| Conformal Coating   | Y                             |     |      |     |      |
| Ingress Protection  | IP65 front panel waterproof   |     |      |     |      |
| ESD                 | Air discharge ±8KV            |     |      |     |      |
| EFT                 | Group pulse interference ±2KV |     |      |     |      |

## Peripheral and Interfaces

| Properties     | Description                        |
|----------------|------------------------------------|
| User Interface | 20Pin-2.54 vertical socket         |
| COM            | RS232*2, RS485*2, RS422*1          |
| Ethernet       | 10/100Mbps                         |
| USB            | USB 2.0*2 (HOST)                   |
| SD card        | Max. 64G                           |
| RTC            | Accuracy: $\pm 20\text{ppm}$ @25°C |
| Buzzer         | 3V passive buzzer                  |
| Speaker        | 2Pin_1.25mm interface*2            |
| CAN            | CAN_L&CAN_H                        |

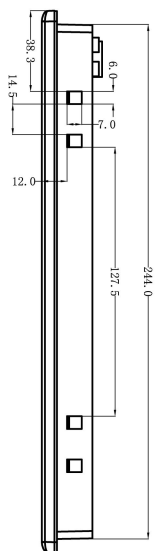
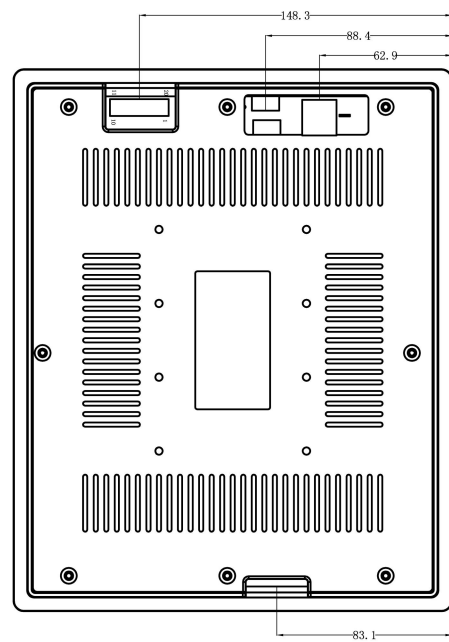
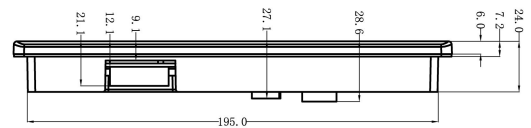
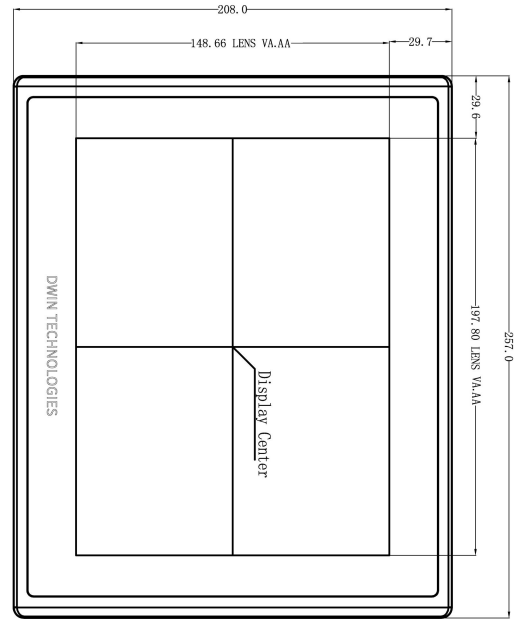


## ● Development Platform

| Development |                          |
|-------------|--------------------------|
| QT          | QtCreator2.7.2 and above |

## ● Packing Capacity & Dimension

| Dimension        |                             |       |                |               |
|------------------|-----------------------------|-------|----------------|---------------|
| Dimension        | 257.0(W)x208.0(H)x28.6(T)mm |       |                |               |
| Net Weight       | 1000g                       |       |                |               |
| Packing Capacity |                             |       |                |               |
| Model            | Size                        | Layer | Quantity/Layer | Quantity(Pcs) |
| Carton1:         | 220mm(L)×160mm(W)×47mm      | -     | -              | -             |
| Carton2:         | 250mm(L)×200mm(W)×80mm      | 2     | 1              | 2             |
| Carton3:         | 320mm(L)×270mm(W)×80mm      | -     | -              | -             |
| Carton4:         | 450mm(L)×350mm(W)×300mm     | -     | -              | -             |
| Carton5:         | 600mm(L)×450mm(W)×300mm     | 1     | 10             | 10            |



Location hole is used as position reference.

Unmarked Tolerance is  $\pm 0.3\text{mm}$

Active area is marked in Dash lines

| Definition | Pin# | Type | Description  |
|------------|------|------|--------------|
| VCC        | 1    | P    | Power Input  |
| GND        | 2    | P    | GND          |
| TX0        | 3    | 0    | UART0 Output |
| RX0        | 4    | I    | UART0 Input  |
| GND        | 5    | P    | GND          |
| TX2        | 6    | 0    | 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  |

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

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- **Revision records**

| Rev | Revise Date | Content              | Editor |
|-----|-------------|----------------------|--------|
| 00  | 2022-12-26  | First Edition        | YML    |
| 01  | 2025-05-16  | Update Brightness    | Chen   |
| 02  | 2025-06-10  | Modify voltage range | Chen   |

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