# 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, 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, RS485 and RS422 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) | 1024*768 |
| **View Area (V.A.)** | 197.8mm(W)*148.66mm(H) | 1024*768 |
| **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** | 350nit | - |
| Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time. | | |

## Voltage & Current

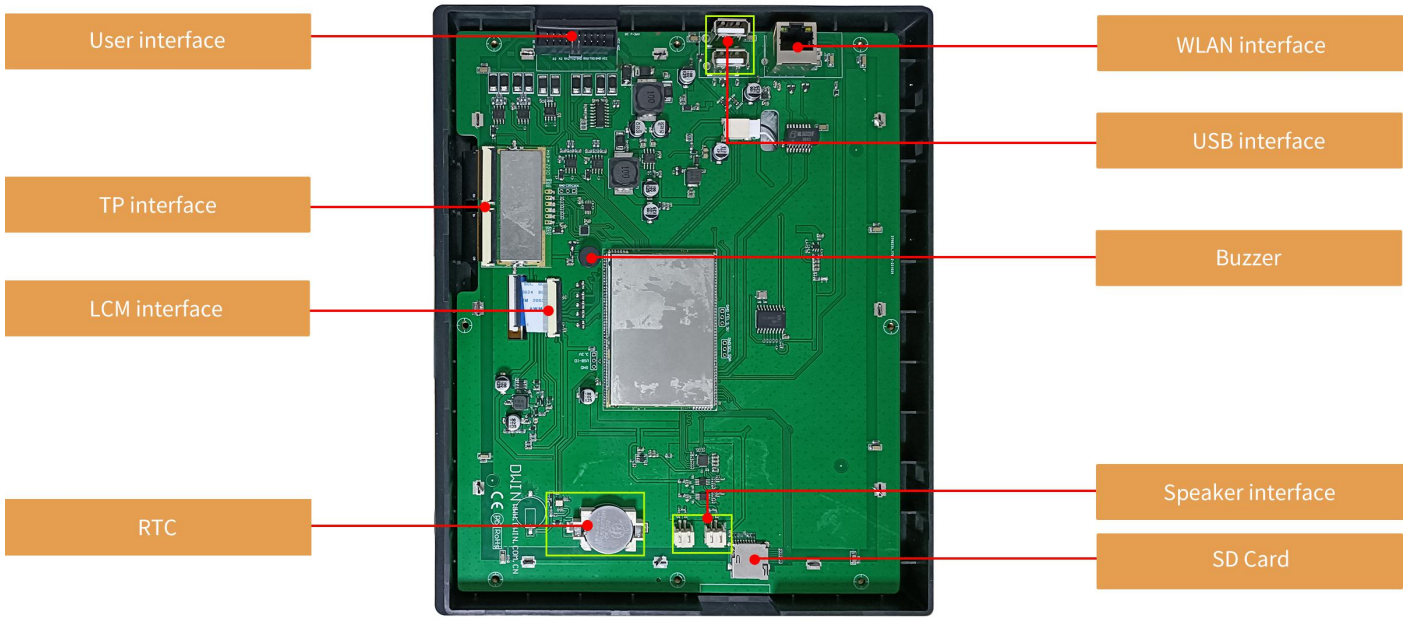
| Properties | Conditions | Min | Typ. | Max | Unit |
|---|---|---|---|---|---|
| **Power Voltage** | - | 7.0 | 12.0 | 36.0 | V |
| **Operation Current** | VCC = +12V, Backlight on | - | 640 | - | mA |
| | VCC = +12V, Backlight off | - | 260 | - | mA |
| Recommended power supply: 12V 1A DC | | | | | |

## 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) |
| **LAN interface** | 1-way | 10/100Mbps |
| **RTC** | Built-in | Button cell for power supply. Accuracy: ±20ppm @25℃ |
| **Buzzer** | Built-in | 3V passive buzzer |



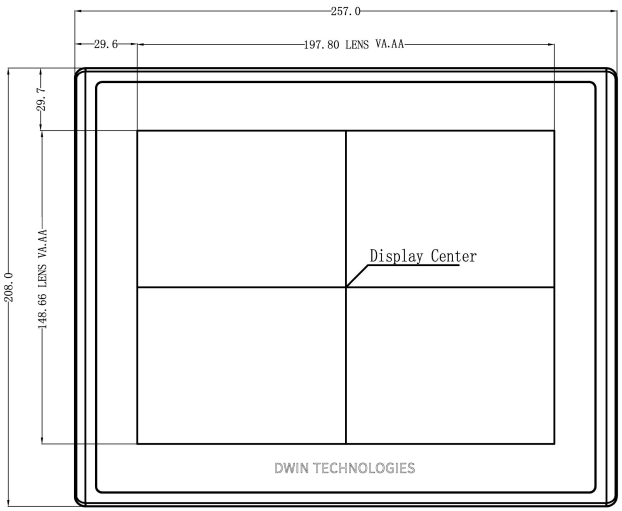
## Interface Parameters

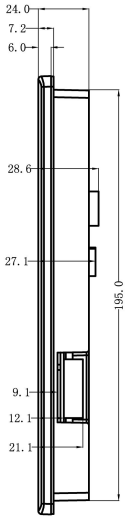
| Properties | Conditions | Min | Typ. | Max | Unit |
|---|---|---|---|---|---|
| **Baud Rate** | User-defined | 3150 | 115200 | 3225600 | bps |
| **Output Voltage (TXD)** | Output 1 | - | -5.0 | -3.0 | V |
| | Output 0 | 3.0 | 5.0 | - | V |
| **Input Voltage (RXD)** | Input 1 | -15.0 | -5.0 | - | V |
| | Input 0 | - | 5.0 | 15.0 | V |
| **Interface** | RS232*2; RS485*1; RS422*1 | | | | |
| **Socket** | 20Pin_2.54mm Socket | | | | |

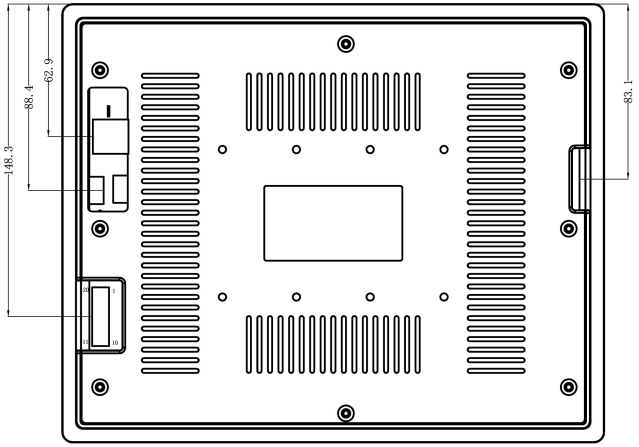
## Packing Capacity & Dimension

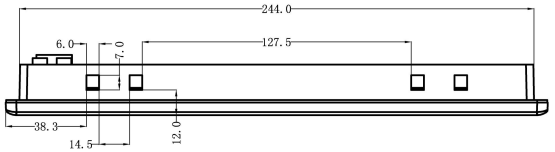
| **Dimension** | | | | |
|---|---|---|---|---|
| **Dimension** | 257.0 (W)mm*208.0(H)mm*28.6(T)mm | | | |
| **Net Weight** | 1000g | | | |
| **Packing Capacity** | | | | |
| **Model** | **Size** | **Layer** | **Quantity/Layer** | **Quantity(Pcs)** |
| **Carton1:** | 220mm(L)*160mm(W)*47mm (H) | - | - | - |
| **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 |

Disclaimer: The product design is subject to alternation and improvement without prior notice.




| Definition | Pin# | Type | Description |
|---|---|---|---|
| VCC | 1 | P | Power Input |
| GND | 2 | P | GND |
| TX0 | 3 | O | UART0 Output |
| 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 | | | | | 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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