



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



## **SPECIFICATION**

**MODEL NO. : WLOF00043000UGFAAEA00**

### **Summary**

**WLOF00043000UGFAAEA00 is built in TFT 4.3" TN display with capacitive touch.**

**The features describe as below:**

#### **4.3 Inch Smart Display Feature**

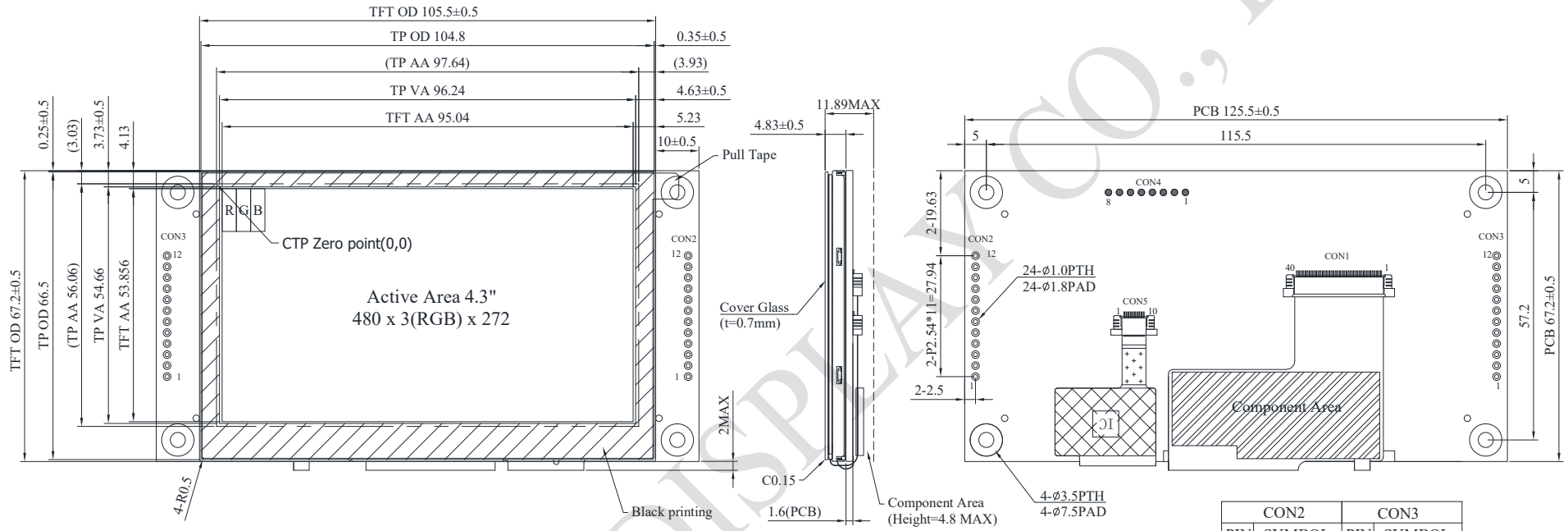
1. DC 5V working voltage.
2. UART Interface with customized UART protocol, default baud rate at 19200 bit/Sec.
3. Built in 16M flash memory.
4. Supports PCAP touch screen.
5. WLOF00043000UGFAAEA00 is defined as a slave device, which is controlled by master device via customized command to render display content on the display screen and return touch event position.

# Product information

## General information

| Item                    | Standard Value                         | Unit              |
|-------------------------|--|-------------------|
| Operating voltage       | 5                                      | Vdc               |
| Communication Interface | UART                                   | N/A               |
| MCU                     | IT9866                                 | N/A               |
| Flash Memory            | 16                                     | MB                |
| SDRAM Frequency         | 16MB/ 360MHz                           |                   |
| LCD display size        | 4.3                                    | inch              |
| Dot Matrix              | 480 x RGBx272(TFT)                     | dot               |
| Module dimension        | 125.5(W)*67.2(H)*9.35(D)               | mm                |
| Active area             | 95.04 x 53.856                         | mm                |
| Dot pitch               | 0.066 x 0.198                          | mm                |
| Brightness              | 400min, 480typ                         | cd/m <sup>2</sup> |
| LCD type                | TFT, Normally White, Transmissive      |                   |
| View Direction          | 12 o'clock                             |                   |
| Aspect Ratio            | 16:9                                   |                   |
| Touch Panel             | Projected Capacitive Touch Panel, PCAP |                   |
| Surface                 | Glare                                  |                   |

# Contour Drawing



| CON2 |         | CON3 |        |
|------|---------|------|--------|
| PIN  | SYMBOL  | PIN  | SYMBOL |
| 1    | GND     | 1    | GND    |
| 2    | UART_TX | 2    | SW1    |
| 3    | UART_RX | 3    | SW2    |
| 4    | +5V     | 4    | SW3    |
| 5    | D+      | 5    | SW4    |
| 6    | D-      | 6    | GND    |
| 7    | GND     | 7    | NC     |
| 8    | /REST   | 8    | NC     |
| 9    | GND     | 9    | NC     |
| 10   | PWM     | 10   | NC     |
| 11   | GND     | 11   | INT    |
| 12   | +5V     | 12   | +5V    |

## Absolute Maximum Ratings

| Item                  | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------|-----|-----|-----|------|
| Operating Temperature | TOP    | -20 | —   | +70 | °C   |
| Storage Temperature   | TST    | -30 | —   | +80 | °C   |

## Electrical Characteristics

| Item           | Symbol | Min | Typ | Max | Unit |
|----------------|--------|-----|-----|-----|------|
| Supply Voltage | VCC    | 4.5 | 5-  | 5.5 | V    |
| Supply current | ICC    | -   | 340 |     | mA   |

## BOM

| Item | Description          |
|------|----------------------|
| LCM  | WF43UTIAEDNGB#       |
| PCBA | SV10004R300UA00N0100 |

# Interface

## CON2 definition :

| Pin | Symbol  | Function               |
|-----|---------|------------------------|
| 1   | GND     | Power Ground           |
| 2   | UART_TX | UART TX                |
| 3   | UART_RX | UART RX                |
| 4   | +5V     | Power supply 5V        |
| 5   | D+      | USB Data+              |
| 6   | D-      | USB Data-              |
| 7   | GND     | Power Ground           |
| 8   | /REST   | Reset (active Low)     |
| 9   | GND     | Power Ground           |
| 10  | PWM     | Pulse width modulation |
| 11  | GND     | Power Ground           |
| 12  | +5V     | Power supply : 5V      |

## CON3 definition :

| Pin | Symbol | Function                                    |
|-----|--------|---|
| 1   | GND    | Power Ground                                |
| 2   | SW1    | Switch ( active low)                        |
| 3   | SW2    | Switch ( active low)                        |
| 4   | SW3    | Switch ( active low)                        |
| 5   | SW4    | Switch ( active low)                        |
| 6   | GND    | Power Ground                                |
| 7   | NC     | Reserved                                    |
| 8   | NC     | Reserved                                    |
| 9   | NC     | Reserved                                    |
| 10  | NC     | Reserved                                    |
| 11  | INT    | Interrupt output for CTP or external switch |
| 12  | +5V    | Power supply : 5V                           |