

Distributed by:



[www.texim-europe.com](http://www.texim-europe.com)



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



**Winstar Display Co., LTD**  
**華凌光電股份有限公司**



WEB: <https://www.winstar.com.tw> E-mail: [sales@winstar.com.tw](mailto:sales@winstar.com.tw)

---

## **SPECIFICATION**

**MODEL NO. : WLOF00050000FGAAGSA00**

## **Summary**

### **5 Inch Smart Display (CANopen series) Feature**

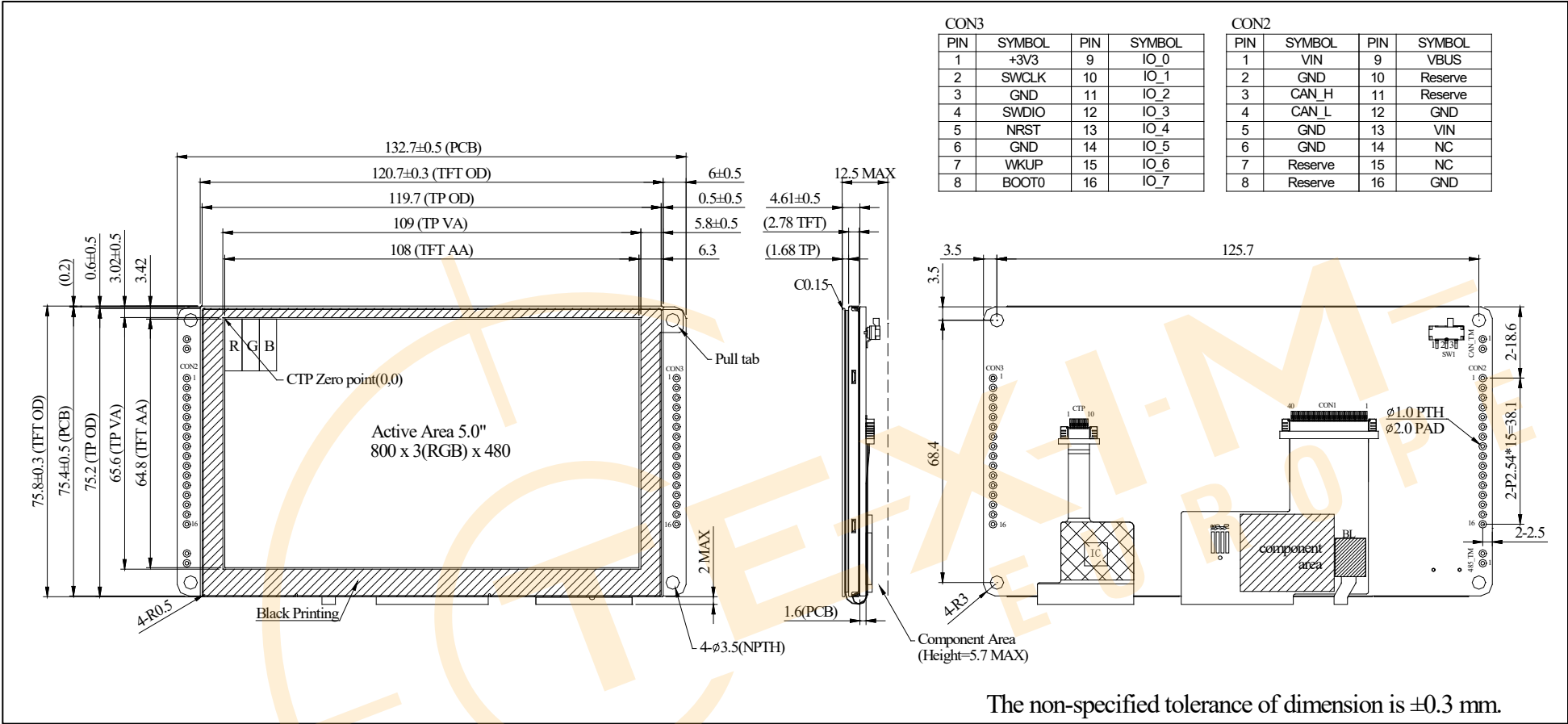
1. Input voltage dynamic range 5V to 28V, typical voltage 12V.
2. Self-testing after booting function.
3. CAN bus communication interface.
4. Supports CANopen protocol, default baud rate at 250Kbps.
5. Built in 16MB external flash memory to store the font and Object Dictionary Data.
6. Support capacitive touch panel (CTP).
7. Build in buzzer and can be controlled by Master Device.
8. Demo set HOST can be used on multiple platforms, such as Computer (with USB to CAN Dongle), MCU, Raspberry Pi (with PiCAN2).
9. GPIO PIN support.

# Product information

## General information

| Item                    | Standard Value                           | Unit              |
|-------------------------|------------------------------------------|-------------------|
| Operating voltage       | 5V~ 28V dynamic                          | Vdc               |
| Communication Interface | CAN Bus                                  | --                |
| MCU                     | STM32F750                                | N/A               |
| Flash Memory            | 16                                       | MB                |
| LCD display size        | 5.0                                      | inch              |
| Dot Matrix              | 800× 3(RGB) × 480                        | dot               |
| Module dimension        | 132.7(W) × 75.8(H) × 12.5                | mm                |
| Active area             | 108(W) × 64.8 (H)                        | mm                |
| Pixel pitch             | 0.135(W) × 0.135(H)                      | mm                |
| Brightness              | Min: 300; Typ: 400                       | cd/m <sup>2</sup> |
| LCD type                | TFT, Normally Black, Transmissive        |                   |
| View Direction          | 80/80/80/80                              |                   |
| Aspect Ratio            | 15:9                                     |                   |
| Touch Panel             | Projected Capacitive touch screen (PCAP) |                   |
| Surface                 | Glare                                    |                   |

# Contour Drawing



## Absolute Maximum Ratings

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

## Electrical Characteristics

| Item            | Symbol | Min | Typ | Max | Unit |
|-----------------|--------|-----|-----|-----|------|
| Supply Voltage  | VCC    | 5   | 12  | 28  | V    |
| Supply Current  | ICC    | 670 | 240 | 110 | mA   |
| I/O pin Voltage | --     | --  | --  | 3.3 | V    |

## BOM

| Item | Description          |
|------|----------------------|
| LCM  | WF50FTWAGDNG0#       |
| PCBA | SV10005R000FG00N0103 |

# Interface

## CON2 definition:

| Pin | Symbol  | Function                     | Remark |
|-----|---------|------------------------------|--------|
| 1   | VIN     | Power supply 5V to 28V input | Input  |
| 2   | GND     | Power supply GND input       | Input  |
| 3   | CAN_H   | CAN bus D+                   | I/O    |
| 4   | CAN_L   | CAN bus D-                   | I/O    |
| 5   | GND     | Power supply GND input       | GND    |
| 6   | GND     | Power supply GND input       | GND    |
| 7   | Reserve | -                            | -      |
| 8   | Reserve | -                            | -      |
| 9   | VBUS    | Power supply 5V input        | Input  |
| 10  | Reserve | -                            | -      |
| 11  | Reserve | -                            | -      |
| 12  | GND     | Power supply GND input       | Input  |
| 13  | VIN     | Power supply 5V to 28V input | Input  |
| 14  | NC      | -                            | -      |
| 15  | NC      | -                            | -      |
| 16  | GND     | Power supply GND input       | Input  |

**CON3 definition:**

| Pin | Symbol | Function                                                     | Remark                     |
|-----|--------|--------------------------------------------------------------|----------------------------|
| 1   | +3V3   | 3.3V power for JTAG interface                                | Output                     |
| 2   | SWCLK  | CLK pin for JTAG interface                                   | Input                      |
| 3   | GND    | GND for JTAG interface                                       | Output                     |
| 4   | SWDIO  | Data pin for JTAG interface                                  | I/O                        |
| 5   | NRST   | Reset pin for JTAG interface                                 | Input                      |
| 6   | GND    | GND                                                          | Output                     |
| 7   | WKUP   | WKup,ADC,Timer,Event,I/O                                     | TTL signal voltage is 3.3V |
| 8   | BOOT0  | Lo: Internal flash boot (Default)<br>Hi: External flash boot | TTL signal voltage is 3.3V |
| 9   | IO0    | ADC,DAC,Timer,Event,I/O                                      | TTL signal voltage is 3.3V |
| 10  | IO1    | ADC,Timer,Event,I/O                                          | TTL signal voltage is 3.3V |
| 11  | IO2    | ADC,Timer,Event,I/O                                          | TTL signal voltage is 3.3V |
| 12  | IO3    | RST,Timer,Event,I/O                                          | TTL signal voltage is 3.3V |
| 13  | IO4    | RST,Timer,Event,I/O                                          | TTL signal voltage is 3.3V |
| 14  | IO5    | ADC,Timer,Event,I/O                                          | TTL signal voltage is 3.3V |
| 15  | IO6    | RST,Timer,Event,I/O                                          | TTL signal voltage is 3.3V |
| 16  | IO7    | RST,ADC,Event,I/O                                            | TTL signal voltage is 3.3V |

## **Disclaimer**

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Texim Europe B.V. its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Texim"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Texim makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product.

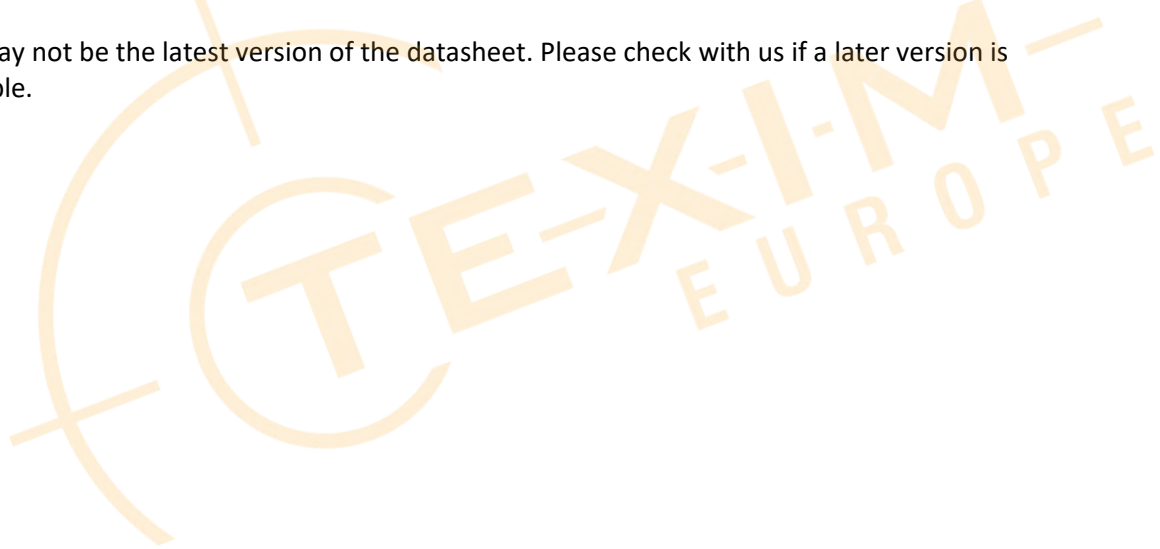
It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time.

All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

Please contact us if you have any questions about the contents of the datasheet.

This may not be the latest version of the datasheet. Please check with us if a later version is available.







## Headquarters & Warehouse

Elektrostraat 17  
NL-7483 PG Haaksbergen  
The Netherlands

T: +31 (0)53 573 33 33  
E: [info@texim-europe.com](mailto:info@texim-europe.com)  
Homepage: [www.texim-europe.com](http://www.texim-europe.com)



### The Netherlands

Elektrostraat 17  
NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33  
E: [nl@texim-europe.com](mailto:nl@texim-europe.com)



### Belgium

Zuiderlaan 14, box 10  
B-1731 Zellik

T: +32 (0)2 462 01 00  
E: [belgium@texim-europe.com](mailto:belgium@texim-europe.com)



### UK & Ireland

St Mary's House, Church Lane  
Carlton Le Moorland  
Lincoln LN5 9HS

T: +44 (0)1522 789 555  
E: [uk@texim-europe.com](mailto:uk@texim-europe.com)



### Germany

Bahnhofstrasse 92  
D-25451 Quickborn

T: +49 (0)4106 627 07-0  
E: [germany@texim-europe.com](mailto:germany@texim-europe.com)



### Germany

Martin-Kollar-Strasse 9  
D-81829 München

T: +49 (0)89 436 086-0  
E: [muenchen@texim-europe.com](mailto:muenchen@texim-europe.com)



### Austria

Warwitzstrasse 9  
A-5020 Salzburg

T: +43 (0)662 216 026  
E: [austria@texim-europe.com](mailto:austria@texim-europe.com)



### Nordic

Stockholmsgade 45  
2100 Copenhagen

T: +45 88 20 26 30  
E: [nordic@texim-europe.com](mailto:nordic@texim-europe.com)



### Italy

Martin-Kollar-Strasse 9  
D-81829 München

T: +49 (0)89 436 086-0  
E: [italy@texim-europe.com](mailto:italy@texim-europe.com)