



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

SPECIFICATION

MODEL NO. : WLOF00101000JGAABSA00

Summary

10.1 Inch Smart Display (CAN series) Features

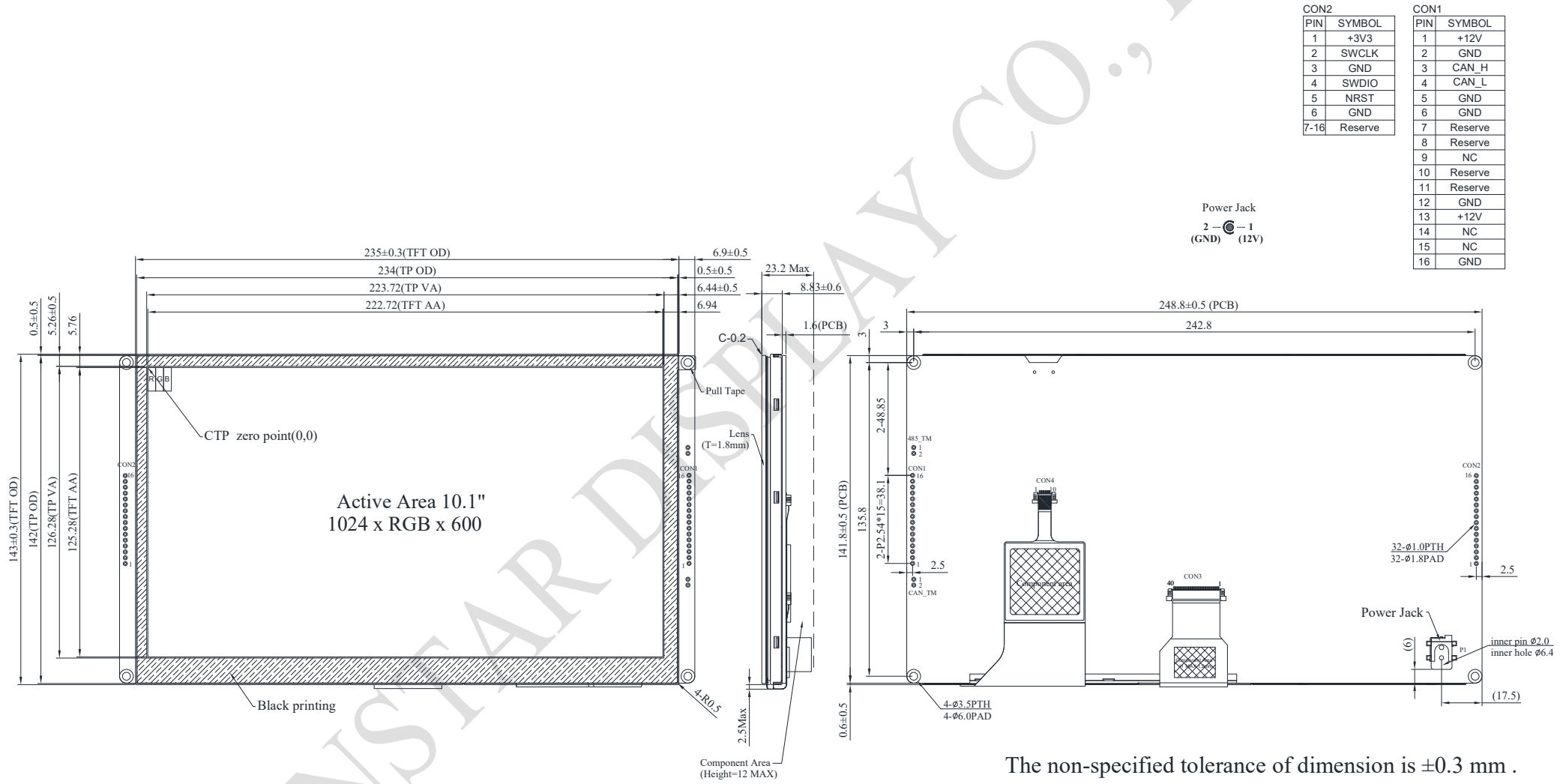
1. +12V power supply input, the power consumption is around 6W.
2. Self testing after booting function.
3. CAN bus communication interface.
4. Supports CANopen protocol. Default baud rate is at 250KB.
5. Built in flash memory, store the font and Object Dictionary Data.
6. Support capacitive touch panel (CTP).
7. Smart Display scenario is slave device display and action from Master Device instruction.
8. Embedded buzzer controlled by Master Device.
9. Demo set HOST can be used on multiple platforms, such as Computer (with USB to CAN Dongle), MCU, Raspberry Pi (with PiCAN2).

Product information

General information

| Item | Standard Value | Unit |
|-------------------------|--------------------------------|------|
| Operating voltage | 8V~28V dynamic | Vdc |
| Communication Interface | CAN bus differential ± 3.3 | Vpp |
| MCU | STM32F746 | N/A |
| Flash Memory | 16 | MB |
| SDRAM Frequency | 166 | MHz |
| LCD display size | 10.1 | inch |
| Dot Matrix | 1024 x RGBx600(TFT) | dot |
| Module dimension | 235(W) x 143(H) x 8.78(D) | mm |
| Active area | 222.72 (H) x 125.28(V) | mm |
| Dot pitch | 0.2175(W) x 0.2088(H) | mm |
| Brightness | Min: 300; Typ: 400 | |
| LCD type | LED, Normally White | |
| View Direction | 85/85/85/85 | |
| Aspect Ratio | 16:9 | |
| Touch Panel | With PCAP | |
| Surface | Glare | |

Contour Drawing



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 | Condition | Min | Typ | Max | Unit |
|--------------------|--------|-----------|------|-----|------|------|
| Supply Voltage | VCC | — | 11.4 | 12 | 12.6 | V |
| Supply LCM current | I(mA) | - | - | 530 | - | mA |

BOM

| Item | Description |
|------|----------------------|
| LCM | WF101JTYAHLNB0# |
| PCBA | SV10010R100JB00N0100 |

1. Interface

CON1 definition:

| Pin | Symbol | Function | Remark |
|-----|---------|-----------------------------|---------|
| 1 | +12V | Power supply 12V 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 | USB_D- | Reserve |
| 8 | Reserve | USB_D+ | Reserve |
| 9 | NC | - | - |
| 10 | Reserve | USART RX interface(Reserve) | Reserve |
| 11 | Reserve | USART TX interface(Reserve) | Reserve |
| 12 | GND | Power supply GND input | GND |
| 13 | +12V | Power supply 12V input | Input |
| 14 | NC | - | - |
| 15 | NC | - | - |
| 16 | GND | Power supply GND input | Input |

CON2 definition:

| Pin | Symbol | Function | Remark |
|-----|------------|---|--------------------------|
| 1 | VDD3V | 3.3V power for JTAG interface | Output |
| 2 | JTAG_SWCLK | CLK pin for JTAG interface | Input |
| 3 | GND | GND for JTAG interface | Output |
| 4 | JTAG_SWDIO | Data pin for JTAG interface | I/O |
| 5 | NRST | Reset pin for JTAG interface | Input |
| 6 | GND | GND | Output |
| 7 | Reserve | IO_8 for system Resume from suspend (Reserve) | WKup,ADC,Timer,Event,I/O |
| 8 | Reserve | Reset (active Low) (Reserve) | I |
| 9 | Reserve | IO_0 (Reserve) | ADC,DAC,Timer,Event,I/O |
| 10 | Reserve | IO_1 (Reserve) | ADC,Timer,Event,I/O |
| 11 | Reserve | IO_2 (Reserve) | ADC,Timer,Event,I/O |
| 12 | Reserve | IO_3 (Reserve) | RST,Timer,Event,I/O |
| 13 | Reserve | IO_4 (Reserve) | RST,Timer,Event,I/O |
| 14 | Reserve | IO_5 (Reserve) | ADC,Timer,Event,I/O |
| 15 | Reserve | IO_6 (Reserve) | RST,Timer,Event,I/O |
| 16 | Reserve | IO_7 (Reserve) | RST,ADC,Event,I/O |