

# INDUSTRIAL STRENGTH... Start Your Application From YOURITECH

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PCAP

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EMC tests

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Optical Bonding

In-house Manufacturing

Cover glass

System solutions

OEM Solutions

Custom Display

Production Custom designs Installation

Mechanical design



# DISPALY MODULE SPECIFICATION

Customer: \_\_\_\_\_

Module No.: ET103F1CSFS01-G

Date: 2024-8-6

Version: 1.0

For Customer’s Acceptance:

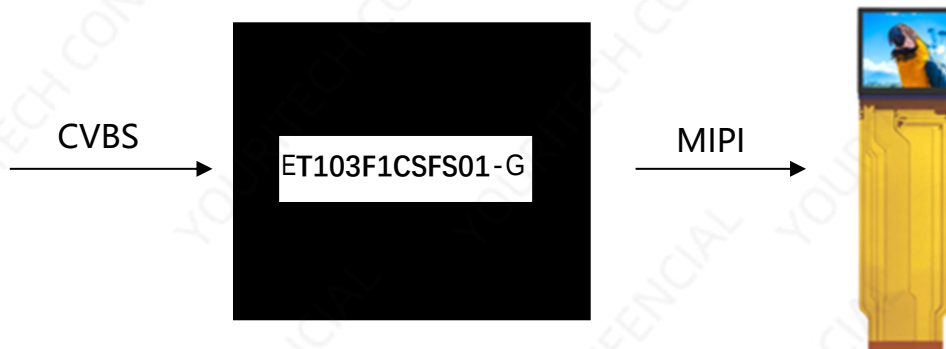
| Approved by | Comment |
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| Approved by | Checked by | Prepared by |
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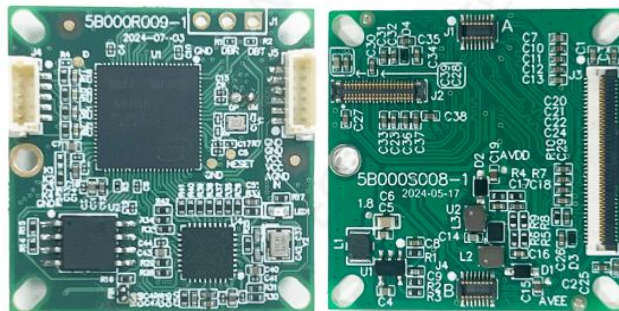
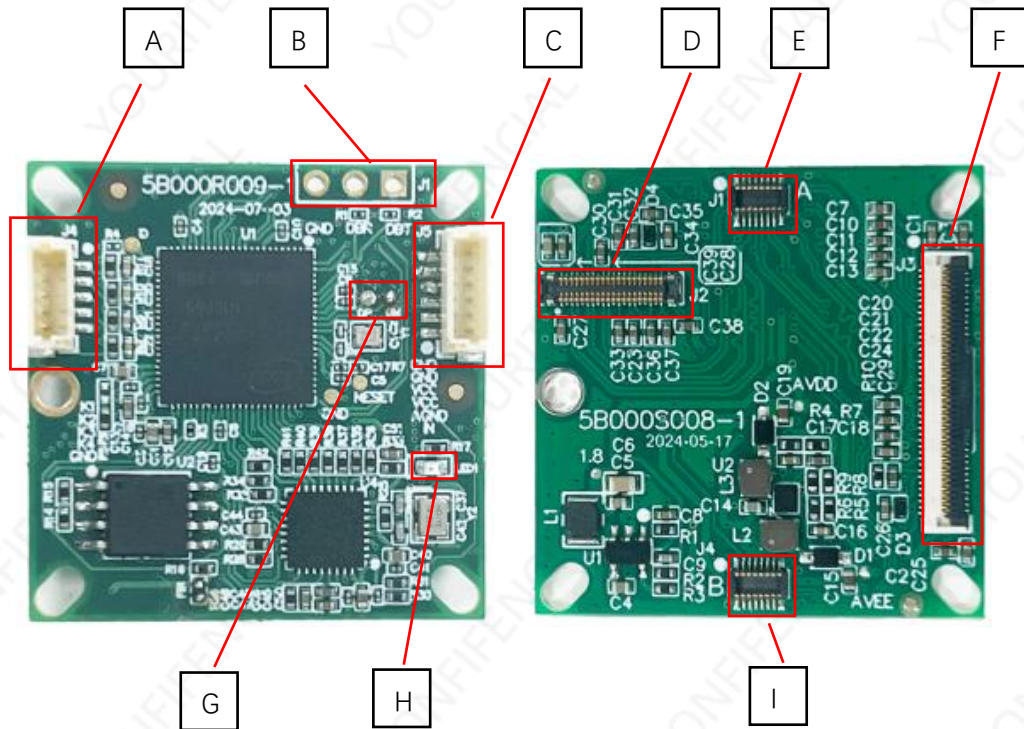


## 1. Product Overview:

ET103F1CSFS01-G is a monocular silicon-based OLED display driver board developed by our company. This product uses SH1.0 connector as CVBS and power input interface, and the output signal is MIPI signal, which supports the brightness adjustment and resolution change button function through the connector. It can be applied to the demo demonstration of YOURITEC H silicon-based products, evaluation of product characteristics, and secondary development of products based on this driver board.



## 2. Product Interface Description:



A: Control Key: (J4 Connector Model: BM05B-SRSS-TB(LF)(SN))

| Pin      | 1 (K1)                                                                     | 2 (K2)                                  | 3 (K3) | 4 (K4) | 5 (GND) |
|----------|----------------------------------------------------------------------------|-----------------------------------------|--------|--------|---------|
| Function | Short press to increase screen brightness, long press to switch resolution | Short press to reduce screen brightness | \      | \      | GND     |

B: UART debug interface

C : 5V power supply and CVBS signal input(J5 Connector Model: BM06B-SRSS-TB(LF)(SN))

| Pin      | 1 (IN)            | 2 (AGND)   | 3 (VCC)         | 4 (VCC)         | 5 (GND) | 6 (GND) |
|----------|-------------------|------------|-----------------|-----------------|---------|---------|
| Function | CVBS Signal Input | Analog GND | 5V Power Supply | 5V Power Supply | GND     | GND     |

D: Display Interface: It can connect to YOURITECH 0.49inch screen.

E&I : For fixing between two boards and for signal and power transmission.

F: Display Interface: It can connect to YOURITECH1.03inch screen.

G: USB interface: for MCU firmware update and debugging.

H : LED Indicator: The LED will light up when the TV103F1CSFS01 is powered on.



### 3. Product Parameter

#### 3.1 Driver board architecture:

TR660+ GM7150BC+ POWER+KEY

1、 TR660 is a 64 bit MCU which is mainly responsible for key function processing, DVP signal to MIPI signal and configuring GM7150BC.

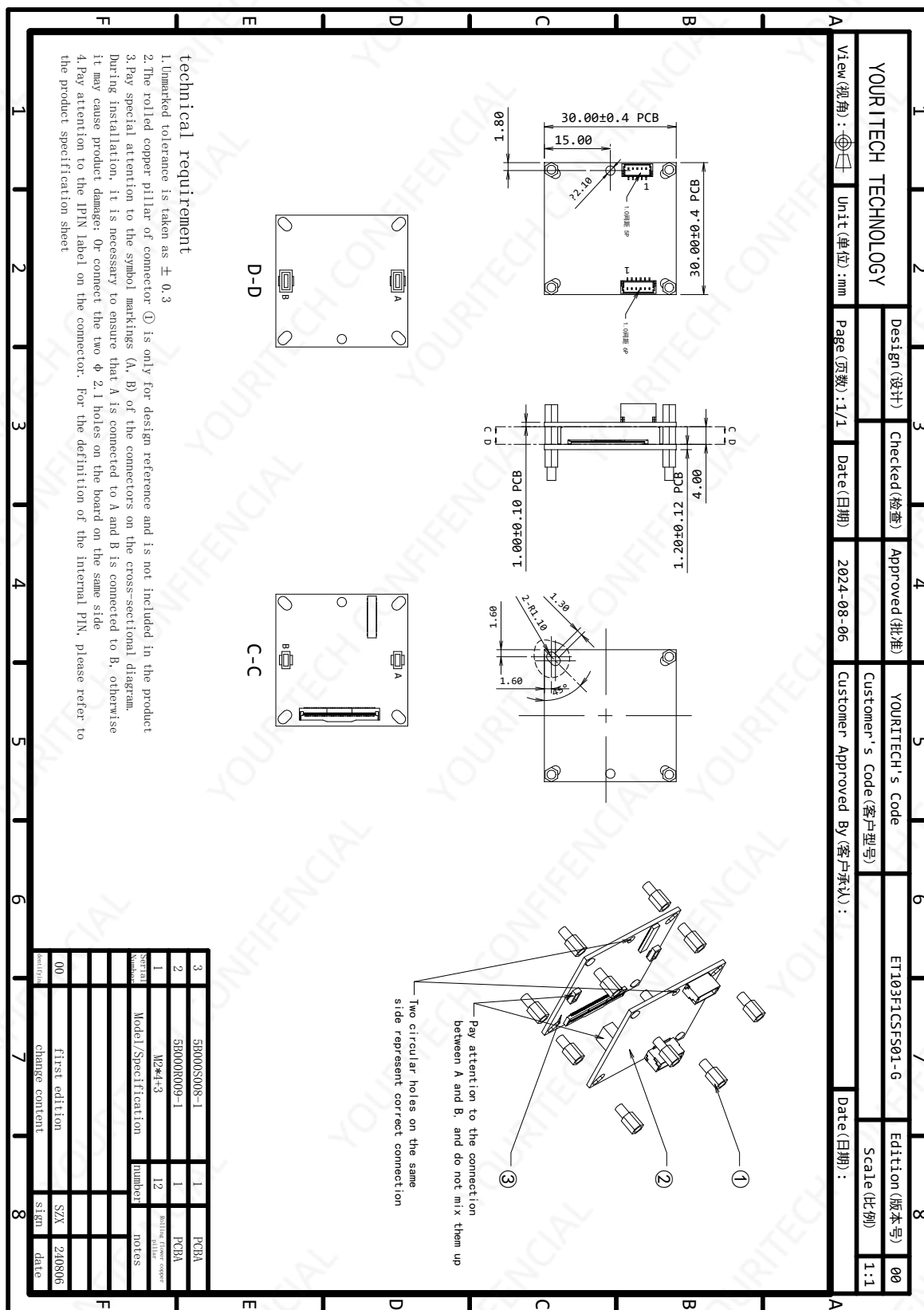
2、 GM7150BC is CVBS to DVP bridge chip

#### 3.2 Resolution supported by the driver board:

Max 1920X1440@60Hz



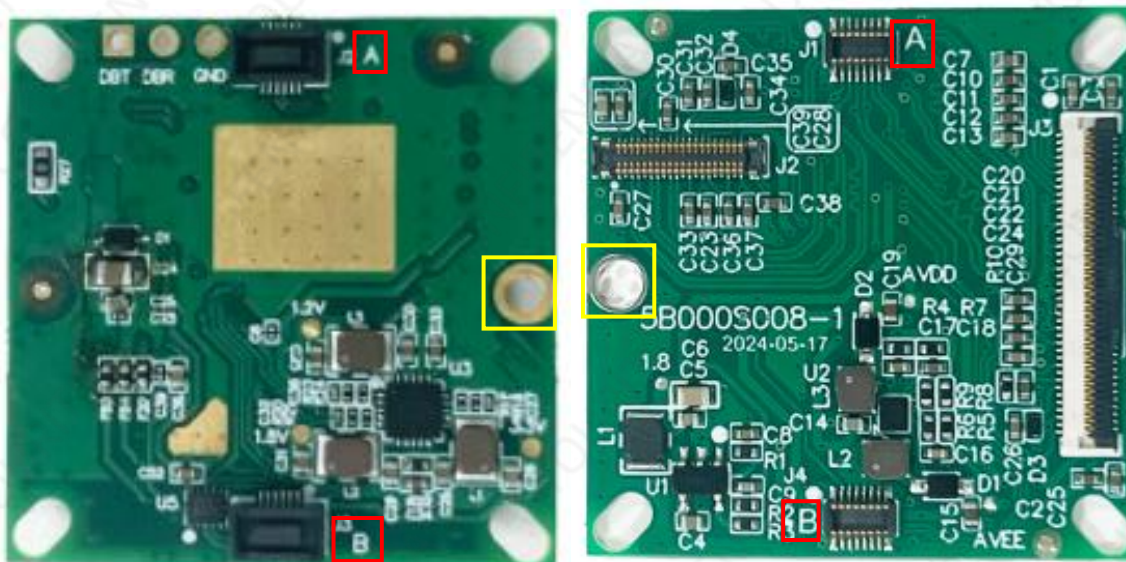
### 3.3 Driver board structure:



### 3.4 Electrical Characteristics:

| Power supply conditions | VINmin | VINmid | VINmax |
|-------------------------|--------|--------|--------|
| Voltage(V)              | 3.4    | 5      | 5.5    |
| Current(A)              | 0.380  | 0.270  | 0.250  |
| Consumption(W)          | 1.292  | 1.35   | 1.375  |

## 4. Caution



When connecting two boards, take care to install the two boards with the round holes aligned on both boards, or you can install them according to the silk-screening next to the connectors on the boards, 'A' and 'B', so that the silk-screening on the two boards, 'A' aligned with 'A' and 'B' aligned with 'B'.

