



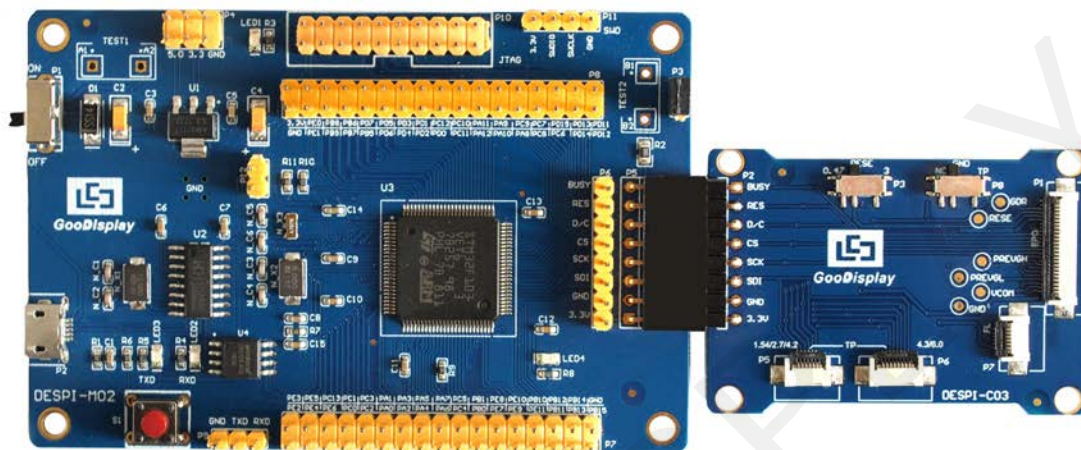
# Development Kit for Epaper Display



**DESPI-V3.0**

Dalian Good Display Co., Ltd.

# Product Specifications



<b>Customer</b>	<b>Standard</b>
<b>Description</b>	<b>Development Kit for Epaper Display</b>
<b>Model Name</b>	<b>DESPI-V3.0</b>
<b>Date</b>	<b>2019/09/10</b>
<b>Revision</b>	<b>3.0</b>

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GOOD DISPLAY

## 1. Overview

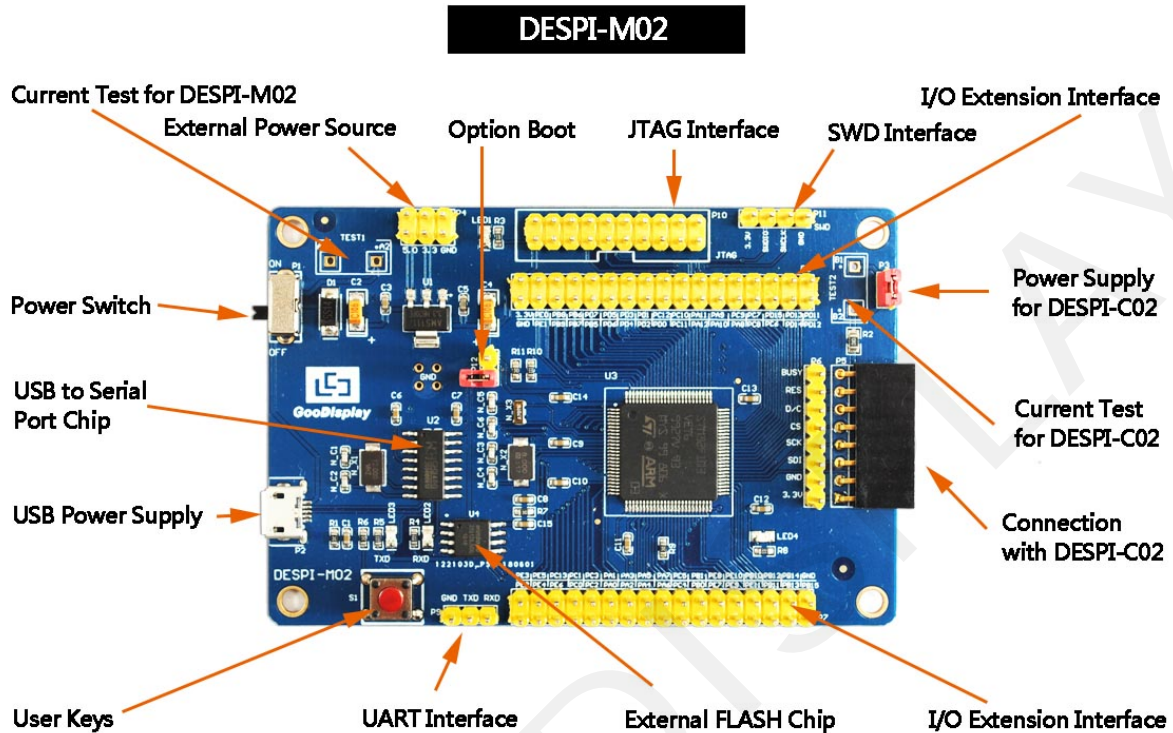
This Development Kit designed for SPI E-paper Display aims to help users to begin constructing our e-paper display with provided source code to create more differentiated solutions. It supports driving Good Display's black-white E-paper Display and three-color (black, white and red/Yellow) Good Display 's E-paper Display: 1.54", 2.04", 2.13", 2.6", 2.7", 2.9", 3.71", 4.2", 5.83" and 7.5". And it is added the functions of USB serial port and LED indicator light ect. It also supports being updated by computer directly. And the connector board DESPI-C03 adds driving function for touch panel and frontlight.

DESPI-V3.0 Development Kit consists of the development board DESPI-M02 and the pinboard DESPI-C03.

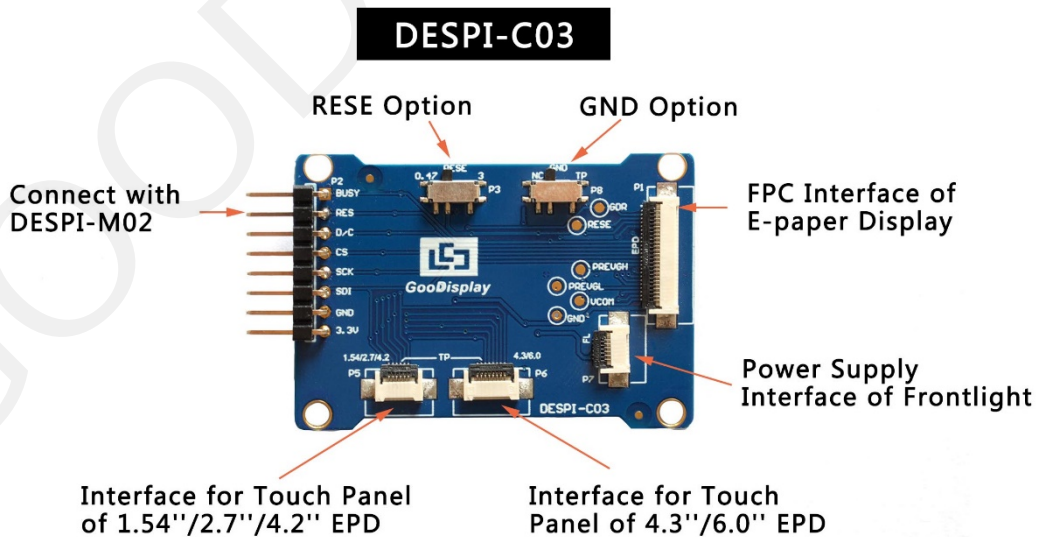
## 2. Mechanical Specifications

Parameter	Specification
Model	DESPI-V3.0
MCU	STM32
Dimension	90mmx60mm (DESPI-M02) 52mmx36mm (DESPI-C03)
Power Interface	USB Interface
Sample Code	Available (please contact sales)
Operating Temp.	-20°C ~ +70°C
Main Function	EPD driving, touch panel driving and frontlight driving.
Additional Function	USB to serial port, indicator light 、 keys、 current detection and so on.

### 3. Functions



**Pic.01 Main Board**



**Pic.02 Connector Board**



### 3.5 Current Test

The demo kit supports the current test of the main board DESPI-M02 and the connector board DESPI-C03.

- 1 ) Test for DESPI-M02: Power off and make series connection between ampere meter and TEST1.
- 2 ) Test for DESPI-C03 : Power on and take off the short circuit plug P3 then make series connection between ampere meter and TEST2. After accomplishing test, put on the short circuit plug 3.

### 3.6 Key

Reserved for developing.

### 3.7 Download

The demo can support 3 modes of download : TAG、SWD、UART.

**TIPS:** When using UART to download program, you needs to use a plug to short circuit P12, and then use FlyMcu software to choose corresponding with Hex file and download it. Be sure to remove the short circuit plug for P12 after the download is complete, or program won't be able to work.

### 3.8 The connector board DESPI- C03 driving EPD

It can refresh Good Display's E-paper Display such as 1.54",

2.04", 2.13", 2.6", 2.7", 2.9", 3.71", 4.2", 5.83", 7.5". The e-paper display can only be refreshed by connecting the DESPI-C03 to the main board. The electronic paper display is plugged in as follow: the FPC's gold finger facing up to the P1 connector of DESPI-C03, and P8 is set to the NC position (factory default NC).

**RESE is set to 0.47Ω position :**

- 1.54 inch: GDEW0154T8、GDEW0154Z17、GDEW0154Z04、  
GDEW0154C39
- 2.13 inch: GDEW0213T5、GDEW0213Z16、GDEW0213V7LT、  
GDEW0213I5F、 GDEW0213C38
- 2.6 inch: GDEW026T0、 GDEW026Z39
- 2.7 inch: GDEW027W3、 GDEW027C44
- 2.9 inch: GDEW029T5、 GDEW029Z10、 GDEW029C32、  
GDEW029I6F
- 3.71 inch: GDEW0371W7、 GDEW0371Z80
- 4.2 inch: GDEW042T2、 GDEW042Z15 、 GDEW042C37
- 7.5 inch : GDEW075Z09、 GDEW075Z08、 GDEW075T7、  
GDEW075C64、 GDEW075C21
- 5.83 inch :GDEW0583Z21、 GDEW0583Z83、 GDEW0583C64

**RESE is set to 3Ω position :**

- 1.54 inch: GDEH0154D67、 GDEP015OC1
- 2.04 inch: GDE021A1



2.13 inch: GDEH0213B31、GDEH0213D30LT、  
GDEM0213U23、GDEM0213D23

2.9 inch: GDEH029A1、GDEH029D56LT、GDEM029E97、  
GDEM029E27LT

5.83 inch : GDEW0583T7

7.5 inch: GDEW075T8

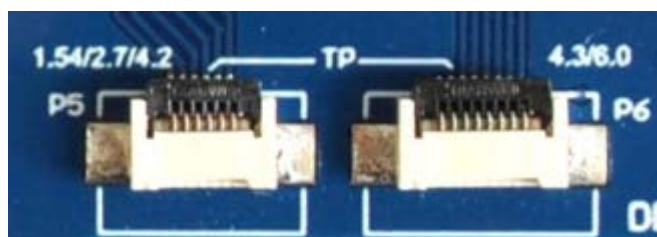
### **3.9 The connector board DESPI- C03 driving frontlight of EPD**

The DESPI-C03 supports a 3.3V power supply for the frontlight driver. The corresponding interface is P7. The electrodes are described as follows: 3.3V (1, 2), NC (3, 4), GND (5, 6)



### **3.10 The connector board DESPI- C03 driving touch panel of EPD**

DESI-C03 supports touch panel of 1.54 inch / 2.7 inch / 4.2 inch e-ink display (corresponding interface is P5), also supports touch panel of 4.3 inch/6 inch e-paper display (corresponding interface is P6). If you want to use the touch function, you need to dial P8 to the TP position. It is plugged in with the touch ribbon facing up.



#### 4. JTAG Simulator (Optional)

There is no brand or model requirement when the user selects the emulator, as long as it has the download function.