

# SPECIFICATION

Product Type : E-Paper Display Development Kit

Model Number : DESPI

Description : STM32 Platform  
Drive E-paper display

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*Good Display*

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## Revision History

Rev.	Issued Date	Revised Contents
1.0	Jan.16.2018	Preliminary



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GOOD DISPLAY

## 1. Over view

This Development Kit designed for SPI E-paper Display aims to help users to learn how to use E-paper Display more easily. It can refresh 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", 2.7", 2.9", 4.2", 5.83", 7.5". And it is also added the functions of USB serial port, Raspberry Pi and LED indicator light ect.

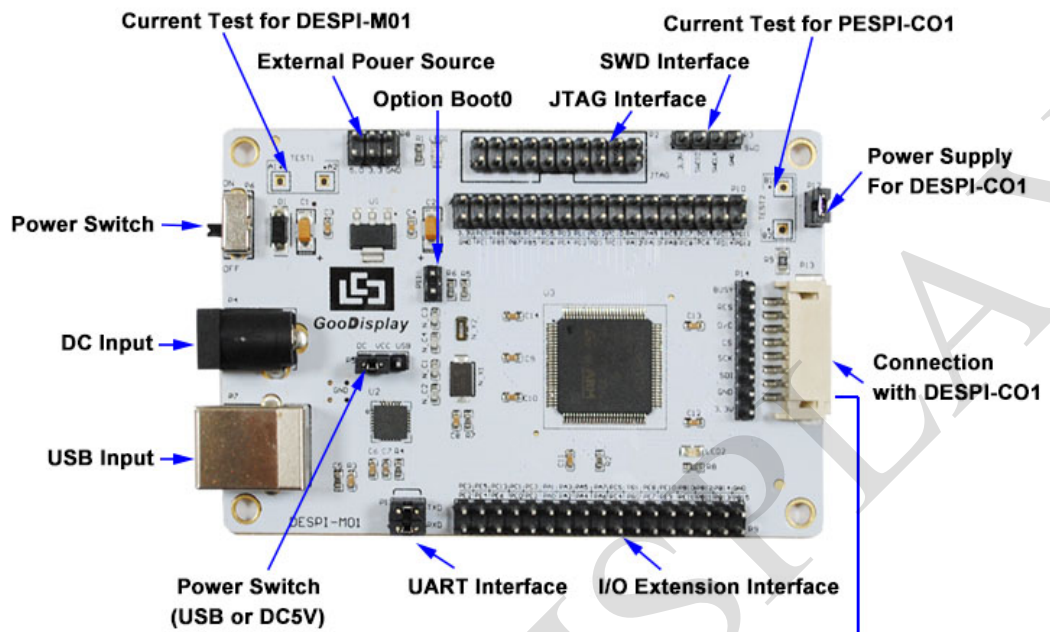
DESPI Develop Kit consists of the development board DESPI-M01 and the pinboard DESPI-C01

## 2. Mechanical Specifications

Parameter	Specification
Model.	DESPI
MCU	STM32
Dimension	90x60mm (DESPI-M01) 65x35mm (DESPI-C01)
Input Voltage	5.0 V
Interface	USB and Raspberry Pi
Sample Code	Available (please contact sales)
Working Temperature	-20°C ~+70°C
Main Function	EPD driving
Additional Function	USB to serial port /indicator light

3. Functions

**DESPI-M01**

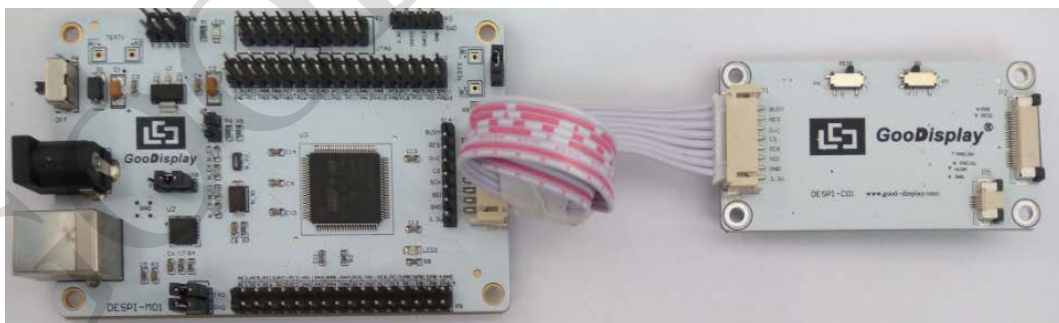


**DESPI-C01**



Pic. 01 Demo Board

DESPI-M01 and DESPI-C01 are connected:



Pic. 02 Demo Board

**3.1 Power Supply**

Power input: Input voltage of Demo Board is DC5V, and there are 2 options for power input via a short circuit P5:

Option 1: Choose "DC5V Power Input" when a short circuit P5 between VCC and DC.

Option 2: Choose "USB interface" when a short circuit P5 between VCC and USB.

### 3.2 LED indicator light

One indicator light reserved for developing, which can indicate E-paper Display status, so you can definite them as your requirements.

### 3.3 Communication

One USB to serial port reserved for transmission .You should install the driver program CP210x

### 3.4 I/O Port Extension

I/O port of STM32 has been led out for developing

### 3.5 Current Test

The demo kit support current test both of the main board DESPI-M01 and the pinboard DESPI-C01

- 1) Test for DESPI-M01: Power off and make series connection between amperemeter and TEST1
- 2) Test for DESPI-C01:Power on and take off the short circuit plug P12 then make series connection between amperemeter and TEST2.After accomplishing test ,put on the short circuit plug P12.

### 3.6 Download

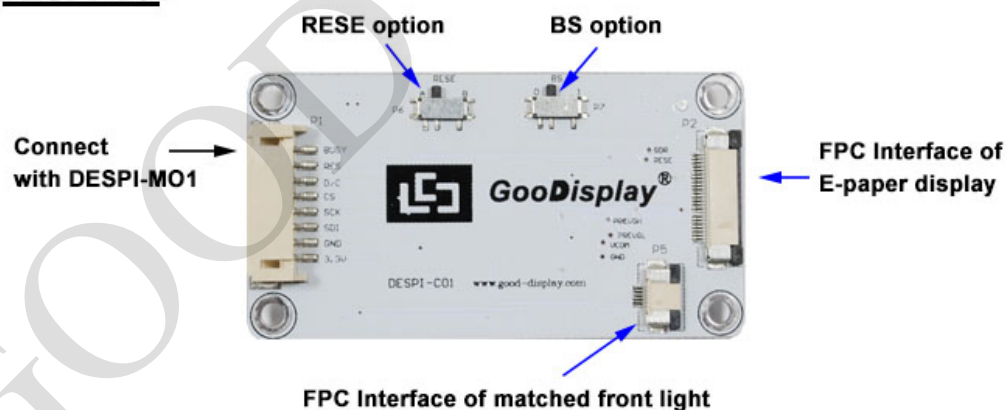
The demo can support 3 modes of download : JTAG、SWD、 UART

**TIPS:** When using UART mode to download program one needs to use a plug to short circuit P11, and then use FlyMcu software to choose corresponding with Hex file and download it. Be sure to remove the short circuit plug for P11 after the download is complete, or program won't be able to work.

### 3.7 The pinboard DESPI-C01

It can refresh total 8 sizes of Good Display 's E-paper Display such as 1.54", 2.04", 2.13", 2.7", 2.9", 4.2",5.83" 7.5" .One needs to connect the wire between FPC of E paper and connect port on DESPI-C01.In addition, it also can supply power to matched e-paper front light.

### DESPI-C01



Pic. 03 Functional Instruction



RESE Position A for matched E paper model :

1.54 inch : GDEW0154T8、 GDEW0154Z04

2.13 inch: GDEW0213Z16

2.7 inch: GDEW027W3 、 GDEW027C44

2.9 inch: GDEW029T5

4.2 inch: GDEW042T2、 GDEW042Z15

RESE Position B for matched E paper model :

1.54 inch: GDEH0154D27、 GDEM0154E97LT、 GDEW0154Z17、 GDEP015OC1

2.04 inch: GDE021A1

2.13 inch: GDE0213B1、 GDEM0213E28LT

2.9 inch: GDE029A1/GDEH029A1、 GDEW029Z10、 GDEM0290E27LT

5.83 inch : GDEW0583T7、 GDEW0583Z21

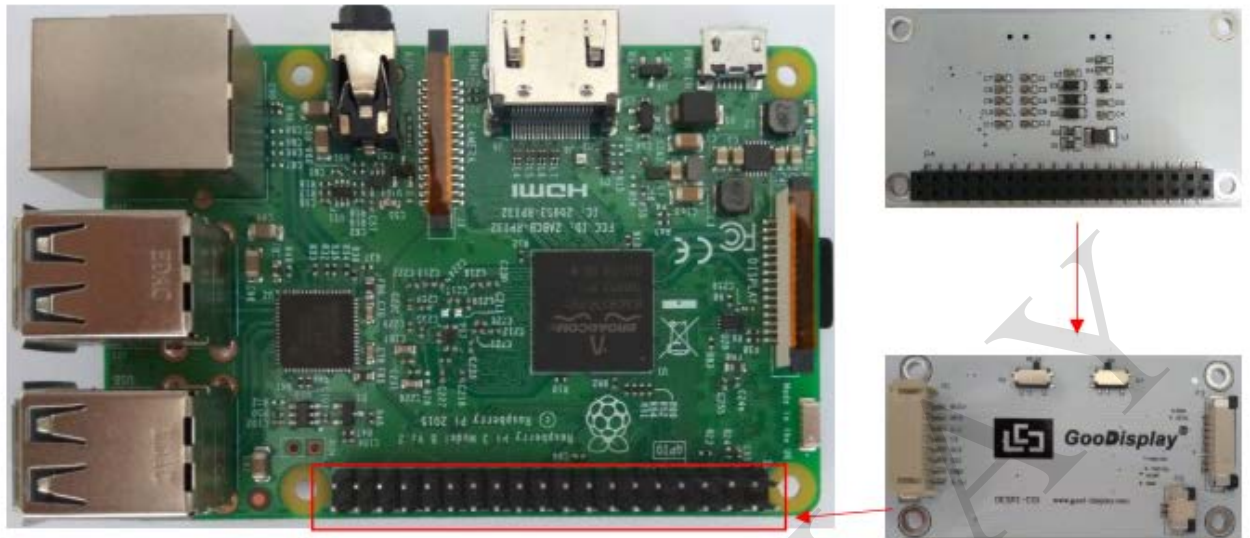
7.5 inch: GDEW075T8、 GDEW075Z09

BS Position "0" : 4-wire SPI serial port ;

BS Position "1" : 3-wire SPI serial port ;

TIPS: We support 4-wire SPI example code only, if one needs 3-wire SPI one please read IC manual and develop by one's own.

3.8 DESPI-C01 supports the connection to Raspberry Pi , See below:



Pic. 04 Installation Instructions.



Pic. 05 Installation rendering

#### 4. JTAG Simulator (optional)

There is no brand or model requirement when the user selects the emulator, as long as the download program can work.