

## DM-ADTTR-022

*DISPLAY ADAPTER FOR HDMI TO MIPI DSI*

## Revision History

<b>Revision</b>	<b>Date</b>	<b>Author</b>	<b>Change Description</b>
1.0	25/10/2022	Stan	New Create

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## 1. DM-ADTTR-022 Adapter

### 1.1. Over View

DM-ADTTR-014 is a HDMI to 4-Lane MIPI DSI Driver, follow up MCU of STM32F103, Support resolution up to 4086\*2160.

Consists of three parts: one driver board, one FPC cable, and one display connect board.

### 1.2. Main Features

Item	Specification	Unit
Function	HDMI to 4-Lane MIPI DSI	
Input interface	A-Type 2.0, 1.4 HDMI	
Out interface	4-Lane MIPI DSI	
Driver IC	Stm32F103	
Resolution	4086*2160	
Display Module	Single	
OS Support	Raspberry Pi/Mac OS	
Operation Temperature	0°C~+70°C	
Outline	65.0*64.0	mm
Backlight	4 level adjust	

## 1.3. External Pins

The DM-ADTTR-014 has two interface, the input interface is a standard A-Type HDMI connector, and the output interface is a 4-Lane MIPI DSI connector.

### 1.3.1. Pin Description

Table 1-1

<b>PIN</b>	<b>SYMBOL</b>	<b>DESCRIPTION</b>
1	GND	Ground
2	DSI1_D3_N	Serial Interface 1 data-3 Low
3	DSI1_D3_P	Serial Interface 1 data-3 High
4	GND	Ground
5	DSI1_D2_N	Serial Interface 1 data-2 Low
6	DSI1_D2_P	Serial Interface 1 data-2 High
7	GND	Ground
8	DSI1_CK_N	Serial Interface 1 clock Low
9	DSI1_CK_P	Serial Interface 1 clock High
10	GND	Ground
11	DSI1_D1_N	Serial Interface 1 data-1 Low
12	DSI1_D1_P	Serial Interface 1 data-1 High
13	GND	Ground
14	DSI1_D0_N	Serial Interface 1 data-0 Low
15	DSI1_D0_P	Serial Interface 1 data-0 High
16	GND	Ground
17	DSI0_D3_N	Serial Interface 0 data-3 Low
18	DSI0_D3_P	Serial Interface 0 data-3 High

19	GND	Ground
20	DSI0_D2_N	Serial Interface 0 data-2 Low
21	DSI0_D2_P	Serial Interface 0 data-2 High
22	GND	Ground
23	DSI0_CK_N	Serial Interface 0 clock Low
24	DSI0_CK_P	Serial Interface 0 clock High
25	GND	Ground
26	DSI0_D1_N	Serial Interface 0 data-1 Low
27	DSI0_D1_P	Serial Interface 0 data-1 Low
28	GND	Ground
29	DSI0_D0_N	Serial Interface 0 data-0 Low
30	DSI0_D0_P	Serial Interface 0 data-0 High
31	GND	Ground
32	NC	No connection
33	3V3_S1	3.3V S1
34	3V3_S2	3.3V S2
35	NC	No connection
36	3V3_OUT	3.3V Out
37	3V3_OUT	3.3V Out
38	NC	No connection
39	VDD18V	VDD
40	NC	No connection
41	1V8_S1	S1
42	1V8_S2	S2
43	NC	No connection
44	GND	Ground

45	NC	No connection
46	GND	Ground
47	AVDD_5V8	Power (Analog)
48	AVEE_5V8	Power (Analog)
49	GND	Ground
50	NC	No connection
51	LED_VOUT	LED Output
52	LED_VOUT	LED Output
53	LED_VOUT	LED Output
54	NC	No connection
55	LED_1	LED 1
56	LED_2	LED 2
57	GND	Ground
58	GND	Ground
59	GND	Ground
60	GND	Ground

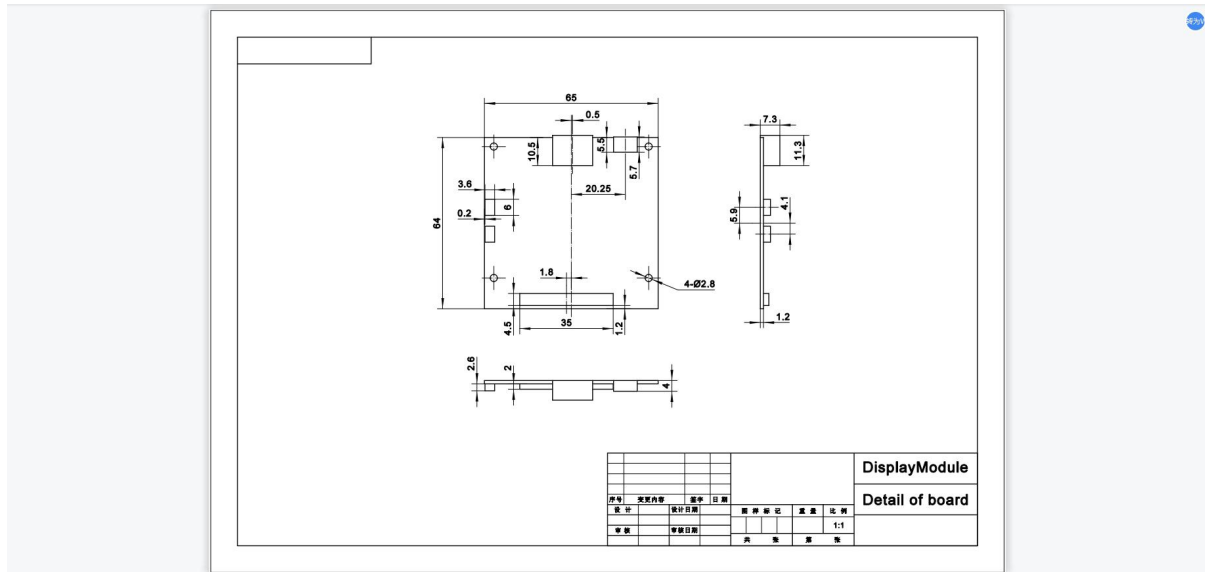
## 1.4. Electrical Characteristics

Item	Min.	Typ.	Max.	Unit
Power Supply	4.5	-	5.5	V
Output Voltage		3.3		V
Current limit		500		mA

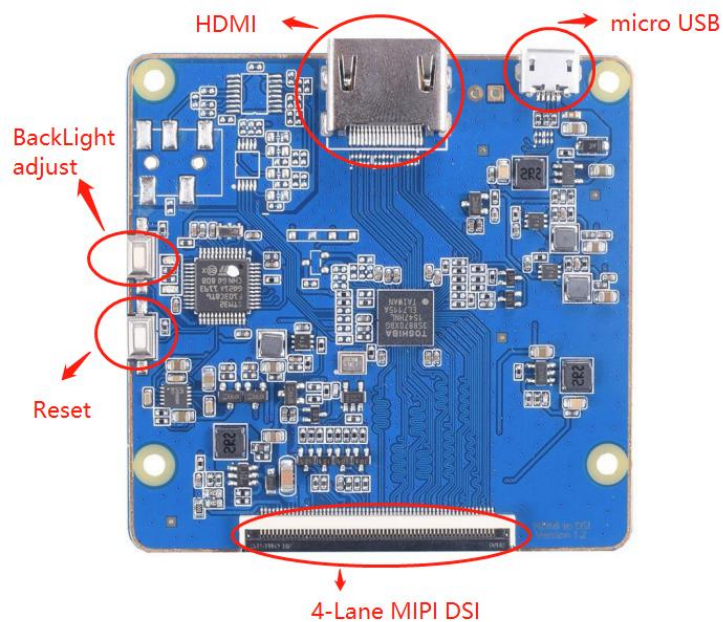
## 1.5. Package

### 1.5.1. Dimension

please inset the dimension of the adapter here, Criteria will be listed later.



### 1.5.2. Detail of board





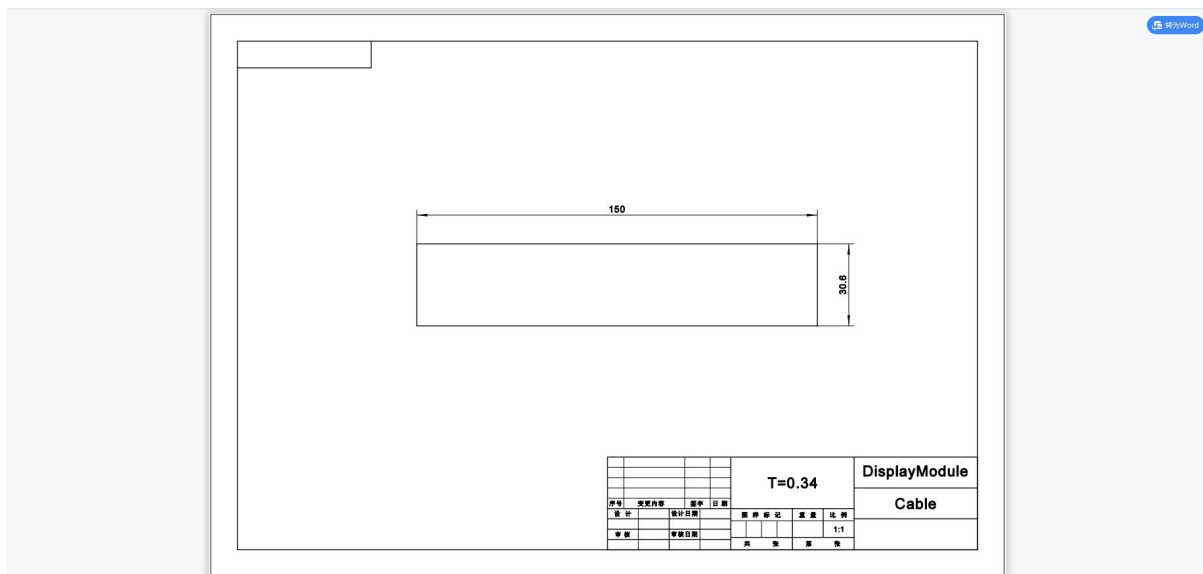
## 2. Adapter Contents

### 2.1. Cable



#### 2.1.1. Pin Layout

The input/output connector dimension should be here.

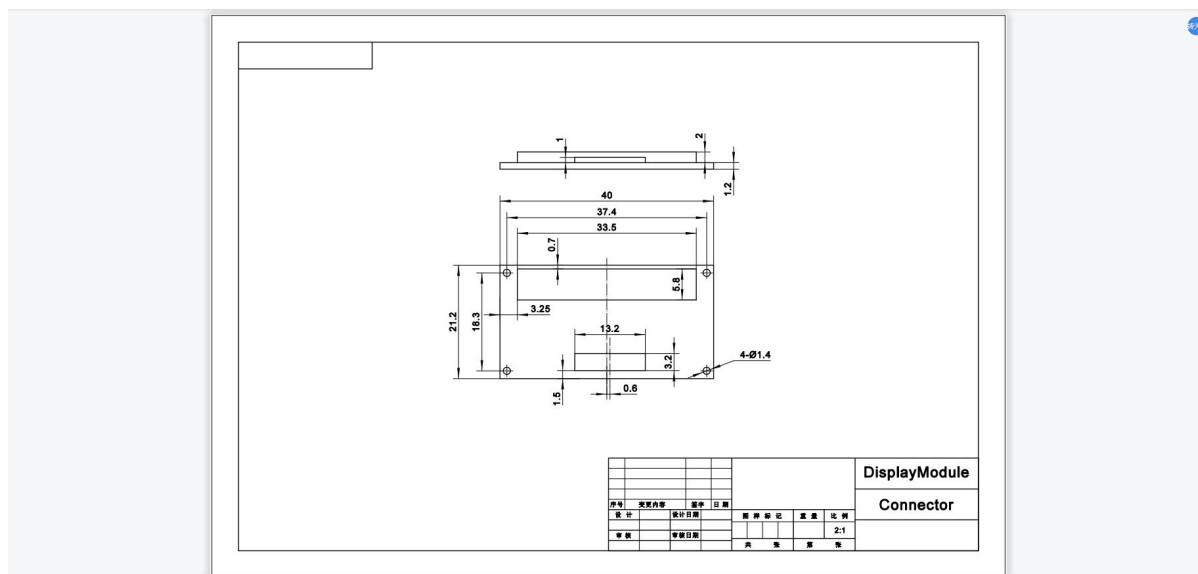


### 2.2. Connector



## 2.2.1. Pin Layout

The input/output connector dimension should be here.



### **3. Configuration Reference**

## 4. Adaptive Screens

[DM-TFTR34-359](#) 3.4" 800x800 Capacitive Touch TFT -MIPI

[DM-TFTR50-413](#) 5.0" 1080x1080 Round TFT -MIPI

[DM-TFT55-419](#) 5.5" 1440x2560 TFT LCD- MIPI

[DM-OLEDC38-652](#) 3.81" 1080x1200 AMOLED-MIPI

## 5. Support and Q&A

Q:is it possible to get a board manufactured with these inductors replaced?

A:We do not recommend that users change the boards themselves.

<http://www.displaymodule.com/pages/faq>