

MDT0500AC-HDMI	800 x 480	HDMI Interface	TFT Module
Specification			
Version: 1		Date: 28/02/2024	
Revision			
1	26/02/2024	First issue	

Display Features			
Display Size	5.00"		
Resolution	800 x 480		
Orientation	Landscape		
Appearance	RGB		
Logic Voltage	3.3V		
Interface	HDMI		
Brightness	400 cd/m ²		
Touchscreen	CTP		
Module Size	120.70 x 98.00 x 13.40 mm		
Operating Temperature	-0°C ~ +60°C	Created By	Checked By
Pinout	---	TSB	---
Pitch	---	Box Quantity	Weight / Display
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DESIGN • MANUFACTURE • SUPPLY

* - For full design functionality, please use this specification in conjunction with the RTD2281 display driver specification.(Provided Separately)

Display Accessories	
Part Number	Description

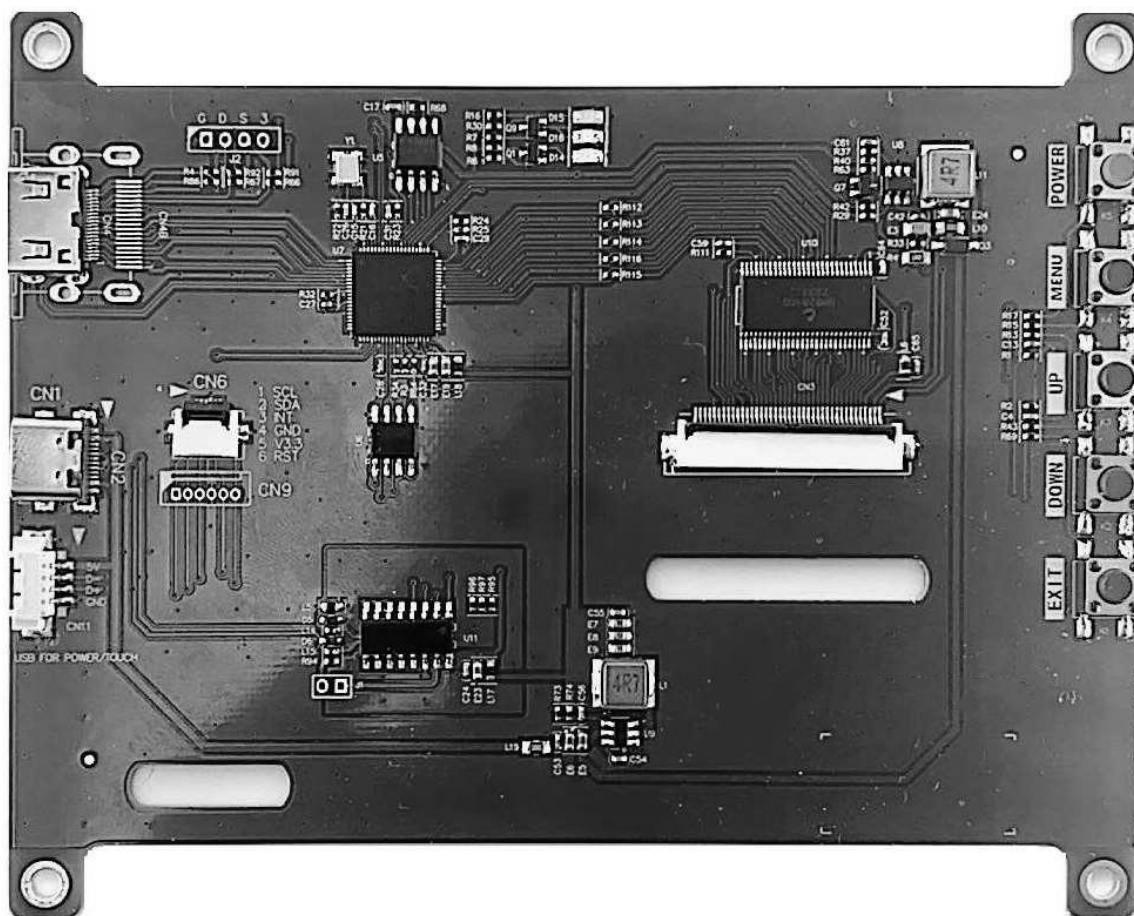
Optional Variants	
Appearances	Voltage



1. GENERAL DESCRIPTION

MDT0500AC-HDMI is a 5.0inch LCD display driver board; supports HDMI input; support capacitive touch panel.

2. FUNCTION LAYOUT



(The color of actual item may vary and the image is only for reference.)

3. FEATURES

Below you will find the detailed features.

MAIN CHIPSET	RTD2281		
OSD LANGUAGE OSD	Chinese, English, (French, Spanish, Italian, German, Portuguese, Dutch, Korean) (Option)		
VIDEO INPUT			
	HDMI	Format	Up to 800*480@50HZ
		Operating Speed	155MHz
AUDIO OUTPUT	Frequency response		
	Output power		
TOUCH	Interface	USB	
	Touch Panel	6-wire capacitive touch panel	
POWER TO PANEL	3.3V		
Management	Standby Power Consumption < 0.2W (Board Only)		
KEY FUNCTIONS	MENU, UP, DOWN, EXIT, POWER		



4. INTERFACE DEFINITION

4.1 DC IN CONNECTOR

CN1 (MICRO-USB5P2J)

NO.	SYMBOL	DESCRIPTION
CN1		
1	5V	+5V DC Power supply
2	D-	USB bus signal
3	D+	USB bus signal
4	NC	NC
5	GND	Ground

4.2 DC IN CONNECTOR

CN2 (USB-TYPE-C)

NO.	SYMBOL	DESCRIPTION
CN2		
1, 2,15,16	GND	Ground
3, 4,13,14	5V	+5V DC Power supply
5,6,11,12	NC	NC
7,9	D-	USB bus signal
8,10	D+	USB bus signal

4.3 DC IN CONNECTOR

CN11 (SMT4Z125T)

NO.	SYMBOL	DESCRIPTION
CN1		
1	5V	+5V DC Power supply
2	D-	USB bus signal
3	D+	USB bus signal
4	GND	Ground

4.4 HDMI IN CONNECTOR

CN4B (HDMI)

NO.	SYMBOL	DESCRIPTION
1-19	HDMI-19	HDMI standard interface

4.5 HDMI IN CONNECTOR

CN4 (MINI-HDMI)

NO.	SYMBOL	DESCRIPTION
1-19	HDMI-	MINI HDMI standard interface

4.6 CAPACITIVE TOUCH SCREEN CONNECTOR

CN6 (FPC6PIN0.5) / CN9 (SIP6Z125T)

This part is optional

(Connect USB interface to computer,

touch control can be effective.)

NO.	SYMBOL	DESCRIPTION
CN6		
1	SCL	Capacitive touch panel SCL
2	SDA	Capacitive touch panel SDA
3	INT	Capacitive touch panel INT
4	GND	signal ground
5	V3.3	+3.3V power supply for capacitor screen port
6	RST	Capacitive touch panel RST

NO.	SYMBOL	DESCRIPTION
CN9		
1	SCL	Capacitive touch panel SCL
2	SDA	Capacitive touch panel SDA
3	INT	Capacitive touch panel INT
4	GND	signal ground
5	V3.3	+3.3V power supply for capacitor screen port
6	RST	Capacitive touch panel RST

4.7 LCD PANEL INTERFACE

CN3 (FPC-40PIN-0.5)

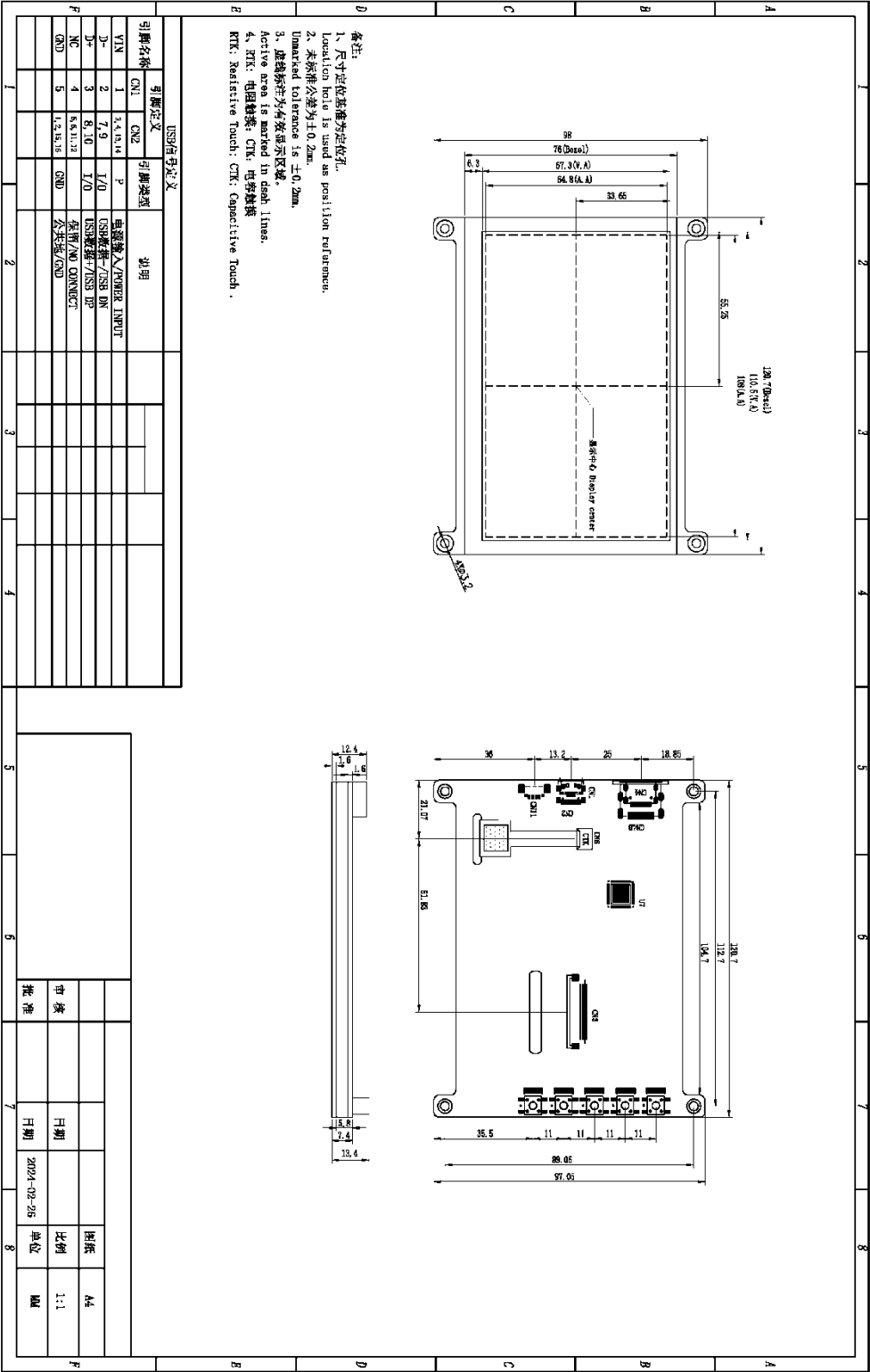
NO.	SYMBOL	I/O	Function	Remark
1	VLED-	P	Power for LED backlight (Cathode)	
2	VLED+	P	Power for LED backlight (Anode)	
3	GND	P	Power ground	
4	DVDD	P	Power for Panel	
5	R0	I	Red data (LSB)	
6	R1	I	Red data	
7	R2	I	Red data	
8	R3	I	Red data	
9	R4	I	Red data	
10	R5	I	Red data	
11	R6	I	Red data	



12	R7	I	Red data (MSB)	
13	G0	I	Green data (LSB)	
14	G1	I	Green data	
15	G2	I	Green data	
16	G3	I	Green data	
17	G4	I	Green data	
18	G5	I	Green data	
19	G6	I	Green data	
20	G7	I	Green data (MSB)	
21	B0	I	Blue data (LSB)	
22	B1	I	Blue data	
23	B2	I	Blue data	
24	B3	I	Blue data	
25	B4	I	Blue data	
26	B5	I	Blue data	
27	B6	I	Blue data	
28	B7	I	Blue data (MSB)	
29	GND	P	Power Ground	
30	DCLK	I	Sample clock	
31	DISP	I	Display on/off	
32	HS	I	Horizontal Sync Input	
33	VS	I	Vertical Sync Input	
34	DE	I	Data Input Enable	
35	NC	-	No connection	
36	GND	P	Power Ground	
37	X1	I/O	Right electrode – differential analog	
38	Y1	I/O	Bottom electrode – differential	
39	X2	I/O	Left electrode – differential analog	
40	Y2	I/O	Top electrode – differential analog	



5. CONTROLLER DIMENSIONS



6. OPERATION REQUIREMENT

- (1) Do not pressed and distorted.
- (2) Keep away from static and water.
- (3) Relative humidity : $\leq 80\%$
- (4) Storage temperature: $-20\sim+60^{\circ}\text{C}$
- (5) Operation temperature: $-0\sim+60^{\circ}\text{C}$

MIDAS
DISPLAYS

DESIGN • MANUFACTURE • SUPPLY

