PRODUCT SPECIFICATION

KADI Model: KD101FHD01

CUSTOMER Model: -

Description: 10.1’ HDMI BOARD

Version: 1.0

KADI	PREPARED BY	CHECKED BY	APPROVED BY
SIGNATURE			
DATE	2025.1.2	2025.1.2	2025.1.2

	SIGNATURE	DATE
CUSTOMER APPROVAL		

Record of Revisions

Version	Revise Date	Description	Page
1.0	2025-1-2	First Release	-

Contents

1. General Specifications

1.1 LCM General Information

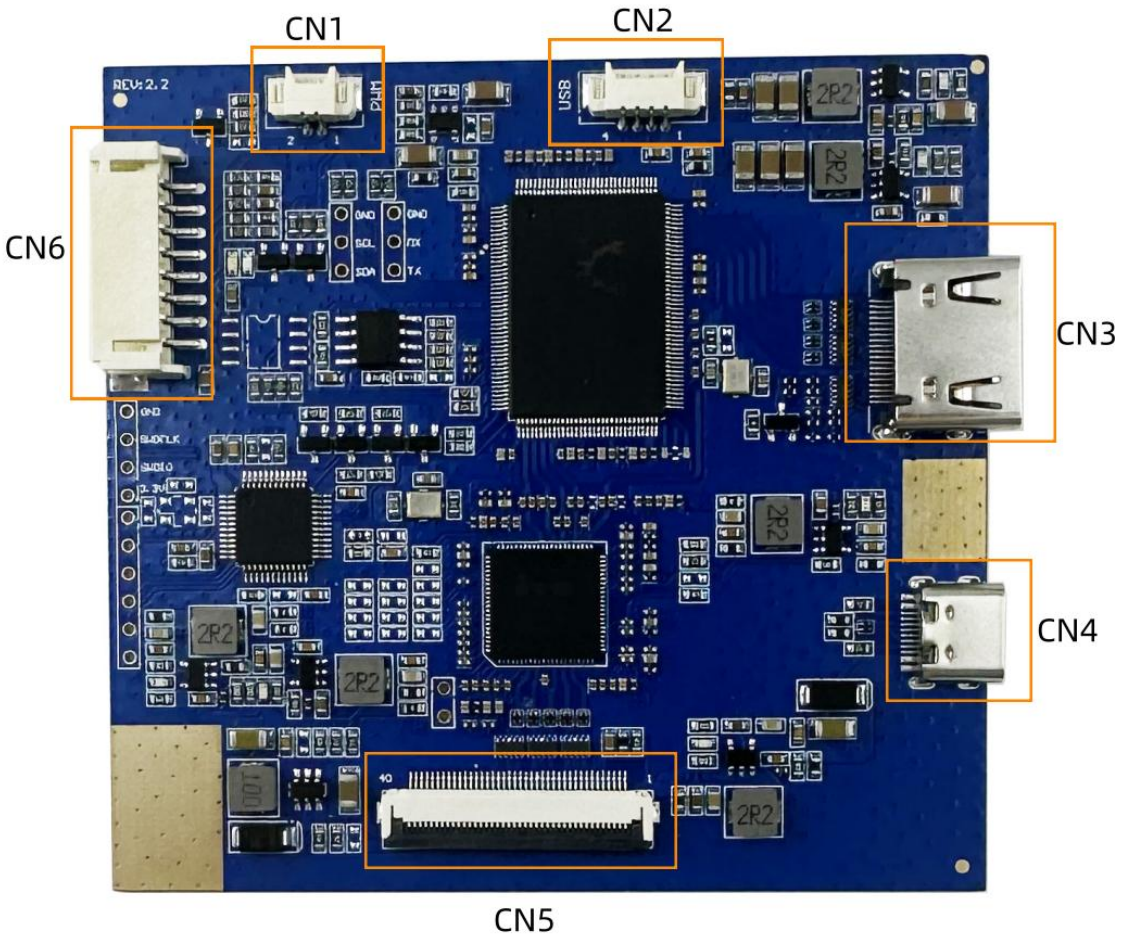
Item	Description
Input Source	HDMI 1.4a
LCD interface	4 lane MIPI (1200*1920 60Hz)
Voltage for LCD	3.3V
Touch Panel	USB-C
Power input	5V(USB-C)
Operation Temperature	-20~70 ℃
Storage Temperature	-30~80 ℃
Users Control	Power On/off OSD Menu Adjust+ Adjust- Exit

Note1:Requirements on environmental protection RoHS compliant.

2. Interface

2.1 PCB overview

Picture below shows the connectors exact placement and their descriptions.



2.2 Connector Description

Item	Type	Description
CN1	External PWM	PWM(2P-1.25mm)
CN2	Touch interface USB	Touch(4P-1.25mm)
CN3	HDMI	HDMI-A
CN4	USB-C	Power and Touch/5V
CN5	LCD Moudle	4 lane MIPI up to 1200*1920/60Hz
CN6	External OSD keyboard	Power/Menu/Exit/Down/Up（8P-2.0mm）

2.3 CN1 (PWM)2P-1.25MM

Pin No.	Symbol	Description
1	PWM	PWM dimming control
2	GND	GND

2.4 CN2 (Touch output) 4P-1.25MM

Pin No.	Symbol	Description
1	USB_5V	USB Power, 5V
2	D-	USB differential pair, position 1, negative
3	D+	USB differential pair, position 1, positive
4	GND	Ground

2.5 CN3（HDMI）

Pin No.	Symbol	Description
1	TMDS_Data 2+	TMDS differential signal 2+
2	TMDS_Data 2_S	Data2 shielding ground
3	TMDS_Data 2-	TMDS differential signal 2-
4	TMDS_Data 1+	MDS differential signal 1+
5	TMDS_Data 1_S	Datal shielding ground
6	TMDS_Data 1-	TMDS differential signal 1-
7	TMDS_Data 0+	TMDS differential signal 0+
8	TMDS_Data 0_S	Data0 shielding ground
9	TMDS_Data 0-	TMDS differential signal 0-
10	TMDS_CLK+	TMDS differential signal Clock+
11	TMDS_CLK_S	Clo6ck shielding ground
12	TMDS_CLK-	TMDS differential signal clock-
13	CEC	Electronic protocol CEC
14	NC	No connection
15	SCL	IIC clock Line
16	SDA	IIC data Line

17	DDC/CEC_GND	Data display channel
18	+5V	HDMI 5V
19	HOT_PLUG_DET	Hot plug detect

2.6 CN4（USB-C）

Pin No.	Symbol	Description
A1B12	GND	Ground
A4B9	VBUS	VBUS Power;5V
A5	CC1	Configuration channel
A6	DP1	USB differential pair, position 1, positive
A7	DN1	USB differential pair, position 1, negative
A8	SBU1	Sideband use
B5	CC2	Configuration channel
B6	DP2	USB differential pair, position 2, positive
B7	DN2	USB differential pair, position 2, negative
B8	SBU2	Sideband use
B4A9	VBUS	VBUS Power;5V
B1A12	GND	Ground

2.7 CN5（LCD Interface）

Pin No.	Symbol	Description
1	NC	No connection
2	VDD	Power supply (3.3V)
3	VDD	Power supply (3.3V)
4	GND	Ground
5	RESET	Global reset pin
6	NC	No connection

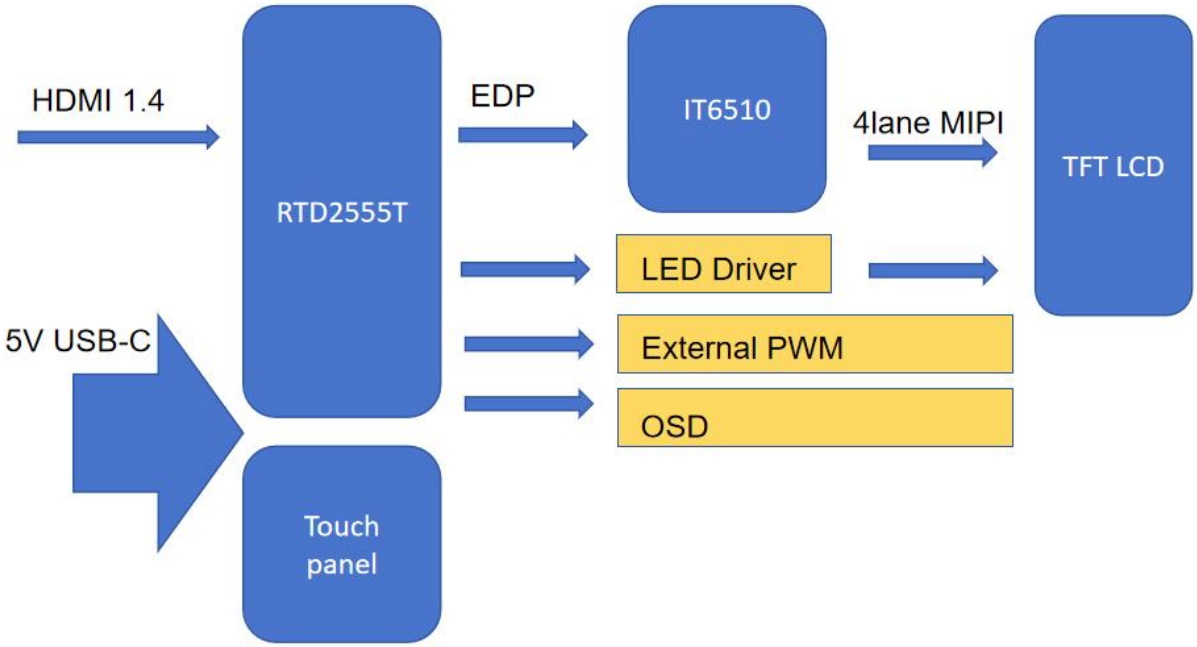
7	GND	Ground
8	MIPI_D0N	MIPI Negative data signal(-)
9	MIPI_D0P	MIPI Positive data signal(+)
10	GND	Ground
11	MIPI_D1N	MIPI Negative data signal(-)
12	MIPI_D1P	MIPI Positive data signal(+)
13	GND	Ground
14	MIPI_CKN	MIPI Negative data signal(-)
15	MIPI_CKP	MIPI Positive data signal(+)
16	GND	Ground
17	MIPI_D2N	MIPI Negative data signal(-)
18	MIPI_D2P	MIPI Positive data signal(+)
19	GND	Ground
20	MIPI_D3N	MIPI Negative data signal(-)
21	MIPI_D3P	MIPI Positive data signal(+)
22	GND	Ground
23	NC	No connection
24	NC	No connection
25	GND	Ground
26	NC	No connection
27	NC	No connection
28	NC	No connection
29	NC	No connection
30	GND	Ground
31	VLED-	Negative backlight
32	VLED-	Negative backlight
33	NC	No connection
34	NC	No connection
35	NC	No connection
36	NC	No connection
37	NC	No connection
38	NC	No connection

39	VLED+	Positive backlight
40	VLED+	Positive backlight

2.8 CN6(External OSD keyboard)

Pin No.	Symbol	Description
1	DOWN	Page down
2	UP	Page up
3	EXIT	Exit
4	MENU	Menu
5	PWR	Power on/off
6	LED_EN	LED Enable; Output signal 3.3V
7	GND	GND
8	Keyboard VDD	Keyboard VDD, Output 3.3V

3. Function Block



4. Mechanical Drawing