



ORIENT DISPLAY

Your Total LCD Solution Provider

Specification for TFT

AFK800480A0-4.3INTH-C-HDMI

Revision V1.0



A	Orient Display
FK	TFT Type
800480	Resolution 800 x 480
A0	Serial A0
4.3	4.3", Module Dimension 105.5 x 83.4 x 9.07 mm
I	IPS Display
N	Top: -20~+70°C; Tstr: -30~+80°C
T	Transmissive
H	High Brightness 680 cd/m2
C	Capacitive Touch Panel
HDMI	With HDMI Port and USB Port Board
/	IC Controller RTD2662



Table of Contents

1. General Specifications.....	4
2. HDMI Specification.....	4
3. HDMI + LCM Drawing.....	5
4. Interface.....	6
5. Working Environmental.....	9
6. Power Supply.....	9
7. Electrical Characteristics.....	9

1. General Specifications

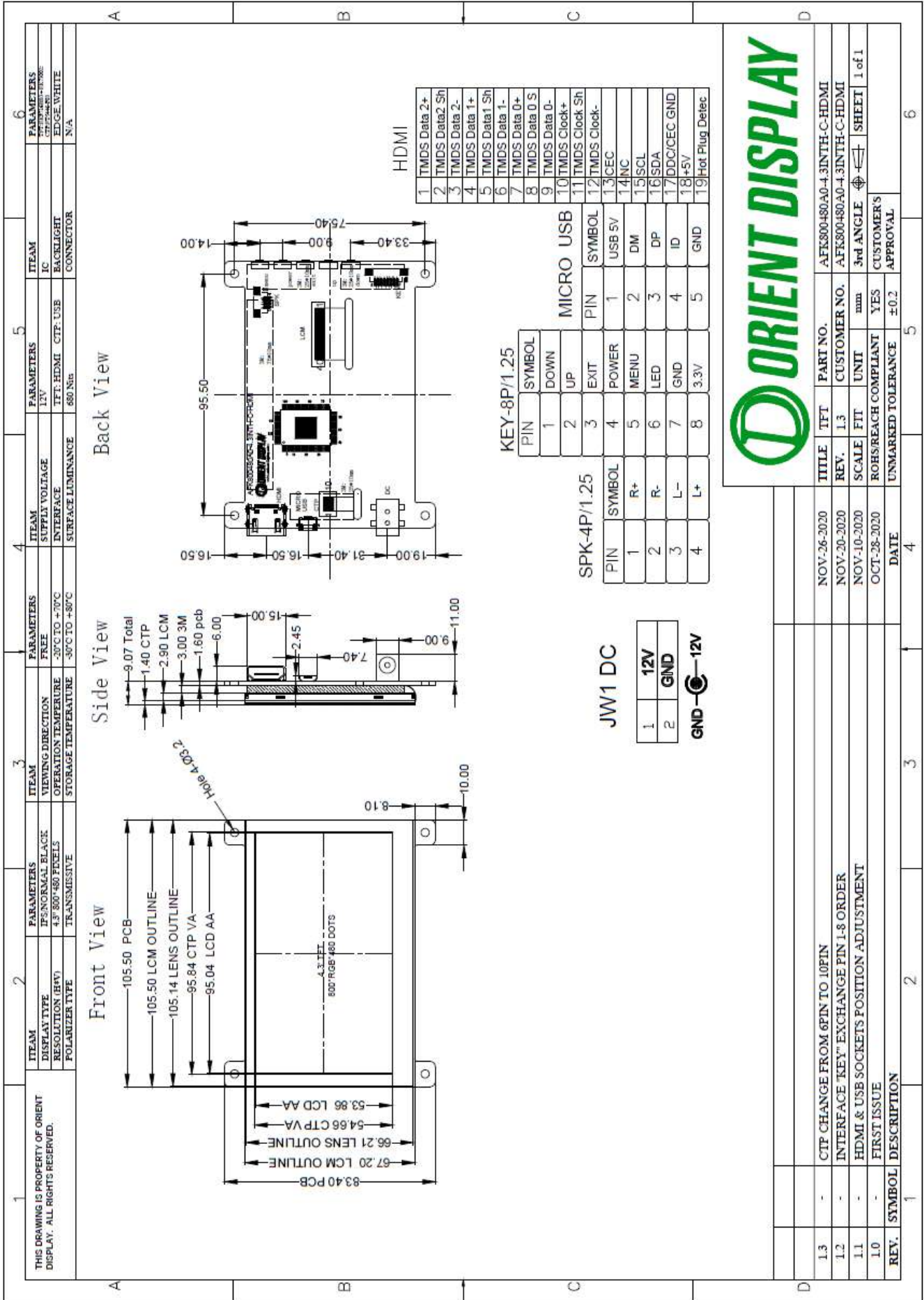
AFK800480A0-4.3INTH-C-HDMI applies to HDMI interface, 800x480 resolution, compatible for 4.3 " RGB interface LCM driver board, which integrated the LCD display、 key menu、 Audio output, adjustable backlight. Used RTD2662 controller chip, the USB can used for CTP driver and software updated.

2. HDMI Specification

2.1 Description

Item	Signal	Interface	Description
Electrical Characteristics	Input Signal	HDMI	Multimedia play
		Micro-USB	driver CTP
		Power	DC +12V
	Output Signal	Audio	Audio signal output
		Display	LCM interface
		CTP	CTP interface
Outline structure	105.5mm*83.4mm		
Keyboard	MENU Power EXIT UP DOWN		

3. HDMI PCBA DRAWING



REV.	SYMBOL	DESCRIPTION	DATE	UNMARKED TOLERANCE	ROHS/REACH COMPLIANT	SCALE	FIT	UNIT	CUSTOMER NO.	PART NO.	TITLE	TFT
1.3	-	CTP CHANGE FROM 6PIN TO 10PIN	NOV-26-2020	±0.2	YES	mm	3rd ANGLE	mm	AFK800480A0-4.3INTH-C-HDMI	AFK800480A0-4.3INTH-C-HDMI		
1.2	-	INTERFACE "KEY" EXCHANGE PIN 1-8 ORDER	NOV-20-2020		YES							
1.1	-	HDMI & USB SOCKETS POSITION ADJUSTMENT	NOV-10-2020		YES							
1.0	-	FIRST ISSUE	OCT-28-2020		YES							
REV.	SYMBOL	DESCRIPTION	DATE	UNMARKED TOLERANCE	ROHS/REACH COMPLIANT	SCALE	FIT	UNIT	CUSTOMER NO.	PART NO.	TITLE	TFT

4. Interface

4.1 LCM PINOUT

4.2 Pin	Pin out	Description
1	LED-K	Backlight LED Cathode
2	LED-A	Backlight LED Anode
3	GND	System Ground
4	VDD	Power supply for logic operation
5	R0-R7	Data bus
6	G0-G7	Data bus
7	B0-B7	Data bus
29	GND	System Ground
30	DCLK	Pixel clock signal
31	DISP	Display on/off control
32	HSYNC	Horizontal Sync signal
33	VSYNC	Vertical Sync signal
34	DE	Data Enable
35	NC	No connect
36	GND	System Ground
37	NC	No connect
38	NC	No connect
39	NC	No connect
40	NC	No connect

4.2 DMI PIN(HDMI)

Pin	Pin out	Description
1	RX2+	TMDS Data2+
2	GND	TMDS Data2 Shield
3	RX2-	TMDS Data2-
4	RX1+	TMDS Data1+
5	GND	TMDS Data1 Shield
6	RX1-	TMDS Data1-
7	RX0+	TMDS Data0+
8	GND	TMDS Data0 Shield
9	RX0-	TMDS Data0-
10	RXC+	TMDS Data-Clock+
11	GND	TMDS Data-Clock Shield
12	RXC-	TMDS Data-Clock-
13	CEC	CEC
14	NC	NC
15	DSCL	I2C-Clock,+5V level
16	DSDA	I2C-Data,+5V level
17	GND	DDC/CEC -GND
18	HDMIHOT	+5V power
19	HOTPLUG	Hot Plug Detect Signal

4.3 USB PIN (Micro-USB)

Pin	Pin out	Description
1	VCC	+5V power
2	D-	Data-
3	D+	Data+
4	GND	Ground

4.4 Power supply +12V 3PIN (DC)

Pin	Pin out	Description
1	VIN	+12V
2	GND	Ground

4.5 Audio output

Pin	Pin out	Description
1	LF+	Left Sound Channel Positive and Negative Audio Output
2	LF-	
3	RF+	Right channel positive and negative audio output
4	RF-	

4.6 CTP- PIN

Pin	Pin out	Description
1	NC	No connect
2	NC	No connect
3	RST	Reset Pin for CTP
4	GND	Ground
5	INT	Interrupt request to the host
6	SDA	I2C data input and output
7	SCL	I2C clock input
8	GND	Ground
9	GND	Ground
10	VDD	Power supply for CTP

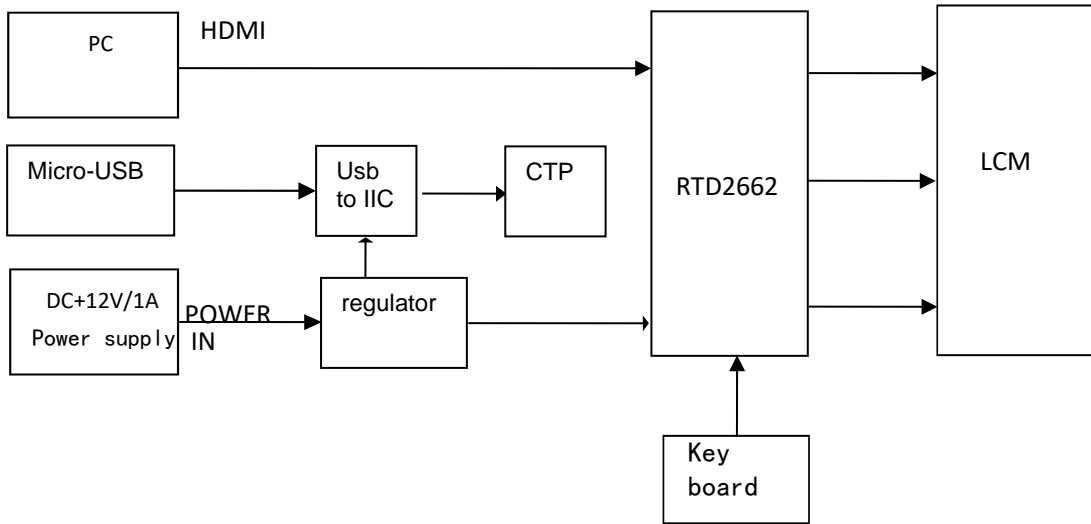
4.7 Keypad definition

Pin	Pin out	Description
1	VCC (3.3V)	5v power supply
2	GND	Ground
3	LED	Power Indicator
4	POWER	Off/on
5	MENU	Menu
6	EXIT	Return / Exit
7	UP	Add key
8	DOWN	Reduce key

5. Working Environment

Item	Condition	Min	Max	Unit
Operation Temp	12V , 60%RH	-20	+70	°C
Storage Temp	-	-30	+80	°C
Humidity	25°C	10%	90%	RH
ESD	touch±4KV, air±8K			

6. Power supply



7. Electrical Circuit

