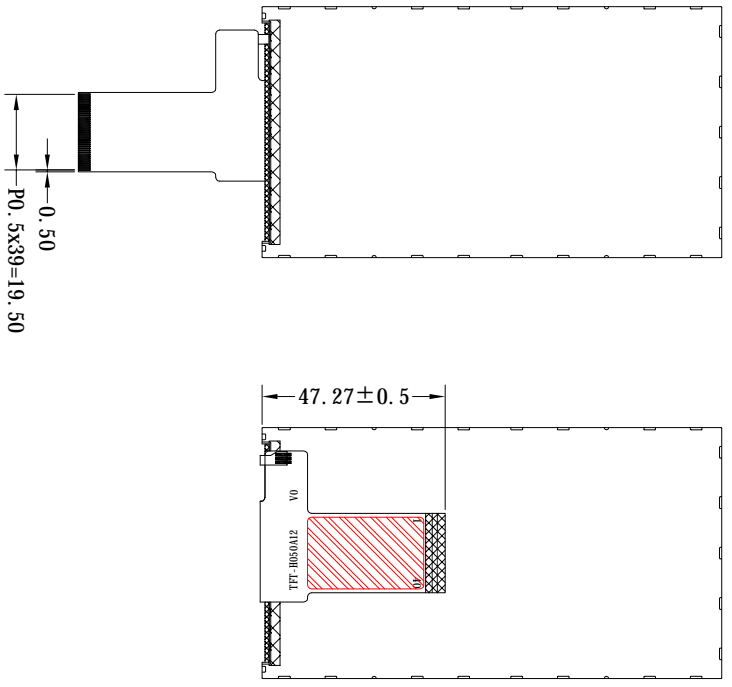
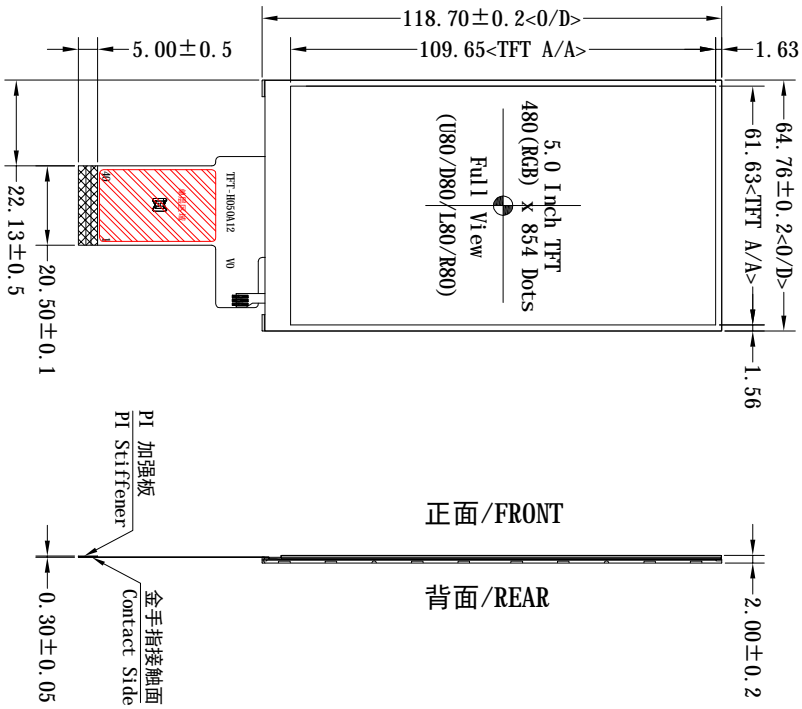


***为防止LCD产生图像残留，在使用常黑面板时不要长时间显示固定图案，建议时间少于2分钟或者更短的时间内刷新显示内容一次或多次。
 ***In order to prevent the LCD from producing image retention, do not display a fixed pattern for a long time when using a normally black panel. If the LCD needs to display a fixed pattern, it is recommended to refresh the display one or more times in less than 2 minutes or less.
 强烈建议使用黑色图像或移动图像作为屏幕保护程序。It is strongly recommended to use a black image or moving image as a screen saver.

LED	MPU Interface Mode	*Note1: 24-bit/pixel, Use DB[0]: 71, DG[0]: 71, DR[0]: 71
0	RGB +0b_SPI (rise)	*Note2: 18-bit/pixel, Use DB[0]: 51, DG[0]: 51, DR[0]: 51. Fix to GND when not in use.
1	RGB +16b_SPI (fall)	*Note3: 16-bit/pixel, Use DB[0]: 41, DG[0]: 51, DR[0]: 41. Fix to GND when not in use.



TFT Pin SIGNAL	TFT Pin SIGNAL		
1	LEDK	21	DB0
2	LEDA	22	DB1
3	GND	23	DB2
4	VCI	24	DB3
5	DR0	25	DB4
6	DR1	26	DB5
7	DR2	27	DB6
8	DR3	28	DB7
9	DR4	29	GND
10	DR5	30	PCLK
11	DR6	31	NC
12	DR7	32	HSD
13	DG0	33	VSD
14	DG1	34	DEN
15	DG2	35	IMD
16	DG3	36	GND
17	DG4	37	RESX
18	DG5	38	SPI-CS
19	DG6	39	SPI-SCL
20	DG7	40	SPI-SDA



Vf=18.0 ~ 20.4V, If=40mA
 Constant Current Test

液晶显示类型 LCD Display Type	薄膜晶体管/透射式/常黑/16.7M色 TFT/Transmit sive/Normal ly Black/16.7M COLOR	TFT 储存温度 TFT Storage Temp	-30 °C ~ 80 °C
观看方向/角度 Viewing Direction	Full View (U80/D80/R80/L80)	TFT 驱动芯片 TFT Driver IC	ST7701S<TFT>
接口 Interface	SPI+RGB	背光 Backlight	白色/12 LEDs/6灯串联2路并联
工作电压 Operating Voltage	VCI=3.3V, CTP-VDD=3.3V(TYP)	液晶模组亮度 LCM Brightness	500 cd/m ² (TYP)/固定电流测试
TFT 工作温度 TFT Operating Temp	-20 °C ~ 70 °C		

产品型号
Product model
TFT-H050A12FWST5N40

比例
Scale
1:1

设计制图
Design
Li u. YL

日期
Date
2023-04-20

版本
Ver
V0-0

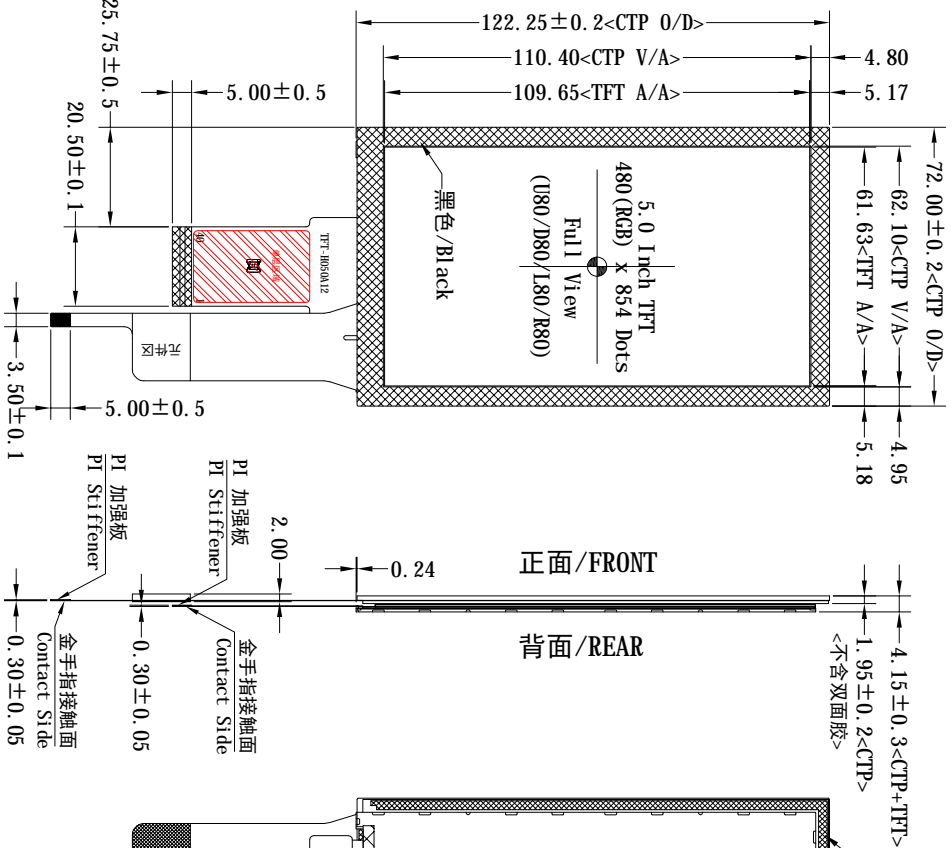
单位
Unit
MM

公差
Tol.
±0.3

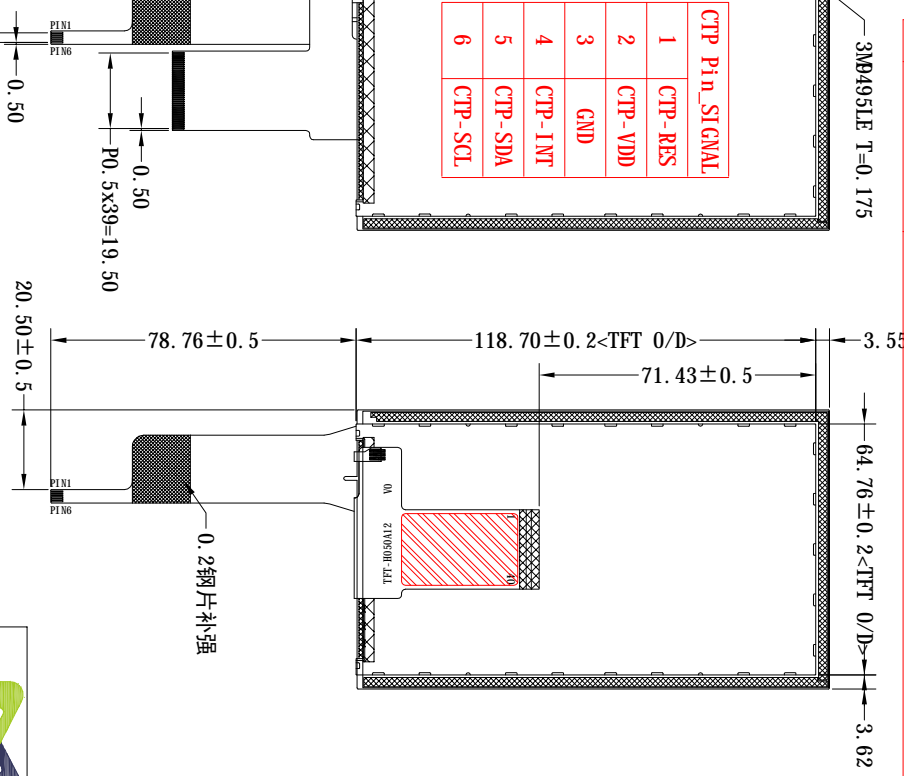
***为防止LCD产生图像残留，在使用常黑面板时不要长时间显示固定图案。如果LCD需要显示固定图案，建议时间少于2分钟或者更短的时间内刷新显示内容一次或多次。
 ***In order to prevent the LCD from producing image retention, do not display a fixed pattern for a long time when using a normally black panel. If the LCD needs to display a fixed pattern, it is recommended to refresh the display one or more times in less than 2 minutes or less.
 强烈建议使用黑色图像或移动图像作为屏幕保护程序。It is strongly recommended to use a black image or moving image as a screen saver.

IND	MPU Interface Mode
0	RGB +9b_SPT (rise)
1	RGB +16b_SPT (fall)

*Note1: 24-bit/pixel, Use DB[0]:71, DG[0]:71, DR[0]:71
 *Note2: 18-bit/pixel, Use DB[0]:51, DG[0]:51, DR[0]:51, Fix to GND when not in use.
 *Note3: 16-bit/pixel, Use DB[0]:41, DG[0]:51, DR[0]:41, Fix to GND when not in use.

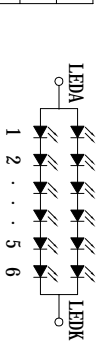


CTP Pin_SIGNAL	
1	CTP-RES
2	CTP-VDD
3	GND
4	CTP-INT
5	CTP-SDA
6	CTP-SCL

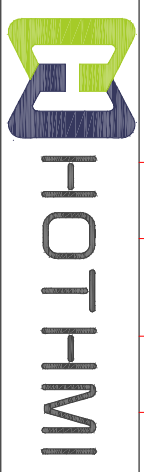


TFT Pin_SIGNAL	TFT Pin_SIGNAL		
1	LEDK	21	DB0
2	LEDA	22	DB1
3	GND	23	DB2
4	VC1	24	DB3
5	DR0	25	DB4
6	DR1	26	DB5
7	DR2	27	DB6
8	DR3	28	DB7
9	DR4	29	GND
10	DR5	30	PCLK
11	DR6	31	NC
12	DR7	32	HSD
13	DC0	33	VSD
14	DC1	34	DEN
15	DC2	35	IMD
16	DC3	36	GND
17	DC4	37	RESX
18	DC5	38	SPI-CS
19	DC6	39	SPI-SCL
20	DC7	40	SPI-SDA

液晶显示类型 LCD Display Type	薄膜晶体管/透射式/常黑/16.7M色 TFT/Transmissive/Normal Ly Black/16.7Mcolor
观看方向/角度 Viewing Direction	Full View(U80/D80/R80/L80)
接口 Interface	SPI+RCB
工作电压 Operating Voltage	VCI=3.3V, CTP-VDD=3.3V(Typ)
TFT 工作温度 TFT Operating Temp	-20 °C ~ 70 °C



产品型号 Product model	TFT-H050A12FWST4C40
比例 Scale	1:1
设计制图 Design	Li u. YL
日期 Date	2023-04-20
版本 Ver	V0-1
单位 Unit	MM
公差 Tol.	±0.3



薄膜晶体管/透射式/常黑/16.7M色
TFT/Transmissive/Normal Ly Black/16.7Mcolor
Full View(U80/D80/R80/L80)
SPI+RCB
VCI=3.3V, CTP-VDD=3.3V(Typ)
-20 °C ~ 70 °C
TFT 储存温度
TFT Storage Temp
-30 °C ~ 80 °C
驱动芯片
Driver IC
ST7701S<TFT>, GT9111<CTP>
背光
Backlight
白色/12 LEDs/6灯串联2路并联
400 cd/m² (Typ)/固定电流测试
LEDK
LEDB
LEDA
VF=18.0 ~ 20.4V, IF=40mA
Constant Current Test