

# SMART DISPLAY SPECIFICATION



Think good, Do good, Be good !

## SPECIFICATION

CUSTOMER	WINSTAR
MODEL NO.	WLOF0007000D2TFAASA00
CURRENT VERSION	0
RELEASE DATE	2026/01/14

### 1. Summary

#### *7.0 Inch Smart Display (UART series ) Features*

1. +12V power supply input with 8V to 35V dynamic range power input, the power consumption is around 5 Watt(WF70D2SYAGDNTA).
2. Self testing after booting function.
3. UART communication interface.
4. Supports UART protocol, default baud rate at 115200Kbps. .
5. Built in 16MB external flash memory to store the font and Object Dictionary Data.
6. Support resistive touch panel (RTP).
7. Build in buzzer and can be controlled by Master Device.
8. Demo set HOST can be used on multiple platforms, such as Computer (with USB to Virtual COM Dongle), MCU, Raspberry Pi .
9. GPIO PIN support With 3.3V.

## 2. Product Information

### General information

Item	Standard Value	Unit
Operating voltage	8V~35V dynamic	Vdc
Communication Interface	UART	--
MCU	STM32F746	--
SDRAM	16	MB
Flash Memory	16	MB
LCD display size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dot
Module dimension	184(W) x 104.6(H) x 20.5(D)	mm
Active area	152.4 (H) x 91.44(V)	mm
Dot pitch	0.1905(W) x 0.1905(H)	mm
Brightness	Min:750; Typ:850	
LCD type	TFT, Normally Black, Transmissive	
View Direction	85/85/85/85	
Aspect Ratio	15:9	
With /Without TP	With RTP	
Surface	Anti-Glare	



## 4. Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	°C
Storage Temperature	TST	-30	—	+80	°C

Note: Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above

1. Temp.  $\leq 60^{\circ}\text{C}$ , 90% RH MAX. Temp.  $> 60^{\circ}\text{C}$ , Absolute humidity shall be less than 90% RH at  $60^{\circ}\text{C}$

## 5. Electrical Characteristics

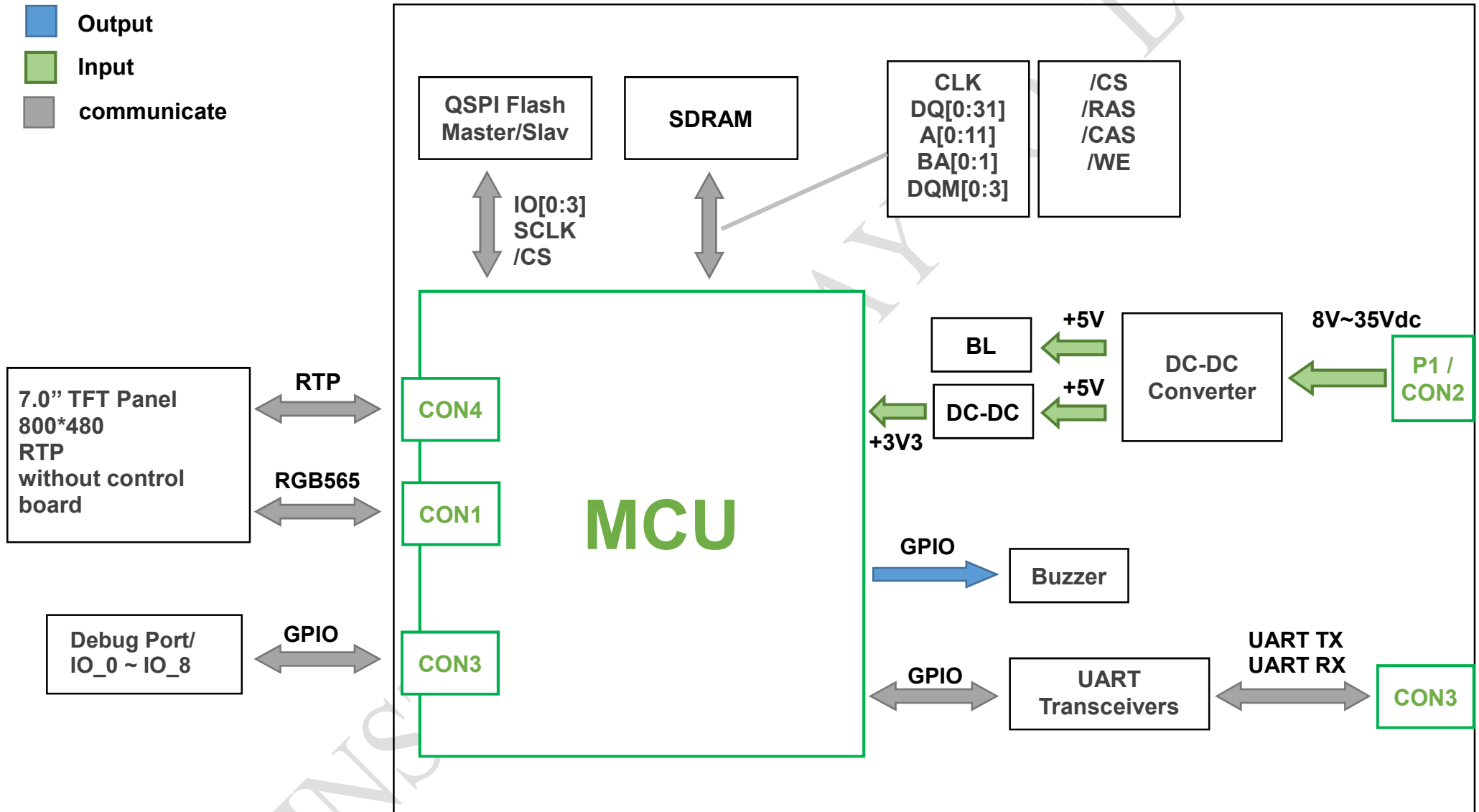
Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	VCC	—	8	12	35	V
Supply LCM current	I(mA)	-	-	385	-	mA

## 6. BOM

Item	Description	Remark
LCM	WF70D2SYAGDNT0#	
PCBA	SV10007R00D2B00N0100	

# 8. Block Diagram

- Output
- Input
- ⇄ communicate



# Interface

## CON2 definition:

Pin	Symbol	Function	Remark
1	Reserve	-	-
2	Reserve	-	-
3	Reserve	-	-
4	Reserve	-	-
5	Reserve	-	-
6	Reserve	-	-
7	Reserve	-	-
8	Reserve	-	-
9	Reserve	-	-
10	URRX	UART Receiver interface	Input
11	URTX	UART Transceiver interface	Output
12	GND	Power supply GND input	Input
13	VIN	Power supply V+ input	Input
14	Reserve	-	-
15	Reserve	-	-
16	Reserve	-	-

### CON3 definition:

Pin	Symbol	Function	Remark
1	+3V3	3.3V power for JTAG interface	Output
2	SWCLK	CLK pin for JTAG interface	Input
3	GND	GND for JTAG interface	Output
4	SWDIO	Data pin for JTAG interface	I/O
5	NRST	Reset pin for JTAG interface	Input
6	GND	GND	-
7	Wkup	(PA0) for system Resume from suspend (Reserve)	WKup,ADC,Timer,Event,I/O
8	BT0	BOOT0 (Normal Low)	Input
9	IO_0	ADC,DAC,Timer,Event,I/O	PA5
10	IO_1	ADC,Timer,Event,I/O	PA6
11	IO_2	ADC,Timer,Event,I/O	PA7
12	IO_3	RST,Timer,Event,I/O	PA8
13	IO_4	RST,Timer,Event,I/O	PC13
14	IO_5	ADC,Timer,Event,I/O	PB11
15	IO_6	RST,Timer,Event,I/O	PA15
16	IO_7	RST,ADC,Event,I/O	PD11