

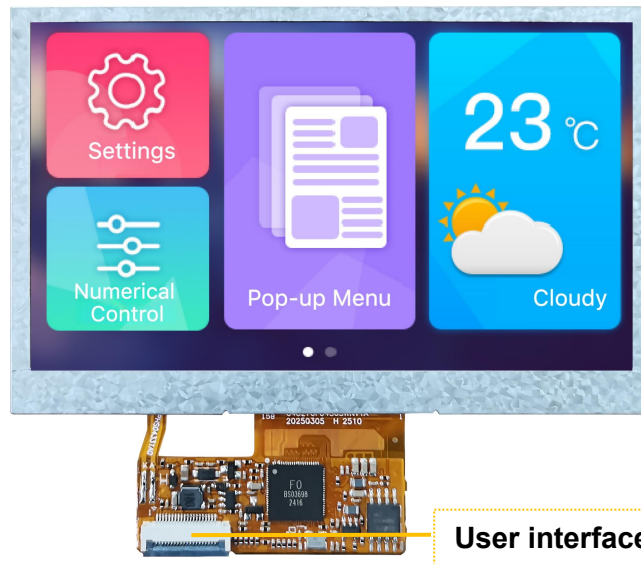
DMG48270F043_05WN

Features:

- Powered by T5F0 ASIC, running DGUS II HMI platform.
- 4.3 inch, 480*272 resolution, TV-TN-TFT LCD.
- 20 pins, including UART2, SD card, Buzzer, touch screen interface.
- Supporting connected to 4-wire RTP or CTP, buzzer or speaker.



1. External interface



PIN#	Definition1	Function1	Definition2	Function2
1	VIN	Power supply, DC3.5-5.5V. IO are all at 3.3V CMOS level.		
2	VIN			
3	GND			
4	GND	GND		
5	GND			
6	3.3V OUT			
7	TX2	UART2		
8	RX2			
9	SD_D0	When JIOS is in the air, SD card interface.	TMS	When JIOS is shorting circuit to ground, JTAG interface.
10	SD_D1		TCK	
11	SD_D2		TDI	
12	SD_D3		TDO	
13	SD_CLK		TX1	Multiplexed UART1
14	SD_CMD		RX1	
15	TPY1	4-wire resistive touch screen interface	CTP_SDA	Capacitive touch screen interface. When connected to CTP, the CTP_SDA and CTP_INT need to be pulled up to 3.3V by an external 4.7K resistance.
16	TPX1		CTP_INT	
17	TPY0		CTP_SCL	
18	TPX0		CTP_RST	
19	JIOS	JTAG/IO choose		
20	BUZZ	Buzzer drives output	D/A	Audio PWM DA output

2. Specification parameters

2.1 Product parameters

Main Chip	T5F0
User Interface	20Pin_0.5mm FCC
FLASH	8M Bytes
UI Version	DGUS II
Debugging Tools	HDL662SZ5 adapter board power supply
Size	4.3 inch
Resolution	480*272
Active Area (AA)	95.04mm (W)×53.86mm (H)
Viewing Angle	TV viewing angle, 70° /70° /40° /30° (L/R/U/D)
Backlight Service Life	>10,000 hours
Brightness	200nit
Brightness Control	100-level brightness adjustment (Flickering may occur at 1%-30% of max brightness; not recommended for use in this range)

2.2 Interface parameters

Item	Conditions	Min	Typ	Max	Unit
Baud Rate	User Set(Configure the CFG file)	3150	115200	3225600	bps
Output Voltage(TXD)	Output 1	3.0	3.3	-	V
	Output 0	-	0	0.3	V
Input Voltage(RXD)	Input 1	-	-	3.3	V
	Input 0	0	-	0.5	V
Interface	UART2: TTL;				
Data Format	UART2: N81;				

2.3 Electrical specifications

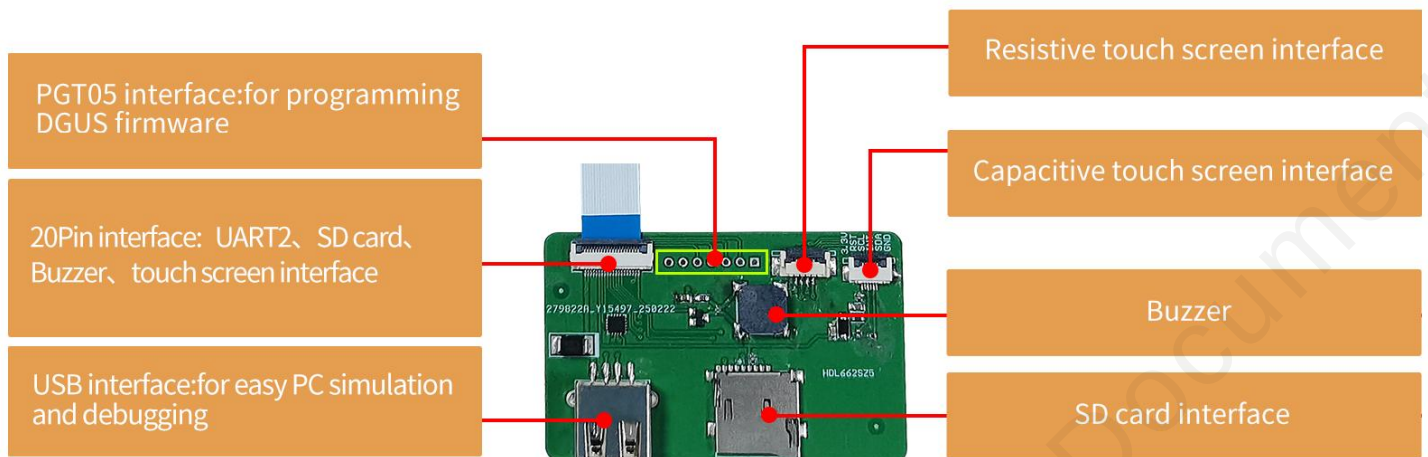
Rated Power	<2W
Operating Voltage	3.5-5.5V, typical value of 5V.
Operating Current	220mA@ 5V
Recommended power supply: 5V 1A DC	

2.4 Operating environment

Operating Temperature	-10℃ to 60℃ (5V @ 60% RH)
Storage Temperature	-20℃ to 70℃
Operating Humidity	10%-90%RH, typical value of 60% RH.

3. Debug

It is recommended for new users of DWIN smart LCMs to purchase official accessories. For more details, please refer to customer service center.



Operation steps: open serial assistant - custom function command - set command - send.

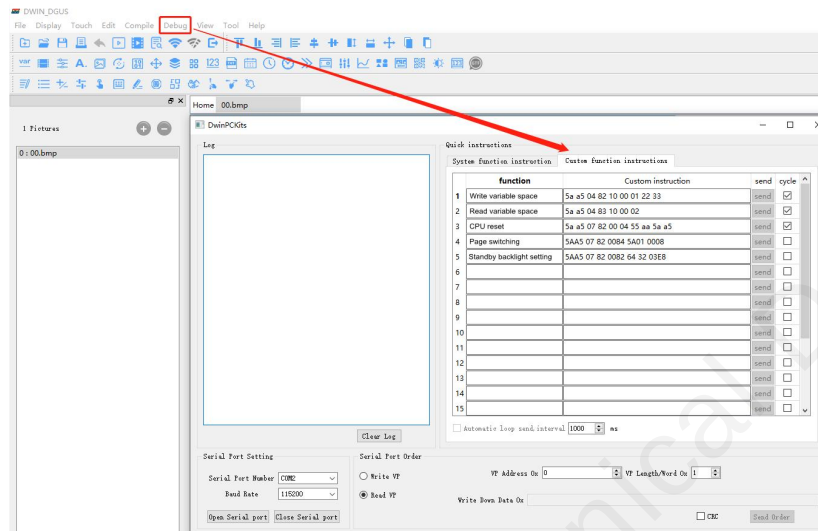
For example:

(1) Page switching

Tx: 5AA5 07 82 0084 5A01 0008

(2) Standby backlight setting

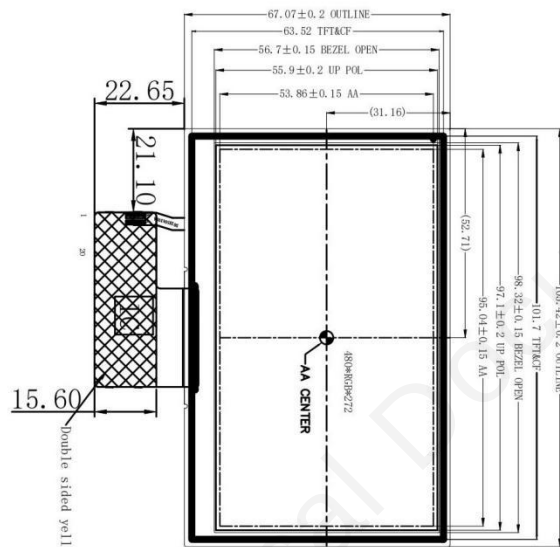
Tx: 5AA5 07 82 0082 64 32 03E8



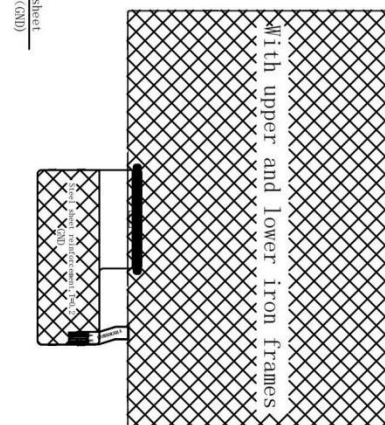
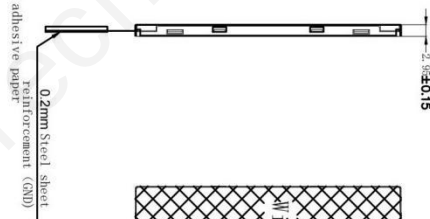
DGUS operation

4. Packing capacity & dimension

Dimension				
Dimension	105.42(W) × 67.07 (H) × 2.95(T) mm			
Net Weight	45g			
Packing Capacity				
Model	Dimensions	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)×160mm(W)×47mm(H)	1	4	4
Carton2:	250mm(L)×200mm(W)×80mm(H)	1	8	8
Carton3:	320mm(L)×270mm(W)×80mm(H)	1	16	16
Carton4:	375mm(L)×275mm(W)×125mm(H)	-	-	100



Front view Side view Back view



PIN Definition

PIN	Name
1	+5V
2	+5V
3	GND
4	GND
5	GND
6	3.3V
7	TX2
8	RX2
9	SD_D0
10	SD_D1
11	SD_D2
12	SD_D3
13	SD_CLK
14	SD_CMD
15	TPY1
16	TPX1
17	TPY0
18	TPX0
19	JIDS
20	BUZZ



*Circuit Diagram
(LED BRCS) Color: WHITE
VF=12V IF=10mA

REVISION RECORD		VER	DATE	DWIN Technology	
1	First Edition	V1-1	20250325	FILE NAME :	DMG48270F043_05WN
2				CUSTOMER NAME :	
3				DESIGN :	
4				DRAWN BY :	
5				CHECKED BY :	
6				APPROVED BY :	
				DATE	DATE
				PRO. (3X)	INIT : mm
				SHEET : 1/1	

5. Revision records

Rev	Revise Date	Content	Editor
00	2025-03-27	Preliminary version	Xu Ying

Please contact us if you have any questions about the use of this document or our products, or if you would like to know the latest information about our products:

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- DWIN Developer Forum: <https://forums.dwin-global.com/>

Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!

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