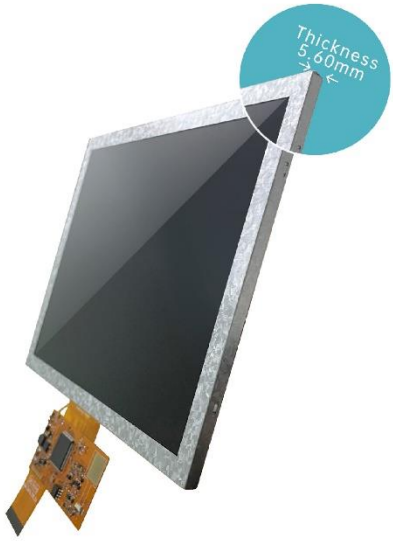
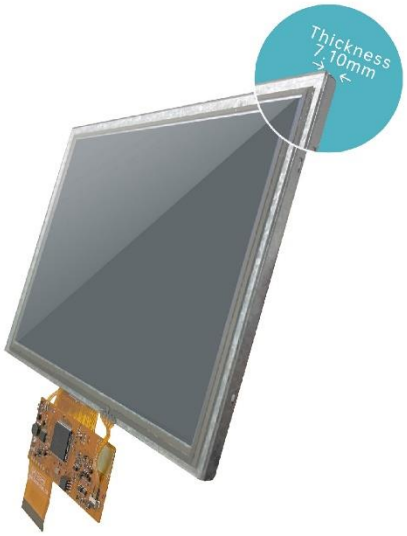
Integrated LCD with CPU



DMG80600F080_01WN

TP type: Without touch
Display type: TN
Pixel: 800*600



DMG80600F080_01WTR

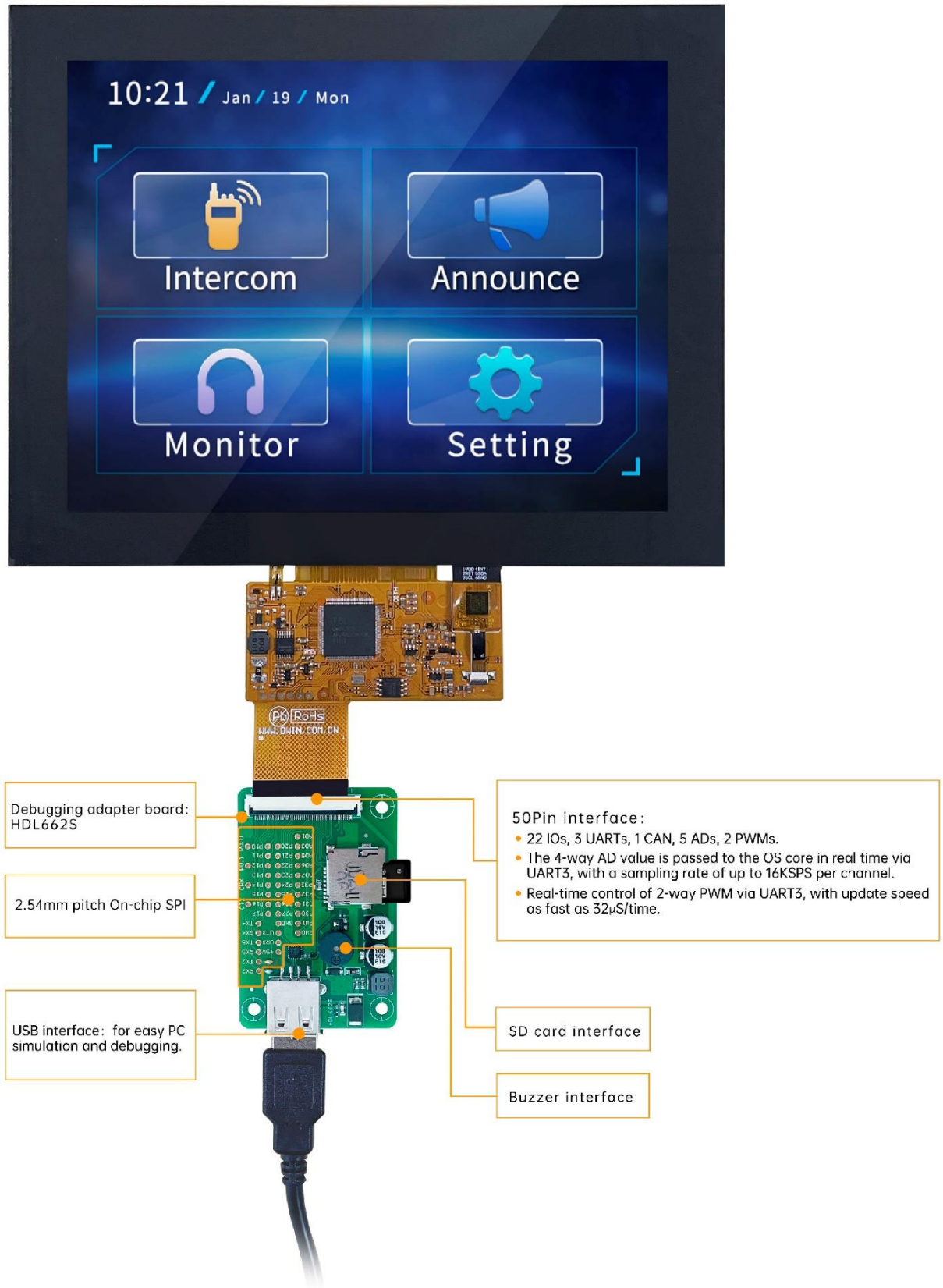
TP type: RTP
Display type: TN
Pixel: 800*600

DMG80600F080_01WTC

TP type: Black CTP
Display type: TN
Pixel: 800*600

DMG80600F080_01WTCZ01

TP type: White CTP
Display type: TN
Pixel: 800*600



Features:

●Based on T5L1, running DGUS II system.
●8.0-inch, 800*600 pixels resolution, 16.7M colors, TN TFT display.
●COF structure. The entire core circuit of the smart screen is fixed on the FPCof LCM, featured by light and thin structure, low cost and easy production.
●50 pins, including IO, UART, CAN, AD and PWM from user CPU core for easy secondary development.

Product Parameters

Model	DMG80600F080_01WTC
Main Chip	T5L1
User Interface	50Pin_0.5mm FPC
FLASH	16M Bytes
UI Version	DGUSII / TA
Power Supply	HDL662S adapter board power supply
Display Color	16.7M colors
Dimensions	8.0-inch
Resolution	800*600
Active Area	162.0mm (W)×121.5mm (H)
View Area	162.0mm (W)×121.5mm (H)
Viewing Angle	TV viewing angel, typical value of 70°/70°/40°/30°(L/R/U/D)
Backlight Service Life	＞ 10000 hours (Time of the brightness decaying to 50% on the condition of continuous working with the maximum brightness)
Brightness	250nit
Brightness Control	0~100 grade (When the brightness is adjusted to 1%~30% of the maximum brightness, flickering may occur and is not recommended to use in this range)
TP Type	CTP (Capacitive Touch Panel)
TP Structure	G+G structure
Touch Mode	Single point touch, support continuous sliding touch
Surface Hardness	6H
Light Transmittance	Over 85%
Life	Over 1,000,000 times touch

Interface Parameters

Item	Conditions	Min	Typ	Max	Unit
Baudrate	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; UART4: TTL;（Only available after OS configuration） UART5: TTL;（Only available after OS configuration）				
Data Format	UART2: N81 UART4: N81/E81/O81/N82; 4 modes (OS configuration) UART5: N81/E81/O81/N82; 4 modes (OS configuration)				

Electrical specifications

Rated Power	<5W	
Operating Voltage	4.5~5.5V, typical value of 5V	
Operating Current	580mA	VCC=5V, max backlight
	160mA	VCC=5V, backlight off
Recommended power supply: 5V 1A DC		

Operating Environment

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

Packing Capacity & Dimension

Dimension				
Dimension	197.0(W) ×155.0 (H) ×7.38(T) mm			
Net Weigh	310g			
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton 1 ：	220mm(L)×160mm(W)×47mm(H)	-	-	-
Carton 2：	250mm(L)×200mm(W)×80mm(H)	1	2	2
Carton 3：	320mm(L)×270mm(W)×80mm(H)	-	-	-
Carton 4：	450mm(L)×350mm(W)×300mm(H)	2	5	10
Carton 5：	600mm(L)×450mm(W)×300mm(H)	3	10	30

ESD Test

Test temperature: 25°C

Test process: the product was placed on the test bench to perform contact and air discharge in turn of the serial screen iron frame and display area. During the experimental process, it was observed whether the screen is dead, black, white, splash, or reboot. According to the experiment results, the performance is in line with the criteria GB/T 17626.2 B level and above.

Electrostatic discharge test		
Discharge Type	Discharge Value	Result
Contact discharge	±4KV	Normal operation
Air discharge	±4KV	Normal operation

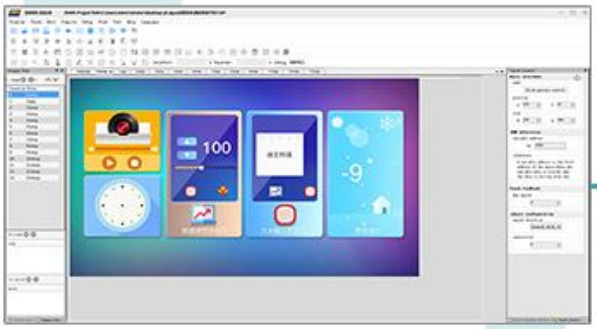
High and Low Temperature Test

Test temperature:-20~70℃

Test process: the product will be placed obliquely in the high and low temperature test chamber for 12h for 20 on and off cycles. Then it will be check at room temperature after power on for the appearance and function, CTP offset situation, jumping point, page random switching and failure.

Temperature	Result
High temperature（70℃）	Normal operation
Low temperature（-20℃）	Normal operation

Operation

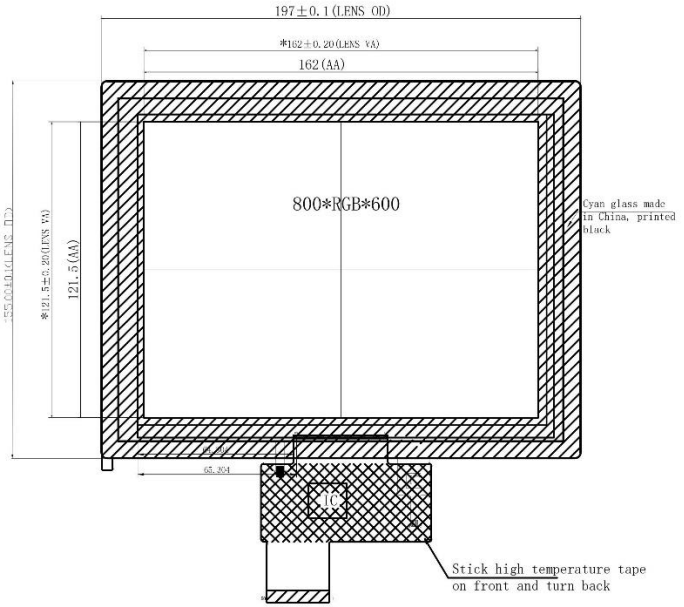


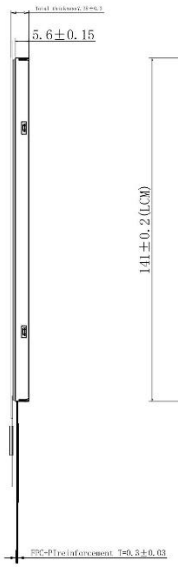
Design excellent GUI by professional design tools (e.g Photoshop) and configured by DGUS software to realize wonderful effect ,such as button ,text ,animation ,progress car ,curve and so on .

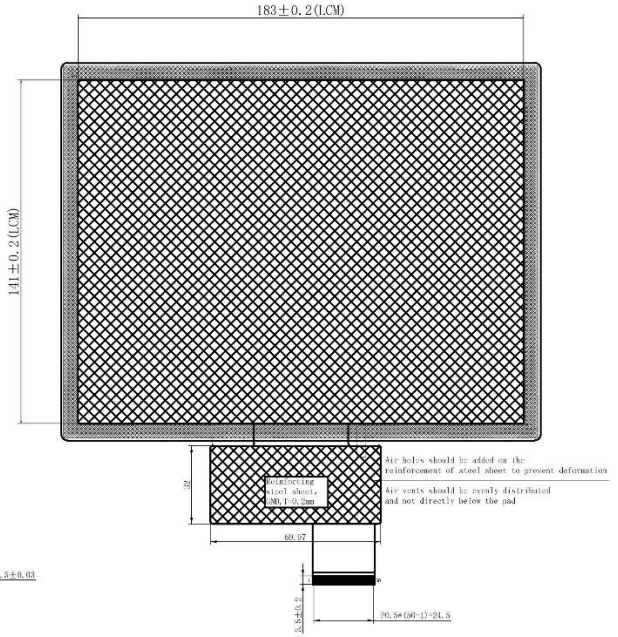
Connect with customer's MCU through RS232/RS485/TTL level directly

Human-computer interaction supported by 5 instructions easily

G+G Made in China glass, printed black







LCD PIN Definition

Pin№	Name		
1	+5V	26	P26
2	+5V	27	P25
3	GND	28	P24
4	GND	29	P23
5	GND	30	P22
6	ADCT	31	P21
7	ADC6	32	P20
8	ADC5	33	P17
9	ADC3	34	P16
10	ADC1	35	P15
11	+3.3V	36	P14
12	SPK	37	P13
13	SD_CD	38	P12
14	SD_CK	39	P11
15	SDD3	40	P10
16	SDD2	41	TX4
17	SDD1	42	RX4
18	SDD0	43	TX5
19	PWM0	44	RX5
20	PWM1	45	P00
21	P33	46	P01
22	P32	47	P02
23	P31	48	P03
24	P30	49	TX2
26	P27	50	RX2

Front view

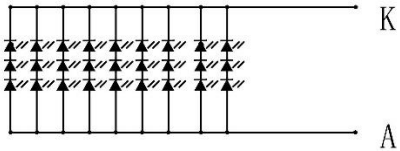
Side view

Back view

CTP Definition

Both SDA and SCL need to pull up 4.7k resistance
PIN Definition

P/N№	Name
1	VDD-3.3V
2	RST
3	SCL
4	INT
5	SDA
6	GND



Circuit diagram: 3 in series*9 in parallel=27LED

REVISION RECORD		VER	DATE	DWIN Technology			
1	First Edition	V1.1		FILE NAME :	IMG80600080_01WTC		TOLERANCES : ±0.3
2	Cover Extension	V2	20230228	CUSTOMER NAME :		SCALE	ANGLES : ±0.1°
3				DESIGN :		RELEASE: V2	SCALE : 1:1
4				DRAWN BY	D.ZQ	DATE 20230228	UNIT : mm
5				CHECKED BY		DATE	PRO. CO
6				APPROVED BY		DATE	SHEET : 1/1