

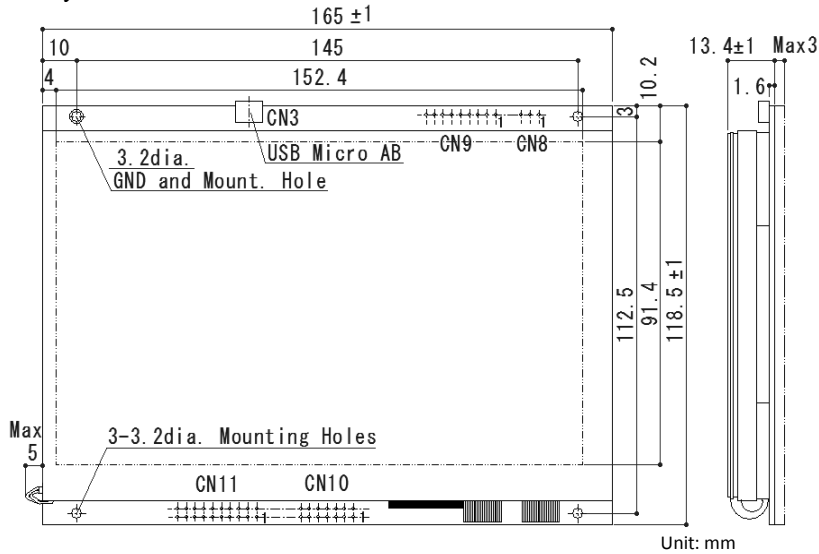
GT800X480A-C903P

SIMPLIFIED DATASHEET

■ Features

A compact size
800x480xRGB dot TFT-
LCD with a LED back light
and a projected
capacitive touch panel.

■ Physical dimension



Unit: mm

Specifications

■ Electrical Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Power supply voltage	VCC	4.75	5.00	5.25	VDC	

■ Electrical Characteristics

Ambient temp. = 25deg. C, VCC = 5.0V

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Input high voltage (UART, I2C, SPI)	VsIH	2.7	-	3.5	V	
Input low voltage (UART, I2C, SPI)	VsIL	0	-	0.6	V	(UART: RL = 3K ohm)
Output high voltage(UART, I2C, SPI)	VsOH	2.8	-	-	V	
Output low voltage(UART, I2C, SPI)	VsOL	0	-	0.4	V	
GPIO High input current	IiIH	-	-	1.0	uA	
GPIO Low input current	IiIL	-	-	-200	uA	
GPIO High input voltage	ViiH	2.4	-	3.3	V	
GPIO Low input voltage	ViiL	0	-	0.8	V	
GPIO High output voltage	ViOH	2.8	-	-	V	IOH = -200uA
GPIO Low output voltage	ViOL	-	-	0.4	V	IOL = 1.6mA
GPIO High output current par port	IiOHp	0	-	-1.5	mA	A port is bundle of 8 GPIO.
GPIO Low output current par port	IiOLp	0	-	8	mA	A port is bundle of 8 GPIO.
GPIO High output current total	IiOht	0	-	-8	mA	Total of 26 GPIO pins.
GPIO Low output current total	IiOLT	0	-	30	mA	Total of 26 GPIO pins.
Power Supply Current 1	ICC1	-	0.7	0.9	ADC	Black screen 100%Brightness
Power Supply Current 2	ICC2	-	0.3	0.45	ADC	Display Power(back light) Off
Power consumption	Pwr	-	3.5	4.5	Watt	Black screen 100%Brightness

■ Optical Specifications

Parameter	Condition
Luminance	400 Nit (Typical) +25 degrees celcius
Color	RGB 16Bit(R5-G5-B5-I1) color
Back light	LED Back light

■ Environmental Specifications

Parameter	Condition
Operating Temperature	-20 ~ +70 degrees celsius 50% brightness
Storage Temperature	-30 ~ +80 degrees celsius
Operating Humidity	20 ~ 80% R.H. (non-condensing)
Vibration (non-operating)	10-55-10Hz, all amplitude 1mm, 30 minutes, X-Y-Z
Shock (non-operating)	392m/s ² (40G) 9ms X-Y-Z, 3 times each direction

■ Physical Specifications

Parameter	Value
Number of Dots	800 x RGB x 480
Display Area	152.4mm x 91.44mm(X x Y)
Pixel Pitch (X x Y)	0.19 x 0.19mm (X x Y)
Weight	Approximately 275g

■ Interface

UART, USB 2.0(High & Full speed), SPI, I2C

■ Connectors

CN3: Micro-AB connector

CN8: Power connector through holes

Pin No.	Signal	Pin No.	Signal
1	Vcc	2	*Test (Factory use)
3	GND		

CN9: Serial interface and Power through holes

Pin No.	Signal (UART/ SPI/ I2C)	Function	Direction
1	*RESET/ *RESET/ *RESET	Reset	Input
2	- /SCK/ SCL	Serial Clock	Input
3	RxD/ MOSI/ SDA	Data Receive Input/Output	
4	DTR/ SBUSY/ SBUSY	Display Busy	Output
5	DSR/ SSEL/ -	Host Busy	Input
6	TxD/ MISO/ -	Data Transmit	Output
7	TRDY/ TRDY/ TRDY	Target Ready	Output
8	VCC/VCC/ VCC	Power Supply (5V)	
9	GND/ GND/ GND	Ground	

CN10, CN11: General Purpose I/O

Please refer to Hardware specification for details.

■ Selectable Font

Parameter	*ANK(Alphabet, Numeric, Kana)
ANK (Alphabet, Numeric, Kana)	All (6x8, 8x16, 12x24, 16x32 dot and Outline font)
JIS Kanji	16x16, 32x32 dot font, outline font
Chinise character, Korean	16x16 dot font, outline font
Character code	ASCII, ont byte code page, JIS X208, Big-5, GB2312-80, KSC5601-87, UTF-8

■ Functions

Multi-touch Touch panel sensing.
Character Display, Graphic Display, Display Action
User definable font, Line, Box draw
Define user windows, Vertical and Horizontal scroll
I/O port Control,
Jumper and memory switch to keep customized settings
Macro and Program Macro function.

