GTWQ043C3A00PA

SIMPLIFIED DATASHEET

■ Features

- 4.3inch TFT-LCD
- LED backlight module
- Wide-QVGA: 480 x RGB x 272 pixels
- High brightness (850cd/m^2)
- FLETAS touch panel mounted
  [Features of FLETAS]
  - High sensitivity
  - Excellent noise resistance

Get full specification

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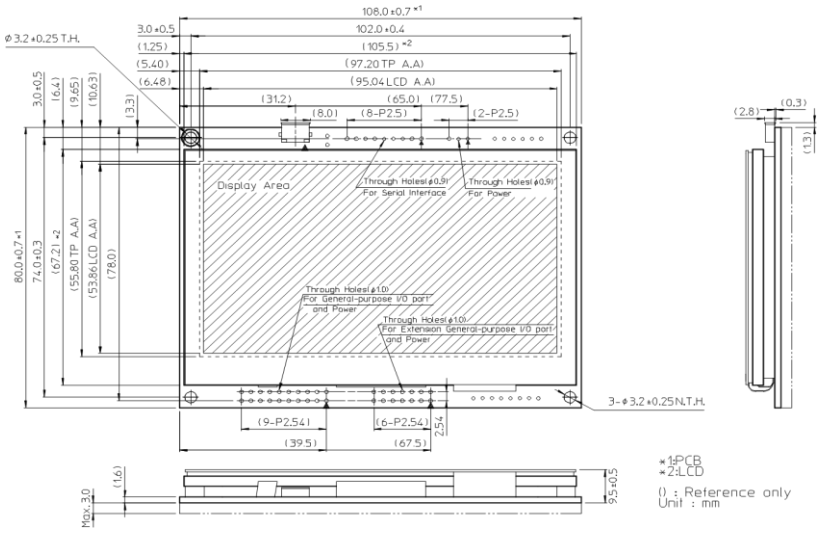
■ Physical Dimensions



Specifications

■ Basic Specification

Item		Content
Display	Display area	95.04 x 53.86 mm (X x Y)
	Number of pixels	480 x RGB x 272
	Pixel pitch	0.198 x 0.198 mm (X x Y)
	Color	16.7M colors (24-bit color (RGB 8-8-8))
	View Direction	12 o'clock
	Gray Scale Inversion Direction	6 o'clock
	Brightness（100%）	Min. 500 cd/m2 (nit) Typ. 850 cd/m^2 (nit)
FLETAS Touch Panel	Type	MPCT (Metallized Projective Capacitive Touch) supporting multi-touch.
Other	Interface	Serial interface (UART / I2C / SPI CMOS 3.3V) USB interface (High-speed / Full-speed)
	Weight	Approximately 100g

■ Electrical Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Power Supply Voltage	VCC	4.75	5.00	5.25	VDC	-

■ Electrical Characteristics

Measuring Conditions: Ambient temperature = 25 ºC, VCC=5.0VDC

Parameter			Symbol	Min.	Typ.	Max.	Unit	Condition
UART	Logic output voltage TXD,DTR		VsOH1	2.8	-	-	VDC	IOH=1.6mA
			VsOL1	-	-	0.4	VDC	IOH=1.6mA
I2C I/F	Logic output voltage TRDY, SBUSY		VsOH2	2.8	-	-	VDC	IOH=1.6mA
			VsOL2	-	-	0.4	VDC	IOH=1.6mA
	Internal pull-up resistance SDA, SCL		Rp	-	10	-	kΩ	-
SPI	Logic output voltage TXD,DTR,MISO		VsOH3	2.8	-	-	VDC	IOH=-1.6mA
			VsOL3	-	-	0.4	VDC	IOL=1.6mA
GPIO Port Port 0,1,2,3	Logic input current		IiIH	-	-	1.0	μADC	-
			IiIL	-	-	-200	μADC	-
	Logic input voltage		ViIH	2.4	-	3.3	VDC	-
			ViIL	0	-	0.8	VDC	-
	Logic output voltage		ViOH	2.8	-	-	VDC	IOH=-200μA
			ViOL	-	-	0.4	VDC	IOL=1.6mA
Power Port 0,1,2,3	Output voltage		VpOH	3.0	-	3.6	VDC	IpOHp=-20mA
	Output permissible current	(Single port)	IiOHp	0	-	-5	mADC	-
			IiOLp	0	-	5	mADC	-
		(Sum of all port)	IiOHt	0	-	-80	mADC	include power 3.3V
			IiOLt	0	-	80	mADC	-
Power			IpOHp	0	-	-20	mADC	-
Power Supply current			ICC-1	-	440	570	mADC	(*1) 100% Brightness
			ICC-2	-	350	-	mADC	(*2) 50% Brightness
			ICC-3	-	260	340	mADC	Display power OFF
Power Consumption			P-1	-	2.2	2.85	W	(*1) 100% Brightness
			P-2	-	1.75	-	W	(*2) 50% Brightness
			P-3	-	1.3	1.7	W	Display power OFF

(*1)All black display (*2)All white display

■ Interface Details／Connectors

・Serial interface (UART / I2C / SPI CMOS 3.3V) [CN9]

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

・USB Interface [CN3]

Pin No.	Signal								
1	VBUS	2	D-	3	D+	4	ID	5	GND

・Power Through-holes [CN8]

NOTE: Shorting JP1 enables power supply from VBUS.

Pin No.	Signal	Function
1	VCC	Power Supply (5V)
2	NC(*TEST)	No Connection
3	GND	Ground

*Factory test use only

・General Purpose I/O & Power Through-holes [CN10][CN11]
Please see the Hardware Specification for details.

■ Environmental Specifications

Parameter	Contents
Operating temperature	-20 ~ +70℃
Storage temperature	-30 ~ +80℃
Operating humidity (No condensation)	Temp. ≦60 ºC, 80% RH MAX. Temp. ＞ 60 ºC , Absolute humidity shall be less than 80% RH at 60 ºC
Vibration (non-operating)	10-55-10Hz, all amplitude 1mm, 30 minutes, X-Y-Z
Shock (non-operating)	392m/s2 (40G) 9ms X-Y-Z, 3 times each direction

■ Selectable Font

Parameter	Contents
1-byte(dot)	6x8, 8x16, 12x24, 16x32, International font
2-byte(dot)	16x16 (Japanese/Korean/SimplifiedChinese/ TraditionalChinese), 32x32(Japanese)
Outline Font	Source Han Sans

■ Functions

Character display, graphic display, control command, display action command, window function, touch panel input, general-purpose I/O port control, macro, program macro function, character and image download function, memory SW, data storage, etc.