

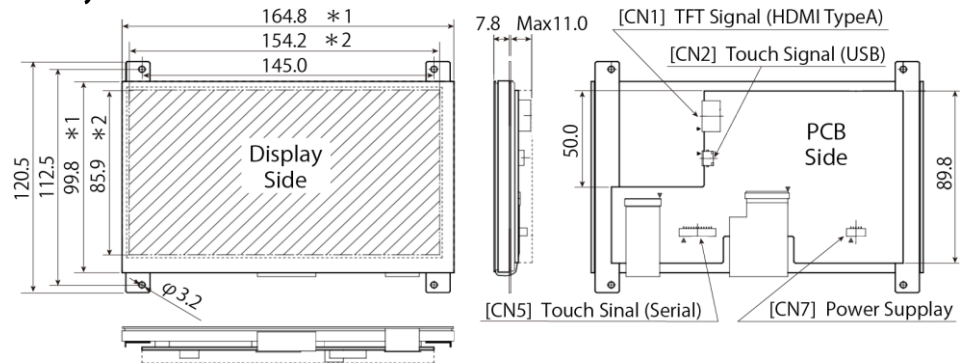
GTWS070VHA00P

SIMPLIFIED DATASHEET

■ Features

- 7 inch size high definition model (1024 x RGB x 600)
- Video input is DVI (HDMI connector)
- Touch I/F is USB (HID compliant)
- Can be used immediately by to a host such as a PC or SBC
- Excellent touch performance (High sensitivity, Stable operation)
- High brightness (850cd/m²)

■ Physical Dimensions



* 1 : LCD Size * 2 : Touch Panel Active Area Unit : mm DS-2094-100

Specifications

■ Basic Specification

Item	Content
Display	Type
	TFT-LCD
	Size
	7.0 inches
	Display area
	154.21 x 85.92 mm (X x Y)
	Number of pixels
	1024 x RGB x 600
	Pixel pitch
	0.1506 x 0.1432 mm (X x Y)
FLETAS touch panel	Colors
	16.7M (24-bit color)
	Recommend viewing direction
	ALL
	Gray scale inversion direction
	-
	Brightness (100%)
	Typ. 850 cd/m ² (nit)
	Display signal interface
	DVI (HDMI connector Type A)
Control	Type
	Metallized projective capacitive touch
	Touch active area
Control	Number of touches
	Max. 10 points (multi-touch enable)
	Interface
Control	UART, I ² C, USB2.0 (full speed 12Mbps.)
	Backlight (display brightness) adjustment,
	Touch sensitivity adjustment, etc.

■ Electrical Ratings

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

■ Electrical Characteristics

(*1)=Logic output voltage

Item	Symbol	Min.	Typ.	Max.	Unit	Condition
UART	(*1) TXD	VOH1	2.7	-	-	VDC
		VOL1	-	-	0.5	VDC
	(*1) SCL, SDA	VOL2	0	-	0.5	VDC
		VOL3	0	-	0.5	VDC
I ² C	(*1) / IRQ					
	Pull-up resistor	Rp	-	10	-	kΩ
	SDA, SCL					Pull-up Voltage 3.3V
Power supply	Power Supply Current	ICC-1	-	930	1210	mADC
						Brightness 100%, All black display
						Touch interface: valid
		ICC-2	-	600	-	mADC
	Power Consumption					Brightness 50%, All white display
						Touch interface: valid
		ICC-3	-	31	45	mADC
						Brightness 0%, No connection
	Power Consumption					Touch interface: valid
		ICC-4	-	11	15	mADC
						Power down mode
						No connection
Power supply	Power Supply Current	P-1	-	4.65	6.05	W
						Brightness 100%, All black display
						Touch interface: valid
		P-2	-	3.00	-	W
	Power Consumption					Brightness 50%, All white display
						Touch interface: valid
		P-3	-	0.16	0.23	W
						Brightness 0%, No connection
	Power Consumption					Touch interface: valid
		P-4	-	0.06	0.08	W
						Power down mode
						No connection

Logic input/ output condition : ambient temperature = 25°C, VCC=5.0VDC
TMDS clock frequency=51MHz, refresh rate=60Hz

■ Environmental Specifications

Parameter	Content
Operating Temperature	-20 to +60°C
Storage Temperature	-20 to +80°C
Operating Humidity	Temp. ≤ 60 °C, 80% RH MAX. (No condensation)
/ Storage humidity	Temp. > 60 °C, Absolute humidity shall be less than 80% RH at 60 °C (No condensation)
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

■ Interface / Connectors

- DVI (HDMI connector) / [CN1]

Pin No.	Terminal	Pin No.	Terminal
1	TMDS data2 +	10	TMDS clock +
2	TMDS data2 shield	11	TMDS clock shield
3	TMDS data2 -	12	TMDS clock -
4	TMDS data1 +	13	NC
5	TMDS data1 shield	14	NC
6	TMDS data1 -	15	SCL
7	TMDS data0 +	16	SDA
8	TMDS data0 shield	17	DDC / CEC ground
9	TMDS data0 -	18	+5V
		19	Hot plug detect

- USB / [CN2]

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

- Power connector / [CN7]

Pin No.	Terminal	Content
1, 3	VCC	+5V
2, 4	GND	Ground
5	NC	No connection

- UART, I²C / [CN5]

Pin No.	Terminal	Content	Pin No.	Terminal	Content
1, 3, 4	IC	Internal connection	7	SCL	I ² C clock
2	GPIO (input only)	For power saving mode wakeup	8	/RESET	Reset input
5	SDA	I ² C data	9	NC	No connection
6	/IRQ	Interrupt output (I ² C data available)	10	GND	Ground
			11	TXD	UART send
			12	RXD	UART receive

■ Functions

- Single-touch mode/ multi-touch mode setting
- Memory SW function
- Brightness level setting
- Touch sensitivity setting etc.