



Parameter	Specification	Unit	Pin No.	Symbol	I/O	Description
LCD size	2.8 (Diagonal)	inch	1	GND	P	Ground.
Resolution Ratio	240(H)×320(V)	pixels	2	XR(NC)	-	Touch panel Right Glass Terminal
Pixel Pitch	0.180(H)×0.180(V)	mm	3	YD(NC)	-	Touch panel Bottom Glass Terminal
Active Area	43.2(H)×57.6(V)	mm	4	XL(NC)	-	Touch panel Lift Glass Terminal
Module Size	50.0(W)×69.2(H)×2.25(D)	mm	5	YU(NC)	-	Touch panel Top Glass Terminal
Display Mode	Normally Black , Transmissive		6-7	IOVCC	P	Logic power for digital circuit.
Interface	MCU/SPI/RGB 18bit		8-9	VDD	P	Supply analog voltage.
Pixel arrangement	RGB-Vertical Stripe		10-12	IM2-0	I	Select the MCU interface mode.
View Direction	ALL	O'clock	13	RESET	I	Reset signal input.
Power Supply	3.3	V	14	SC	I	Scan direction control (Low=Normal, High=Reverse)
Power Consumption	0.5(Typ.)	W	15	RS(SPI-SCL)	I	This pin is used to select "Data or Command" in the parallel interface.
Weight	15.0(Typ.)	g	16	WR(SPI-RS)	I	The data is applied on the rising edge of the SCL signal.
Luminance	450(Typ.)	cd/m ²	17	RD	I	Serves as a read signal and MCU read data at the rising edge.
Driver IC	ST7789V2		18	VSYNC	I	Vertical synchronizing signal input.
Operating Temperature	-20~+70	°C	19	HSYNC	I	Horizontal synchronizing signal input.
Storage Temperature	-30~+80	°C	20	ENABLE	I	Data enable signal for RGB interface operation.
			21	DCLK	I	Pixel clock input signal.
			22	SDI	I	Serial data input signal.
Digital supply voltage	VDD	2.4	3.3	3.6	V	Data bus.
Digital interface supply voltage	IOVCC	1.65	1.8	3.3	V	If not used pin, fix this pin to GND.
Normal mode Current consumption	IDD	-	8	16	mA	Serial data output signal.
Level input voltage	VIH	0.7IOVCC		IOVCC	V	Ground
	VIL	GND		0.3IOVCC	V	Anode pin of backlight
Level output voltage	VOH	0.8IOVCC		IOVCC	V	Cathode pin of backlight
	VOL	GND		0.2IOVCC	V	Ground

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Current Voltage	VF	2.8	3.1	3.3	V
Forward Current	If	-	120	-	mA
Backlight Power Consumption	Wbl	-	0.372	-	W
LED Lifetime	-	30000	-	-	Hrs