



GENERAL INFORMATION		
Item	Contents	Unit
LCD Size	1.54	Inch
Resolution	240RGB × 240dots	---
Pixel pitch (W × H)	0.1155 × 0.1155	mm
Active area (W × H)	27.72 × 27.72	mm
Viewing area (W×H)	28.32 × 28.32	mm
LCM outline (W×H×T)	31.52 x 33.72 x 2.00	mm
Display mode	IPS,NB	---
View angle(L/R/U/D)	80/80/80/80	Degree
TFT Driver IC	ST7789V2-G4-A	---
Interface Type	MCU/SPI	---
Color depth	262	K
LCM brightness	MIN 230	Cd/m <sup>2</sup>
With/Without tp	Without	---
TFT Power consumption	TBD	mw
BL Power consumption	TBD	mw
Operation Temperature	-20~70	°C
LED life time	30,000	Hrs

INTERFACE DESCRIPTION			
No.	SYMBOL	I/O	Description
1	LEDA		LED power anode.
2	LEDK		LED power cathode.
3	GND		System ground.
4	VDD		Power Supply for Logic.
5	TE		Tearing effect output pin to synchronize MCU to frame rate, activated by S/W command.
6	CS		Chip selection pin.
7	RES		This signal will reset the device and must be applied to properly initialize the chip. Signal is active low.
8	RS/SCL		RS: Display data/command Selection Pin in MCU Interface. SCL: Serial communication clock input.
9	SDI		Serial communication data input.
10	WR/SDI2		WR: Write Enable in MCU Parallel Interface SDI2: Second Data lane in 2 data lane serial interface.
11	RD		Read Enable in MCU Parallel Interface.
12-19	D[7:0]		D[7:0]are used as MCU parallel interface data bus.
20	IM0/IM2		MPU Parallel interface bus and serial interface.

ELECTRICAL CHARACTERISTICS					
Item	Symbol	Min	Typ.	Max	Unit
Power supply voltage	VDD	2.4	2.8	3.3	V
Input signal high voltage	VIH	0.7VDD	--	VDD	V
Input signal low voltage	VIL	VSS	--	0.3VDD	V

BACKLIGHT DRIVING CONDITION					
Item	Symbol	Min	Typ.	Max	Unit
Forward current	If	54	60	66	mA
Forward voltage	Vf	2.8	3.2	3.4	V