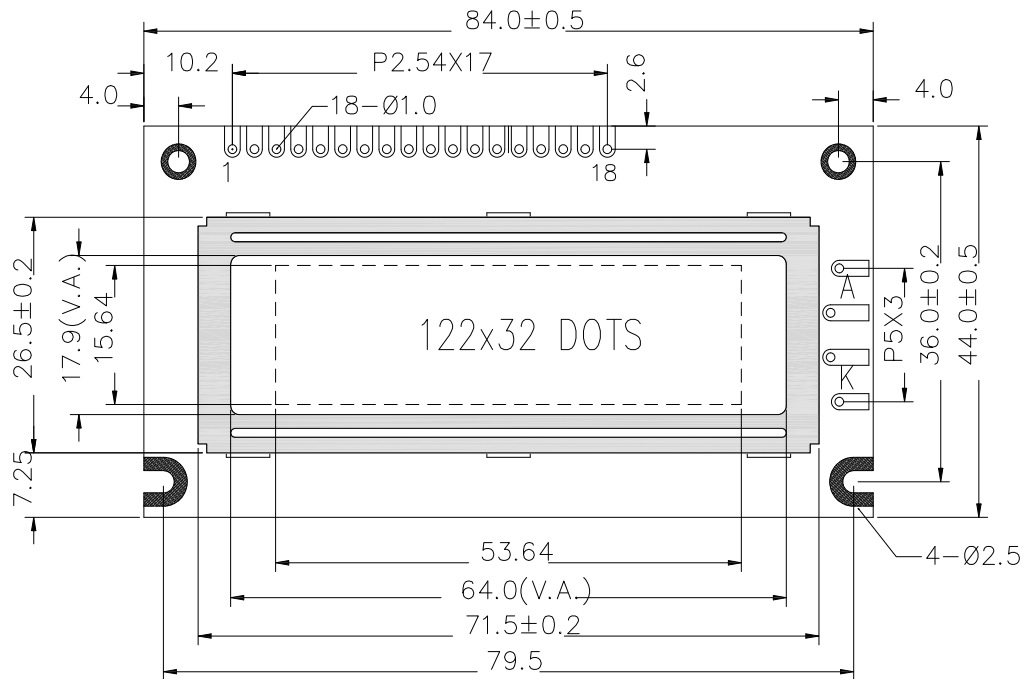
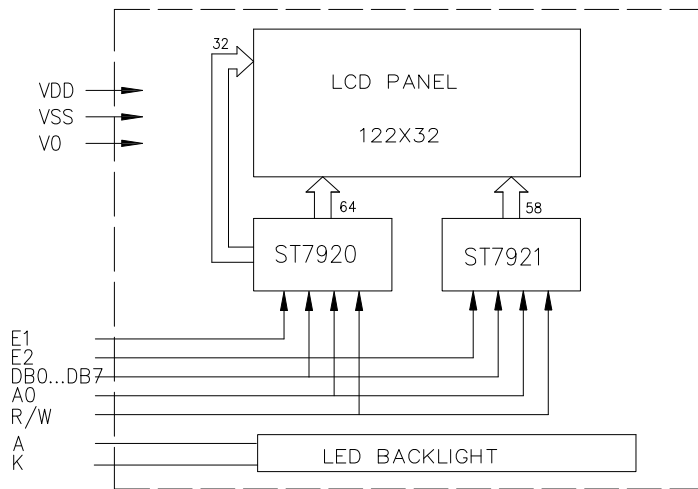


Pin	Symbol
1	VSS
2	VDD
3	V0
4	RS
5	RW
6	E
7~10	DB0~DB3
11~14	DB4~DB7
15	RST
16	VOUT
17	NC
18	NC



Block diagram



Feature

1. 122 dots X 32 dots matrix.
2. Built-in controller (ST7920)
3. Interface with 4-bit 8-bit or serial
4. 1/32 Duty cycle, 1/6 Bias.
5. Display Mode & Backlight Variations.
6. ROHS Compliant

Mechanical thickness

LCD module	T1	T2	Unit
Without or EL	5	10	mm
Edge backlight	9.4	15	mm
Bottom backlight	9.4	15	mm

Mechanical data

Item	Standard	Unit
Module size	84.0X44.0	mm
View area	64.0X17.9	mm
Dot size	0.40X0.45	mm
Area size	53.64X15.64	mm

Maximum Absolute Power Ratings

Item	Symbol	Standard			Unit
		Min	Typ	Max	
Input voltage	V _{DD}	-0.3	---	5.5	V
Power supply	V _{in}	-0.3	---	V _{DD}	

Electronical characteristics

Item	Symbol	Condition	Standard			Unit
			Min	Typ	Max	
Operating voltage	V _{DD}	V _{DD} =5.0V	4.5	---	5.5	V
Operating current	I _{DD}	V _{DD} =5.0V	---	2	---	mA
Recommended LCD driving voltage for normal temp module	V _{LCD}	T _A =+25 °C	---	4.3	---	V
		T _A =0 °C	---	4.5	---	
		T _A =-20 °C	---	4.8	---	
Backlight voltage	V _{LED}	Y-G	---	4.2	---	V
Backlight current	I _{LED}	V _{LED} =4.2V	---	120	---	mA
Operating temperature	T _o	---	-20	---	70	°C
Storage temperature	T _s	---	-30	---	80	