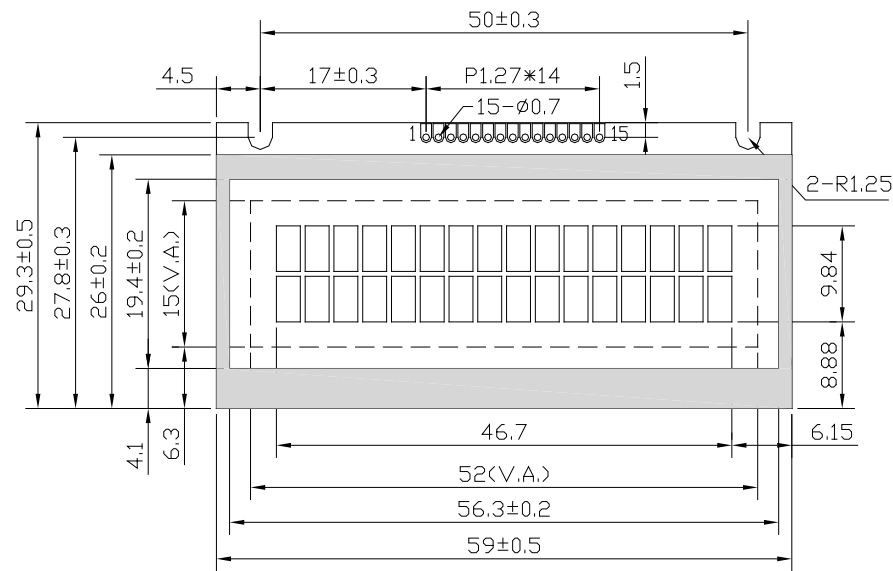


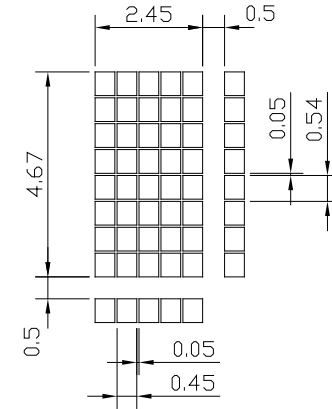
LCM1602Q

Pin connections

PIN NO	Symbol
1	VLED-
2	VSS
3	VDD
4	V0
5	RS
6	RW
7	E
8	DB0
9	DB1
10	DB2
11	DB3
12	DB4
13	DB5
14	DB6
15	DB7



DOTS DETAIL



Feature

- 2-line x16 characters display; 5x8 dots with cursor
- Built-in controller (KS0066U or Equivalent)
- +5V power supply(Also available for +3.3V)
- 1/16 duty cycle;1/5bias;
- TN, HTN, STN or FSTN mode

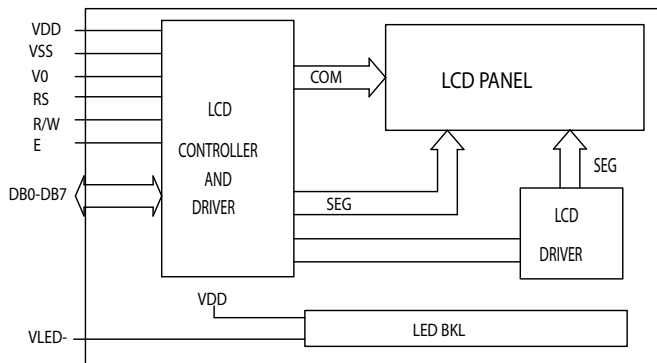
Display character address code

Display position	1	2	3	4	5	---	---	---	---	14	15	16
DDRAM address	00	01	02	---	---	---	---	---	---	0EH	0FH	
DDRAM address	40	41	42	---	---	---	---	---	---	4EH	4FH	

Absolute Maximum Rating

Item	Symbol	Standard			Unit
		Min	Typ	Max	
Input voltage	VI	-0.3	-----	5.5	V
Power supply	VDD-VSS	-0.3	-----	VDD	

Block diagram:



Mechanical thickness

LCD module thickness	T1	T2	UNIT
Without or EL backlight	3.1	5.5	mm
With edge LED backlight	3.1	5.5	mm
With LED bottom backlight	----	-----	mm

Mechanical data

Item	Standard	Unit
Module dimension	59.0x29.3	mm
Viewing area	52.0x15.0	mm
Dot size	0.45x0.54	mm
Character size	2.45x4.67	mm

Electronical characteristics

Item	Symbol	Condition	Standard			Unit	
			Min	Typ	Max		
Input voltage	VDD	+5V	4.7	5.0	5.5	V	
		+3.3V	2.7	3.3	5.3		
		Recommended LCD driving voltage for normal temp version module	-20°C	4.8	5.0		5.3
			0 °C	4.6	4.8		5.0
			25°C	4.3	4.5		4.7
		50°C	4.2	4.3	4.5		
		70°C	4.1	4.2	4.3		
LED forward voltage	VF	25°C	-----	4.2	5.0	V	
LED forward current	IF	25°C	-----	30	-----	mA	
EL power supply current	IEL	VEL=110V AC 400Hz	-----	-----	-----	mA	