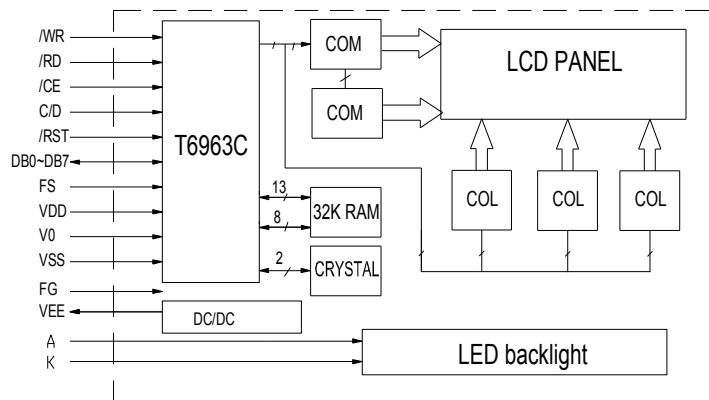


PIN NO	Symbol
1	FGND
2	VSS
3	VDD
4	V0
5	/WR
6	/RD
7	/CE
8	C/D
9	VEE
10	/RET
11	DB0
18	DB7
19	FS
20	NC
A	LED+
K	LED-

Feature

1. 240x64dots display
2. Built-in controller (T6963C)
3. +5V power supply
4. 1/64 duty cycle;1/9bias;
5. STN or FSTN mode
6. With LED backlight or EL backlight or CCFL backlight

Block diagram:



Mechanical thickness

LCD module thickness	T1	T2	UNIT
Without or EL backlight	4.8	10.0	mm
With edge LED backlight	---	---	mm
With LED bottom backlight	11.0	16.0	mm

Mechanical data

Item	Standard	Unit
Module dimension	180.0x65.0	mm
Viewing area	132.0x39.0	mm
Dot size	0.49x0.49	mm
Dot pitch	0.53x0.53	mm

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	

Electronical characteristics

Item	Symbol	Condition	Standard			Unit
			Min	Typ	Max	
Input voltage	VDD	+5V	4.7	5.0	5.5	V
		+3.3V	---	---	---	V
Supply current	IDD	VDD=5V	-----	7.2	8	mA
Recommended LCD driving voltage for normal temp version module	VDD-V0	-20°C	---	---	---	V
		0 °C	---	12.8	---	
		25°C	---	12.6	---	
		50°C	---	12.4	---	
		70°C	---	---	---	
LED forward voltage	VF	25°C	-----	4.2	5.0	V
LED forward current	IF	25°C	-----	450	-----	mA
EL power supply current	IEL	VEL=110V AC 400Hz	-----	---	---	mA