

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	Vdd - Vss	-0.3	5.25	V
Supply Voltage(LCD)	Vdd - V0	---	---	V
Input Voltage	Vi	-0.3	Vdd + 0.3	V
Operating Temp.	Topr	-20	70	°C
Storage Temp.	Tstg	-30	80	°C

MECHANICAL DATA

Item	Max.	Unit
Module Size (W X H X T)	128.0 X 50.0 X 11.5	mm
Viewing Area(W X H)	99.0 X 29.0	mm
Dot Pitch(W X H)	0.37 X 0.37	mm
Dot Size(W X H)	0.33 X 0.33	mm
View Angle	6 or 12 O'Clock	

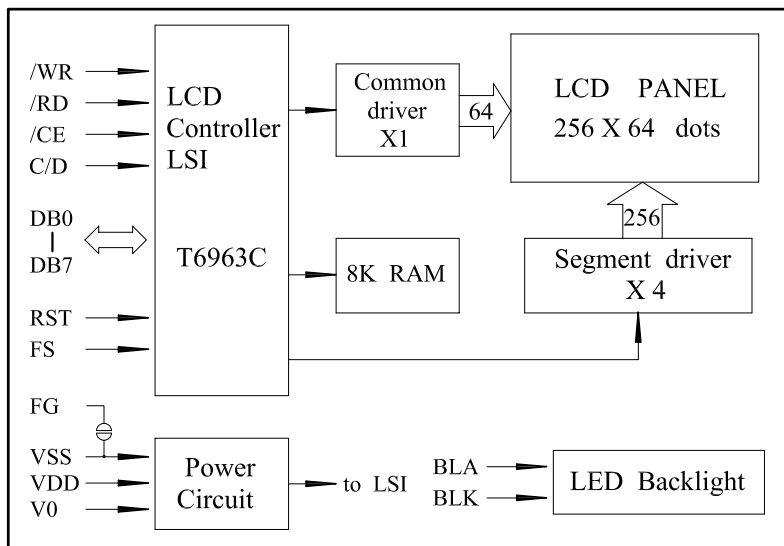
ELECTRICAL CHARACTERISTICS (Vdd=5V±0.25V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	Vih	--	2.2	--	Vdd	V
Input Low Voltage	Vil	--	-0.3	--	0.8	V
Output High Voltage	Voh	Ioh=-0.2mA	2.4	--	Vdd	V
Output Low Voltage	Vol	Iol=-1.6mA	0	--	0.4	V
Supply Current	Idd	Vdd=5.0V	--	3.0	5.0	mA
LCD Driving Voltage	Vdd - V0	Ta=25 °C	--	9.0	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	FG	0V	Frame ground
2	VSS	0V	Power GND
3	Vdd	5V	supply voltage for logic
4	V0	--	Input voltage for LCD
5	/WR	L	Write signal
6	/RD	L	Read signal
7	/CE	L	Chip enable signal
8	C/D	H/L	H:Instruction Code,L:Data
9	NC	---	No connection
10	/RST	L	Reset signal
11	DB0	H/L	Data bit 0
12	DB1	H/L	Data bit 1
13	DB2	H/L	Data bit 2
14	DB3	H/L	Data bit 3
15	DB4	H/L	Data bit 4
16	DB5	H/L	Data bit 5
17	DB6	H/L	Data bit 6
18	DB7	H/L	Data bit 7
19	FS	H/L	Font select signal(H:6x8 dots,L:8x8dots)
20	UEE	-15V	Output voltage for LCD driving
21	A	+5V	
22	K	0V	

BLOCK DIAGRAM



LCD Type

LCD Color	Backlight