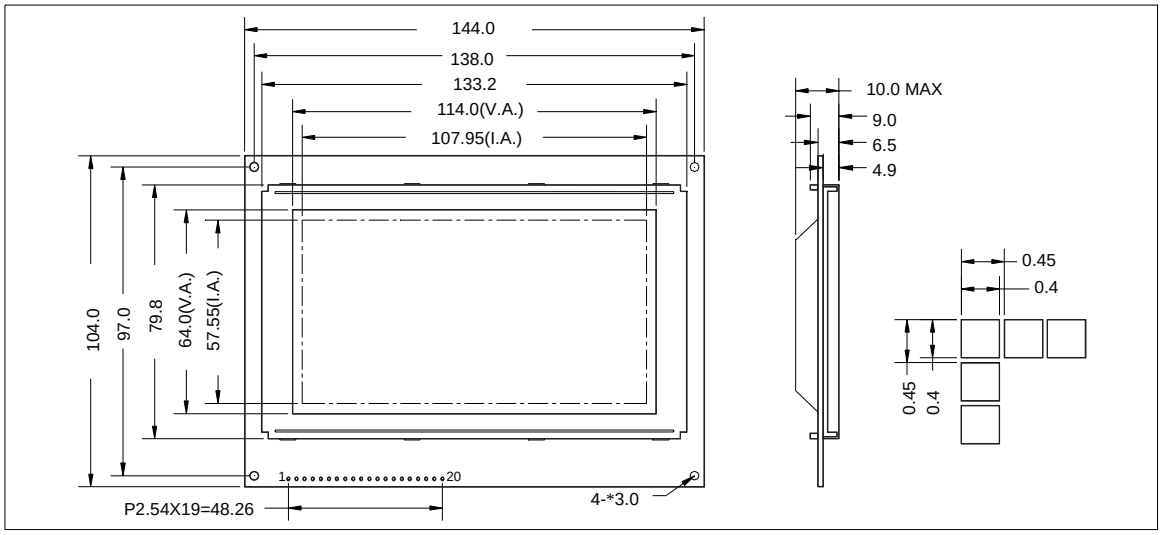
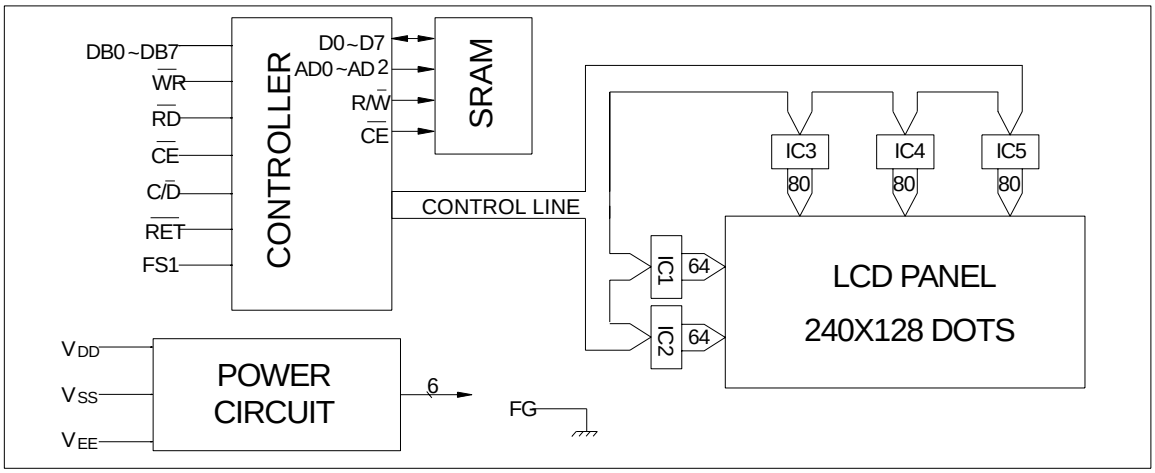
1.0 Features

* Display Mode: Transflective and Positive Type STN, Wide Temp.
* Input Data: 8-Bits Parallel Data Input from a MPU
* Assembly: SMT
* Backlight: Optional

2.0 External Dimensions



3.0 Block Diagram



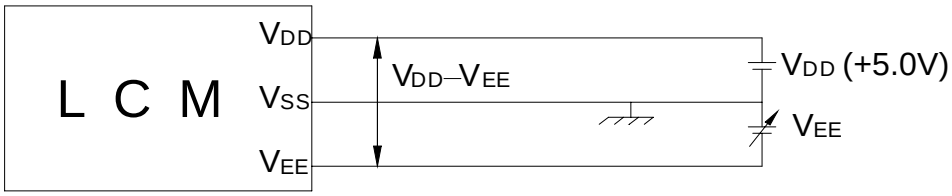
4.0 Maximum Rating

Item	Symbol	Test Condition	Standard Value		Unit
			Min.	Max.	
Supply Voltage for Logic	V_{DD}–V_{SS}	Ta=25 ˚C	0	6.0	V
Supply Voltage for LCD	V_{DD}–V_{EE}		0	25.0	V
Input Voltage	V_I		0	V_{DD}	V
Operating Temperature	Topr	—	0	+50	˚C
Storage Temperature	Tstg	—	–10	+60	˚C

5.0 Electro-Optical Characteristics

Item		Symbol	Conditions	Standard Value			Unit
				Min.	Typ.	Max.	
Power Supply for Logic	Logic	Vdd	—	4.75	5.0	5.25	V
	LCD Drive	Vdd-Vee		—	21.0	—	
Frame Frequency		f FLM	Vdd=5.0V	70	75	80	Hz
Current Consumption		Idd	Vdd=5.0V, Vdd-V0=21.0 f FLM=75Hz	—	5.7	10.0	mA
LCD Driving Voltage(Recommended)		Vdd-V0	Ta=25℃; Ø, θ =0°	—	21.0	—	V
Response Time(Rising)		Tr	Ta=25℃; Ø, θ =0°	—	100	150	ms
Response Time(Decay)		Td		—	200	250	ms
Viewing Angle		Ø2-Ø1	K≥2	5	—	45	DEG.
Contrast Ratio		K	Ø=0°, θ =0°	15.0	25.0	—	—

6.0 Power Supply for LCM



V_{DD} –V_{EE}: LCD Driving Voltage

7.0 I/O Connection

Pin No	Symbol	Level	Function
1	LED+	5.0V	Anode of LED Backlight
2	LED-	0V	Cathode of LED Backlight
3	FG	0V	Frame ground
4	V_{SS}	0V	Ground
5	V_{DD}	5.0V	Power supply for logic and LCD
6	V_{EE}	—	Power supply for LCD
7	WR	L	Write signal
8	RD	L	Read signal
9	CE	L	Chip enable signal
10	C/D	H/L	H: Instruction code L: Data
11	RST	L	Reset signal
12	DB0	H/L	Data bit 0
13	DB1	H/L	Data bit 1
14	DB2	H/L	Data bit 2
15	DB3	H/L	Data bit 3
16	DB4	H/L	Data bit 4
17	DB5	H/L	Data bit 5
18	DB6	H/L	Data bit 6
19	DB7	H/L	Data bit 7
20	FS	—	Font select signal