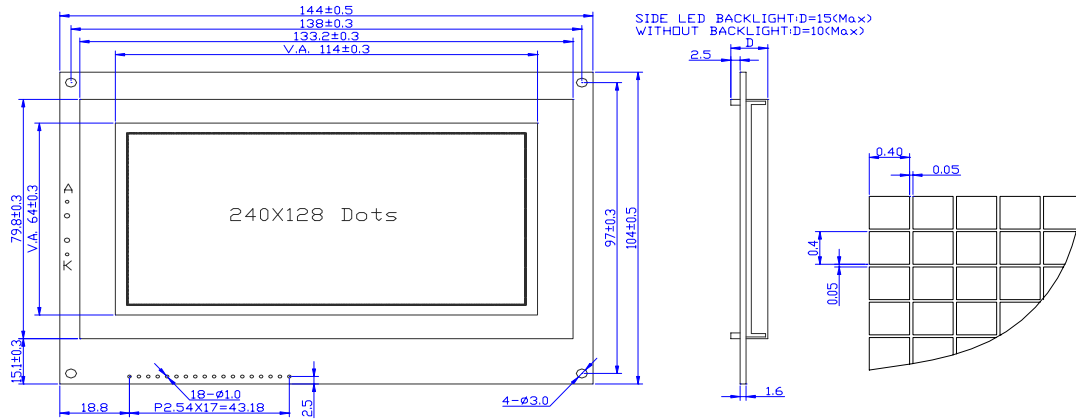
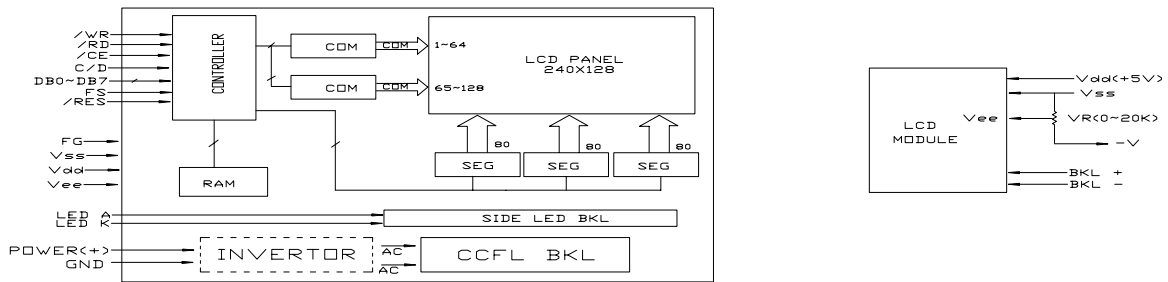


OUTLINE DIMENSION



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPEC. & FEATURES

Item	Dimension(mm)	Features	
Module Size(W × H × T)	144.0 × 104.0 × 10.0/15.0	LC Fluid	STN (Yellow-green, Gray, Blue), FSTN
Viewing Area(W × H)	114.0X64.0	Polarizer	Reflective, Transflective, Transmissive
Dot Size(W × H)	0.40X0.40	View Angle	6:00 o'clock or 12:00 o'clock
Dot Pitch(W × H)	0.45X0.45	Display Type	Positive or Negative
Dots × Dots	240 × 128	Backlight	LED (Optional)
		Operating Temp.	0 ~50 or -20 ~70
		Controller	T6963C or Equivalent

INTERFACE PIN CONNECTIONS

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	FG	Frame ground	8	C/D	Register selection (H:Data, L:Instruction)
2	Vss	Ground for logic	9	/RES	Reset signal
3	Vdd	Power supply for logic	10~17	DB0~DB7	Data bus lines
4	Vee	Power supply for LCD	18	FS	Font selection
5	/WR	Write enable		A	Anode of LED
6	/RD	Read enable		K	Cathode of LED
7	/CE	Enable signal for IC			

ELECTRICAL CHARACTERISTICS

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Operating Voltage	Vdd	Ta=25	4.5	5.0	5.5	V
Operating Voltage for LCD	Vlcd	Ta=25	---	-14	---	V
Supply Current	Idd	Ta=25 , Vdd=5.0V	---	9.5	---	mA
Supply Voltage for LED	Vf	Ta=25	---	4.1	---	V
Supply Current for LED	If	Ta=25 , Vf=4.1V	---	110	---	mA