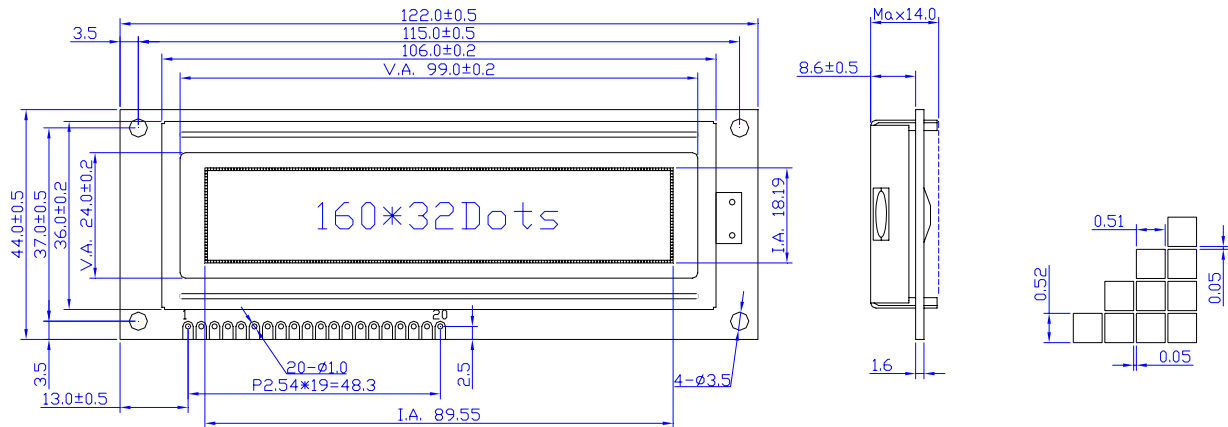
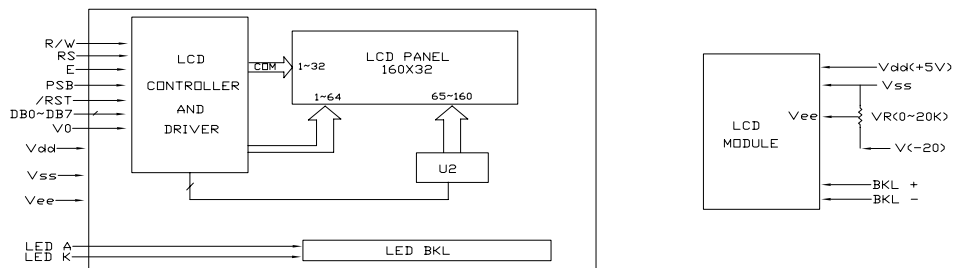


◆ OUTLINE DIMENSION



◆ BLOCK DIAGRAM & POWER SUPPLY



◆ MECHANICAL SPEC. & FEATURES

Item	Dimension(mm)	Features	
Module Size(W×H×T)	122.0×44.0×14.0	LC Fluid	STN (Yellow-green, Gray, Blue), FSTN
Viewing Area(W×H)	99.0×24.0	Polarizer	Reflective, Transflective, Transmissive
Dot Size(W×H)	0.51×0.52	View Angle	6:00 o'clock or 12:00 o'clock
Dot Pitch(W×H)	0.56×0.57	Display Type	Positive or Negative
Dots×Dots	160×32	Backlight	LED (Optional)
		Operating Temp.	0°C~50°C or -20°C~70°C
		Controller	ST7920 or Equivalent

◆ INTERFACE PIN CONNECTIONS

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	K	BKL -	15	Vdd	Power supply for logic
2	A	BKL +	16	Vss	Ground for logic
3~10	DB7~DB0	Data bus lines	17	PSB	Interface selection
11	E	Enable signal	18	RES	Reset signal
12	R/W	Read/Write selection (H: R, L: W)	19	NC	
13	RS	Register selection (H:Data, L:Instruction)	20	VEE	Negative voltage output
14	Vo	Power supply for LCD			

◆ ELECTRICAL CHARACTERISTICS

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Operating Voltage	Vdd	Ta=25°C	---	5.0	---	V
Operating Voltage for LCD	Vled	Ta=25°C	---	6.5	---	V
Supply Current	Idd	Ta=25°C, Vdd=5.0V	---	2.0	3.0	mA
Supply Voltage for LED	Vf	Ta=25°C, R=6.8Ω	---	4.2	---	V
Supply Current for LED	If	Ta=25°C, Vf=4.2V	---	240	---	mA