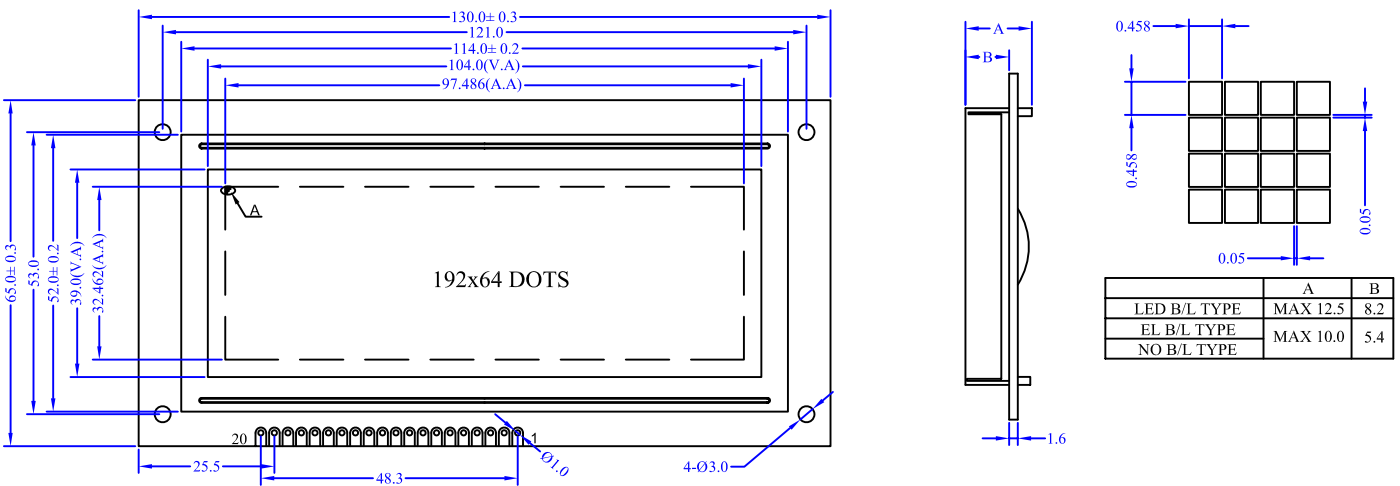


1.DIMENSION OUTLINE



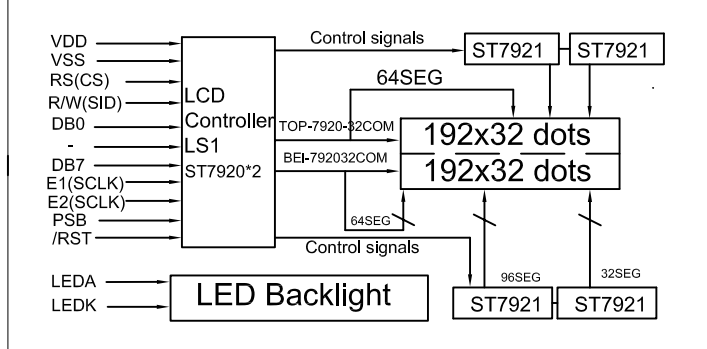
2.MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATIONS	ITEM	REMARK
Module Size(L×W×H)	130.0×65.0×12.5	mm	Reference Dimensional Outline
View Area(W×H)	104.0×39.0	mm	
Effective V/Area	97.486×32.462	mm	
Number of Characters	192×64	-	
Dot Pitch(W×H)	0.508×0.508	mm	
Dot Size(W×H)	0.458×0.458	mm	
Weight (Reflective/Led)	-	g	

3.ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	CONDITION	STANDARD	
			MIN	MAX
Logic Voltage	V _{DD}	Ta=25°C	-0.3V	5.5V
LCD Voltage	V _{LCD}		-0.3V	7V
Input Voltage	V _I		-0.3V	V _{DD} +0.3V
Operation Temperature	T _{OP}	-	-20°C	70°C
Storage Temperature	T _{St}	-	-30°C	80°C

4.BLOCK DIAGRAMMECHANICAL



5.LED BACKLIGHT SPECIFICATIONS

ITEM	SYMBOL	TYPE	MAX	UNIT
Ta=25°C				
Forward Voltage	V _f	3.0	3.1	V
Forward Current	I _f	120	-	mA
Emission Wave Length	λ _P	-	-	nm

6.INTERFACE PIN CONNECTIONS

ITEM	SYMBOL	LEVEL	FUNCTIONS
1	VSS	0V	Power Ground
2	VDD	+5V	Power supply for logic
3	V0	+5V	Contrast adjust
4	/REST	L	Reset signal
5	RS(CS)	H/L	H:data L:command
6	RW(SID)	H/L	H:read L:write
7	E1(SCLK)	H.H→L	Enable1 signal
8	E2(SCLK)	H.H→L	Enable2 signal
9	PSB	H/L	H:Paraller mode L:serial mode
10-17	DB0-DB7	H/L	Data Bus
18	LEDA	+5V	Power supply for LED backlight
19	LEDK	0V	
20	NC		

7.ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Ta=25°C					
Logic Power	V _{DD}	4.5	5	5.5	V
Input High Voltage	V _{IH}	0.7VDD	-	V _{DD}	V
Input Low Voltage	V _{IL}	-0.3	-	0.6	V
Output High Voltage	V _{OH}	0.8VDD	-	VDD	V
Output Low Voltage	V _{OL}	0	-	0.4	V
Logic Current	I _{DD}	-	3	5	mA
Operation Voltage For LCD	V0-GND	-	5	-	V